Strategies for Fairer Council Tax in London

Introduction

Council tax is a critical source of revenue that local councils use to fund essential services such as adult social care, education, and waste management. In England, the amount of council tax is determined by the property's assigned band, which ranges from A (the lowest) to H (the highest). These bands were originally set based on property values assessed on April 1, 1991, by the Valuation Office Agency (VOA).

Despite its importance, the council tax system has faced increasing scrutiny over its fairness and responsiveness to current economic conditions. The financial challenges of local councils have been exacerbated by demographic changes, economic shifts, and dramatic housing price increases. These issues came to a head following the COVID-19 pandemic, which further strained local government finances and highlighted the need for fiscal reforms. The bankruptcy of Croydon Borough in 2023 underscored the severe challenges local councils can face and sparked widespread calls for a thorough reassessment of the council tax system.

This study aims to analyse council tax trends across various London boroughs, focusing on their temporal and geographical distributions. It evaluates the tax burden through a specifically developed index and compares boroughs within similar clusters to identify features that contribute to higher taxation. The study also assesses the adequacy of current tax bands in reflecting contemporary property values. By doing so, it seeks to develop informed recommendations that could make the council tax system fairer for all London residents, thereby enhancing the financial resilience of local governments.

Band	Value (relative to 1991 prices)	Ratio	Ratio as %	2023-2024 Council Tax (Camden)	2024-2025 Council Tax (Camden)
A	Up to £40,000	6/9	67%	1,267	1,341
B	£40,001 to £52,000	7/9	78%	1,478	1,564
C	£52,001 to £68,000	8/9	89%	1,689	1,787
D	£68,001 to £88,000	9/9	100%	1,900	2,011
E	£88,001 to £120,000	11/9	122%	2,323	2,458
F	£120,001 to £160,000	13/9	144%	2,745	2,905
G	£160,001 to £320,000	15/9	167%	3,167	3,351
H	£320,001 and above	18/9	200%	3,801	4,022

Council Tax Bands and Ratios

Literature Review

Research consistently highlights the inherent unfairness in the current council tax valuation system, which relies on property assessments that are decades old. Murphy (2019) advocates for a valuation system based on current housing prices, asserting that the existing method is outdated. Furthermore, Leishman et al. (2014) argue for a tax system that considers an individual's ability to pay. Efforts to reform taxes generally aim to achieve three key outcomes: fairness among individuals, reduced house price volatility, and equitable distribution of tax burdens. However, local governments, especially in boroughs lacking diverse revenue sources, face increasing challenges exacerbated by substantial reductions in central government funding post-COVID-19. The Institute for Fiscal Studies (IFS) reports a significant funding shortfall, with London boroughs experiencing a 17% deficit per capita. In an international context, the fiscal autonomy of UK local

authorities is notably restricted. The OECD reports that in 2018, only 7% of UK taxes were collected locally, significantly lower than in other G7 nations such as Italy (12%), Germany (32%), and Canada (nearly 50%) (Atkins and Hoddinott, 2020). This limited autonomy impairs the ability of local governments to effectively deliver services and respond to community needs. Proposals like the Mansion Tax, suggested by the Labour and Liberal Democrats, aim to tap into higher-value properties to increase revenue but have yet to address foundational problems with the Council Tax system (Atkins and Hoddinott, 2020).

This research aims to update council tax bands to more accurately reflect current housing prices and include income in the tax assessment process, addressing operational pressures on local governments. Understanding the temporal and geographical variations in council tax across London boroughs, and proposing long-term solutions to address these disparities, are vital to ensuring fairness and enhancing the financial resilience of local administrations.

Analysis Plan

1. **Data Collection**
   Datasets encompassing various borough profiles—including demographic, economic, employment, housing, education, health, crime, and public infrastructure, along with geographical boundaries—were sourced from GOV.UK, the Urban Big Data Center, the London Database, and the Office of National Statistics. To enrich these datasets, web scraping techniques were used to gather additional data on council tax amounts from GOV.UK. Furthermore, information regarding council tax rates and the number of properties across different boroughs was also included.
2. **Data Wrangling**
   Information on London boroughs was compiled into a primary dataset for 2022, the year with the most complete data. Additionally, two datasets were developed to track changes from 2010 to 2022: one for the ratio of council tax to average housing prices, and another for the ratio of council tax to average income. Missing values (NAs) were filled based on set conditions, and data types were standardized across all datasets to support subsequent analysis.
3. **Descriptive Statistic and Visualisation**
   This stage focuses on exploring and visualizing the relationships between council tax and various socio-economic indicators across London boroughs. The objectives are as follows:
   a. Relationship Between Council Tax and Current Housing Prices
   b. Distribution of Council Tax by Borough
   c. Proportion of Council Tax Bands by Borough
   d. Fairness of Council Tax
      Assess the fairness of council tax using two specific evaluation methods:
      • The ratio of Council Tax to Average Housing Price (2010-2024)
      • The ratio of Council Tax to Average Income (2010-2021)
      • Fairness Index: This index is derived from the above ratios to identify areas that require more attention.
      These assessments will be further categorized into:
      i. Temporal Trends in Fairness
         The analysis was structured by grouping the years into five-year intervals. Specifically, the period from 2020 to 2022 was analys
      ii. ed to capture the impact of the pandemic, with an extension into 2023 where data is available.
      iii. Geographical Distribution of Fairness

4. **Correlation Matrix**
   Initial analysis assessed the correlation between council tax and socio-economic features across different boroughs. Features with correlation coefficients exceeding 0.5 or falling below -0.5 were selected as potential candidates for further analysis.

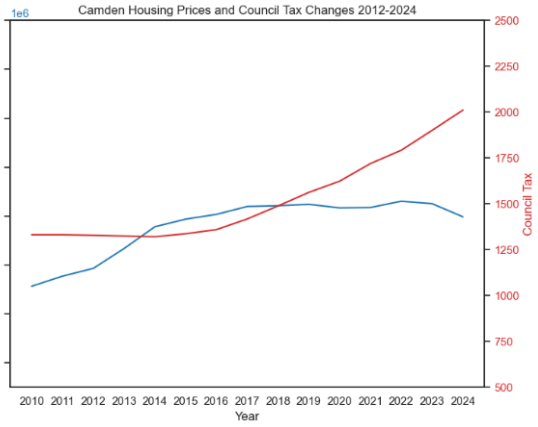
5. **Clustering**
   Hierarchical(Dendrogram) and K-means clustering were selected to analyse the small dataset (33 rows and 34 columns). To tackle multicollinearity, the correlation matrix for the selected features was recalculated to identify high correlations, with coefficients above 0.8 or below -0.8. Multicollinearity severity was assessed using the Variance Inflation Factor (VIF). If high VIF values indicated significant linear dependencies, Principal Component Analysis (PCA) was applied to reduce these dependencies and extract principal components that best represent the data structure, enhancing clustering analysis. After clustering completion, the cluster distributions were compared with council tax distributions to identify common patterns and factors influencing council tax variations.

Findings and Discussion

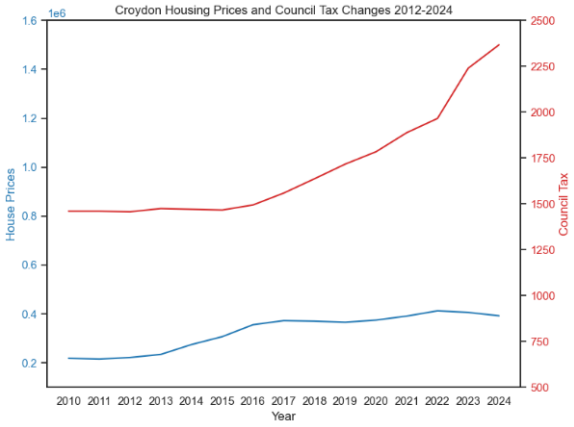
1. **Variation in Council Tax and Average Housing Prices Across Different Boroughs from 2010 to 2024**

   Across London boroughs, council tax has exhibited a consistent upward trend from 2010 to 2024, with the rate of increase accelerating in recent years. Interestingly, this rise in council tax does not

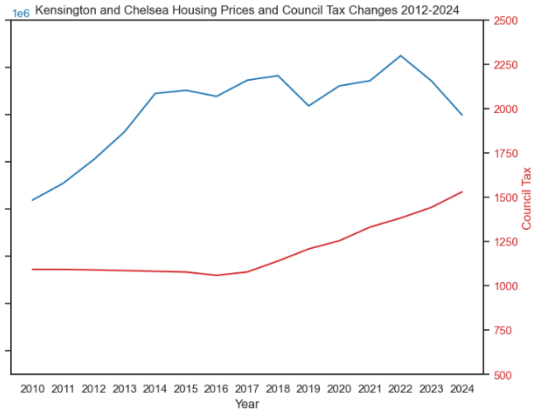
appear to be directly correlated with average housing prices.



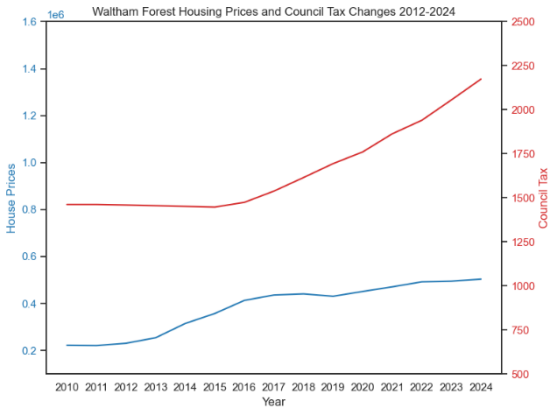
Camden Housing Prices and Council Tax Changes 2012-2024



Croydon Housing Prices and Council Tax Changes 2012-2024



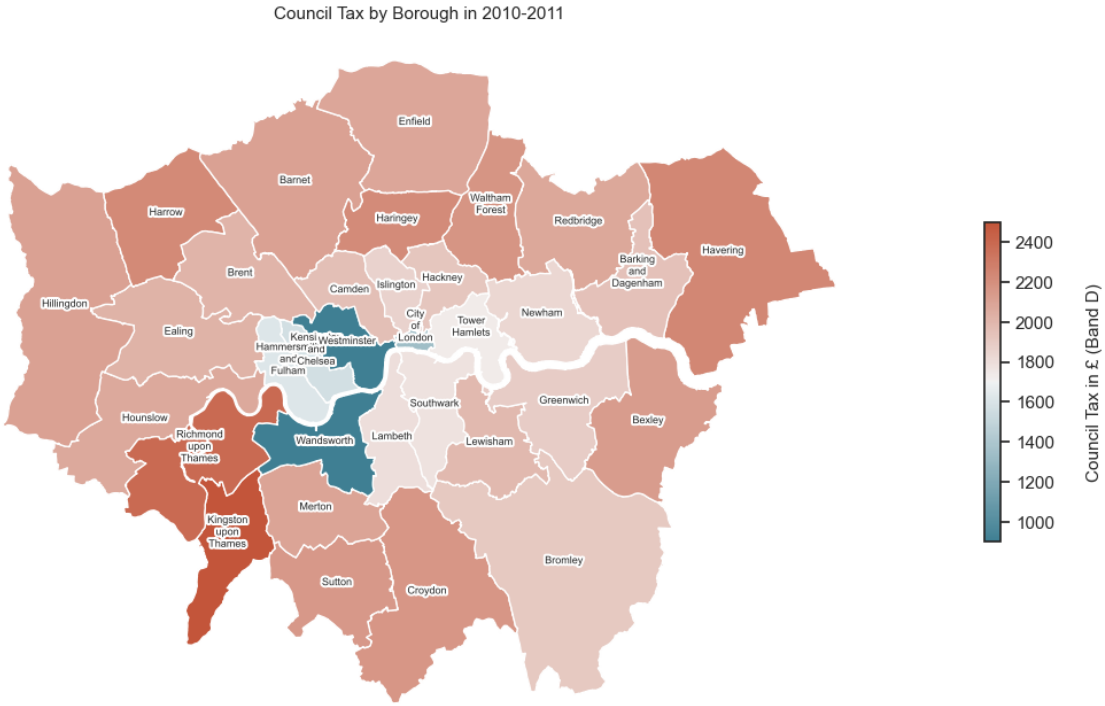
Kensington and Chelsea Housing Prices and Council Tax Changes 2012-2024

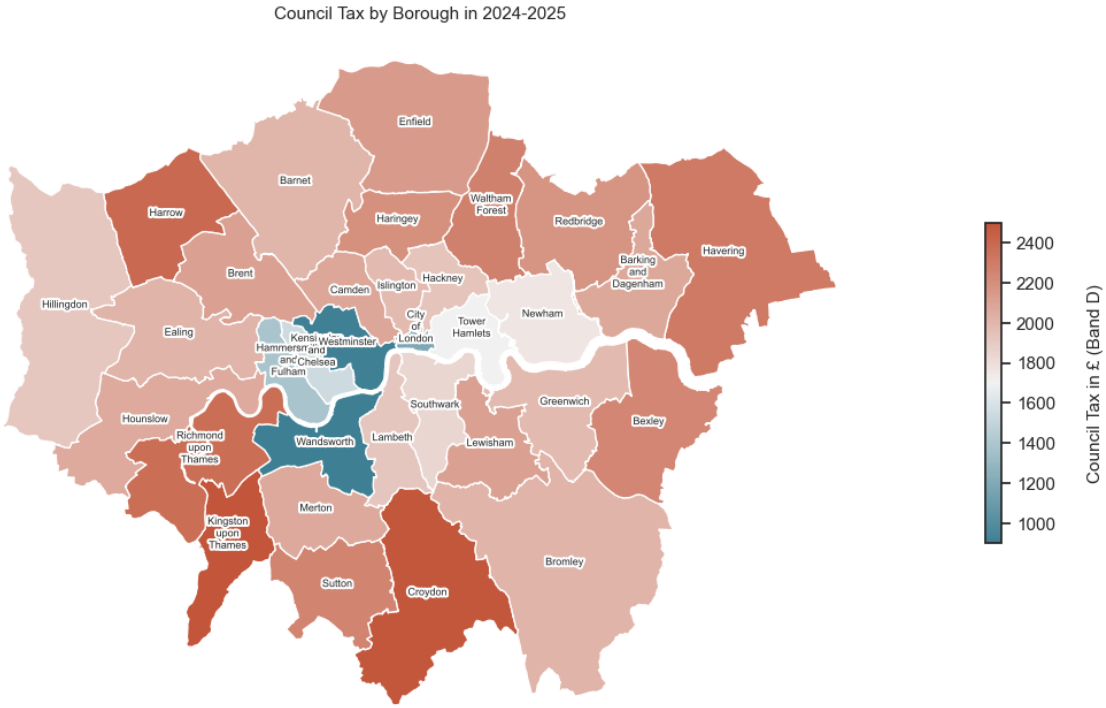


Waltham Housing Prices and Council Tax Changes 2012-2024

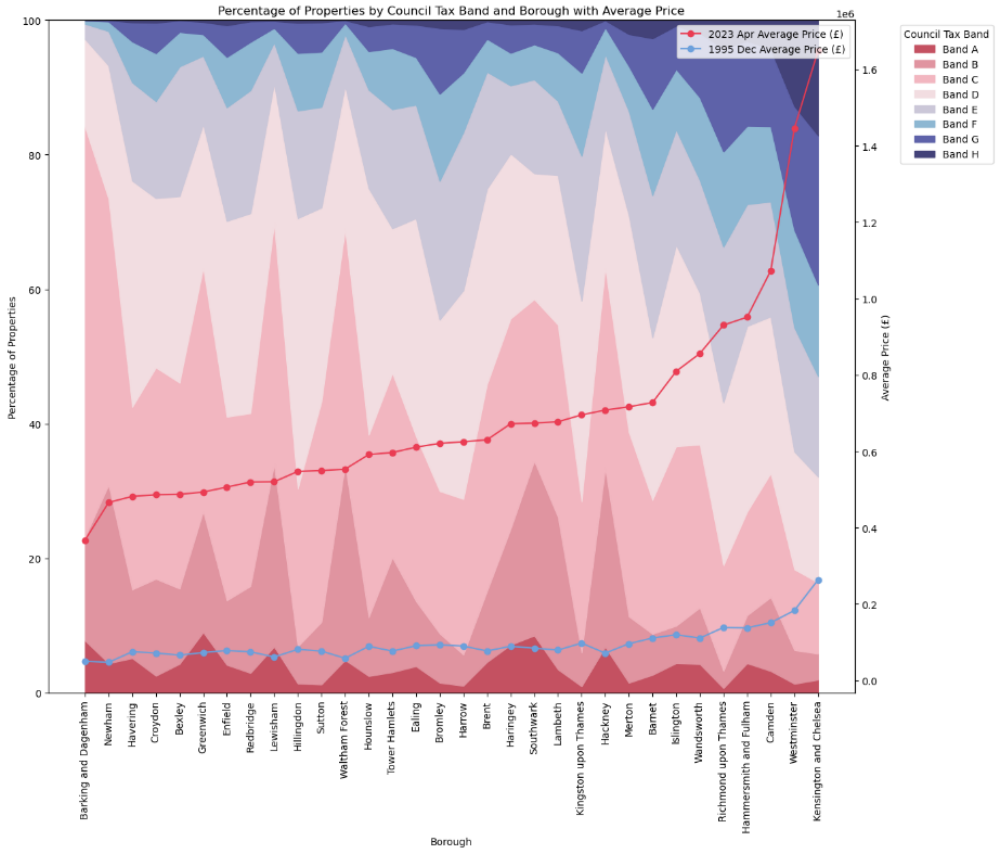
(Visualizations of council tax and housing price variations across boroughs can be found in the Jupyter notebooks.)

2. **Variation in Council Tax Across Different Boroughs from 2010 to 2024**
   The plots highlight distinct variations in Band D council tax rates across London boroughs from 2010 to 2024. Inner London boroughs, such as Westminster and Wandsworth, have maintained stable and relatively low rates. In contrast, outer London boroughs have seen more significant increases, a trend accentuated post-COVID-19 pandemic in 2022, with Croydon experiencing the sharpest rise. Throughout the period, Kingston upon Thames has consistently recorded the highest council tax rates among all boroughs. *(plots from 2010 to 2024 can be found in Jupyter Notebook)*



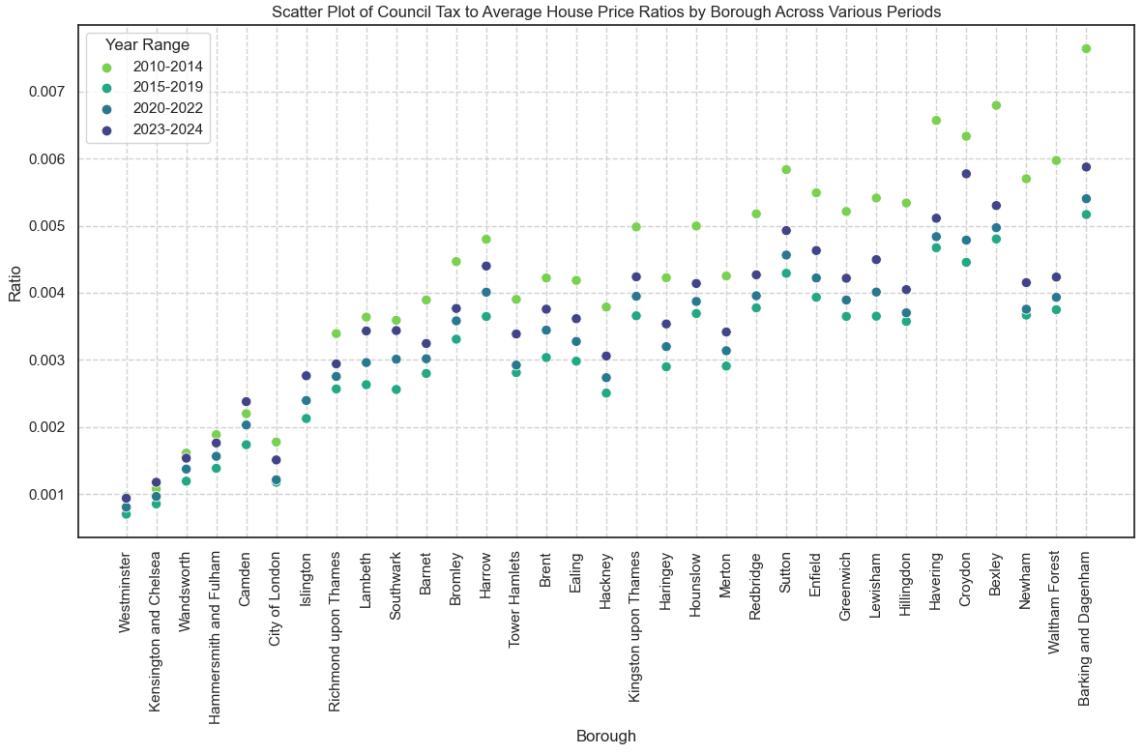


3. **Proportion of Council Tax Bands by Borough**
   The proportion of council tax bands in each borough generally corresponds to the average housing prices.

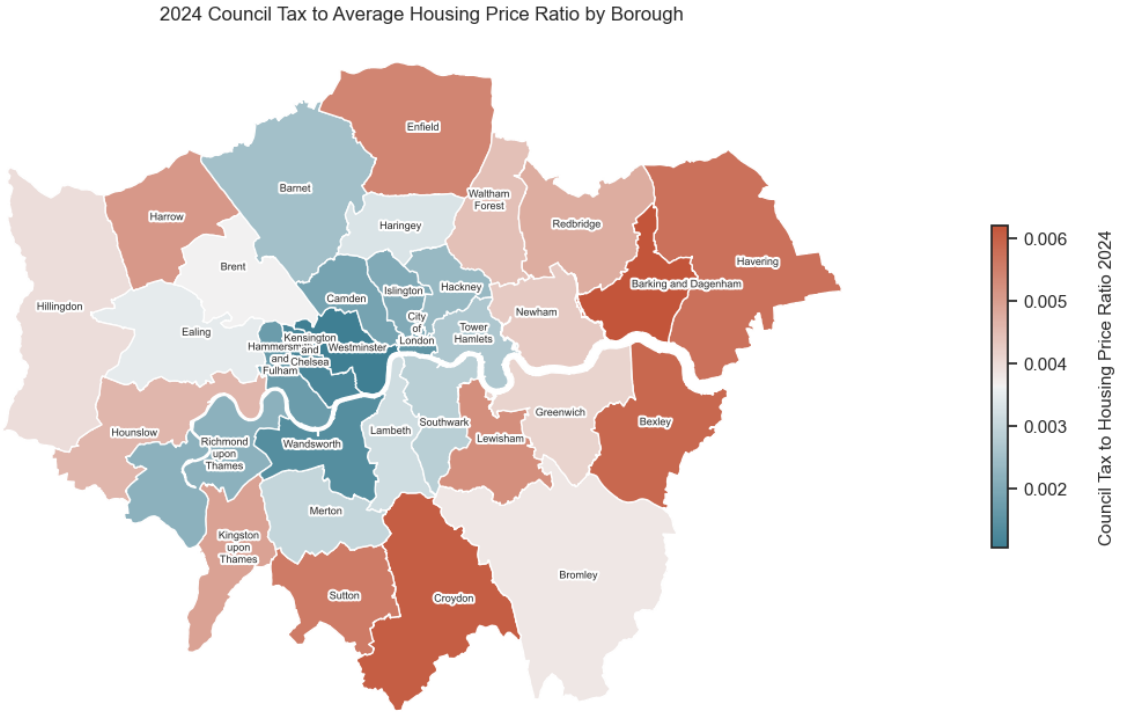


4. **Fairness of Council Tax**

   a. Ratio of Council Tax to average housing price (2010-2024)

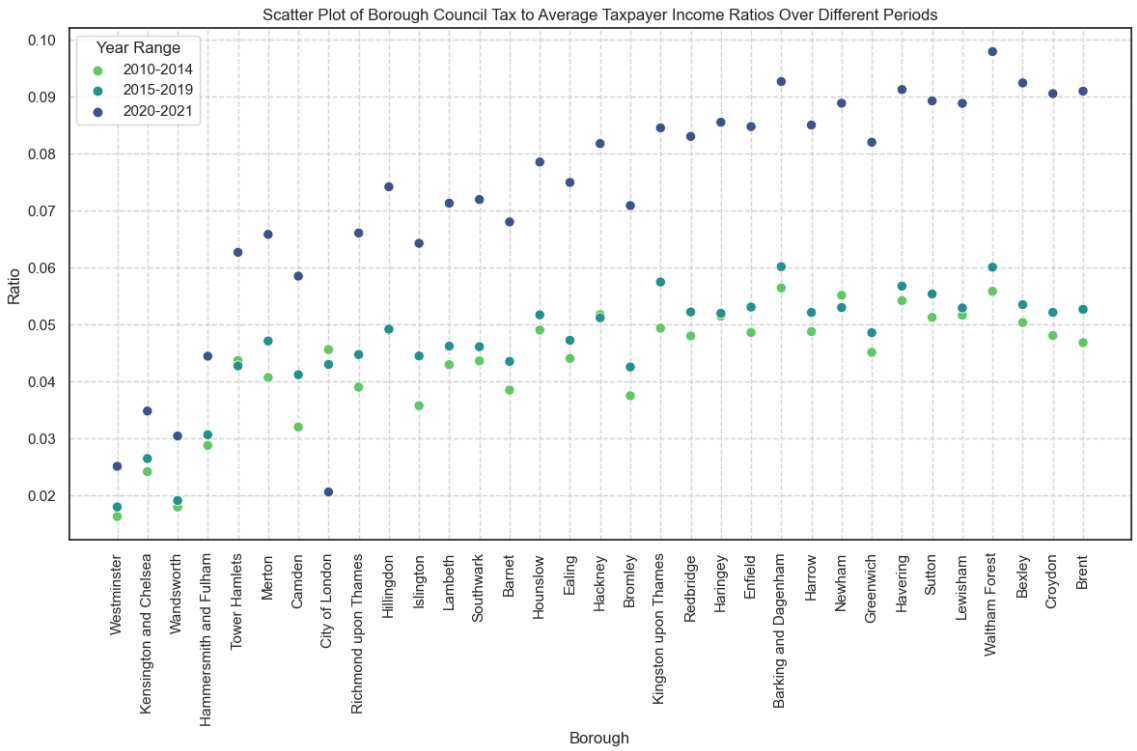


The boroughs are ordered by the standard deviation. A higher ratio indicated a greater financial burden on residents. Overall, compared to the period from 2010-2014, the burden of council tax has decreased, partly due to subsidies from local governments during the pandemic period (2020-2022). In terms of individual boroughs, Westminster and Kensington & Chelsea showed stability in the ratios, while Barking and Dagenham, and Waltham Forest experienced significant changes in the ratios.

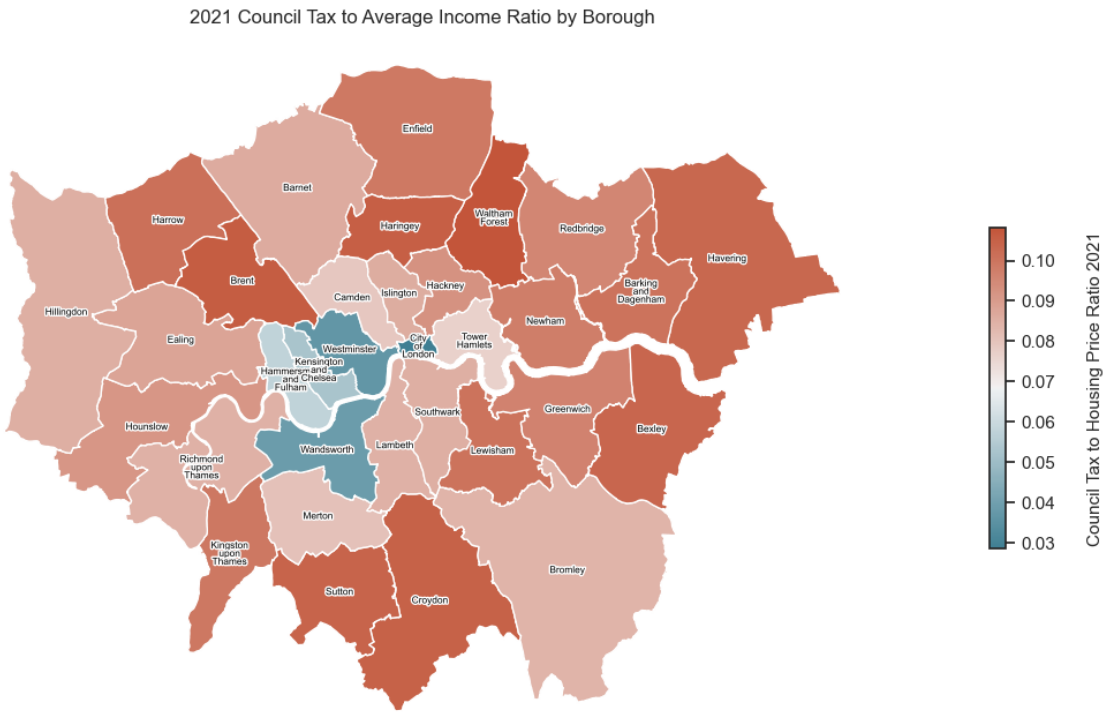


Boroughs have much burden located at outer London and mostly in east side

b. **Ratio of Council Tax to average taxpayer income (2010-2021)**

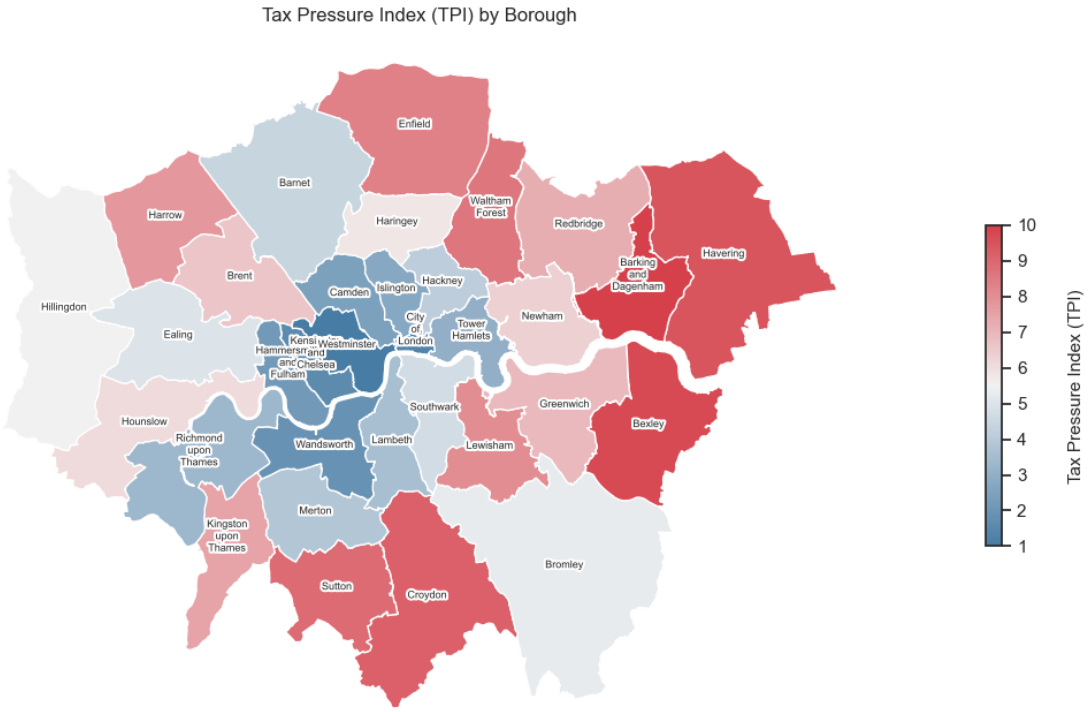


The boroughs are organized by the standard deviation. Overall, the tax burden has been increasing annually. In 2021, council tax in Waltham Forest accounted for 0.1% of the average income, which is five times higher than in the City of London. Although areas with higher incomes should ostensibly pay more tax, the plots demonstrate that this is not consistently the case.



Boroughs in outer London face a heavier tax burden, while the city center of London bears the least.

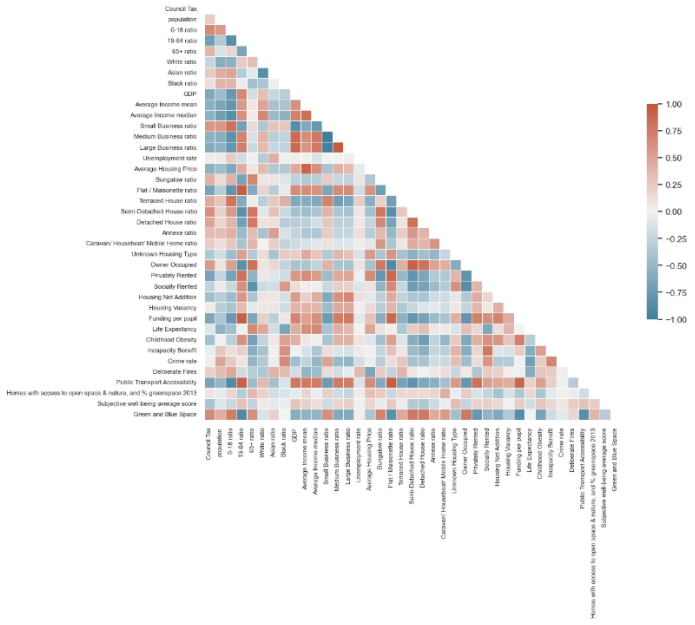
c. Tax Pressure Index



From the map, it is evident that wealthier areas like Central London experience the lowest tax burdens. Conversely, poorer boroughs such as Barking and Dagenham, Bexley, and Havering—located on the eastern side of London—bear the heaviest burdens. These areas should be considered for improvements in tax burden ratios to address disparities.

5. **Corelation with Council Tax**

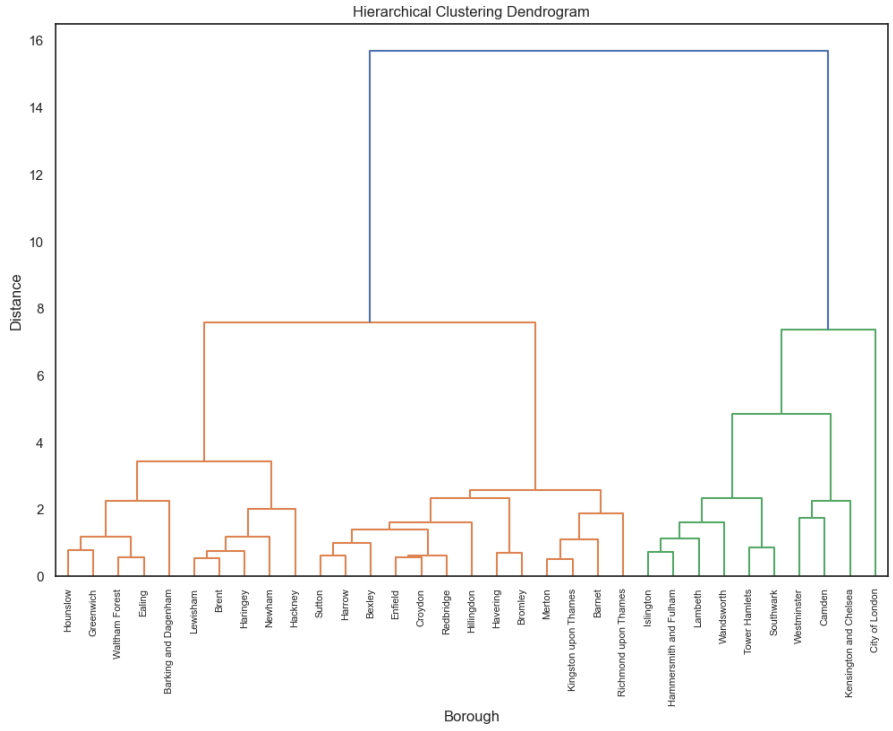
Features such as the ratios of ages 0-18 and 19-64, green and blue space, owner-occupied properties, average housing prices, large business ratio, and the proportion of flats/maisonettes demonstrate strong correlations with council tax.

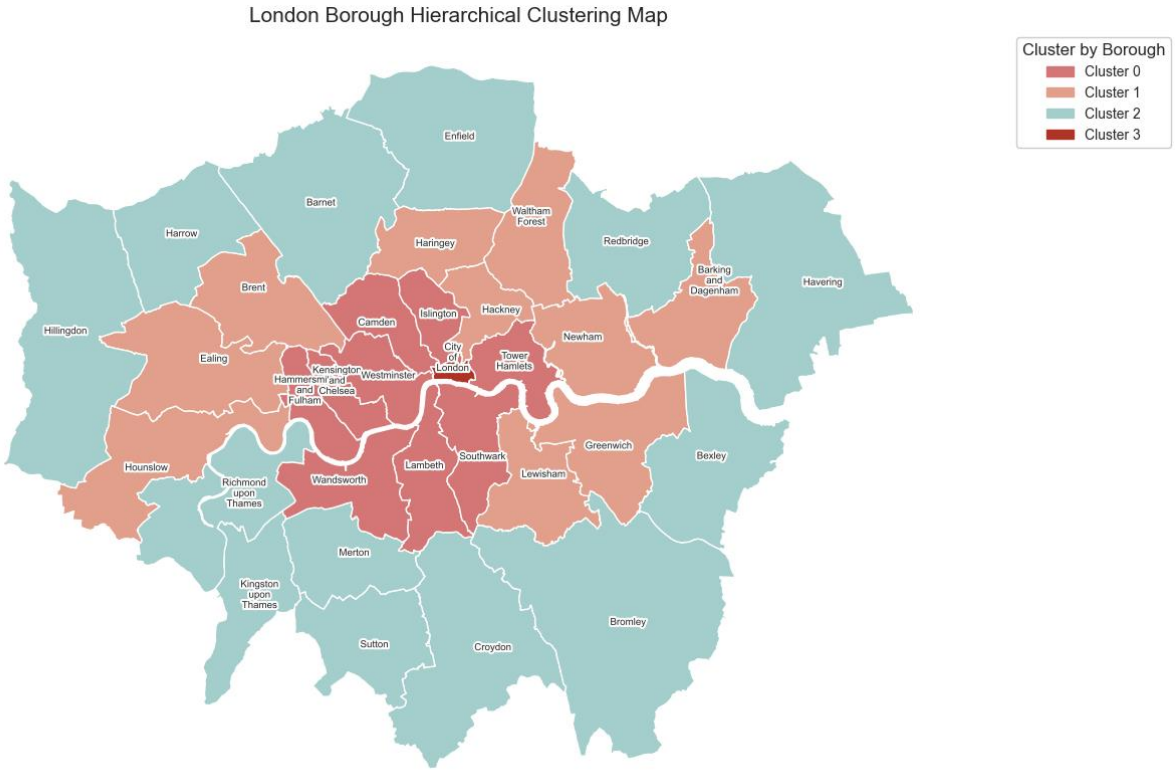


The correlation matrix between borough features and council tax can be found in the Jupyter Notebook.

6. **Clustering**

The hierarchical and K-means clustering methods show similar results.





Feature	Cluster 0	Cluster 1	Cluster 2	Cluster 3
0-18 Ratio	Low (18%)	Medium (23.9%)	High (24.2%)	Very Low (6.4%)
19-64 Ratio	High (71.8%)	Medium (65.9%)	Low (60.7%)	Very High (81.6%)
Green and Blue Space	Low (37.29%)	Medium (44.87%)	High (57.72%)	Very Low (13.31%)
Owner Occupied	Low (35.04%)	Medium (44.37%)	High (64.30%)	Medium (42.74%)	
Average Housing Price	High (£970,365)	Medium (£561,365)	High (£607,342)	High (£811,032)
Large Business Ratio	High (0.56%)	Low (0.23%)	Low (0.26%)	Very High (1.64%)
Flat/Maisonette Ratio	Very High (81.0%)	High (55.91%)	Low (37.37%)	Very High (98.37%)
Boroughs	Camden(3.2), Hammersmith and Fulham(2), Islington, Kensington and Chelsea(1.4), Lambeth, Southwark, Tower Hamlets, Wandsworth, Westminster(1)	Barking and Dagenham(10), Brent, Ealing, Greenwich, Hackney, Haringey, Hounslow, Lewisham, Newham, Waltham Forest	Barnet, Bexley(9.3), Bromley, Croydon(9.1), Enfield, Harrow, Havering(9.1), Hillingdon, Kingston upon Thames, Merton, Redbridge, Richmond upon Thames, Sutton(8.6)	City of London(1.1)

Based on the borough profiles, the 33 boroughs were categorized into four clusters, each with distinct characteristics. **Cluster 3**, representing the City of London, is distinguished by its thriving business sector and a demographic profile dominated by working adults, with fewer children. The area mainly comprises flats and has limited green and blue space. **Cluster 0** is characterized by high business activity and the highest housing prices among all clusters. It has the lowest proportion of owner-occupied housing, with most residents renting their homes. **Clusters 1** and **2** are similar, with a higher proportion of families indicated by a larger 0-18 age group. Both have less commercial activity and abundant green and blue spaces. The key difference is property ownership, with Cluster 2 residents more likely to own their homes compared to Cluster 1 residents who tend to rent.

Compared to the Tax Pressure Index (TPI), the boroughs with the highest tax burdens are mainly in **Cluster 2**, possibly due to extensive green and blue spaces and a higher percentage of children, leading to increased spending on education and caring services. In contrast, boroughs with the least tax burden are in **Clusters 0** and **3**. These clusters have thriving business sectors and a higher proportion of working-age residents, generating more local authority revenue. Additionally, the limited green and blue spaces in the City of London (**Cluster 3**) require less maintenance budget.

Conclusion and Recommendations

Although council tax is currently calculated based on property values from 1991, our analysis has revealed that numerous factors influence it, highlighting significant concerns regarding equity, especially as poorer areas face disproportionately higher tax burdens. The existing council tax system does not reflect the modern economic landscape or the real needs of local authorities. To address these disparities and enhance fairness, the following steps are recommended:

1. **Annual Borough Profile Review**

Given the available data, we should annually identify the specific characteristics of each borough. By understanding the similarities and differences among grouped boroughs, we can assign each a borough-specific coefficient to achieve fairer taxation.

2. **Update Council Tax Valuation**
   The method for evaluating council tax should be aligned with the calculation used for business rates, which are based on up-to-date rateable values and revised more frequently. As of April 1, 2021, rateable values are assessed every five years, with plans to shift to a triennial review starting in 2023. This ensures that evaluations are current and reflective of prevailing market conditions.
3. **Reform Council Tax Bands**
   The existing council tax bands are outdated and exhibit a negative correlation with current housing prices, indicating a flawed system. Consider eliminating these bands, or directly linking council tax to updated housing values for simplicity and enhanced fairness
4. **Cross-Borough Collaboration with Equitable Distribution of Services**
   Some boroughs face higher tax burdens due to larger populations of children or the elderly. Instead of basing calculations solely on updated housing values, introducing a local coefficient to account for demographic variances could foster greater equity across boroughs.

Limitation

1. **Data Timeliness**: The Tax Pressure Index (TPI) relies on data from 2021, a period that may not accurately reflect typical fiscal conditions due to pandemic-related anomalies, including exceptional financial aid provided to local governments.
2. **Data Granularity**: The study targets borough-level data, which comprises only 33 data points. This small sample size limits the model's ability to reduce multicollinearity and achieve high accuracy.
3. **Council Tax Relief**: The analysis does not account for council tax relief measures, which could significantly alter the fiscal burden on residents and distort the perceived equity of the tax system.
4. **Regulatory Caps on Increases**: The legal regulation that caps council tax increases at below 5% annually means that the data might not fully capture the real demand for public services and the corresponding financial stress on local governments.
5. **Data Richness**: Incorporating a broader set of features could enhance the differentiation of boroughs, or potentially smaller areas such as MSOAs or LSOAs, ensuring a more comprehensive analysis.
6. **Real-World Implementation Challenges**: While the analysis employs several methods to highlight the inequities of council tax, real-world implementation encompasses more complex issues, such as political factors, which cannot be easily analysed or predicted with numerical data alone.

Reference

1. London Borough of Camden. (2024) *2024/25 Revenue Estimates and Council Tax Setting*. Cabinet Member for Finance and Cost of Living. Report submitted to Resources and Corporate Performance Scrutiny Committee, Cabinet, Council on 27th February, 28th February and 4th March.
2. Brokenshire, J. (2024) *Paying the right level of Council Tax: a plain English guide to Council Tax*. Updated 26 April 2024. Secretary of State for Housing, Communities and Local Government. [PDF] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/926688/Paying_the_Right_Level_of_Council_Tax.pdf (Accessed: 9 May 2024)
3. Murphy, L. (2019) *A Poor Tax: Reforming Council Tax in London*. Institute for Public Policy Research (IPPR).
4. Atkins, G. and Hoddinott, S. (2020) *Local government funding in England*. [Online] Available at: https://www.instituteforgovernment.org.uk/explainer/local-government-funding-england (Accessed: 12 May 2024).
5. Sewraz, R. (2017) *Where does your council tax money go?* Available at: https://www.which.co.uk/news/article/where-does-your-council-tax-money-go-aEruX1D3wl9C (Accessed: 12 May 2024).
6. Taxlab (2023) *Where does the government get its money?*. Available at: https://ifs.org.uk/taxlab/taxlab-key-questions/where-does-government-get-its-money (Accessed: 12 May 2024).
7. OECD (no date) *OECD Fiscal Decentralisation Database*. Available at: www.oecd.org/tax/federalism/fiscal-decentralisation-database/ (Accessed: 13 May 2024).
8. BBC News (2022) *Croydon Council declared bankrupt for third time*. Available at: https://www.bbc.co.uk/news/uk-england-london-63714274 (Accessed: 09 May 2024)
9. McVicker, M. (2023) *Commentary on the 2024-25 Provisional Local Government Finance Settlement*. 19 December. Available at: https://www.londoncouncils.gov.uk/members-area/member-briefings/local-government-finance/commentary-2024-25-provisional-local (Accessed: 10 May 2024).
10. Leishman, C. et al. (2014) *After the Council Tax: impacts of property tax reform on people, places and house prices*. Available at: https://www.jrf.org.uk/housing/after-the-council-tax-impacts-of-property-tax-reform-on-people-places-and-house-prices (Accessed: 11 May 2024).
11. WalesOnline (2024) 'Wales looks at replacing council tax with a "land tax"', *WalesOnline*, 14 May. Available at: https://www.walesonline.co.uk/news/wales-news/wales-looks-replacing-council-tax-28122005 (Accessed: 14 May 2024)
12. Forgrave, A. (2023). Wales looks at replacing council tax with a 'land tax'. *WalesOnline*. https://www.walesonline.co.uk/news/wales-news/wales-looks-replacing-council-tax-28122005 Available at: [insert URL here] (Accessed 11 May 2024)
13. GOV.UK, 2024. Business rates. [online] Available at: https://www.gov.uk/introduction-to-business-rates [Accessed 12 May 2024].