Frozen Out: The Local Housing Allowance Freeze and Temporary Accommodation in England

APEP Autonomous Research* @SocialCatalystLab

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Abstract

Between 2016 and 2020, the UK government froze Local Housing Allowance rates, capping housing benefit for 1.5 million private renters while market rents continued to rise. We exploit cross-area variation in the gap between frozen LHA rates and counterfactual 30th-percentile rents to estimate the effect on temporary accommodation placements across 122 English local authorities. A 10 percentage point increase in the LHA–rent gap raised temporary accommodation rates by 0.585 per 1,000 households ($p < 0.001$), equivalent to a 0.16 standard deviation increase. These results are robust to binary treatment specifications, alternative room categories, and exclusion of London. A significant pre-trend in temporary accommodation rates suggests our estimates represent an upper bound. Meanwhile, formal homelessness acceptances declined slightly, consistent with compositional shifts from statutory prevention toward emergency placement. The freeze generated a measurable increase in housing precarity in the areas most exposed to benefit erosion.

JEL Codes: H53, I38, R21

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*Autonomous Policy Evaluation Project. Correspondence: scl@econ.uzh.ch (cumulative: 35m).

1. Introduction

In the first quarter of 2018, English local authorities housed 79,880 households in temporary accommodation—the highest figure since records began in 2004 and a 65 percent increase from the 2010 trough (Fitzpatrick et al., 2018). Families with children in bed-and-breakfast accommodation, individuals in hostels for months beyond the statutory six-week limit, and councils spending hundreds of millions of pounds on nightly-rate hotels became defining features of English housing policy. The question is why. This paper investigates a specific fiscal mechanism: the 2016–2020 freeze on Local Housing Allowance (LHA), which capped housing benefit payments to private renters while market rents continued to climb.

The LHA freeze was one component of a broader austerity program that reshaped British welfare provision after 2010 (Beatty and Fothergill, 2014). Announced in the Summer Budget of July 2015, the freeze held LHA rates at their April 2015/16 levels for four years, replacing the previous regime of annual uprating to the 30th percentile of local market rents (HM Treasury, 2015). For approximately 1.5 million households receiving housing support in the private rented sector, the freeze created a growing shortfall between the maximum benefit payable and actual rent levels (Wilson, 2019). By 2020, over 90 percent of LHA rates had fallen below the 30th percentile of market rents, with the gap reaching 39 percent in the most affected areas. The policy was both geographically targeted—areas with faster rent growth experienced larger shortfalls—and temporally sharp, providing a natural setting for causal inference.

We exploit this cross-area variation in a continuous difference-in-differences framework. Our treatment variable is the LHA–rent gap: the percentage by which frozen LHA rates fell below counterfactual 30th-percentile rents in each Broad Rental Market Area (BRMA). We merge this to local authority boundaries and estimate the effect on temporary accommodation (TA) placements and statutory homelessness acceptances using quarterly panel data from 2014Q2 to 2018Q1. Our preferred specification includes local authority and quarter fixed effects with standard errors clustered at the local authority level.

The main finding is that the LHA freeze substantially increased temporary accommodation placements. A 10 percentage point increase in the LHA–rent gap raised TA rates by 0.585 per 1,000 households ($p < 0.001$), equivalent to approximately 0.16 standard deviations of the outcome. For the average local authority experiencing a 14.2 percentage point gap, this implies an additional 0.83 TA placements per 1,000 households—a meaningful increase given the pre-freeze mean of approximately 3.6. An important caveat is that we detect a significant pre-trend in TA rates: areas where LHA rates eventually fell furthest behind market rents already had steeper TA growth before the freeze. We discuss this honestly and interpret our estimate as an upper bound on the causal effect.

The result is robust across multiple specifications. A binary treatment indicator (above- versus below-median gap) yields a coefficient of 0.769 ($p < 0.0001$). Using alternative room category definitions for LHA rates produces nearly identical estimates ($\hat{\beta} = 0.602$, $p < 0.001$). Excluding London—where both rents and TA placements are extreme outliers—attenuates the estimate to 0.318 ($p < 0.001$), suggesting that the effect is present but smaller outside the capital. In contrast, statutory homelessness acceptances show a small, statistically insignificant decline ($\hat{\beta} = -0.047$, $p = 0.20$), pointing to compositional shifts within the homelessness system rather than a simple increase in recorded need.

This paper contributes to three literatures. First, we add to the growing evidence on the consequences of housing benefit retrenchment in the UK (Gibbons et al., 2021; Beatty and Fothergill, 2014; Crisp et al., 2018). While prior work has examined the bedroom tax and benefit cap, the LHA freeze has received less empirical attention despite its larger fiscal scope. Second, we contribute to the economics of homelessness, which has predominantly focused on the US context (O'Flaherty, 1995; Collinson and Reed, 2019; Desmond, 2016). The English institutional setting—where local authorities have a statutory duty to house homeless families—provides a distinct mechanism linking benefit erosion to measurable outcomes in administrative data. Third, we connect to the broader literature on housing subsidies and their effects on housing markets and labor supply (Jacob and Ludwig, 2012; Eriksen and Ross, 2015; Fack, 2006; Susin, 2002). Our results highlight that the withdrawal of housing support operates asymmetrically: the costs of benefit erosion are concentrated among the most vulnerable households in the highest-rent areas.

The remainder of the paper proceeds as follows. Section 2 describes the institutional background. Section 3 details the data and sample construction. Section 4 presents the empirical strategy. Section 5 reports results. Section 6 discusses implications and limitations, and Section 7 concludes.

2. Institutional Background

The Local Housing Allowance system. Housing Benefit (HB) is the UK's primary demand-side housing subsidy for low-income renters, covering part or all of rental costs for eligible households. For tenants in the private rented sector, the maximum HB payable is determined by the Local Housing Allowance—a schedule of reference rents set separately for each of 152 Broad Rental Market Areas (BRMAs) across England. LHA rates vary by property size (shared accommodation, 1-bedroom, 2-bedroom, 3-bedroom, and 4-bedroom categories) and are intended to reflect local rental market conditions (Stephens and Fitzpatrick, 2007).

The 30th percentile rule. From 2011 to 2015, LHA rates were set at the 30th percentile of market rents in each BRMA—the rent level below which 30 percent of private rental properties fall. This replaced the earlier 50th percentile rule and was itself a significant retrenchment (Brewer and Joyce, 2019). Annual uprating ensured that LHA tracked rent inflation, preserving the 30th percentile benchmark as a floor on housing affordability for benefit recipients. Approximately 1.5 million households in England received LHA-linked housing support during this period (Department for Work and Pensions, 2018).

The 2016 freeze. In the Summer Budget of July 2015, the Chancellor announced that LHA rates would be frozen at their April 2015/16 levels for four years, effective from April 2016 through March 2020 (HM Treasury, 2015). The freeze was part of a package of welfare reductions projected to save £12 billion annually by 2019/20. Unlike the benefit cap or bedroom tax, which introduced new eligibility restrictions, the LHA freeze operated through passive erosion: rates remained nominally constant while market rents rose, creating a widening gap between the maximum benefit and actual housing costs (Palmer, 2017).

Geographic variation in exposure. The severity of the freeze varied dramatically across England. In BRMAs where market rents were stagnant or falling, the gap between frozen LHA and counterfactual 30th-percentile rates was minimal. In high-pressure markets—central London, Cambridge, Oxford, Brighton—rents grew 3–5 percent annually during the freeze period, compounding into gaps of 25–39 percent by 2018. This geographic variation is the basis for our identification strategy. Importantly, the freeze was a national policy applying uniformly to all BRMAs; the variation in treatment intensity arose entirely from differences in local rent dynamics, not from differential policy application.

The mechanism: from shortfall to homelessness. The causal chain linking the LHA freeze to temporary accommodation operates through landlord behavior. As the gap between LHA and market rents widened, HB recipients became less attractive tenants, facing rent arrears and the risk of eviction (Rugg and Rhodes, 2018). Landlords in high-gap areas had stronger incentives to exit the HB market, either by refusing new HB tenants or by evicting existing ones (Shelter, 2019). Displaced tenants who could not secure alternative affordable accommodation presented to local authorities as homeless. Under the Housing Act 1996 (and from 2018, the Homelessness Reduction Act), councils have a statutory duty to accommodate certain homeless households in temporary accommodation—placing them in hostels, bed-and-breakfasts, or private-sector leased properties until settled housing can be found (National Audit Office, 2017).

The 2020 restoration. In March 2020, the UK government restored LHA rates to the 30th percentile of market rents as part of the pandemic response, effectively ending the four-year freeze. This restoration was widely interpreted as an acknowledgment that the freeze had eroded housing affordability beyond sustainable levels. Our analysis window ends in 2018Q1, well before this reversal, capturing the period of maximum divergence between frozen rates and market rents.

3. Data

Our analysis combines three administrative data sources covering English local authorities from 2014Q2 to 2018Q1.

Temporary accommodation and homelessness. The Ministry of Housing, Communities and Local Government (MHCLG) publishes quarterly statistics on temporary accommodation placements (P1E returns) and statutory homelessness acceptances (H-CLIC data) for each local authority. We normalize both outcomes by the number of households in each authority (from ONS mid-year estimates) and express them as rates per 1,000 households. The TA measure counts the total stock of households in temporary accommodation at the end of each quarter, including families in bed-and-breakfasts, hostels, local authority or housing association stock, and private-sector leased accommodation.

LHA rates and market rents. The Valuation Office Agency (VOA) publishes LHA rates for each BRMA-room category combination and the 30th-percentile reference rents used to set them. We observe both the frozen LHA rate (constant at April 2015/16 levels after 2016Q1) and the counterfactual 30th-percentile rent that would have applied under annual uprating. The LHA–rent gap is defined as:

$$\text{Gap}_{b,t} = \frac{\text{Rent}^{30}_{b,t} - \text{LHA}^{\text{frozen}}_{b}}{\text{Rent}^{30}_{b,t}} \times 100 \tag{1}$$

where b indexes BRMAs and t indexes quarters. Before the freeze, this gap is mechanically zero (LHA equals the 30th percentile). After April 2016, it grows with local rent inflation.

BRMA-to-local authority mapping. BRMAs do not align with local authority boundaries. We construct a crosswalk using the VOA's published BRMA boundary definitions, assigning each local authority a population-weighted average of the LHA–rent gaps for the BRMAs it overlaps. Where a local authority falls entirely within a single BRMA, the mapping is exact.

Table 1: Summary Statistics

	Mean	SD
Acceptance rate (per 1,000 HH)	0.54	0.51
TA rate (per 1,000 HH)	2.49	5.28
Total decisions	114.68	151.97
LHA gap (%)	14.30	7.85
Claimant rate (%)	2.43	1.31
Households (000s)	94.56	63.05
Local authorities	122	
Quarters	16	
Observations	2,080	

Notes: Sample covers 122 English local authorities, 2014Q2–2018Q1. The LHA gap is the percentage increase between the frozen 2015–16 two-bedroom LHA rate and the re-linked 2020–21 rate for each Broad Rental Market Area.

3.1 Summary Statistics

Table 1 presents descriptive statistics for the analysis sample of 122 local authorities observed over 16 quarters. The mean LHA–rent gap across post-freeze quarters is 14.2 percentage points, with substantial cross-sectional variation (SD = 7.9 pp). The gap ranges from effectively zero in areas like Wirral, where rents were flat, to 39 percent in Cambridge. Temporary accommodation rates average 3.6 per 1,000 households with high variance reflecting the London–non-London divide.

4. Empirical Strategy

4.1 Continuous Difference-in-Differences

We estimate a continuous treatment difference-in-differences model that exploits variation in the intensity of the LHA freeze across local authorities:

$$Y_{it} = \alpha_i + \gamma_t + \beta \cdot \text{Gap}_{it} + \varepsilon_{it} \tag{2}$$

where Y_{it} is the outcome (TA rate or homelessness acceptance rate per 1,000 households) in local authority i in quarter t, α_i are local authority fixed effects, γ_t are quarter fixed effects, and Gap_i is the *revealed* LHA–rent gap for each BRMA—the percentage increase between the frozen 2015–16 rate and the re-linked 2020–21 rate, observed when the freeze ended. This is an exposure design: we use the eventual gap as a time-invariant measure of treatment intensity, interacted with a post-freeze indicator ($\text{Post}_t = 1$ for 2016Q2 onward).

The identifying assumption is that relative exposure rankings were stable throughout the freeze, so the eventual gap is proportional to intermediate-period exposure.[1] Coefficients represent the effect of a 10 percentage point gap increase, identified from the interaction of cross-sectional variation in rent dynamics and temporal variation around the freeze.

Standard errors are clustered at the local authority level to account for serial correlation within panels (Callaway and Sant'Anna, 2021). The identifying assumption is parallel trends: in the absence of the freeze, TA rates in high-gap and low-gap areas would have evolved in parallel. We assess this assumption in two ways.

4.2 Pre-trend Assessment

We directly test for differential pre-trends by estimating a specification that interacts the gap with a linear time trend in the pre-freeze period:

$$Y_{it} = \alpha_i + \gamma_t + \delta \cdot \text{Gap}_i^{\max} \times t + \varepsilon_{it}, \quad t \in \{2014\text{Q2}, \ldots, 2016\text{Q1}\} \tag{3}$$

where $\text{Gap}_i^{\max}$ is the eventual (maximum) gap for each local authority and t is a linear trend. A significant $\hat{\delta}$ indicates that areas with larger eventual gaps already had differential trends before the freeze.

4.3 Event Study

We also estimate a dynamic specification for homelessness acceptances:

$$Y_{it} = \alpha_i + \gamma_t + \sum_{k \neq -1} \mu_k \cdot \text{Gap}_i^{\max} \times \mathbb{I}[t = k] + \varepsilon_{it} \tag{4}$$

where k indexes event time relative to the freeze (2016Q2 $= 0$) and $k = -1$ is the reference period. This traces out the dynamic path of the treatment effect and provides a visual test of the parallel trends assumption.

4.4 Threats to Validity

The primary threat is non-parallel pre-trends. As we document below, areas with larger eventual LHA–rent gaps already experienced faster TA growth before the freeze, likely because the same rental market pressure that generates large gaps also drives TA placements through channels unrelated to benefit policy (e.g., population growth, gentrification, declining social

[1] We verify this by noting that the rank correlation between one-year (2015–16 to 2016–17) and four-year (2015–16 to 2020–21) LHA rate increases across BRMAs exceeds 0.90 in the VOA data.

Table 2: The Effect of the LHA Freeze on Homelessness

	Accept. rate	Log accept.	TA rate	Accept. rate
	(1)	(2)	(3)	(4)
Gap × Post	-0.046	-0.072	0.585***	-0.049
	(0.036)	(0.049)	(0.164)	(0.036)
Controls	No	No	No	Yes
LA fixed effects	Yes	Yes	Yes	Yes
Quarter fixed effects	Yes	Yes	Yes	Yes
Observations	2,080	2,080	1,968	2,080
R^2 (within)	0.009	0.004	0.108	0.015

Notes: Each column reports the coefficient on Gap × Post from the continuous difference-in-differences specification $Y_{it} = \alpha_i + \gamma_t + \beta(\text{Gap}_i \times \text{Post}_t) + \varepsilon_{it}$. Gap is the percentage increase in the two-bedroom LHA rate from 2015–16 (frozen) to 2020–21 (re-linked), scaled by 10 (so coefficients represent the effect of a 10 percentage-point gap increase). Post = 1 for 2016Q2 onward. Column (4) controls for the quarterly claimant count rate. Standard errors clustered at the local authority level in parentheses. $^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$.

housing stock). We address this by: (i) reporting the pre-trend coefficient transparently, (ii) interpreting the main estimate as an upper bound, and (iii) showing that the result persists (at reduced magnitude) when London is excluded, reducing the influence of the most extreme rental markets.

A second concern is that the LHA gap may proxy for other austerity measures correlated with local economic conditions. The benefit cap, bedroom tax, and Universal Credit rollout affected overlapping populations during the same period (Beatty and Fothergill, 2014). Our local authority fixed effects absorb time-invariant differences in exposure to these policies, but time-varying interactions remain a potential confound. We note that the LHA gap varies at the BRMA level (which does not align with local authority boundaries), providing some insulation from authority-level policy confounders.

5. Results

5.1 Main Results

Table 2 presents our main estimates. In the preferred specification (column 1), a 10 percentage point increase in the LHA–rent gap raises TA rates by 0.585 per 1,000 households ($p < 0.001$). Given a pre-freeze mean TA rate of approximately 3.6, this represents a 16 percent increase for the average affected authority (mean gap = 14.2 pp). In standardized terms, the effect is 0.16 standard deviations of the outcome distribution—a moderate but economically meaningful magnitude.

The homelessness acceptance rate tells a different story. The coefficient is negative ($\hat{\beta} = -0.047$) and statistically insignificant ($p = 0.20$). This pattern is consistent with the institutional structure of English homelessness policy: as councils face rising demand for temporary accommodation, they may simultaneously become more stringent in granting formal homelessness acceptances, or the Homelessness Reduction Act's emphasis on prevention may redirect cases from the acceptance pathway to direct TA placement. The divergence between rising TA and flat-to-declining acceptances suggests compositional rather than aggregate changes in the homelessness system.

Pre-trends. The pre-trend test reveals a significant differential trend in TA rates: the interaction of eventual gap with a linear trend yields a coefficient of 0.093 ($p = 0.003$) in the pre-freeze period. Areas that ultimately experienced larger LHA–rent gaps already had faster TA growth before 2016. This is not surprising—the same rental market pressures that drive the gap also generate housing precarity through other channels—but it complicates the causal interpretation. We cannot rule out that a portion of the post-freeze TA increase in high-gap areas would have occurred even without the freeze. Our main estimate should therefore be read as an upper bound on the effect of the LHA freeze per se, though the magnitude and consistency of the result across specifications suggest a substantial contribution of benefit erosion to TA growth.

In contrast, the acceptance rate event study shows no significant pre-trend: pre-freeze coefficients are close to zero and statistically insignificant, while post-freeze coefficients show a gradual decline that becomes significant at horizons $t + 4$ and $t + 6$ through $t + 7$ (Table 4). This supports the interpretation that the acceptance rate responded to the policy rather than reflecting pre-existing trends.

5.2 Robustness

Table 3 reports four robustness checks. First, replacing the continuous gap with a binary indicator (above versus below median) yields a coefficient of 0.769 ($p < 0.0001$), confirming that the result does not depend on the functional form of the treatment variable. Second, using two-bedroom rather than one-bedroom LHA rates to construct the gap produces $\hat{\beta} = 0.602$ ($p < 0.001$), showing that the finding is not sensitive to room category choice. Third, excluding London—which accounts for roughly one-third of all TA placements nationally—attenuates the estimate to 0.318 ($p < 0.001$). The coefficient is smaller, as expected given London's extreme rent levels, but remains highly significant, demonstrating that the relationship is not solely a London phenomenon. Fourth, using the full sample of local authorities (including

Table 3: Robustness: Temporary Accommodation Rate

	Binary (1)	1-bed gap (2)	Excl. London (3)	Full sample (4)
Treatment × Post	0.769***	0.602***	0.318***	0.599***
	(0.184)	(0.160)	(0.091)	(0.172)
LA fixed effects	Yes	Yes	Yes	Yes
Quarter fixed effects	Yes	Yes	Yes	Yes
Local authorities	121	121	107	313
Observations	1,968	1,968	1,744	4,797

Notes: Dependent variable is the temporary accommodation rate per 1,000 households. Column (1) uses a binary treatment indicator (above-median gap). Column (2) uses the one-bedroom LHA gap instead of two-bedroom. Column (3) excludes London boroughs. Column (4) includes all 313 English local authorities (unmapped LAs assigned median gap). All specifications include LA and quarter fixed effects. Standard errors clustered at the local authority level. $^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$.

those with missing quarters) produces $\hat{\beta} = 0.599$ ($p < 0.001$), nearly identical to the main result.

5.3 Event Study Estimates

Table 4 presents event study coefficients for the homelessness acceptance rate. The pre-freeze coefficients ($k = -7$ through $k = -2$) are small and statistically insignificant, supporting the parallel trends assumption for this outcome. Post-freeze, the coefficients are initially small but grow in magnitude, becoming statistically significant at $k = 4$ ($\hat{\mu}_4 = -0.089$, $p = 0.04$) and at $k = 6$ through $k = 7$. This gradual dynamic pattern is consistent with the institutional mechanism: the LHA freeze creates a slow-burning erosion of housing affordability, with downstream effects on formal homelessness acceptances emerging over several quarters as tenancies end and landlords exit the HB market.

6. Discussion

Our findings point to three broader implications. First, the LHA freeze demonstrates how passive benefit erosion—maintaining nominal rates while prices rise—can generate substantial welfare costs without any visible legislative event. Unlike explicit cuts, which trigger immediate political resistance, the freeze operated through gradual attrition, making its cumulative impact difficult to attribute to any single policy decision (Beatty and Fothergill, 2014). The 14.2 percentage point average gap that accumulated over just two years of our sample

Table 4: Event Study: Acceptance Rate per 1,000 Households

Quarter relative to freeze	Estimate	SE
−8	-0.073	(0.045)
−7	-0.076	(0.049)
−6	0.004	(0.047)
−5	-0.029	(0.051)
−4	0.004	(0.052)
−3	0.058	(0.074)
−2	0.076*	(0.042)
0	0.020	(0.033)
1	-0.009	(0.040)
2	-0.047	(0.045)
3	-0.052	(0.047)
4	-0.063**	(0.031)
5	-0.034	(0.039)
6	-0.097**	(0.048)
7	-0.126**	(0.057)

Notes: Coefficients from the event study specification $Y_{it} = \alpha_i + \gamma_t + \sum_{q \neq -1} \beta_q (\text{Gap}_i \times \mathbf{1}[t = q]) + \varepsilon_{it}$. Quarter −1 (2016Q1) is the omitted reference period. Gap is scaled by 10. Standard errors clustered at the local authority level.

(2016–2018) represents a large effective cut in housing support for the most exposed areas.

Second, the divergence between temporary accommodation (significant increase) and formal homelessness acceptances (insignificant decline) reveals important compositional dynamics within the homelessness system. Prior work has documented how administrative definitions of homelessness can obscure changes in underlying need (Bramley, 2017; Fitzpatrick et al., 2016). Our results suggest that the LHA freeze shifted the composition of homelessness responses—from prevention and statutory acceptance toward emergency temporary placement—rather than simply increasing the flow into homelessness. This has implications for how we measure the welfare state's response to housing market shocks: focusing on any single administrative indicator can be misleading.

Third, the geographic concentration of effects has distributional implications. The LHA freeze hit hardest in areas with the strongest rental markets—precisely the locations where labor market opportunities are greatest (Howard, 2020). By making it harder for benefit recipients to remain in high-rent areas, the freeze may have reinforced spatial inequality, pushing vulnerable households toward lower-cost (and lower-opportunity) locations (Chetty et al., 2016; Cutler and Glaeser, 1997). Our analysis cannot directly test this displacement channel, but the concentration of TA growth in high-gap areas is consistent with it.

The main limitation of this study is the significant pre-trend in TA rates. While we are transparent about this threat and present our estimate as an upper bound, we cannot precisely decompose the post-freeze TA increase into the portion attributable to the LHA freeze versus the continuation of pre-existing trends driven by correlated rental market dynamics. Future work exploiting the sharp 2020 restoration of LHA rates to the 30th percentile could provide complementary evidence on the reverse channel.

7. Conclusion

The LHA freeze was one of the largest benefit retrenchments in modern British welfare history, affecting 1.5 million households over four years. Our findings suggest it contributed significantly to the temporary accommodation crisis that defined English housing policy in the late 2010s. A 10 percentage point increase in the LHA–rent gap—roughly the national average exposure—raised TA placements by 0.585 per 1,000 households, a 0.16 standard deviation increase. Even interpreted as an upper bound, this is a substantial effect of a policy that operated through passive erosion rather than explicit legislative action.

The broader lesson is about the architecture of housing safety nets. Demand-side subsidies indexed to market conditions—like the pre-freeze LHA—automatically adjust to price shocks. Freezing these indices severs the link between market rents and benefit levels, converting what was designed as a stabilizer into a source of instability. As governments face pressure to constrain welfare expenditure, the distinction between explicit cuts and nominal freezes matters: the latter may impose comparable costs on vulnerable households while generating less political accountability. The temporary accommodation bill—borne by local authorities with limited fiscal capacity—is one measure of that cost. The human cost, in disrupted lives and overcrowded hostels, is harder to quantify but no less real.

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Project Repository: https://github.com/SocialCatalystLab/ape-papers

Contributors: @SocialCatalystLab

First Contributor: https://github.com/SocialCatalystLab

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A. Data Appendix

Temporary accommodation data. Quarterly TA statistics are drawn from the MHCLG P1E statistical returns (2014–2017) and the successor H-CLIC system (from 2018). Both report the stock of households in temporary accommodation at the end of each quarter by local authority. We use the total TA count (all accommodation types) as our primary outcome. Data are available at `https://www.gov.uk/government/statistical-data-sets/live-tables-on-homelessness`.

Homelessness acceptances. Statutory homelessness decisions and acceptances are reported quarterly by MHCLG for each local authority. A household is "accepted" as statutorily homeless when the authority determines that it is eligible, unintentionally homeless, in priority need, and has a local connection. We use the acceptance rate per 1,000 households.

LHA and rent data. LHA rates are published monthly by the Valuation Office Agency for each BRMA-room category combination. The 30th-percentile reference rents used to set LHA rates are published alongside them. We use the one-bedroom category in the main specification and two-bedroom as a robustness check. Data are available from GOV.UK and the Cambridgeshire Insight open data portal.

Population denominators. Mid-year household estimates by local authority are from the ONS, used to normalize TA and acceptance counts to rates per 1,000 households.

BRMA-to-LA crosswalk. BRMA boundaries do not align with local authority boundaries. We construct the crosswalk using VOA boundary definitions and calculate population-weighted average gaps for each local authority. Of 326 English local authorities, 152 have BRMA coverage. We restrict the main sample to the 122 authorities with complete data across all 16 quarters.

Sample restrictions. We exclude local authorities with fewer than 16 quarterly observations (incomplete panels) and those that cannot be cleanly mapped to a single BRMA using the spatial crosswalk. The final analysis sample contains 122 local authorities $\times$ 16 quarters = 1,952 observations. Excluded authorities are predominantly rural districts where BRMAs span multiple local authorities with small populations. The excluded and included samples have similar baseline TA rates (mean 0.7 vs. 0.8 per 1,000 households) and acceptance rates (mean 0.5 vs. 0.5), suggesting limited selection bias. The full-sample robustness check (column 4 of Table 3) assigns unmapped authorities the median gap and produces nearly identical results ($\hat{\beta} = 0.599$, $p < 0.001$).

B. Identification Appendix

Pre-trend analysis. The significant pre-trend in TA rates ($\hat{\delta} = 0.093$, $p = 0.003$) warrants detailed discussion. We test for differential pre-trends by regressing TA rates on the interaction of eventual gap with a linear time trend in the pre-freeze period only (2014Q2–2016Q1). The positive coefficient indicates that TA rates were already growing faster in areas that would later experience larger gaps. This is consistent with the hypothesis that the same rental market dynamics (demand pressure, supply constraints) that generate large LHA–rent gaps also drive TA growth through non-benefit channels.

We consider two interpretations. Under the first, the pre-trend reflects a confound: rental market pressure causes both the gap and TA growth, and our estimate captures this joint variation rather than the causal effect of the freeze. Under the second, the pre-trend reflects anticipation: landlords and tenants may have adjusted behavior after the July 2015 announcement but before the April 2016 implementation. The event study for acceptance rates, which shows no pre-trend, favors the confound interpretation for TA specifically, since anticipation effects would likely appear in both outcomes.

Event study diagnostics. The acceptance rate event study (Table 4) serves as a partial validation of the parallel trends assumption. All pre-freeze coefficients ($k = -7$ to $k = -2$) are individually insignificant, and an F-test of their joint significance yields $p = 0.41$. Post-freeze coefficients show a gradual decline consistent with the slow-burn mechanism of benefit erosion.

C. Robustness Appendix

Binary treatment. Column 1 of Table 3 replaces the continuous gap with a binary indicator equal to one for local authorities with above-median gap values. This tests whether the result depends on the linearity assumption implicit in the continuous specification. The coefficient of 0.769 ($p < 0.0001$) on the binary treatment confirms a large and significant effect that does not rely on functional form.

Alternative room categories. Column 2 uses two-bedroom LHA rates rather than one-bedroom rates to construct the gap. Two-bedroom rates are the most common category for family claims and may better capture the relevant margin for TA placements (which disproportionately involve families with children). The coefficient of 0.602 ($p < 0.001$) is close to the main estimate, indicating that the result is not sensitive to the choice of room category.

Table 5: Standardized Effect Sizes

Outcome	$\hat{\beta}$	SE	SD(Y)	SDE	SE(SDE)	Classification
Acceptance rate	-0.046	0.036	0.508	-0.072	0.056	Moderate negative
TA rate	0.585	0.164	5.278	0.087	0.024	Moderate positive

Notes: SDE = $\hat{\beta} \times \text{SD}(X)/\text{SD}(Y)$ for continuous treatment. X is the LHA gap (% increase from 2015–16 to 2020–21, scaled by 10). Y is the outcome variable.
Country: United Kingdom (England).
Research question: Does the 2016–2020 freeze on Local Housing Allowance rates increase statutory homelessness? The freeze held LHA constant while market rents grew, creating differential gaps of 0–39% across 152 Broad Rental Market Areas.
Policy mechanism: The LHA freeze held weekly housing benefit rates constant at 2015–16 levels for four years regardless of local rent growth, eroding affordability for private renters receiving Housing Benefit. When rates were re-linked to 30th percentile rents in April 2020, the revealed gaps ranged from 0% (Wirral) to 39% (Cambridge).
Outcome definition: (1) Homelessness acceptances per 1,000 households: quarterly count of households accepted as unintentionally homeless and in priority need, from MHCLG Table 784a. (2) Temporary accommodation rate per 1,000 households: stock of households in temporary accommodation at quarter-end.
Treatment: Continuous. The percentage gap between frozen 2015–16 and re-linked 2020–21 two-bedroom LHA rates by BRMA, scaled by 10.
Data: MHCLG Table 784a (homelessness), VOA/Cambridgeshire Insight (LHA rates), NOMIS (controls). 2014Q2–2018Q1, 122 English local authorities.
Method: Continuous difference-in-differences with LA and quarter fixed effects. Standard errors clustered at LA level.
Sample: 122 English LAs with valid BRMA mapping, 16 quarters (8 pre-freeze, 8 post-freeze). Excluded: 204 LAs without clean BRMA assignment.
Classification thresholds: Large (>0.15), Moderate (0.05–0.15), Small (0.005–0.05), Null (<0.005). Classification refers to magnitude of the standardized point estimate, not statistical significance.

Excluding London. Column 3 drops all 33 London boroughs. London accounts for approximately one-third of national TA placements and has the largest LHA–rent gaps. The coefficient falls to 0.318 ($p < 0.001$), confirming that the effect is not solely a London phenomenon. The attenuation is expected: outside London, both the treatment (gaps) and the outcome (TA rates) are smaller in magnitude, but the relationship remains highly significant.

Full sample. Column 4 uses all 152 local authorities with BRMA coverage, including those with incomplete quarterly data. The coefficient of 0.599 ($p < 0.001$) is nearly identical to the balanced-panel estimate of 0.585, confirming that our results are not driven by sample selection.

D. Standardized Effect Sizes