An evaluation of the relationships between construction developments and retail vacancy

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Project Background

Vacancy rate is considered to be a key indicator when assessing retail centre performance, yet very little literature has been produced evaluating the relationship between construction developments and retail vacancy. Suggestions have been made that developments in surrounding areas may impact the performance of a retail centre, yet no previous studies have undertaken quantitative analysis of this. An increase in the proportion of vacant retail units is generally linked to economic decline within an area, therefore establishing the factors that influence vacancy is valuable. This study explores this novel concept and attempts to establish the strength of the relationships present between data provided by Barbour ABI and the Local Data Company.

Data and Methods

The relationships between construction developments and retail vacancy within the area of Greater Manchester were assessed using multiple linear regression and geographically weighted regression. Fixed effects were included within the linear model to account for spatial heterogeneity. Four contrasting drive distance catchments were computed using road networks and retail centres and their performance evaluated across four different time-span groupings. From the options evaluated, it was determined that variable drive distance catchments relative to retail centre size best represented the data over the course of a bi-yearly twelve-month timespan. Four categories of construction developments were then evaluated in relation to Comparison, Convenience, Leisure and Service vacancy, alongside a variable that accounts for retail vacancy collectively. Model fit for both linear regression and geographically weighted regression was assessed throughout, in order to establish the strength of the relationships present.

Key Findings

The results obtained within this study are complex, allowing for generalisations to rarely be made across each of the variables and areas. Residential developments predominantly yield a positive relationship with reduction of retail vacancy, with Stockport being the only area to display a negative relationship. Results

from human amenity, industry and transport service developments vary considerably, emphasising that the relationship between construction developments and retail vacancy is not unanimous across time and space. The level of detail and complexity within the results of this study suggest that the relationship between construction developments and retail vacancy cannot be generalised to all areas, and should be considered on a case by case basis in future studies.
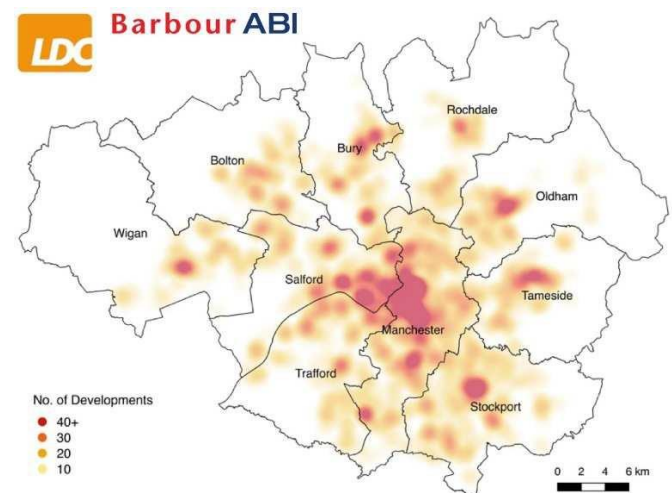

Figure 1. Construction developments between 2011 – 2017 within the area of Greater Manchester

Value of the Research

The exploration of this novel concept has given insight into an area that has received relatively little attention within previous literature, allowing for a better understanding of the factors that influence such a key element of retail health. Contrasting two datasets from inherently different sectors has allowed for relationships to be established that were not achievable before. This not only allows for better insight into the relationship between construction developments and retail vacancy, but also allows for a more pragmatic approach to be undertaken when assessing future developments.