JULY 2022

COVID-19 AND THE SPATIAL DISTRIBUTION OF BUSINESS CLOSURES

EVIDENCE FROM WEST YORKSHIRE

Dr Gissell Huaccha

Professor Jamie Morgan

Foreword

The impact of COVID-19 on customer behaviour was immediate and widespread across all industries and Regions in the UK. These unprecedented changes have put the future of towns and cities in question.

In this report, we examine the impact of COVID-19 on the spatial distribution of business closures in West Yorkshire. Using unique store level data, we furnish a comprehensive review of the change in trends in West Yorkshire major metropolitan districts and its core cities.

Retail, Hospitality, Entertainment and Leisure (RHEL) businesses are the lifeblood of every Town and City and the consumers they attract are the oxygen that enables towns and cities to exist, grow and thrive. There is a cadence — a rhythm — associated with how the RHEL businesses and cities interact with one other over time. With this cadence comes the news that in turn establish and sustain enduring relationships and drive value the wider economy.

Understanding the spatial distribution of RHEL business closures and openings in West Yorkshire allows policy led decisions to be made on how best to structure the future of West Yorkshire.

Authors

This report has been written by Dr Gissell Huaccha, and Professor Jamie Morgan. Gissell is a research fellow at Leeds University Business School, Economics department. Her research interests include macroeconomic theory and policy; banking and financial institutions; economic development; urban economics; and inequality.

Jamie Morgan is Professor of Economics at Leeds Beckett University. Jamie co-edits Real World Economics Review with Edward Fullbrook, and former coordinator of the Association for Heterodox Economists. Over the last decade, Jamie has published widely in the fields of economics, political economy, philosophy, sociology and international politics.

Contents

List of Figures

List of Tables


SHOP UNIT
TO LET
barkerproudlove
InLinkUK
BT
NHS
CORONAVIRUS
STAY HOME
PROTECT
THE NHS
SAVE LIVES
JOY

COVID-19 AND THE SPATIAL DISTRIBUTION OF STORE CLOSURES IN WEST YORKSHIRE

INTRODUCTION

A global pandemic was not unimaginable but Covid-19 still came as a surprise. The resultant deliberate widespread suppression of economic activity in pursuit of life-saving isolation is unprecedented in our lifetime. The UK has not experienced such severe restrictions on the freedom of its people since WWII.

While all sectors have been impacted some have been impacted more than others. Retail, Hospitality, Entertainment, and Leisure (RHEL)[1] are key sectors in this regard. As Figure 1 illustrates, beginning in March 2020, severe restrictions spread over more than a year. This report sets out the uneven spatial distribution of impacts on RHEL business closures in West Yorkshire.

The pandemic *may* be over as a public health crisis and central government has been quick to signal 'time to move on', but this does not absolve local government from a need to be aware of the pandemic's continued effects. Real economies evolve. They do not merely experience shocks and then simply revert to some abstract state of equilibrium.

Our concern is that the consequences of 'stay at home, save lives' may, if appropriate action is not taken, cost livelihoods. Equally, an understanding of spatial patterns may offer insight regarding future policy, and this has only become more important in the light of the current cost of living crisis.

We begin with three orienting points. First, the impact of Covid-19 on RHEL is a major

Figure 1: *Timeline of UK Covid-19 Restrictions*

[1] A detailed list of the categories included in this report is provided in appendix 4.

concern because RHEL is a significant component in the West Yorkshire economy.

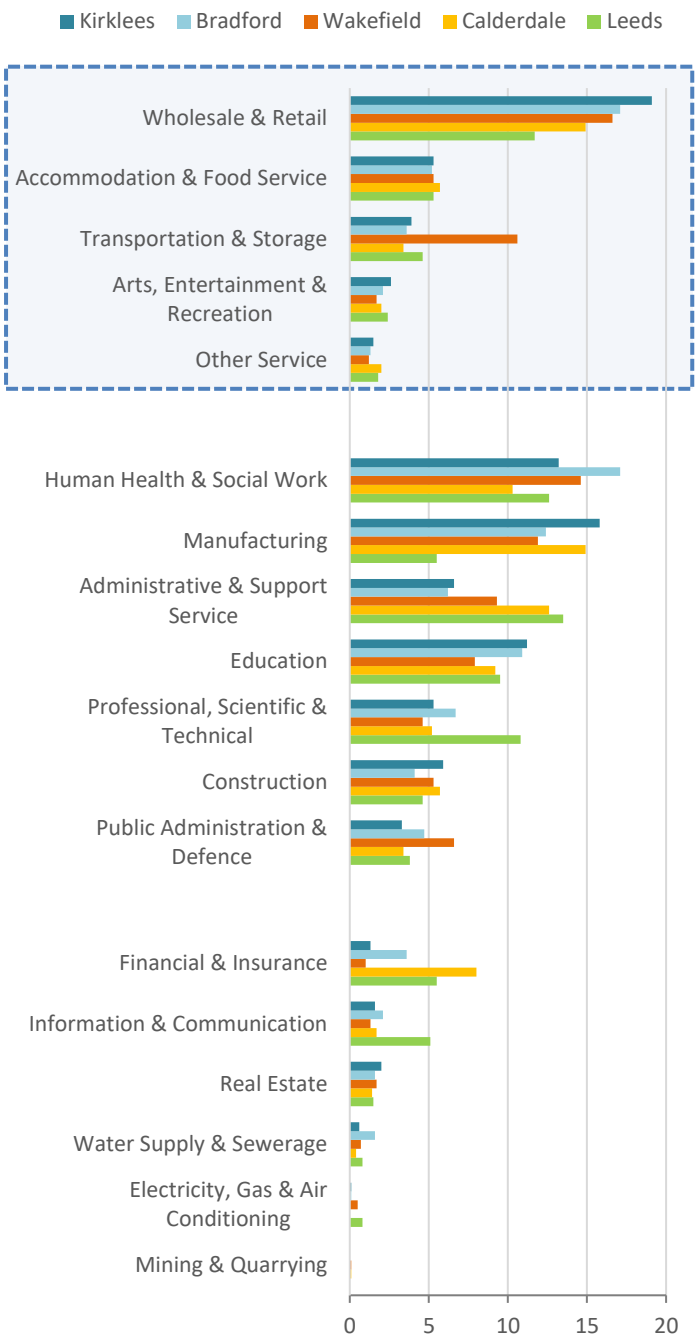
As Figure 2 illustrates, averaged across the five metropolitan districts, RHEL accounts for about 18% of total employment by industry in West Yorkshire. In 2019 RHEL accounted for £12,584 million of West Yorkshire's Gross Value Added (GVA), or about 22%.[2]

Second, a key distinction introduced by central government during the period in which severe restrictive measures were applied separated out 'essential' and 'non-essential' businesses. While essential businesses did not escape restrictions, non-essential businesses, including RHEL, bore the brunt of lockdowns. As we go on to show in later sections RHEL non-essential businesses have experienced greater and continuing impacts. These are unevenly distributed yet patterned.

Third, the pandemic was a period of unusual uncertainty. This was characterised by a 'will this never end?' or 'one thing after another' in a continued deferment of normality. In the meantime, whatever the merits of government support schemes, investment was delayed, debts were accumulated, management had the opportunity to rethink staffing and small business owners and employees had the chance to rethink their life choices (or, in some cases, lack of them), all within a context for retail of seismic changes to consumer behaviour.[3]

Figure 3 highlights the significant drop off in visits to retail during the pandemic, while Figure 4 confirms that these visits were substituted for

Figure 2: *West Yorkshire - Proportion of Total Employee Jobs by Industry*



Authors' own elaboration.
Source*: Office for National Statistics - Workforce Jobs Survey 2021.*

[2] Source: Office for National Statistics – Regional Economic Activity, May 2021.
https://www.ons.gov.uk/economy/grossdomesticproductgdp/datasets/regionalgrossvalueaddedbalancedbyindustrylocalauthoritiesbyitl1region
One might also want to consult statistical releases from the ONS Business insights and impacts on the economy dataset:
https://www.ons.gov.uk/economy/economicoutputandproductivity/output/datasets/businessinsightsandimpactontheukeconomy

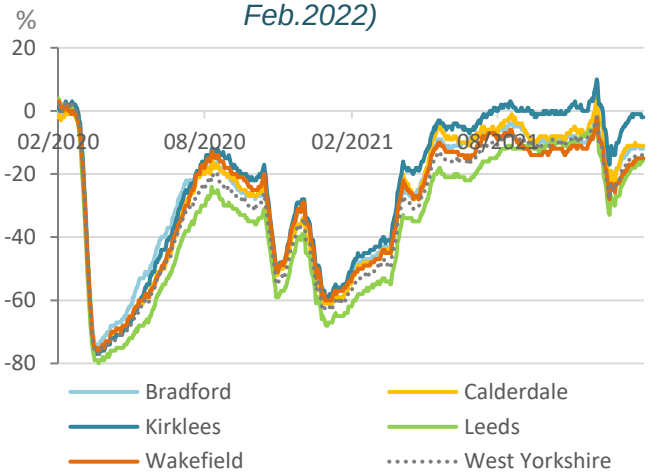
[3]For data and assessment of government economic support see:
https://www.instituteforgovernment.org.uk/explainers/coronavirus-economic-support

online activity.[4] More fine-grained analysis of available data indicates that the implementation and subsequent removal of restrictions (a next lockdown or tier requirement etc.) repeated a pattern of substitution and subsequent reversion, but that overall, the ratio of instore spending to internet sales has not returned to pre-pandemic levels. For instance, as of May 2022, retail visits remained 11% below pre-pandemic levels. Clearly, this affects motives for and frequency of visits to locations and thus has wider impacts across RHEL. In Figure 3 the deficit is highest in Leeds and lowest in Kirklees.

With these three orienting points in mind, in Sections 2 to 7 using an exclusive dataset that offers granular detail, we provide a breakdown of the spatial distribution of impacts on RHEL in West Yorkshire.[5] In Section 2 we begin by laying out the proportion of RHEL that fell into the 'essential' and 'non-essential' categories at the beginning of lockdown in March 2020. This first step allows us to understand the proportion of RHEL expected to experience the greatest impacts. We break the data down in two ways. First, by type of business location, whether they are located on the high street, in a shopping centre and so forth. Second, by spatial distribution across the West Yorkshire metropolitan districts.

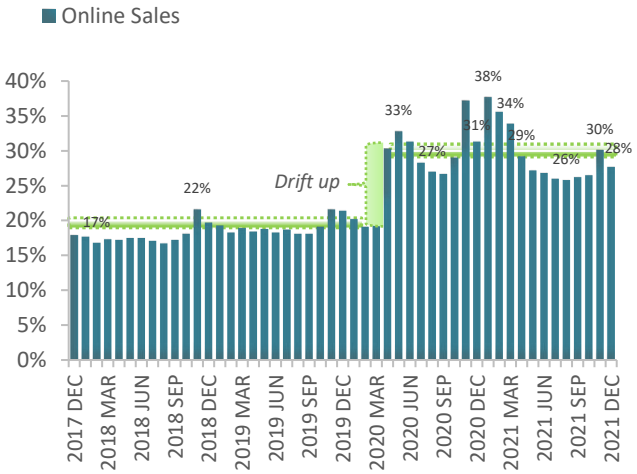
In the following five sections we then shift focus to July 1st 2021. June 2021 was the last full month for data prior to 'freedom day' July 19th when the majority of remaining restrictions (on capacity etc.) were lifted.

Figure 3: *West Yorkshire - Mobility Trends of Retail Stores (Feb. 2020 - Feb.2022)*



Author's own elaboration.
Source*: Google Covid-19 Community Mobility trends. The baseline Index is the median value, for the corresponding day of the week, during the 5-week period Jan 3-Feb 6, 2020.*

Figure 4: *Great Britain – Online Sales as a Percentage of Total Retail (Dec. 2017 – Dec. 2021)*



Author's own elaboration.
Source*: Office for National Statistics – Monthly Business Survey – Adjusted Retail Sales Index times series (DRSI).*

For ongoing research on impacts on employment etc. see, for example, Institute for Government, "The Coronavirus Job Retention Scheme - How Successful Has the Furlough Scheme Been and What Should Happen Next? Resolution Foundation, "Post-furlough blues - What happened to furloughed workers after the end of the Job Retention Scheme?" "The Great Resignation, The Great Reset, The Great Reshuffle and The Great Retention." LSE Centre for Economic Performance, "Covid-19 and self-employment.". Institute for Fiscal Studies, "Changing patterns of work at older ages.". TUC, "The Future of Flexible Work" Centre for Progressive Policy, "Women in the Labour Market."

[4] Figure 3 depicts how overall movements in retail, groceries markets and workplaces have changed over time. This effect is captured by converting the raw day-to-day data into the moving seven-day average. Figure 4 shows the month-on-month and month-on-year (annual) growth rate for the proportion of total retail sales that was made online.

[5] The exclusive dataset used throughout this report was made available by the Local Data Company .

As such, the period between March 2020 to July 2021 provides cumulative data on those businesses that did and did not survive the immediate and severest impacts of successive lockdowns and restrictions, though, of course unintended consequences and disruptions continued, such as the 'pingdemic'.[6]

In Section 3 we provide a spatial breakdown of RHEL that did survive and in Section 4 we look at those who did not. The breakdown follows the format set out in Section 3 but with an additional breakdown according to type of business ownership – whether the business is independent or multiple (chain). In Section 5 we combine the data from previous sections and comment on relative impacts by business location for each metropolitan district, and here we also introduce a more fine grained breakdown of RHEL business category. In Section 6 we extend the time frame both forwards and backwards. This has two purposes. It locates impacts in terms of longer-term trends, and it provides a sense of quite how impactful March 2020 to July 2021 was. In Section 7, in order to bring community context into focus, we overlay a choropleth of the Index of multiple deprivation (IMD) for West Yorkshire with data for location of those RHEL businesses that failed during the period of most severe restrictions.

Overall, some relatively simple descriptive statistics can be helpful in telling an interesting, albeit preliminary, story of the complex dynamics exacerbated or triggered by the pandemic and we highlight throughout this report that spatial patterns of RHEL business survival and failure reveal an important degree of heterogeneity within the region. This should not be overlooked when formulating policy. Impacts on RHEL do not reduce to a simplistic 'death of the high street' situation and there is a need for further research to capture the complexity and range of explanatory mechanisms that stand behind observable trends. We would suggest that a system of systems approach is appropriate for further research. Given our ultimate purpose is to shed light on the available policy space for local government, our final remarks and suggestions regarding future research are reported in the conclusions of this report.

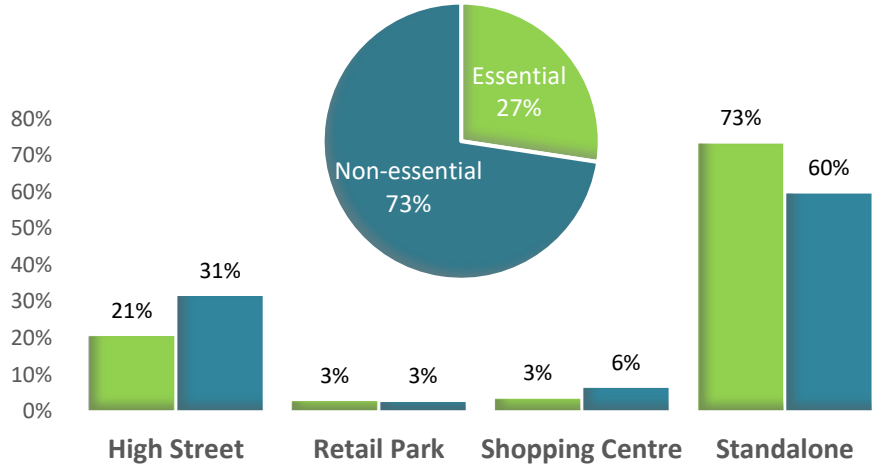
[6] See: Business leaders demand fix to England's 'pingdemic': https://www.ft.com/content/7fad9882-9de1-44f1-8e0f-b8958a653d4d; UK 'pingdemic' spreads as record 600,000 people told to self-isolate: https://www.ft.com/content/1bdef6b5-672d-46e0-9502-492a432a51af

SECTION 2: ESSENTIAL & NON-ESSENTIAL: THE SPATIAL DISTRIBUTION OF RHEL CATEGORISATION MARCH 2020

Covid-19 related closure of and restrictions on business required legal powers and the statutory instrument 'Health Protection (Coronavirus restrictions) Regulations 2020' provided those powers. Schedule 2 of Part 3 of the instrument lists initial businesses subject to restrictions but not closure for England, March 2020.[7] Section 5 grants powers to require closure of other businesses.[8] It was accompanied by guidance, reinforced through press releases and briefings, on whether a business fell into the category 'essential' or was deemed 'non-essential'. Essential was restricted to supermarkets, food shops, medical (including veterinary) services and pharmacies, hardware and repair shops, petrol stations and other activity vital to health, well-being and a minimally functioning society. 'Non-essential' was a residual category of everything else, including great swathes of RHEL. The instrument was modified several times afterwards.

As Figure 5 makes clear, in the final week of March 2020, 73% or the vast majority of West Yorkshire RHEL was categorised as 'non-essential', a category which required them to close immediately and without clarity on when they would be able to reopen. Just 27% fell into the 'essential' category.

Figure 5: *Percentage of RHEL categorised as Essential & Non-Essential in West Yorkshire, end of March 2020*



As Figure 5 also makes clear, the greater part of both 'essential' and 'non-essential' RHEL were *not* located on the high street, in retail parks or shopping centres.[9] They were in 'standalone'

[7] Visit: https://www.legislation.gov.uk/uksi/2020/350/schedule/2/made

[8] Section 5 (1): "A person responsible for carrying on a business, not listed in Part 3 of Schedule 2, of offering goods for sale or for hire in a shop, or providing library services must, during the emergency period— (a)cease to carry on that business or provide that service except by making deliveries or otherwise providing services in response to orders received." https://www.legislation.gov.uk/uksi/2020/350/regulation/5/made

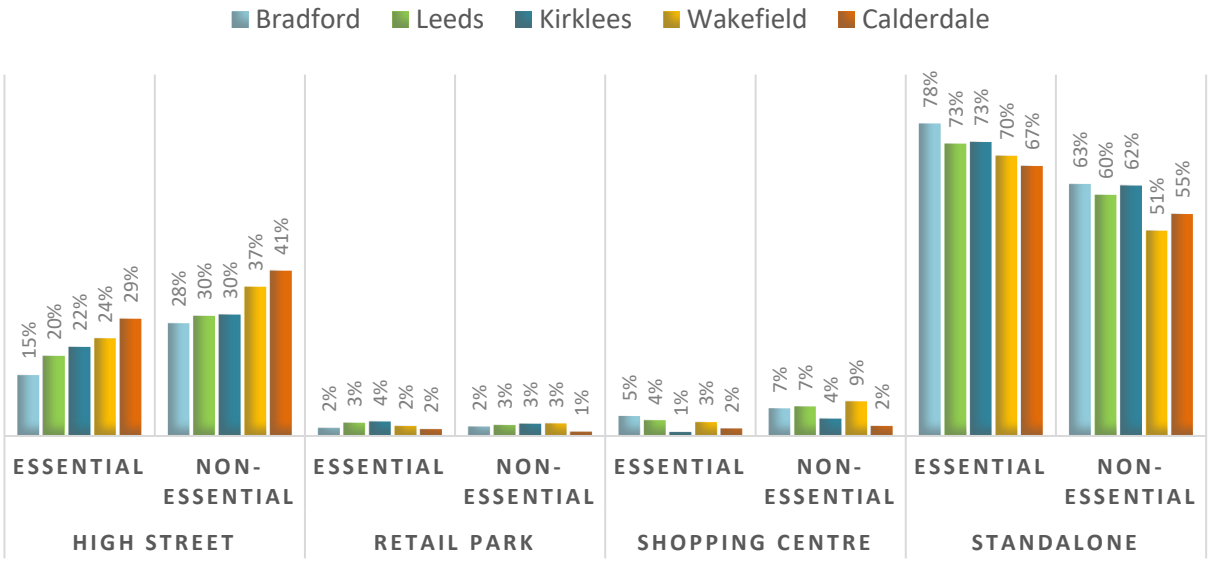
[9] We identify four trading locations: High Street; Shopping Centre; Retail Park; and Standalone. The Office for National Statistics defines a high street as a cluster of 15 or more retail addresses within 150 metres. Shopping centres are defined as a group of retail stores and service establishments that share the same roof (e.g., Trinity Centre in Leeds). A retail park is defined as a scheme with at least 30,000 square ft GIA mainly comprised of retail warehouses units, usually located on the edge of towns or out of town, open to the elements, and with dedicated car parking (e.g., Crown Point Retail Park in West Yorkshire). A Standalone location is none of these – the 'shop around the corner'.

locations. It should also be clear from Figure 5 that while a larger proportion of standalone RHEL were categorised as 'essential' than 'non-essential' (73% compared to 60%), this is a larger proportion of a much smaller figure (27%). In any case, the impact of categorisation as 'non-essential' has significant bearing for standalone locations.

The proportions of standalone location RHEL complicates understanding of the spatial distribution of RHEL and thus also complicates targeting for policy since it implies heterogeneity and a need for further or granular investigation of the underlying mechanisms that influence location (see e.g., Carmona 2022). 'Death of the high street' has, of course, been a focus of concern since at least the Portas Review of 2011, but it is important not to be too literal regarding designation of location (see Hughes and Jackson 2015).[10] Policy support for RHEL should not be conflated with concern over 'death of the high street', though it does not follow that the concern with the state of high streets is misplaced. Nor does the proportion of standalone locations suggest other locations, such as retail parks, are economically irrelevant. That would be absurd. Many other metrics and considerations apply. What the spatial data *does* suggest is that there are many neighbourhood businesses, and these are likely important to local economy and community servicing or provisioning. For our purposes Figure 5 also suggests that if there are greater impacts from March 2020 through to July 2021 associated with categorisation as 'non-essential' then these too are more spatially dispersed and hence complex. We will return to the importance of this dispersal later. Suffice it to say for now that there are population concentrations within districts and core towns and cities and so dispersal is patterned yet not evenly distributed.

Moving on, Figure 6 reveals that the general pattern in Figure 5 is repeated across the five metropolitan districts of West Yorkshire. Figures sum to 100% for each separate metropolitan district in each division of each subcategory.[11]

Figure 6: *Percentage categorised as Essential & Non-Essential by metropolitan district and business location*



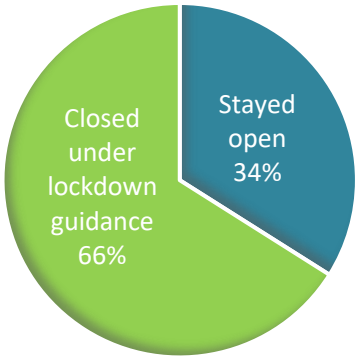
[10] The Portas review is available here.

[11] So, for example, Bradford district sums to 100% for Essential across high street, retail park, shopping centre and standalone, and to 100% in equivalent manner for non-essential.

Within the general pattern in Figure 6, Calderdale seems to have greater proportions of high street establishments in both the essential and non-essential categories and this has commensurate effects on proportions in other categories of business locality.

Figures 5 and 6 provide an initial categorisation of RHEL in March 2020 and a useful breakdown of its spatial distribution. However, if one shifts focus to July 1st 2021, then one finds that only 34% of RHEL in fact closed during the main lockdown and restriction period. This indicates a creative response to the unusual circumstances lockdown imposed. Many restaurants and pubs, for example, became community hubs providing takeaway and delivery meals for health service workers and the vulnerable.

Figure 7: *Percentage of RHEL categorised as Essential & Non-Essential in West Yorkshire, July 2021*



Author's own elaboration.
Source*: © Local Data Company*

So, while 73% of RHEL businesses were initially categorised as non-essential and thus subject to lockdown and periods of more or less restriction from March 2020 to July 2021, 66% followed this guidance. As indicated in the introduction, our focus is the spatial distribution of those RHEL businesses that did and did not survive the immediate and severest impacts of successive lockdowns and restrictions. While businesses that stayed open may subsequently have folded, the category of most concern is those that were required to lockdown under government guidance. As such, we now narrow down to the 66% and divide these into those who survived the period from March 2020 to July 2021 and those who did not. The data indicates that 79% of those 66% survived and 21% did not.[12] There is a 'who, where and why' to this, albeit determinations on 'why' are preliminary, since, as previously intimated, there is a need for granular investigation of the underlying mechanisms. We begin in Section 3 with a breakdown of those who survived.

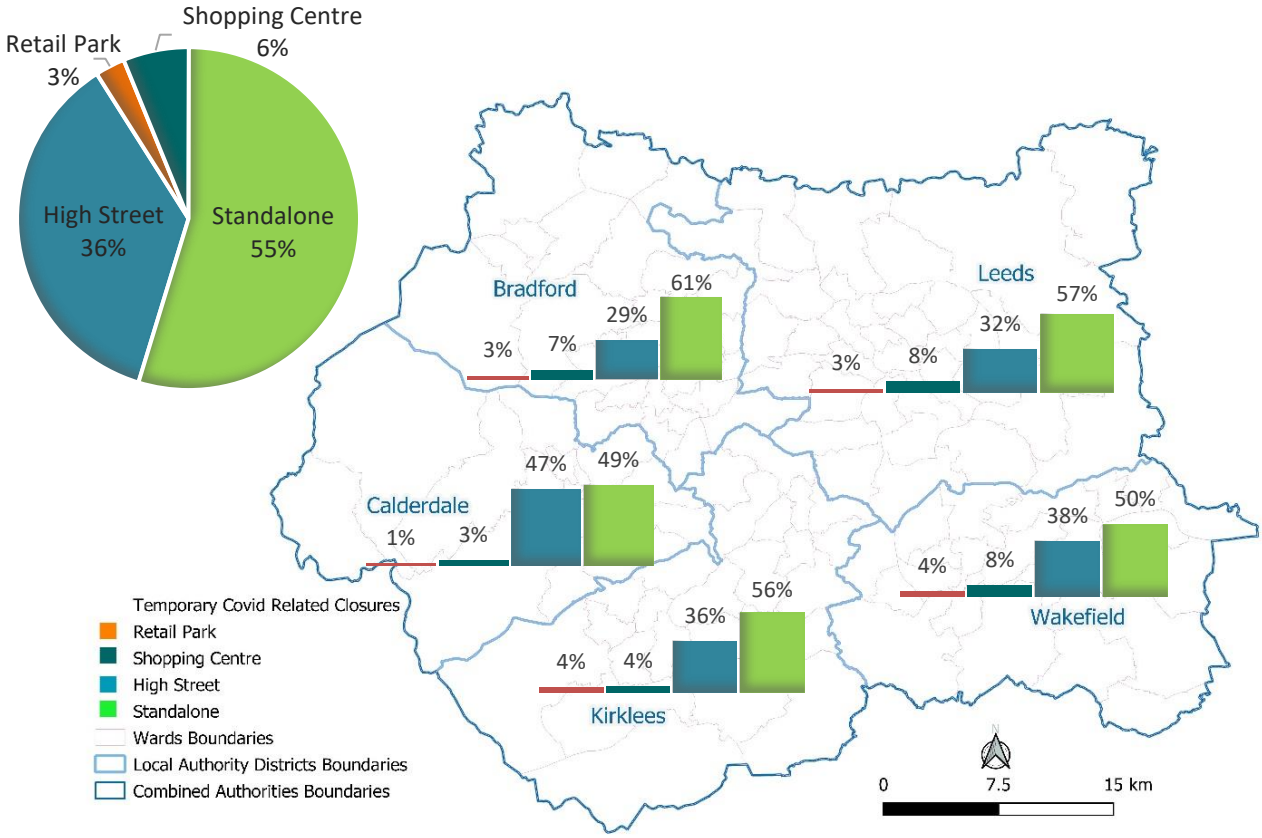
SECTION 3: SPATIAL DISTRIBUTION OF SURVIVORS JULY 2021

Figure 8 provides a breakdown of those RHEL who survived and in similar fashion to Section 2 this is presented by category of business location. The map of West Yorkshire indicates the spatial distribution across the five metropolitan districts. This reveals some significant differences in percentage point terms across those districts in the standalone and high street subsets of the category. While the average for standalone and high street are 55% and 36% respectively, the relative balance between these two varies markedly across the districts.[13] For example, 61% in standalone locations and 29% on high streets in Bradford, compared to 49% and 47% respectively

[12] In percentage point terms 52% of the 66% survived and 14% did not.
[13] Note this is the average of the percentages for each district and not the average of the collated raw numbers, and that would obviously be different based on the larger numbers for Leeds.

in Calderdale. To be clear, this data provides a simple first step visualisation of one aspect of 'where' those businesses that survived are. It reinforces the initial point from Section 2 insofar as many RHEL businesses which survived the initial lockdown period were *not* located on the high street and so there is value in understanding their experience and needs as more than merely responses to the problem of 'death of the high street'.

Figure 8: *Percentage of survivors according to business location for the metropolitan districts*

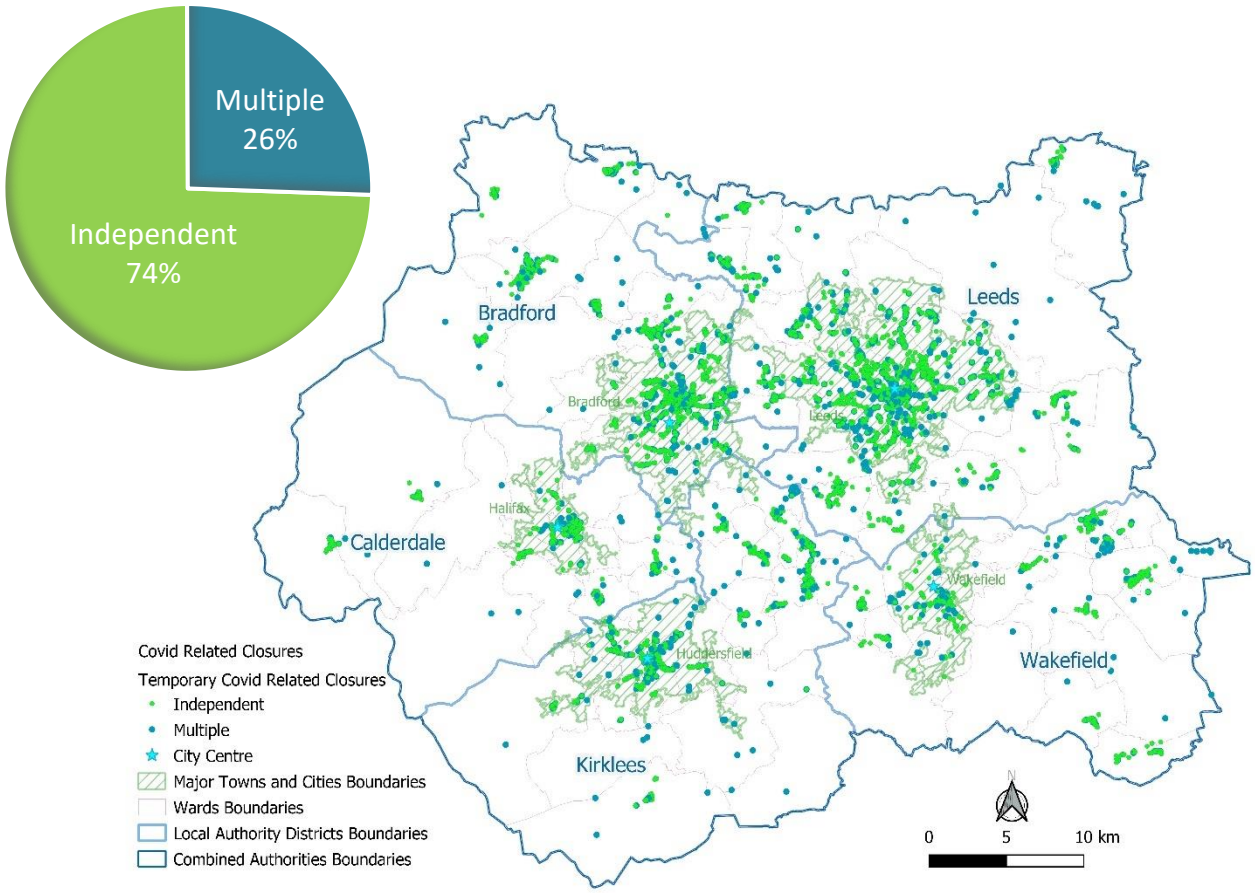


Following on from Figure 5, Figure 8 reveals that many businesses are in 'standalone' locations. Figures 9, 10 and 11 below provide both a more detailed visualisation of the 'where', and a different additional breakdown that speaks to an initial aspect of 'who' for those RHEL that survived. Here businesses are categorised according to ownership. 'Independent' businesses are those trading at fewer than five locations and 'multiple' businesses are those with five or more.[14]

Intuitively one would expect that multiples are more resilient, since they are more likely to have brand recognition, are more likely to have well-developed banking relations and are able to exploit economies of scale, and subsidise losses in one place with revenues from another. One would expect this to translate into a higher survival rate and we will return to this in Section 5.

[14] Both independent and multiple businesses may also operate at locations outside West Yorkshire and in the case of multiples they may also be international.

Figure 9: *Location of survivors according to category of business ownership*



The vast majority of RHEL businesses that survived the lockdown period were independent, 74% compared to 26%. A cursory glance at Figure 9 reveals that these are mainly located within major town and city boundaries i.e., 'where the people are'. This is, of course, unsurprising. It is equally unsurprising that the majority of survivors are independent, given that the UK has far more small and medium sized enterprises (SMEs) than it does larger enterprises and SMEs are dominated by 'micro-businesses' with fewer than 10 employees and typically trading from one registered location.[15]

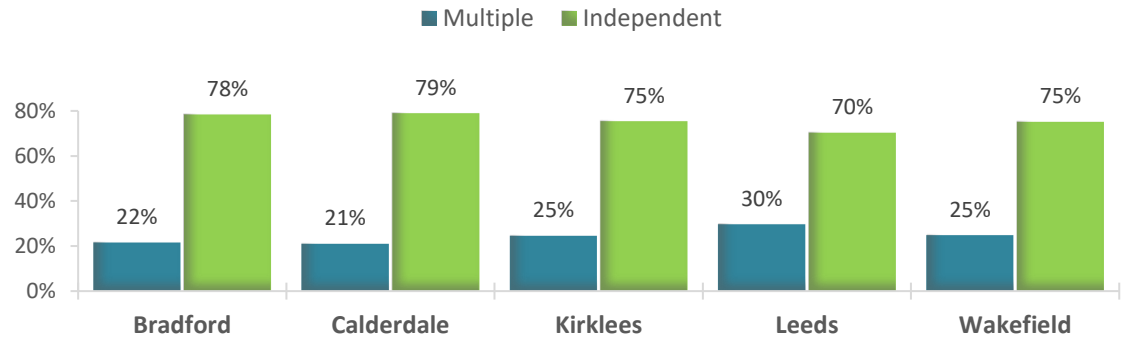
The fact that independents are the majority of survivors simply reflects the prevalence of micro-businesses, and the figures do not in and of themselves indicate whether independents were more or less likely to survive (again see Section 5).[16] Figure 10 highlights that the proportions are repeated across the five metropolitan districts. As one might expect, since cities are more likely

[15] According to the ONS SMEs account for 99.9% of all businesses 52% of turnover and 61% of employment; within this micro-businesses account for 96%, 21% and 33% respectively.
For associated issues see for example, Enterprise Research Centre: The Enterprise Research Centre : The State of Small Business Britain 2021 Bank of England: "The impact of the Covid pandemic on Small and Medium Enterprise (SME) indebtedness." Bank of England: "Impacts of the Covid-19 crisis: evidence from 2 million UK SMEs."

[16] Note: our phrasing here is somewhat loose, Section 5 data is not analytic statistics of likelihoods. It is failures as a percentage of total RHEL businesses calculated by category and district. So the data is within categories for comparison rather than, strictly speaking, is a comparative statistic. We are, as such, using 'likely' in the ordinary language sense.

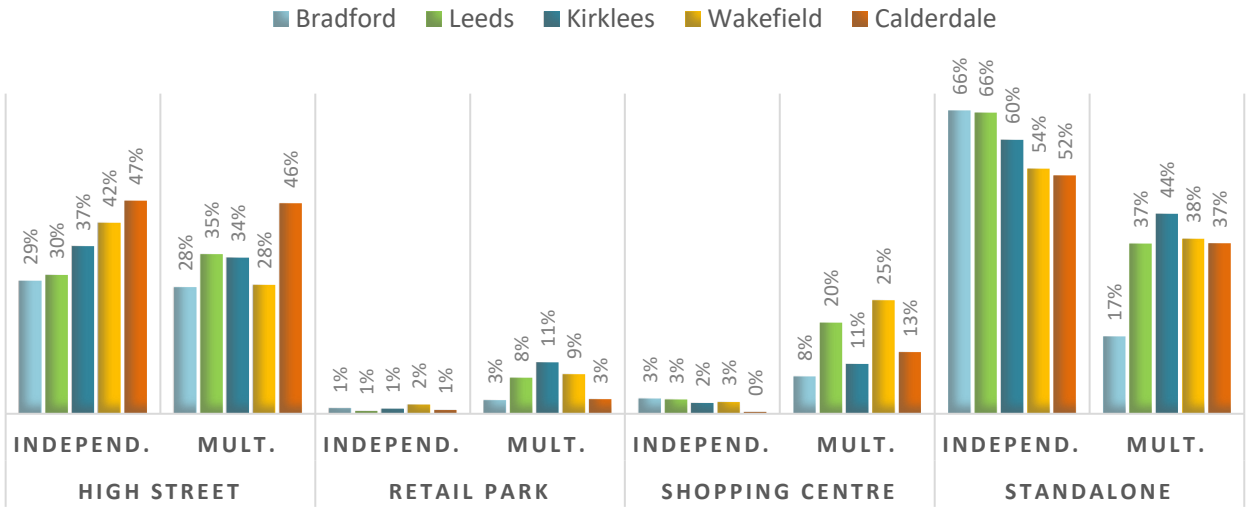
to attract and retain large national firms, Leeds is an outlier with the lowest proportion of independents. Calderdale has most at 79%.

Figure 10: *Percentage of survivors according to category of business ownership for the metropolitan districts*



While the figures are unsurprising the data is a timely reminder that it is important not to overlook independents – likely smaller more local businesses – precisely because there are many of them. Moreover, if one refers back to Figure 8 the clear inference is that 'where the people are' is not quite the same as located on the high street or concentrated in retail parks. There are many standalone location RHEL. Figure 11 confirms this. In similar fashion to Figure 6, Figure 11 sums to 100% for each separate metropolitan district in each division of each subcategory:[17]

Figure 11: *Percentage of survivors according to category of business ownership and business location for the metropolitan districts*



[17] So, for example, Bradford district sums to 100% for Independents across high street, retail park, shopping centre and standalone, and to 100% in equivalent manner for multiples.

We have become familiar of late with a language of 'anchor institutions', behemoths whose activity plays a key role in the constitution and reproduction of local economy (procurement, employment etc.), but it is independents whose capillary action sustains everyday community connections. Clearly, RHEL independents are also, by virtue of the sector they operate in, integral to the present and future character of communities. RHEL are sites of everyday interaction. They are home to casual conversation, meeting places for friends, hubs for every kind of social exchange… As such, they foster important social and commercial relations. As micro hubs, what they look like – how they are designed, the state of their upkeep – conveys something about an area.

There is then, to reiterate, a need for further granular investigation of the underlying mechanisms that influence location. But more than this, there is a need for research able to trace out the ties and relations that businesses have within local and regional economies and communities. This, of course, is not a new insight – models of community wealth building are now a mainstay of local policy discussion and while these emphasise the role of anchors, more sophisticated variants recognise local economies are more complex than simply the local multipliers and social value effects of those anchors.[18]

The capillary effects of independents do not reduce to their interdependencies with anchors. Independents, precisely because they are localised, are also likely to spend back into their communities, and while this is not at the scale of anchors, it ought not to be neglected. A system of systems perspective embracing the complexity of a servicing or provisioning economy seems well suited to undertaking subsequent research on these matters (see Appendix 1). It offers the prospect of supporting local government in terms of understanding of policy space and this is a point we will return to.

SECTION 4: SPATIAL DISTRIBUTION OF NON-SURVIVORS

As stated at the end of Section 2, 66% of RHEL ultimately followed guidance applied to the category non-essential and were subject to lockdown and severe restriction from March 2020 to July 2021. Of these 66%, 21% did not survive – they either chose not to reopen or succumbed to any one of a number of causes of failure – inability to retain staff, loss of custom, cashflow, crippling debt, or just lockdown fatigue.[19] Figure 12 provides a breakdown of those RHEL by category of business location.

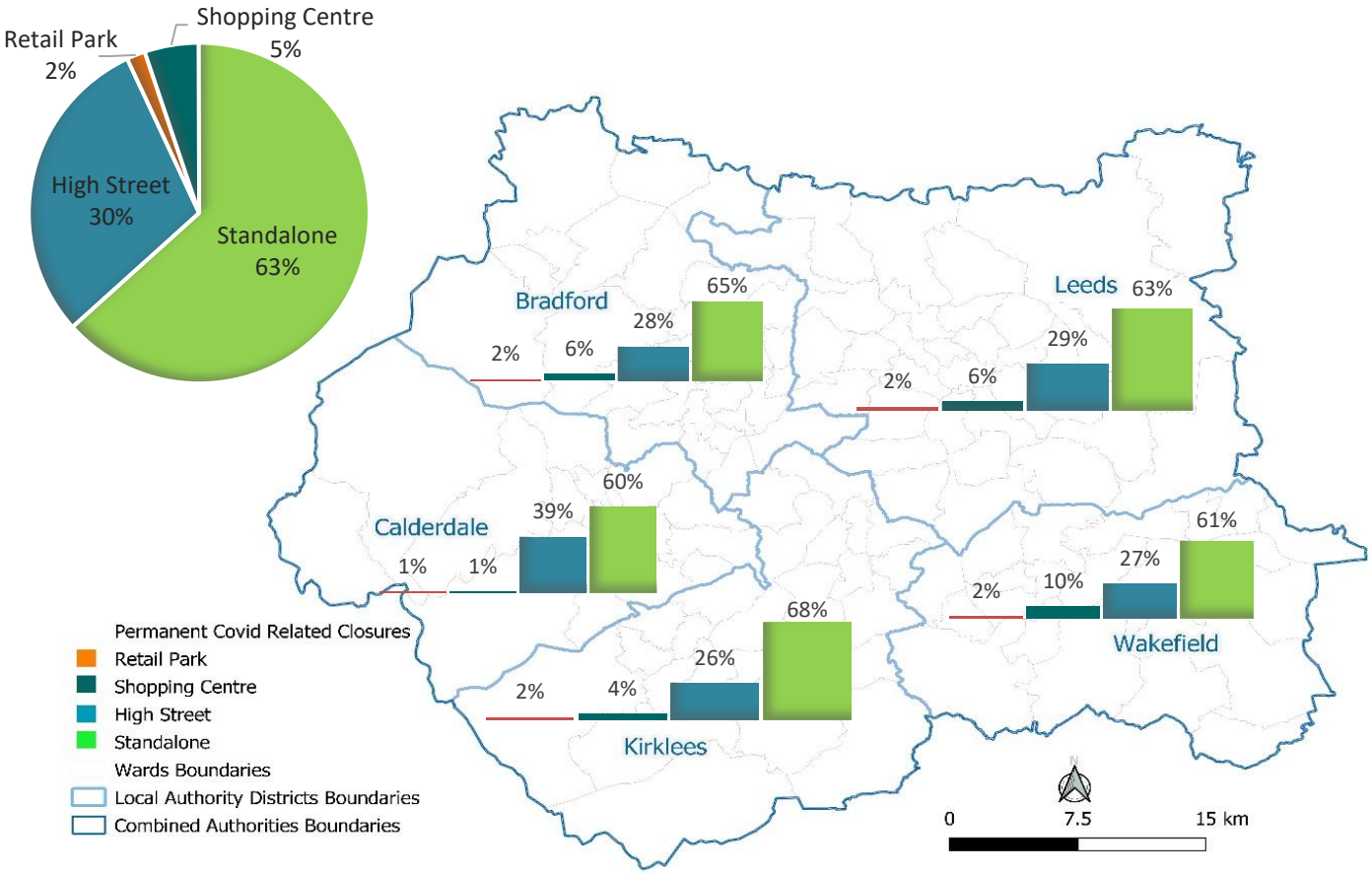
One should note that Figure 12 data does not mirror Figure 8 because the percentages relate to the *spatial distribution* within each metropolitan district of those RHEL who did not survive. So, for example, the standalone percentage in Bradford indicates that 65% of those businesses that did not survive in Bradford were standalone, while 28% were located on the high street, 6% in shopping centres and 2% in retail parks (rounding means this does not quite sum to 100%). This, of course, does not mean 65% of standalone businesses in Bradford did not survive – if it did then the corresponding figure in Figure 8 would be 35%, which clearly it is not (it is 61%). Figure 12 thus parallels Figure 8. As in Figure 8 it reveals an overwhelming percentage of standalone

[18] The 'Preston model' is just one version and many economic and social policy professionals working at the district level in West Yorkshire are acutely aware of this.

[19] 14 percentage points translates to 21% of 66%.

location RHEL followed by a large percentage on the high street and some difference between the five districts.[20]

Figure 12: *Percentage of non-survivors according to business location for the metropolitan districts*



The data again highlights, this time from the point of view of failure rather than survival that there is more at stake than 'death of the high street'. Moreover, if one compares Figure 12 to Figure 8, in all five districts the percentage of standalone that did not survive is higher than its level for those that did survive and this in a preliminary sense would seem to suggest standalone RHEL were less resilient than their counterparts in other locations.

In Section 3 we distinguished between independent and multiple location businesses and we provide the same breakdown here. Figure 13 reveals that the vast majority of RHEL businesses which did not survive the lockdown period were independent, 76% compared to 24%. Again, this parallels data in Section 3 and for broadly the same reasons. The visualisation of data is additionally useful here, however, since Figure 13, allows one to compare and contrast locations. While it is again the case that most of those that did not survive are within major town and city

[20] As in Figure 8 the pie chart represents the average of the percentages for each district and not the average of the collated raw numbers, and that would obviously be different based on the larger numbers for Leeds.

boundaries, it seems also to be the case there are relatively more non-survivors outside of these boundaries and especially in parts of Wakefield and Kirklees.

Figure 13: *Location of non-survivors according to category of business ownership*

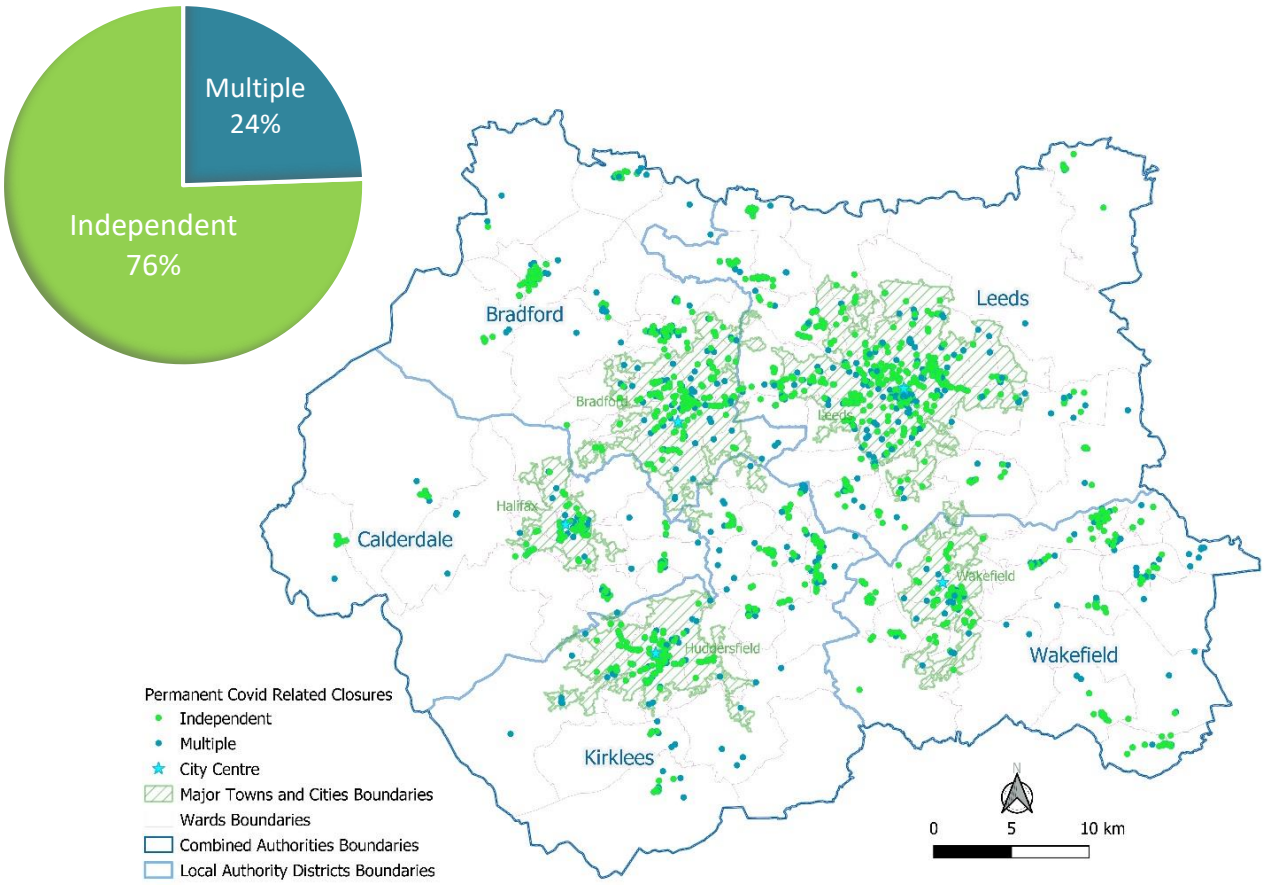
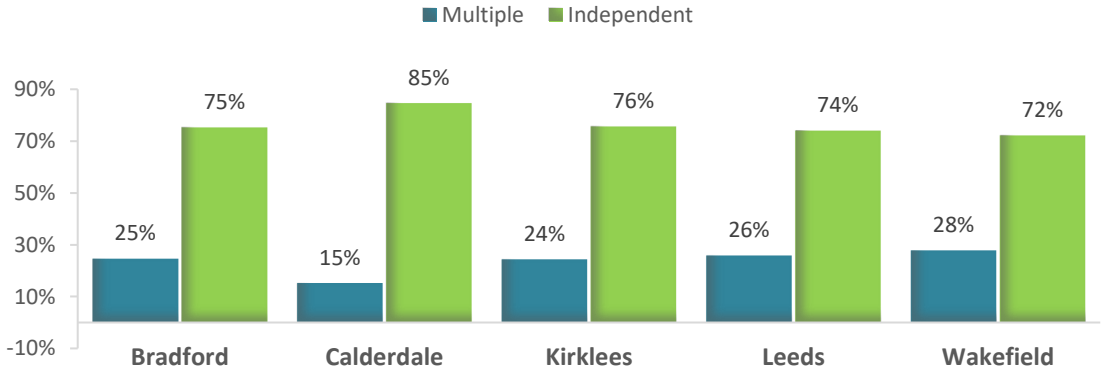


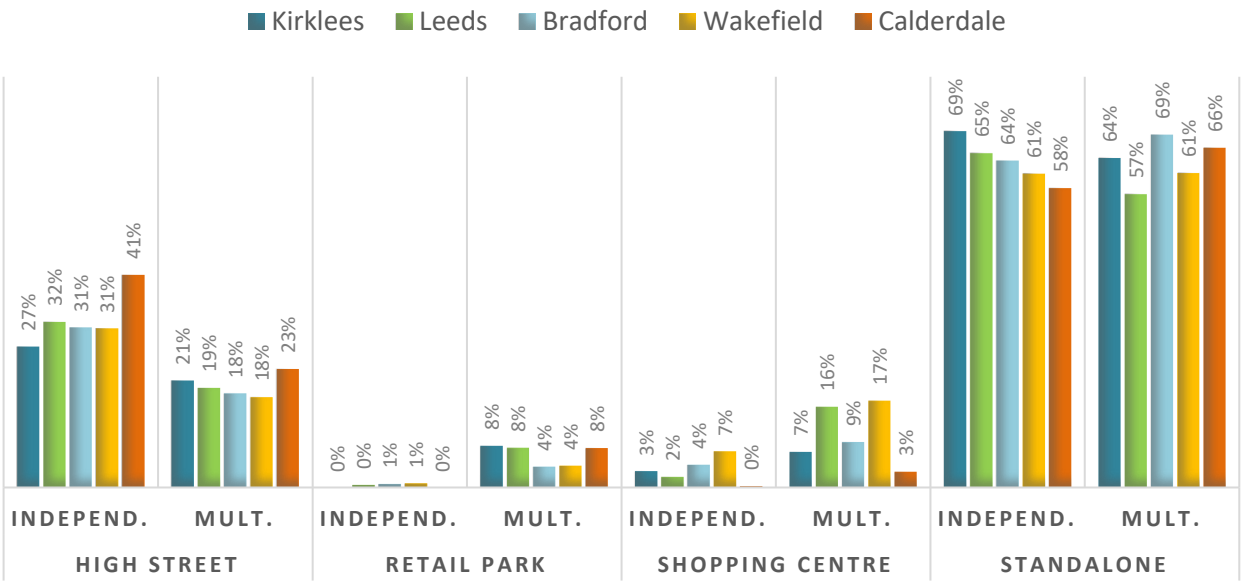
Figure 14 highlights that the proportions are repeated across the five metropolitan districts, but it is notable that Leeds is not this time an outlier (compare to Figure 10). Here Calderdale stands out, as it does in Figure 12 where the district has a higher proportion of non-survivors on the high street, and as it does also in Figure 13 insofar as it exhibits relatively few non-survivors outside major town boundaries.

Figure 14: *Percentage of non-survivors according to category of business ownership for the metropolitan districts*



As Figure 15 reveals, more non-survivors fall into the standalone category for both multiple and independent RHEL than any other and this is repeated across the five metropolitan districts:[21]

Figure 15: *Percentage of non-survivors according to category of business ownership and business location for the metropolitan districts*



Again, this parallels data in Section 3 and for broadly the same reasons – the descriptive statistics reflect effects on businesses that already have existing proportions in the given categories. To be clear, the data highlights effects on proportions, it is not necessarily revealing of whether those effects are in some sense disproportionate effects. The fact that independents are the majority of non-survivors, for example, does not in and of itself indicate whether independents were more or less likely to survive since this is a matter of comparative rates of survival and failure. The data and its visualisation do, however, provisionally speak to the intuitive point made previously that one would expect different degrees of resilience.

The data presented so far is in one sense fairly limited insofar as it requires relatively little technical sophistication in the form of modelling and analysis. However, it is important not to neglect this first step because spatially patterned descriptive statistics provide a sense of who survived and where according to categories used. Resorting immediately to standardised models and analytical statistics risks treating differences as error and heterogeneity as noise to be smoothed, it tends to inadvertently privilege treating phenomena as sets of regular relations repeated through time and across places – sets of variables with revealed strengths of association which can be relied on to apply everywhere and continue indefinitely. Such an approach favours prediction over explanation and so misses a vital step in making sense of why things happen, and this is to the detriment of policy. As economic geographers interested in uneven urban development have argued over many years one cannot intervene effectively in what one does not understand, and this requires more diverse methods and framing.[22]

[21] As Figures 6 and 11, figures sum to 100% for each separate metropolitan district in each division of each subcategory.

[22] Debates on spatial relations and the difference space makes came to the fore in the 1980s either in criticism of use of econometrics, regressing one variable against another in simple models, or in criticism of Marxist meta-theory. In both cases the accusation is that much research lacks concrete explanation of place-based real processes and difference. See e.g., Massey

As we suggested in Section 3 there is scope for further granular investigation of the underlying mechanisms and a system of systems perspective seems well suited to this (again see Appendix 1). Well-conceived follow up mixed method research could help to make sense of identified spatial differences in RHEL. Conducting such research across the five metropolitan districts could support knowledge exchange and good policy practice, opening up dialogue focused on which businesses did survive and which did not, how communities are affected, what type of support is required and so on.

Such research might shed light on existing research and contribute to recent initiatives within districts and across West Yorkshire. For example, work on Business Improvement Districts (BIDs) or the work of the Centre for Cities.[23] The ultimate context is, of course, provided by the West Yorkshire Combined Authority (WYCA) economic plan, economic assessments and the periodic *State of the Region Report,* as well as the corporate plans or 'visions' of the five authorities.[24]

SECTION 5: RHEL FAILURES AS A PERCENTAGE OF THOSE BUSINESSES REQUIRED TO CLOSE

Our focus has been the 66% of RHEL businesses that, following advice, closed during lockdown and the periods of more or less restriction from March 2020 to July 2021. Sections 3 and 4 provide data by category on where RHEL businesses were that did and did not survive from this 66%. In order to provide a better sense of the comparative impacts we now briefly set out those that did not survive (failed) as a percentage of those who closed over the period – the 66%. Figure 16 breaks this down by metropolitan district and for business location. It is immediately obvious that there is significant variation across the five districts and thus some degree of heterogeneity. For example, a surprising 30% of standalone businesses in Wakefield and Calderdale failed, followed closely by Kirklees with 29%, while Leeds experienced 23% and Bradford just 17%. This

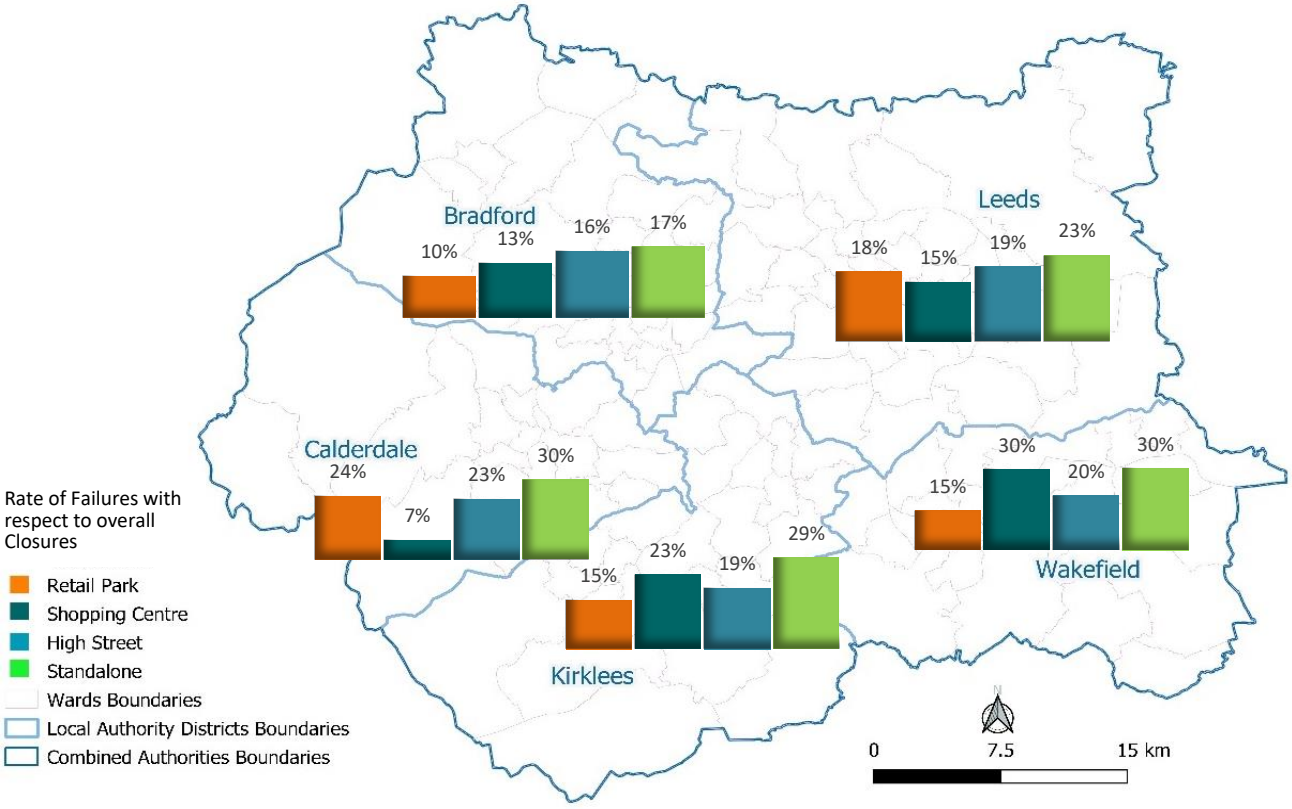
(1984), Sayer (1985); Gregory and Urry (1985); Morgan and Sayer (1988). The debate has resurfaced periodically since. For example, in the mid-to-late 1990s Bob Jessop, Neil Brenner, Martin Jones and Gordon Macleod sought to strike a balance in their Territory, Place, Scale and Network (TPSN) initiative in political economy. Brenner periodically works with Jamie Peck, another who has had significant influence over space-focused economic geography. See Peck (2005); Massey (2005); Jessop, Brenner and Jones (2008).

[23] According to UK government "A Business Improvement District is a defined area in which a levy is charged on all business rate payers in addition to the business rates bill. This levy is used to develop projects which will benefit businesses in the local area." Visit: https://www.gov.uk/guidance/business-improvement-districts For example: https://www.leedsbid.co.uk/
Centre for Cities produces a periodic 'Cities Outlook' e.g. 2022: https://www.centreforcities.org/wp-content/uploads/2022/01/Cities-Outlook-2022-2.pdf as well as an updated city monitor report on the 63 cities within its index: https://www.centreforcities.org/city-monitor/ For the latest research from the Centre for Cities, see:https://www.centreforcities.org/wp-content/uploads/2022/06/Homeworking-and-the-high-street.pdf And, "So You Want To Level Up?" https://www.centreforcities.org/wp-content/uploads/2021/06/So-you-want-to-level-up-Centre-for-Cities.pdf

[24] See West Yorkshire Combined Authority & Leeds City Region Enterprise Partnership (2020) Economic Assessment, March. Visit: https://www.westyorks-ca.gov.uk/media/5642/west-yorkshire-economic-assessment-feb-20-updated.pdf
And WYCA (2021) *State of the Region Report.* Visit: https://www.westyorks-ca.gov.uk/media/7533/west-yorkshire-state-of-the-region-full-report-2021.pdf
For district plans/visions visit, Leeds: https://transformingleeds.com/leeds-city-council/vision-leeds
Calderdale: https://www.calderdale.gov.uk/vision/
Kirklees: https://www.kirklees.gov.uk/beta/delivering-services/council-plan.aspx
Wakefield: https://www.wakefield.gov.uk/about-the-council/about-wakefield/corporate-plan

clearly begs further investigation. Significant variation can also be observed for those located in shopping centres and retail parks, albeit in the case of shopping centres Calderdale is, rather than highest, lowest at 7%. In the case of retail parks Calderdale is again highest at 24%, followed this time by Leeds at 18%. There seems, however, to be more commonality for those located on the high street – all are between 16% and 20%.

Figure 16: *Percentage rate of non-survivors from those who closed over the period for the metropolitan districts*



Looking at Figure 16, overall, no district seems to consistently fare better than others in percentage terms across the different subdivisions of the category. The accompanying Table 1 below provides detail on the raw numbers involved. The districts are placed in descending order according to the total number of RHEL business units involved in the calculation. The use of percentages is, of course, useful insofar as it allows us to look past the raw numbers for some purposes. From a district and local point of view even a few failures matter if the pool is small and high percentages of failures may indicate something is amiss. Equally, however, small numbers of failures can result in large percentage changes if the total number of units they are calculated from is also relatively small and one needs to keep in mind that there are different concerns when considering an economy at different scales, from local to district to West Yorkshire as a whole.

Looking at Table 1 one might pick out various elements. It should be apparent that the difference in percentages for Calderdale between retail park and shopping centre locations (24% compared to 7%) is in part a product of small numbers – 5 from 21 and 3 from 41 units. This, however, is

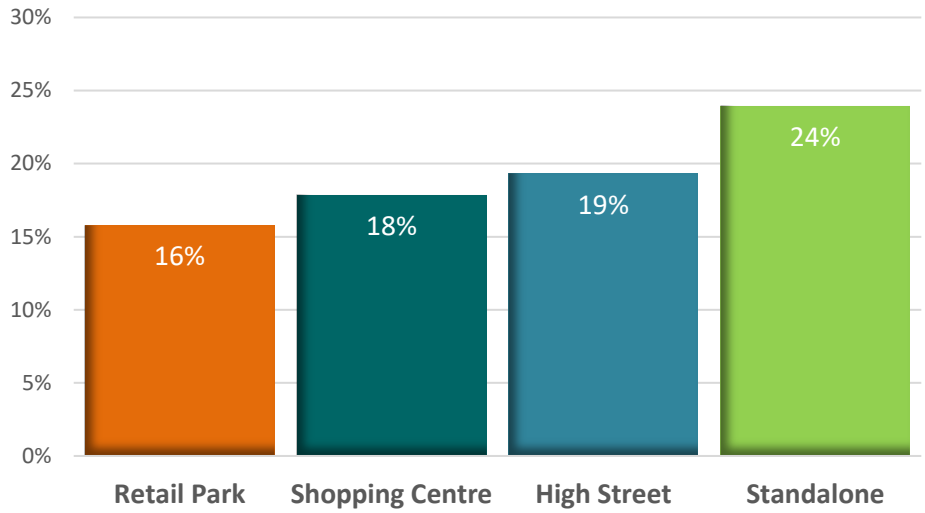
not the case for standalone locations. Here, it is also worthy of note that while Leeds is not the highest percentage – 23% compared with 30% for Calderdale – the raw numbers, 852 from 3781, indicates important effects within the city, the district and on RHEL for West Yorkshire as a whole. Moreover, the table provides a further useful reminder that supporting RHEL does not reduce to policy in response to 'death of the high street'. While the percentage of failures in all districts for high street locations is by no means small – around a fifth everywhere but Bradford – many other locations matter.

Table 1: *Total closures, total failures and percentage of failures according to category of business location for the metropolitan districts*

	Total Closures	Total Failures	Percentage of Failures
	Calderdale		
High Street	722	164	23%
Retail Park	21	5	24%
Shopping Centre	41	3	7%
Standalone	841	253	30%
Overall	**1625**	**425**	**26%**
	Wakefield		
High Street	691	139	20%
Retail Park	62	9	15%
Shopping Centre	167	50	30%
Standalone	1027	312	30%
Overall	**1947**	**510**	**26%**
	Bradford		
High Street	1029	167	16%
Retail Park	88	9	10%
Shopping Centre	248	33	13%
Standalone	2227	387	17%
Overall	**3592**	**596**	**17%**
	Kirklees		
High Street	952	183	19%
Retail Park	91	14	15%
Shopping Centre	124	29	23%
Standalone	1677	483	29%
Overall	**2844**	**709**	**25%**
	Leeds		
High Street	2011	391	19%
Retail Park	175	32	18%
Shopping Centre	491	76	15%
Standalone	3781	852	23%
Overall	**6458**	**1351**	**21%**

Figure 17 switches scale to the whole of West Yorkshire. The percentages in the chart closely track those for Leeds in Figure 16.

Figure 17: *Percentage rate of non-survivors from those who closed over the period for West Yorkshire as a whole*



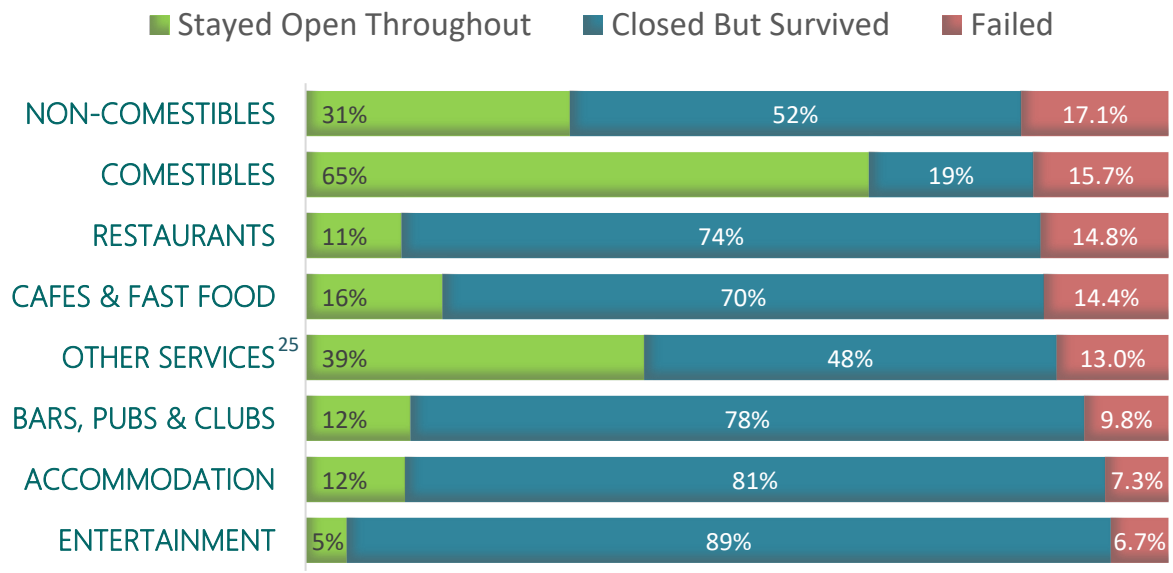
This is, of course, what one might expect since Leeds contributes two fifths or more to the raw numbers summarised in the accompanying Table 2 below.

Table 2: *Total closures, total failures and percentage of failures according to category of business location for West Yorkshire as a whole*

	Total Closures	Total Failures	Percentage of Failures
	West Yorkshire		
High Street	5,405	1,044	19%
Retail Park	437	69	16%
Shopping Centre	1,071	191	18%
Standalone	9,553	2,287	24%
Overall	**16,466**	**3,591**	**22%**

Of course, data on business location can only tell us so much. RHEL is diverse and it is important to have a sense of how different sectors fared. Figure 17 provides a breakdown by type of business activity and for comparative purposes the figure includes data on the small proportion of RHEL that stayed open during the period under scrutiny, March 2020 to July 2021. This is useful, for example, because many comestibles' stores were deemed essential. Figure 17 is set out in descending order according to the percentage of the sector who ultimately failed (see also Appendix 4 where a breakdown of the sample by category and subcategory is presented).

Figure 18: *Percentage rate of survivors & non-survivors by subcategory for West Yorkshire*



Several components of Figure 18 are worthy of comment.[25] 'Non-comestibles' is something of a catch-all for those businesses selling non-food goods – everything from hardware stores to hobby shops.[26] The sector contains many types of retailer who purvey specialist goods that one might do without or can be sourced online and as one might expect these stores were hit hard by the pandemic. It may, in contrast and at first sight, seem odd that the percentage of failures among comestibles stores is so high.[27] However, the reported data extends beyond supermarkets and corner shops purveying everyday items of food and so also includes more specialist businesses, such as butchers, bakers and confectioners and clearly some of these were likely vulnerable to staff loss, effects on customer loyalty, the slow cumulative effect of loss of revenue and the process of rethink of or change in life circumstances and goals that have been widely reported. These, of course, are factors that likely also account for the percentages recorded for restaurants and cafes and fast-food businesses.

We use 'likely' since it should be clear that even data on RHEL that has been broken down into finer subdivisions includes a wide variety of businesses and metrics do not speak for themselves, they merely provide indicators for states of affairs that require explanation and this in turn calls for further investigation (see Appendix 2 for additional related data).[28]

---

[25] 'Other services' covers businesses offering beauty, cleaning, real estate, repair &c services to the public: Auto & Accessories; Auto Services; Employment & Post Offices; Estate Agents & Auctioneers; Hairdressing, Health & Beauty; Household & Home; Launderettes, Dry Cleaners & Other; Locksmiths, Clothing Alterations & Shoe Repairs; Miscellaneous items; Travel Agents & Tour Operators.

[26] 'Non-comestibles' covers all businesses that trade with non-perishable goods: Book Shops, Arts and Crafts; Stationery; Printers; Car & Motorbike Showrooms; Charity and Second-hand Shops; Chemists, Toiletries and Health; Department Stores and Mail Order; Discount and Surplus Stores; DIY; Hardware; Builder's Merchants and Household Goods; Electrical Goods and Home Entertainment; Fashion and General Clothing; Florists and Garden; Footwear; Furniture; Carpets; Textiles; Bathrooms and Kitchens; Gifts, China and Leather Goods; Jewellers, Clocks and Watches; Pet Shops and Pet Supplies; Sports; Toys; Cycle Shops and Hobbies.

[27] 'Comestibles' covers all businesses that trade with perishable goods. Business activities that lie within the convenience category are Bakers; Butchers & Fishmongers; Confectionery; Tobacco and Newsagents; Groceries, Supermarkets and Food shops; Off Licenses; and Petrol filling stations.

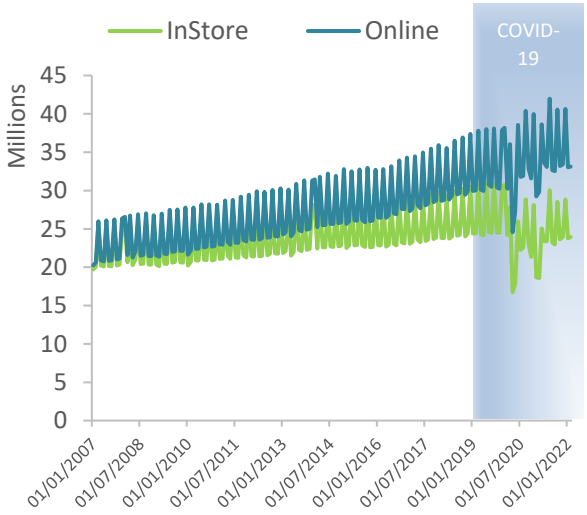
[28] For relevant research and data see: "Coronavirus and its impact on UK hospitality: January 2020 to June 2021."

SECTION 6: EXTENDING THE TIME FRAME

The events March 2020 to July 2021 are unprecedented in modern times and it is reasonable to assume the cumulative effects during that period have been unusually impactful. However, it is always good practice to place an unusual and punctuated period of events in the context of a longer time frame. This is for at least for two reasons. First, in order to place impacts in terms of longer-term trends. Second, in order to get a better sense of quite how impactful events have been and, going forward, what subsequent trends might be observable. The pandemic was a deferment of normality, one that commentators suggest may have ushered in a new normal. In some ways, however, its effects might more accurately be described as an acceleration and exacerbation of trends that predate the pandemic. 'Normal', of course, must be taken under advisement, since it is always an error to naturalise what is not inevitable.

In the introduction we noted that the pandemic substituted online activity for in-person visits to retail establishments and that this constituted a seismic change in consumer behaviour (see Figure 3 and Figure 4). Figure 18 makes very clear that there was a major fall in visits to retail stores, with particular drop-offs for the two most restrictive lockdown events. It is notable also that these are mirrored by two short falls in online activity (during periods where logistics were initially affected).

Figure 19: *Great Britain – Online and in Store Sales 2007-2020*



Authors and Office for National Statistics.

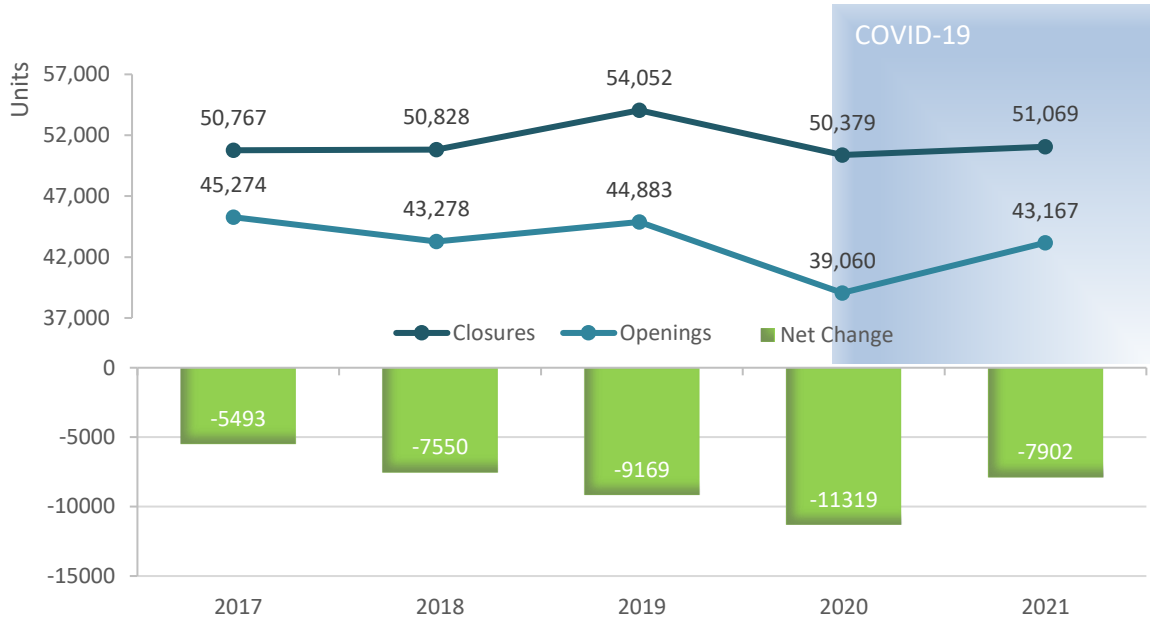
It has, of course, been widely reported that the pandemic has merely accelerated existing trends for retail. This is not a simple story though since, while in-person visits have not recovered and seem to have reset along a lower trajectory, online activity has not experienced a commensurate leap.

As we also noted in the introduction, the deficit is also the case for West Yorkshire. Visits remained on average 11% down as of May 2022 and the deficit has been highest in Leeds and lowest in Kirklees.

Lower footfall, of course, is not just a problem for individual retail stores. Fewer visits to an area represents a drop-off in potential passing trade to every other store along the route a customer might otherwise traverse. There is, therefore, a reduction in spontaneous consumption, as well as a decline in demand for businesses whose services meet shopper's needs while 'out and about' – cafés and so on. Effects, thus, ripple outwards across RHEL. As councils are well aware the sense of vibrancy of a place matters for business sentiment. It can influence the psychology of those thinking of starting (or reopening) a business and high streets and shopping centres are particularly vulnerable to a 'ghost town' effect – hence, previous commentary on standalone locations notwithstanding, the valid concern induced by 'death of the high street'.

More positively, this concern translates into the need for a high street rebirth, which reconceives what a high street is and what it is for – and this is a policy subject where there is already a great deal of creative thinking (some of which we have previously referred to at the end of Section 4)..[29] Arguably, the pandemic has accelerated the need for a rebirth, given the scope for what we might term 'contagion of despair', an effect damaging in quite a different way than Covid itself but no less a blight on communities. Again, this is not a simple tale in terms of observable effects, and this is perhaps best illustrated by thinking about the 'churn' in RHEL business opening and closure..[30]

Figure 20: *Great Britain – Openings and Closures RHEL businesses Jan-Dec 2017-2021*



Author's own elaboration.
Source*: © Local Data Company*

As Figure 20 establishes, for Britain as a whole, there is a year to year net reduction in RHEL business units and thus a trend decline which is not reducible to the pandemic alone. In this context 2020 is unusual not because many more businesses closed than in previous years, but rather because far fewer opened, 39,060 compared to 44,883 in 2019. The result was a significant uptick in the net effect in 2020, a loss of 11,319 units and a 23% year-on-year change in the net reduction. That fewer businesses opened, of course, is attributable to the immediate impact of lockdown – many put their investment decisions on pause. Meanwhile, there were also

[29] For a range see, for example, Grimsey Review: "Against All Odds; How independent Retail, Hospitality and Services Businesses have adapted to survive the pandemic."; UK Government, "Build Back Better High Streets." (proposed actions) ; What Works Centre for Local Economic Growth, "Reflections on Struggling High Streets."; Federation of Small Businesses: "Supporting and growing small hospitality and tourism businesses after the pandemic."; UK Government: "Hospitality Strategy." (the '22 commitments')

[30] Note the ONS provides general statistics on 'UK Business Demography" (where and what businesses are created and closed). For example, for October to December 2021

fewer businesses closed than in the previous year 50,379 compared to 54,052 in 2019, and this was probably because of furlough and the raft of other short term government interventions.[31]

Figure 20 provides an important contextual reality check in terms of the findings in Section 5. It may be the case that the pandemic was unusually impactful, but we ought to distinguish between it being 'unusual' in the sources of, and patterns in, its impacts and 'unusual' in the degree of its impact – as yet, at least.[32] If we refer again to Figure 20, in 2021 there seems to be a return to levels similar to those in 2018, but this may be misleading since there may well be an accumulation of businesses 'hanging by a thread' who may in the coming months cease to trade. If so, the near future may look more like 2019, or worse, and this provides yet another reason to pursue follow up research, this time in order to provide support for damage control measures. An obvious focus for this is the problem of debt accumulated during (and after) the pandemic both by businesses and the public (noting also that according to the Office for Budget Responsibility and numerous other sources, significant increases in saving during lockdown was experienced by only some households).[33]

In any case, it is important to keep in mind that the trend in Figure 20 is a net reduction year to year and even if 2020 turns out to be an anomaly in terms of openings it has contributed considerably to an underlying cumulative effect. The nature of this cumulative effect is, however, variable and still evolving in the wake of the pandemic. For example, focusing down on core urban areas, Figure 21 highlights a difference between Bradford City and Leeds City.[34]

The figure provides year-on-year change in total number of units opening and closing for both independent and multiple businesses. The bounce back in independent openings in Bradford City clearly stands out at almost 4 times the previous year, while the change in closures almost doubled. In Leeds City, independent openings also show an improvement with respect to the previous year, although the change is small. Openings for multiple businesses remain in negative territory in both cities and in both cases, they are exceeded by the change in closures.

---

[31] For research and discussion on furlough and job retention in general see, for example, ONS, An overview of workers who were furloughed in the UK - Office for National Statistics (ons.gov.uk); Institute for Fiscal Studies, "Employment and the end of the furlough scheme."; Resolution Foundation, "18th months of the Coronavirus Job Retention Scheme."; and Resolution Foundation, "Furlough - The Beginning of the End."

[32] For some discussion of context see, for example, Bank of England: "Did Covid-19 Local Lockdowns Reduce Business Activity in The UK?" Did the Covid-19 local lockdowns reduce business activity in the UK? – Bank Underground

[33] See, for example, New Economics Foundation, "Business in Arrears: Preventing Collapse in Sectors Hardest Hit by Covid-19." https://neweconomics.org/uploads/files/Business-in-Arrears-FINAL.pdf
Joseph Rowntree Foundation, "Dragged Down by Debt: Millions of Low-Income Households Pulled Under by Arrears While Living Costs Rise." Dragged down by debt: Millions of low-income households pulled under by arrears while living costs rise | JRF

[34] Figure 21 reports rounded decimal numbers. Associated percentage changes are reported in table 3.

Figure 219: *West Yorkshire's Core Cities – Y-O-Y Change of RHEL Openings & Closures*

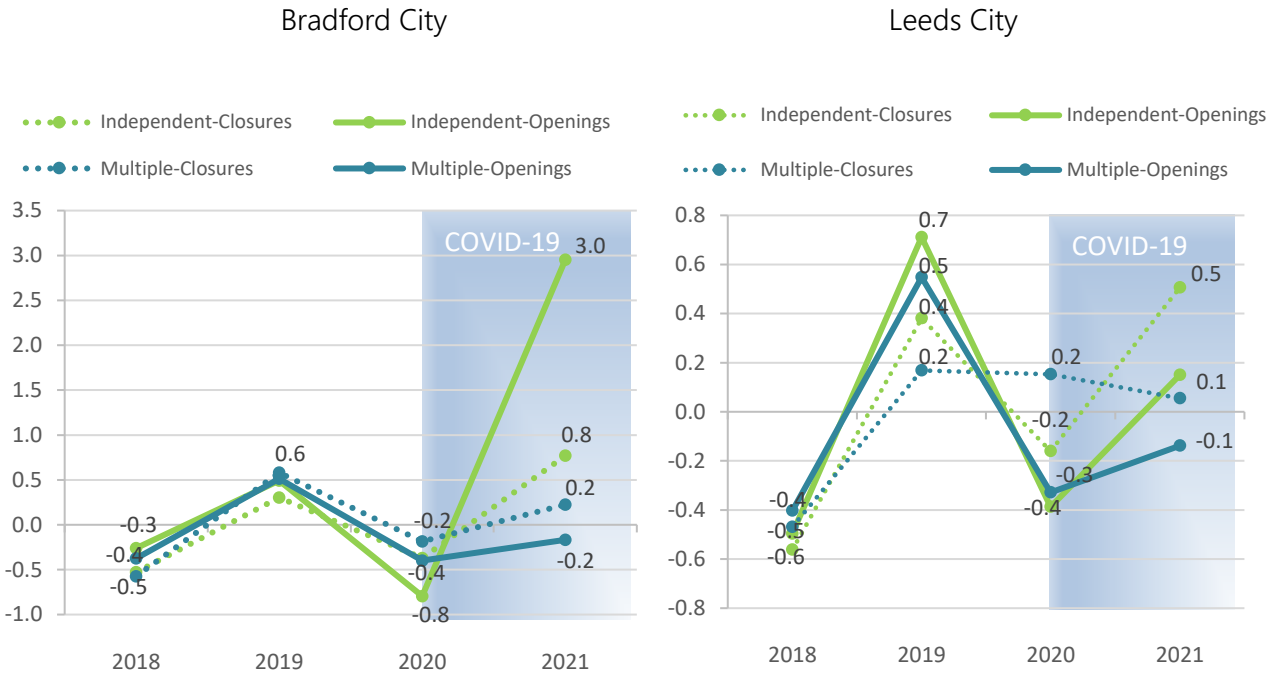


Figure 21 also makes it clear that negative year-on-year changes are not new. The accompanying Table 3, reported below, helps to clarify what is going on in 2021 compared to 2020. In Bradford City, in 2020 there were 146 new openings of independent businesses; in 2021 the number of new openings increased to 577, almost four times as many. In Leeds City, by comparison the equivalent figures were 581 and 668.[35]

This evidence shows that all in all, 2021 was a very positive year for net economic activity of independent businesses, in Bradford City, compared to RHEL multiple businesses.[36] The latter experienced negative net economic activity of -39 units, which is the effect of a negative change in new openings (approx. -16%) and a positive change in closures (approx. 23%) compared to the previous period, i.e., 2020.

[35] Note, we have used the term 'times' in order to clarify for non-statisticians, it is typical however to express this as a year-to-year percentage change, hence use of % in Table 3.

[36] Note, we define net economic activity as the difference between business' openings and closures. For instance, in 2021, Bradford's net economic activity of independents was positive. It recorded a positive value of 317 brand-new businesses openings (577units-260units, see table …). In Contrast, Bradford's net economic activity of multiple businesses was negative. It recorded a negative value of -39 units, this means that at the end of the year the number of units that have closed aid higher than the number of brand-new openings.

Table 3: *West Yorkshire's Core Cities – Y-O-Y Change of RHEL Openings & Closures*

		Bradford City			Leeds City		
	Status	**2020**	**2021**	**% Change Units**	**2020**	**2021**	**% Change Units**
Independent	*Openings*	146	577	295%	581	668	15%
	Closures	147	260	76%	435	655	51%
Multiple	*Openings*	71	59	-16%	218	188	-14%
	Closures	80	98	23%	256	270	5%

This is a timely reminder that there are different micro-trends at work within West Yorkshire (see Appendix 3 for additional data).[37]

SECTION 7: CONTEXT AND CONSEQUENCES FOR COMMUNITIES

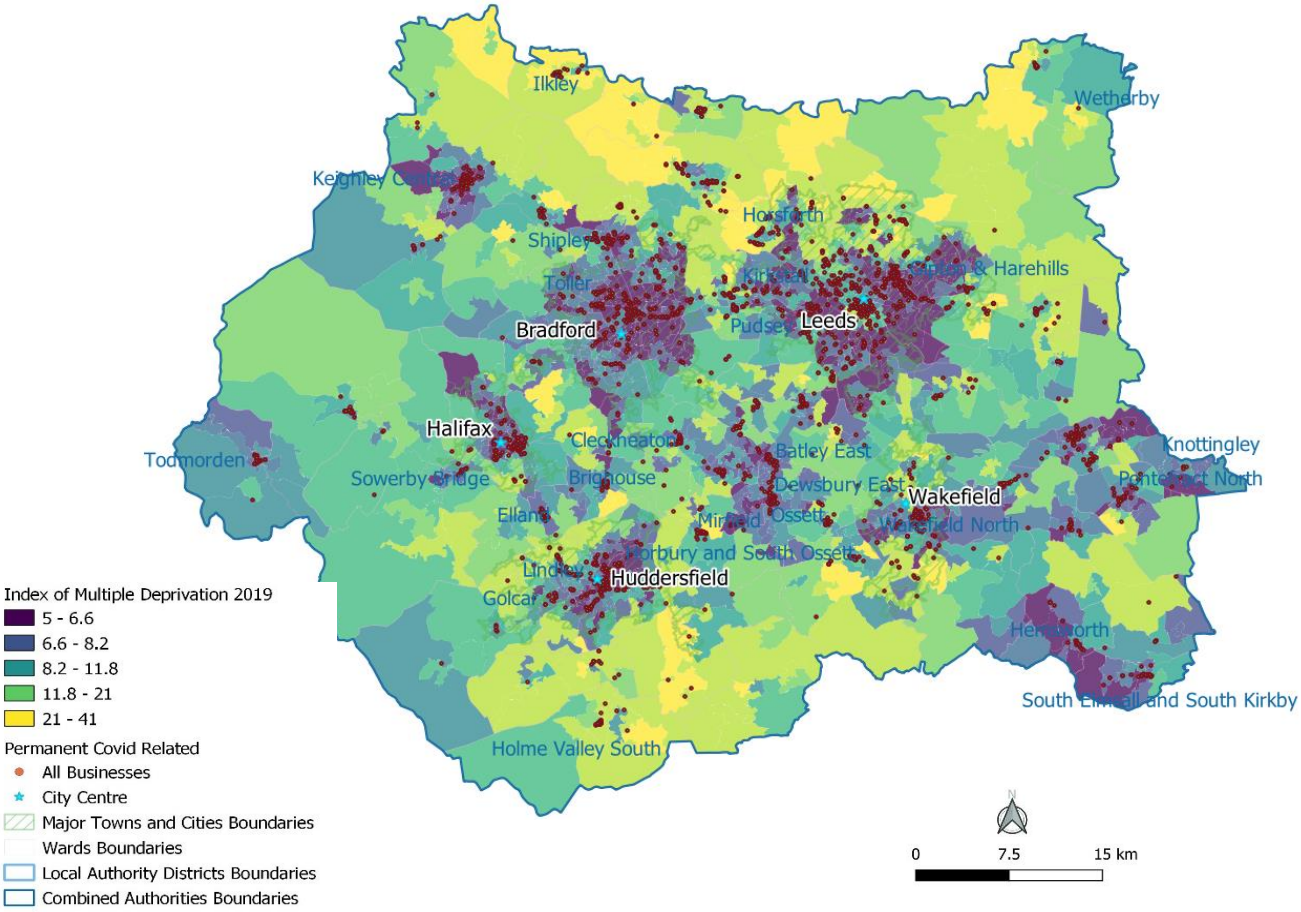
The Ministry of Housing, Communities and Local Government collects and collates data on relative deprivation in England for seven 'domains' based on 39 indicators and publishes this as an index of multiple deprivation (IMD). The data is available for small areas and is presented using a standard choropleth map depicting the intensity of deprivation according to colour – darker for more deprived areas and steadily lighter for less.[38] The domains are weighted and cover relative income, involuntary exclusion from the labour market, educational attainment and skill levels, health impairment and life expectancy, crime rates, housing stock and its availability and affordability, and the 'living environment'. The IMD is an extremely useful visual tool for presenting spatial difference in quality of life and life chances. In series it can be used to explore progress and highlight entrenched problems of inequality and lack of opportunity. Moreover, when paired or overlain with other data it can be additionally useful in visualising community based economic impacts and problems of uneven development. It speaks indirectly to structural issues and provides a geographic complement for such initiatives as 'levelling up'. 64% of the most deprived neighbourhoods in England are in just 8 local authority districts, among them Leeds and Bradford.[39]

[37] See also, for example: https://www.bradford.gov.uk/business/bradford-economy/about-bradfords-economy/

[38] The data is built up using 'lower layer super output areas (LSOAs). For comparability LSOA are designated as areas with an average of 1500 people or 650 households. An area has a higher IMD score if it performs badly on several indicators and across more domains. On a national basis the worst performing are in the most deprived decile for 6 domains. For a simple guide visit: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/833959/IoD2019_Infographic.pdf

[39] Visit: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/835115/IoD2019_Statistical_Release.pdf

Figure 202: Spatial distribution of RHEL non-survivors & deprivation in West Yorkshire



In Figure 22 we have overlain the latest IMD from 2019 for West Yorkshire with the location of all those RHEL businesses that did not survive during March 2020 to July 2021. It should be immediately obvious that the majority of those businesses were located within the boundaries of areas with high levels of deprivation.

Overlaying RHEL data on the IMD is a stark reminder that businesses come from and serve communities. To understand the impact of those businesses and the scope for business creation requires an understanding of communities and this is widely recognised, albeit there is no clear consensus on policy.[40]

[40] The British Retail Consortium regularly reports on retail trends, for example, December 2021 https://brc.org.uk/news/corporate-affairs/festive-success-but-head-winds-for-2022/
For examples of the range of research and opinion with a community focus see, for example,
All Party Parliamentary Group for Left Behind Neighbourhoods(LBN'S). "Left Behind Neighbourhoods - Community Data Dive." APPG-Community-Data-Dive-Report-for-APPG-S7.pdf (appg-leftbehindneighbourhoods.org.uk)
Commission into Prosperity and Community Placemaking, "No Place Left Behind." https://www.createstreetsfoundation.org.uk/wpcontent/uploads/2021/09/8560_PS_Create_No_Place_Left_Behind_FINAL.pdf
The think tank, UK Onward, "Turnaround: How to regenerate Britain's less prosperous communities by helping them take back control." Turnaround-Publication-3.pdf (ukonward.com) and "Social Contract; The relationship between business and society after the crisis." https://www.ukonward.com/wp-content/uploads/2021/06/ONWJ9102-A5-Booklet-210809-WEB-1.pdf
Power to Change, "Backing our Neighbourhoods: making levelling up work by putting communities in the lead." PTC_3822_Backing_our_Neighbourhoods_DR3-1.pdf (powertochange.org.uk) Centre for Social Justice, "Pillars of Community: Why Communities Matter and What Matters to Them." June 2021, https://www.centreforsocialjustice.org.uk/wp-content/uploads/2021/06/Pillars-of-Community.pdf

CONCLUSION: SUPPORTING POLICY SPACE

The pandemic has not been a storm in an otherwise calm sea. It has rather contributed to a direction of travel in terms of cumulative economic uncertainty and adversity: Brexit, Covid, war in Europe and a cost-of-living crisis, as well as a drip-feed of political scandal and an increasingly urgent need to address a slow-burning climate emergency.[41] There are and have been, of course, more or less optimistic positions on the future of the economy, national and local – different takes on the opportunities afforded – but that is different than whether the concatenation of outcomes has provided policymakers with a stable and benign environment with which to work.

As evidenced throughout this report RHEL is an important part of the West Yorkshire economy. We have, however, thus far done no more than identify important spatial differences and commonalities. The existence of these invites further research in order to establish clear understanding of underlying generative processes. It is one thing to forecast or predict the future, it is another to have appropriate understanding of the means to achieve ends. A great deal of research tends to assume existence of relevant causal mechanisms is clear and the measurable association of variables can proceed on the basis of one-size-fits-all models. This tends to undervalue the need for granular investigation. Possible foci for follow-up research and policy formulation include:

- Measuring value added from the 'off the high street' economy.
- Business resilience, damage control and debt overhang in vulnerable neighbourhoods.
- Explaining the differences in non-survival patterns between metropolitan districts.
- Developing best practice from what has worked elsewhere in the metropolitan districts to inform policy and achieve community impact.
- Assessing the long-term impact of loss of 'flag ship' stores.
- Making sense of agglomeration.
- Understanding 'when to let go', smart support policies for viable businesses and creative use of vacated spaces.
- How to facilitate coordinated repurposing able to contribute to broader goals, such as reducing car dependency for short journeys and fostering 'fifteen minute' urban places.

The list is indicative rather than exhaustive and there are other no less urgent concerns, such as how vacancy rates might evolve and impact business rate revenues of local authorities. Overall, however, uncertain times call for clearsighted evidence-informed decision-making and that can only benefit from appropriately focused research on key problems and challenges. This is basic to realistic creation and exploitation of opportunity. A system of systems approach, which embraces the complexity of a servicing or provisioning economy seems highly conducive to such research. As such, it offers the prospect of supporting local government in terms of understanding of its policy space.[42] The scope for this, moreover, seems likely to grow as West Yorkshire devolution develops and the levelling-up agenda becomes clearer.[43]

---

[41] For example, Institute for Fiscal Studies, "The Cost of Living Crisis – Who Is Hit by Recent Price Increases?"
And for context: Joseph Rowntree Foundation, "UK Poverty 2022."

[42] Similar research, for example, has been recently published by staff at the Bank of England.
Visit: https://bankunderground.co.uk

[43] On devolution see, for example, https://www.westyorks-ca.gov.uk/a-mayoral-combined-authority/the-devolution-deal/
And https://www.westyorks-ca.gov.uk/about-us/devolution/

REFERENCES

Carmona, M. (2022) "The existential crisis of traditional shopping streets: the sun model and the place attraction paradigm." *Journal of Urban Design*, 27 (1): 1-35.

Harari, D., et al. (2021). Coronavirus: Economic Impact. House of Commons Library, Briefing Paper No. 8866. https://commonslibrary.parliament.uk/research-briefings/cbp-8866/

Hughes, C. and Jackson, C. (2015) "Death of the high street: identification, prevention, reinvention." *Regional Studies, Regional Science*, 2 (1): 237-256.

Jessop, B., N. Brenner, and M. Jones. (2008) "Theorising Socio-spatial Relations." *Environment and Planning D: Society and Space,* 26 (3): 389–401.

Massey, D. (1984) *Spatial Divisions of Labour.* London: Macmillan.

Massey, D. (2005) *For Space*. London: Sage

Moore, J.F. (1993). "Predators and prey: a new ecology of competition." *Harvard Business Review*, 71(3): 75-86.

Morgan, K., and Sayer, A. (1988) *Microcircuits of Capital.* Cambridge: Polity Press.

Peck, J., (2005) Economic sociologies in space. Economic geography, 81(2), pp.129-175.

Sayer, A. (1984) "Defining the Urban." *GeoJournal*, 9 (3): 279–285.

Gregory, D. and Urry, J. (1985) *Social Relations and Spatial Structures*. London: Macmillan.

On local government see, for example, County Councils Network/PWC, "The Future of Local Government."
On levelling up see, for example, the February 2022, White paper
And BEIS Select Committee, Post-pandemic economic growth: Levelling up - Business, Energy and Industrial Strategy Committee - House of Commons (parliament.uk)

Appendix

Appendix 1: Rethinking economic value with 'system of systems' economics

HM Treasury's '5 case model' requires business cases to value all public spending in terms of affordability, fit with strategic objectives and value for money. Due to the climate emergency, the need for post-pandemic economic recovery, Brexit and the levelling up agenda, these guidelines, their interpretation and their operationalisation across the public sector are evolving (See HMTs Nov 2020 *National Infrastructure Strategy* and *Spending Review*).

HMTs '5 case model' is based upon the conceptual principles of 'neoclassical welfare economics.' These principles set out the nature and conditions of applicability of standard value theory, as taught in microeconomics textbooks. As HMTs Nov 2020 Green Book Review makes clear, standard value theory is inapplicable for 'transformational' interventions. We have co-developed, with HMT and many other stakeholders, 'system-of-systems' economics that is applicable for such cases,[44] making the comparison summarised in the table below.

	Conventional microeconomics	'System of systems' economics
Wellbeing is…	One-dimensional 'subjective utility'	Multi-dimensional 'human flourishing'
Money is…	Measure of wellbeing	Not sole measure of wellbeing
Vision of…	Market allocation of scarce resources	Profit system of social provisioning[45]
Basic principle is…	Monetise costs and benefits to assess options	Analyse value creation and value capture to develop and assess options
Theory of change is	Static equilibrium	Dynamic process
Decision-making under…	Probabilistic risk	Fundamental uncertainty
Preferences are…	Pre-given and unchanging ('exogenous')	Shaped by, and change with, provisioning ('endogenous')
Applicable scale is…	Small-scale interventions impacting on part of system ('marginal')	Large-scale interventions impacting on system-of-systems ('non-marginal').[46]

For more details see the forthcoming report on 'rethinking economic value' from the Business cases project of iCASP (https://icasp.org.uk/).

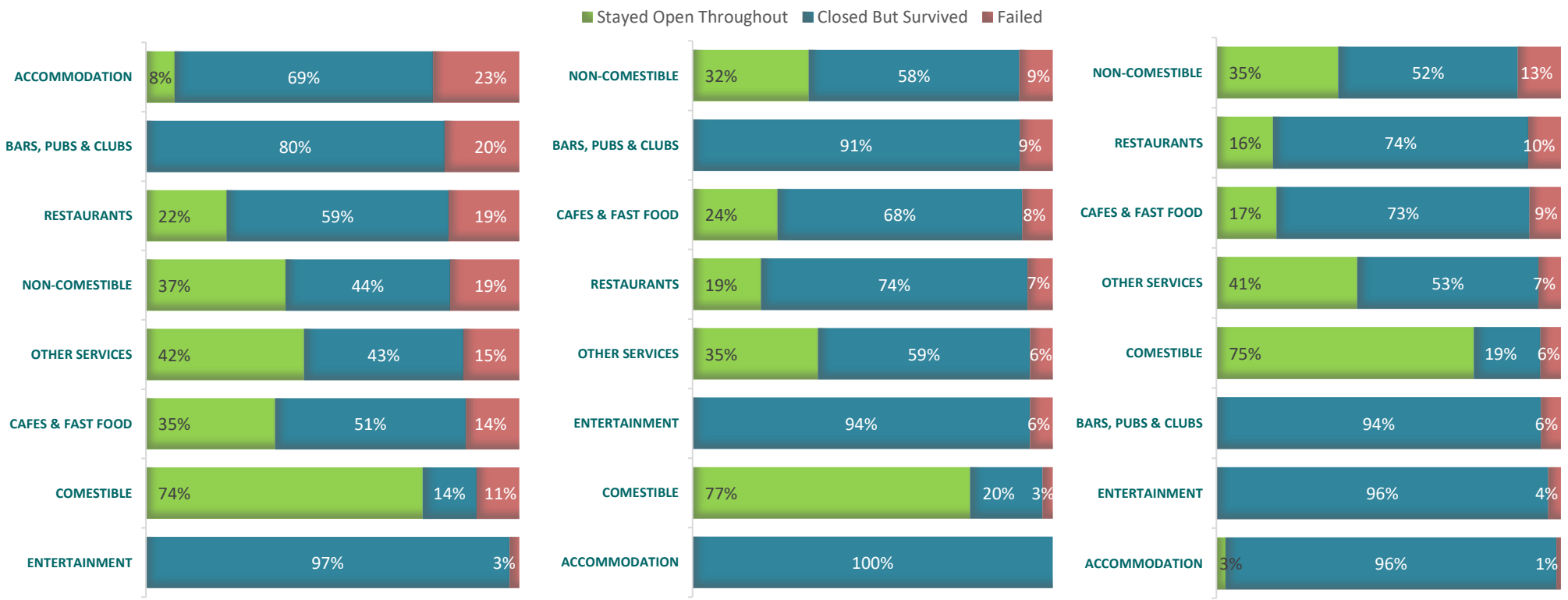
[44] Elements of system-of-systems principles are drawn from HMT's 2015 rewrite of its *Valuing Infrastructure Spend* guidelines; from discussions of HMT Green Book assessment of strategic 'missions' (e.g., Mazzucato et al. 2019); from DEFRA circular economy initiatives (e.g,. Brown et al. 2020); and from the 'new public sector economics' in the 'political economy' tradition (e.g., Lind 2019).

[45] On the distinction between 'social provisioning' and 'market allocation' see, e.g., Brown and Robertson (2014).

[46] Note that it is possible for relatively small-scale interventions to have relatively large-scale impacts (e.g., a strategic flood barrier may protect an entire city). These are cases of non-marginal impacts requiring system-of-system valuation. In general, it is the scale of *impact* not of *intervention* that determines whether an intervention is marginal or non-marginal. See also the definition of 'transformational' programmes in the 2020 HMT Green Book Review.

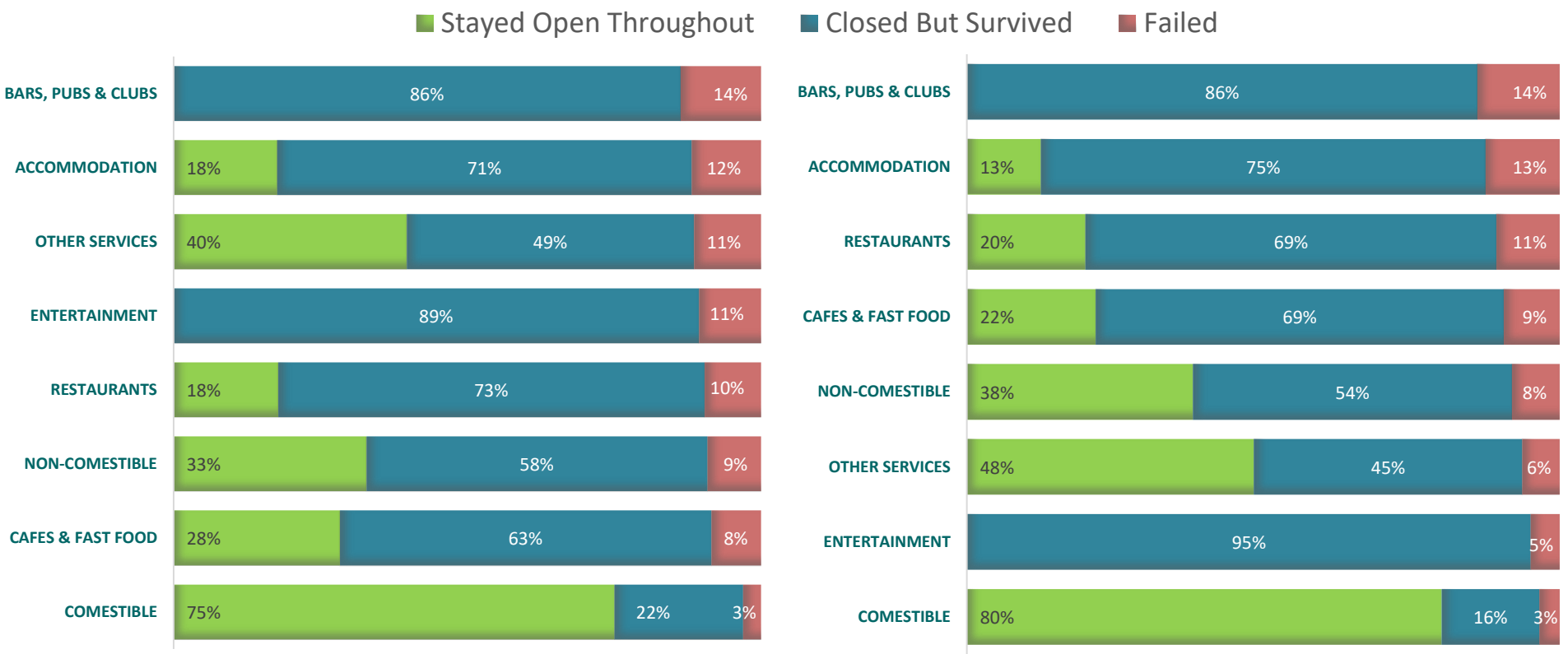
Appendix 2: RHEL Closures by Category in Core Towns and Cities

Figure 2a: West Yorkshire's Core Cities – RHEL Closures by Category (March 2020 – July 2021)



Author's own elaboration.
***Source**: © local Data Company. **Note**: West Yorkshire's major cities follows the Office for National Statistics definition*

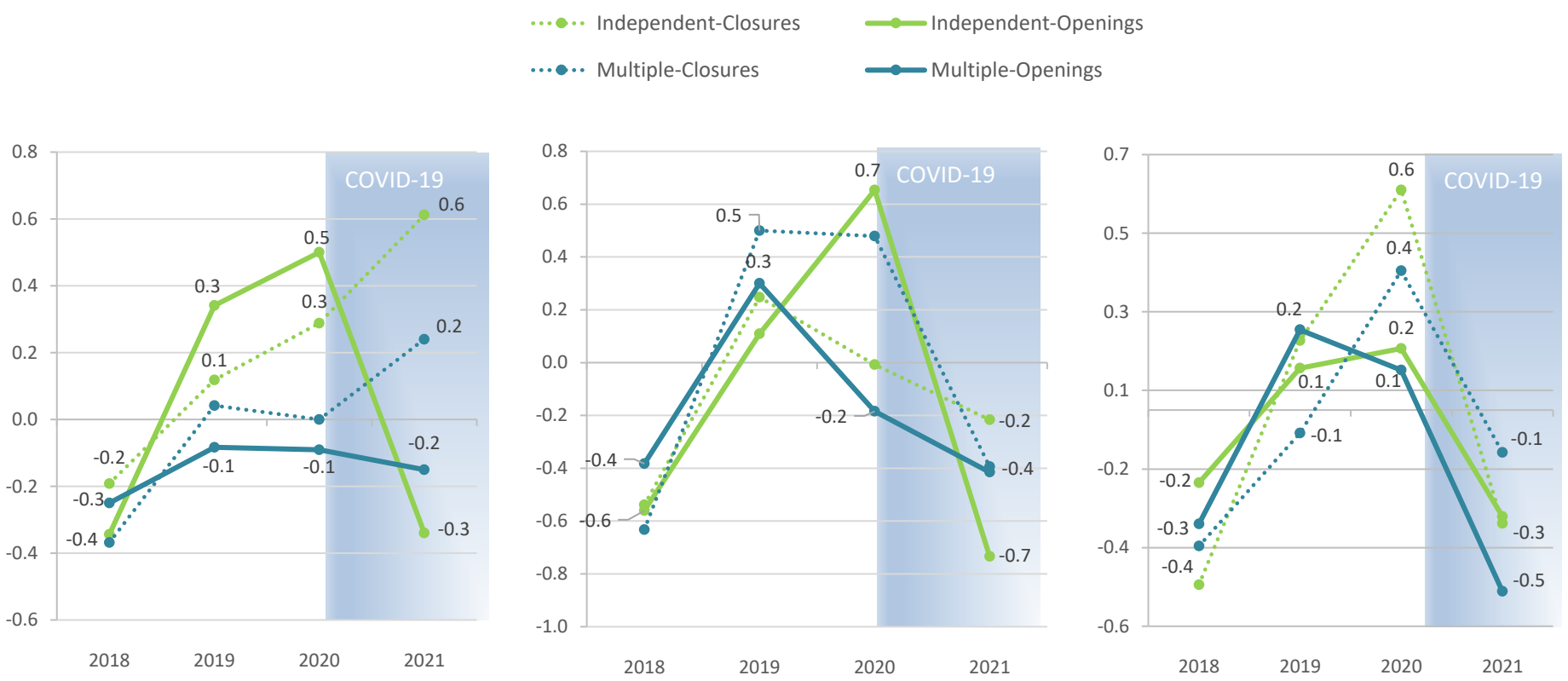
Figure 2b: West Yorkshire's Core Cities – RHEL Closures by Category (March 2020 – July 2021)



Author's own elaboration.
***Source**: © local Data Company. **Note**: West Yorkshire's major cities follows the Office for National Statistics definition*

Appendix 3: Net Change in Economic Activity by core Cities

Figure 4a: West Yorkshire's Core Cities – RHEL Closures by Category (March 2020 – July 2021)



Author's own elaboration.
***Source**: © local Data Company. **Note**: West Yorkshire's major cities follows the Office for National Statistics definition*

Appendix 4: Breakdown of the Sample by Category and Subcategory

Comestibles	Bakers Butchers & Fishmongers Confectionery, Tobacco, Newsagents Groceries, Supermarkets & Food Shops Off Licenses Petrol Filling Stations
Non-comestibles	Books, Arts & Crafts, Stationery, Printers Car & Motorbike Showrooms Charity & Second-hand Shops Chemists, Toiletries & Health Department Stores & Mail Order Discount & Surplus Stores DIY, Hardware, Builder's Merchants & Household Goods Electrical Goods & Home Entertainment Fashion & General Clothing Florists & Garden Footwear Furniture, Carpets, Textiles, Bathrooms & Kitchens Gifts, China & Leather Goods Jewellers, Clocks & Watches Pet Shops & Pet Supplies Sports, Toys, Cycle Shops & Hobbies
Hospitality, Entertainment & Leisure	Accommodation Bars, Pubs & Clubs Cafes & Fast Food Entertainment Restaurants
Other Services	Auto & Accessories Auto Services Employment & Post Offices Estate Agents & Auctioneers Hairdressing, Health & Beauty Household & Home Launderettes, Dry Cleaners & Other Locksmiths, Clothing Alterations & Shoe Repairs Miscellaneous Travel Agents & Tour Operators


CAROLINE GARDN
Design
CAROLINE GARDNER