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Mapping the slippery slope: the growth of predatory financial services markets across the UK

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ABSTRACT

This study examines two-tier financial services markets. These markets are characterised by new alternative financial services providers (AFSPs) entering local financial services markets after bank branch closure and undertaking high levels of financial misconduct. We examine this description of local financial services markets using the regulatory status and location of the UK population of AFSPs between 2002 and 2015. We report significantly higher numbers of AFSPs undertake financial misconduct in areas of high bank branch closure, with the most severe offending occurring within urban and deprived areas. AFSPs operating in these areas are not just new entrants but they also include new and established firms. We propose that the current scope of regulation applied to assess bank branch closures in the UK is too narrow. By only considering the effect of bank branch closure on the access to cash, current UK regulation overlooks multiple outcomes arising from bank branch closure, not least the behaviour of AFSPs examined in this work.

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KEYWORDS

Financial exclusion; financial ecology; alternative financial services provider; bank branch closure

1. Introduction

The last twenty years has witnessed a reshaping of the retail financial services landscape. As bank and building society branches (hereafter bank branches) have closed, a spatial void in retail financial services provision has formed. It has been widely argued this space has been filled by alternative financial services providers (hereafter AFSPs) moving into areas of bank branch closure, forming two-tier markets, and engaging in financial misconduct to the detriment of their customers. While this process of bank branch closure and two-tier market formation has been documented (Cover and Kleit 2014; Dunham 2019; Dunham and Foster 2015; Goodstein and Rhine 2017; Graves 2003; Prager 2014; Simpson and Buckland 2016), the predicted outcomes of two-tier markets, have faced less academic scrutiny. Specifically, two assumed features of two-tier financial markets are not fully understood. First, do AFSPs display the predicted poor behaviour towards their retail customers in areas of high bank branch closure, and particularly if these areas are urban and deprived. Second are the AFSPs operating in these two-tier markets as new entrants? Alternatively, are these AFSPs existing firms, who adapt their behaviour once bank branches have closed?

This study considers these questions through examining the regulatory status and behaviour of 83,064 UK AFSPs. We use data from the UK financial services register, financial notices issued by the UK financial regulator and a diverse range of hand-collected and publicly available data. The data are examined using descriptive, nonparametric, and count regression techniques. We report significantly higher levels of financial misconduct by AFSPs operating in areas of high bank closure and similar urban and deprived areas. These AFSPs include both new and existing firms.

This examination is important for many reasons. Initially, there has been a dramatic growth and change in AFSP numbers. In the UK, AFSPs are regulated financial firms offering financial services including consumer credit, mortgages, insurance, and investment services. These AFSPs include firms regulated to accept deposits, appointed representatives, tied agents and/or firms providing basic advice, consumer credit, self-invested personal pensions, regulated mortgages, general insurance, home purchase plans, home reversion business, or investment business regulated under the Insurance Mediation Directive, the Investment Services Directive, or MiFID. Over the sample period and reflecting international trends, the numbers of these firms grew from 30,553 in 2002–53,470 in 2015, and following regulatory developments have provided different financial services. The definition of UK AFSPs is distinct from that seen within the USA and North American studies. In the USA, AFSPs are defined on regulatory criteria from bodies such as the Federal Deposit Insurance Corporation (FDIC) and include check-cashing outlets, money transmitters, car title lenders, payday loan stores, pawnshops, and rent-to-own stores (see Friedline and Kepple 2017).

Second, global processes of financialization and deregulation have enabled new financial providers to enter retail financial services markets, potentially creating a riskier and more predatory financial system (Dwyer 2018). Indeed, the behaviours of AFSPs could enable institutional forms of financial exclusion (Bunyan, Collins, and Torris 2016) whereby customers' maybe unable to find an appropriate conventional financial services provider. As old, disabled, and small business customers are adversely affected by bank branch closure and are less able to use alternative digital services (Browning 2022), red lining in the provision of financial services based on access to high-speed internet maybe emerging (Friedline and Chen 2021). This is a notable concern for the UK, where 6.9 million or 14% of the UK adult population were digitally excluded in 2017 (Financial Conduct Authority 2023) and digital skills are critical when accessing banking services (Vik, Kamerāde, and Dayson 2024).

Third, academic work examining bank branch closure and AFSP growth, has focussed on the formation of these two-tier markets rather than their outcomes, and exclusively examined North American markets. This is worrisome as multiple and often polarised policy responses to bank branch closure have emerged internationally. Many academic and policy voices have argued banks should face greater legal social obligations when addressing bank branch closure, alike those within the US Community Reinvestment Act (House of Lords and House of Commons 2013; Marshall 2004). Indeed, this US legislative framework has successfully enhanced credit availability (Bates and Robb 2015) and employment for small businesses (Kim 2023). As the UKs' policy response has focussed only on the provision of cash and retail depository services (Panjwani and Browning 2024), the extent of bank branch closure and subsequent changes might be expected to be different.

This study contributes to prior research through multiple avenues. This work extends the literature on financial complaints made about AFSPs (Dimmock, Gerken, and Graham 2018; Egan, Matvos, and Seru 2019; Law and Zuo 2021; Parsons, Sulaeman, and Titman 2018), by examining the regulatory response to such concerns in the context of bank branch closure. We contribute to the literature studying AFSPs and two-tier financial services markets (Cover and Kleit 2014; Dunham 2019; Dunham and Foster 2015; Goodstein and Rhine 2017; Graves 2003; Prager 2014; Simpson and Buckland 2016) by investigating the outcomes of this phenomena outside North America and determining the overlooked legal and regulatory outcomes of this change (Potts 2021). This includes assessment of a national population of AFSPs operating within areas high bank branch closure and uniquely quantifying the frequency and forms of financial misconduct undertaken by these AFSPs. In the next section we review pertinent literature and develop the hypotheses. The data and methodology are described in section 3. The results are reported in section 4 with a discussion of these finding presented in section 5. Section 6 provides the conclusions and examines different policy options arising from the study findings.

2. Pertinent literature and hypothesis development

The decline of the UK bank branch network has been swift, falling 60 per cent from 21,643 branches in 1986–8,060 branches in 2022 (Booth 2022). The literature on bank branch closure proposes that several factors have driven this process including changing financial regulations, uneven population dynamics, (Argent and Rolley 2000), declining profitability, the merger of financial institutions, overlapping branch networks (Calzada, Fageda, and Martínez-Santos 2023; Damar 2007; Jackowicz, Kozłowski, and Wnuczak 2021), the expansion of internet use (Jackowicz, Kozłowski, and Wnuczak 2021), and growing risk aversion and profit maximisation

objectives of financial institutions (Leyshon and Thrift 1995). These explanations of bank branch closure have focussed on the banks' immediate economic viewpoint rather than contemplating a wider societal perspective of bank branch closure (French, Leyshon, and Signoretta 2008).

A wider appraisal of bank branch closure is important as bank branches confer multiple benefits, enabling customers to access lower cost credit (Hegerty 2016), providing greater low-income household wealth accumulation (Célerier and Matray 2019), enhancing lending to local people (Bates and Robb 2015) and delivering lifelong positive effects in how individuals manage credit (Brown, Cookson, and Heimer 2019). When bank branches are closed, financial exclusion of poor communities develops (de la Cuesta-González et al. 2021; Leyshon et al. 2004), credit constraints emerge (Zhao and Jones-Evans 2017), limiting new firm formation (Ho and Berggren 2020) and restricting small business lending (Nguyen 2019).

Moreover, after bank branches closure, a spatial void emerges which has been filled by AFSPs or other fringe financial institutions (Cover and Kleit 2014). These AFSPs are small firms offering financial services targeted at minority and poorer clientele including payday loans, money transmission services, consumer credit and check cashing. Once bank branches close, the numbers of AFSPs in an area rises, increasing the use of non-conventional financial services. Longstanding concerns exist as to the poor behaviour, high costs and predatory outlook of these AFSPs (Dwyer 2018; Stegman 2007), and the subsequent negative outcomes for vulnerable groups (Joassart-Marcelli and Stephens 2010). UK AFSPs are distinct, offering different financial products from US AFSPs, yet are also assumed to predate on vulnerable customers in two-tier financial services markets (House of Commons and House of Lords 2013).

It is challenging to theoretically explain the development of such a hostile environment for customers, after bank branch closure. A starting point is the financial ecology literature, which assumes changing relationships within the financial system generates unequal outcomes (Dwyer 2018) and socio-spatial inequalities. As bank branches serve multiple economic and social roles (Argent and Rolley 2000), their closure results in financial exclusion for poor communities or a flight to wealthier areas by mainstream financial services firms (Leyshon et al. 2004). Following Leyshon et al. (2004), we can view AFSPs through the metaphor of parasitism, whereby these financial firms exist to prey upon and exploit less advantaged customer groups. The conduct of AFSPs could also be viewed from a predatory perspective (Mesly et al. 2020). As banks have vacated certain areas, new, small and distinct market suppliers (AFSPs) with different standards of conduct fill this spatial void, fundamentally altering local market dynamics and the probability of adverse consumer outcomes.

These outcomes are also associated with the wider causes of financial exclusion, which includes access to bank branches, as well as banking costs, legal rights, and political stability (Allen et al. 2016). While the proportion of unbanked people has fallen internationally, this change has been uneven, with disadvantaged areas often retaining higher proportions of the unbanked (Creamer and Warren 2023). Replacing bank branches with AFSPs providing non-conventional financial services, may amplify financial exclusion, leading to 'predatory inclusion' (Bea 2022) whereby access to financial services for marginalised groups is provided under terms and conditions which jeopardise the benefits of this access. In other words, if areas become increasingly served by AFSPs, the use of unconventional financial services is normalised, particularly for lower income households (Friedline and Kepple 2017), generating future financial insecurity and inequality.

While these explanations reflect a jaundiced perception of financial services provision, deprived areas do contain a higher proportion of vulnerable customers (Marshall 2004), which are particularly profitable for unscrupulous AFSPs (Egan, Matvos, and Seru 2019). Indeed, location may explain why certain firms offend more than others (Glaeser and Sacerdote 1999). The distribution of US complaints about financial advisors are disproportionately centred in certain cities by a factor of three (Parsons, Sulaeman, and Titman 2018), and focussed within wealthy, elderly, and less educated counties (Egan, Matvos, and Seru 2019). A significant market change such as bank branch closure may also provide a conducive environment within which financial misconduct can spread (Dimmock, Gerken, and Graham 2018).

This theoretical backdrop leaves many questions unanswered. Not least, the predicted financial misconduct of AFSPs is yet to be systematically tested. Second, as AFSPs have existed in local financial markets for many years, would these firms really alter their existing regulatory behaviours in response to bank branch closures? While the literature has proposed AFSPs' poor behaviour has arisen from new entrants, the accuracy of this prediction remains unclear. We therefore examine the following hypotheses:

H₁: Alternative Financial Services Providers (AFSP) undertaking financial misconduct are more frequently observed in areas of higher bank branch closure, and particularly in similar deprived, urban areas.

H₂: Two tier markets consist of a combination of new and existing firms, rather than being dominated by new entrant Alternative Financial Services Providers (AFSPs)?

3. Data and methodology

The data are primarily taken from the financial services register, an underutilised data source including all UK regulated financial firms operating over the 2002–2015 period (110,617 firms). These data compiled by the Financial Conduct Authority (FCA) after 2013, and the Financial Services Authority (FSA) between 2001 and 2013, record all firms regulated through the UK approved person regime; a system replaced by the Senior Managers and Certification Regime in 2019. The data indicate when the firm was first regulated, if the firm has a cancelled or revoked status and is withdrawn from the market, and the firms' location. A cancelled or revoked status occurs when a firm ceases to operate and/or falls short of expected regulatory standards and/or resource/competence thresholds. Details are provided within the FCA enforcement guide (Financial Conduct Authority 2016). The dependent variables include the location and number of regulated AFSPs, newly registered AFSPs, AFSPs with a cancelled or revoked regulatory status and AFSPs which have been registered to operate since 2002 (termed 'old' AFSPs). We also consider the numbers, locations, and characteristics of AFSPs which have received a final notice from the financial regulator, indicating poor regulatory behaviour. These AFSPs operate in areas of insurance, mortgages, investments, and consumer credit, often in the guise of independent traders or agents working for larger financial services providers.

All data were converted to and was recorded at the local authority area using the Office for National Statistics Post Code Directory. In total we consider 346 local authorities across the UK, including 290 of the 317 English authorities and all local authorities from Wales and Scotland, Isle of Man and the Channel Islands. These authorities are administrative bodies of local government representing a county, or a borough, district or metropolitan area. These areas vary both in scale and population, with an average population of 160,000 people in our sample, varying from two thousand in the Isles of Scilly to Birmingham with over a million residents. As there isn't a direct relationship between living near a financial services provider and the use of those financial services (Dunham 2019), the local authority area incorporates a space within which customers plausibly undertake their face-to-face financial services transactions. We employ count measures to record the number of AFSPs annually for each local authority area, assuming the AFSP head office address indicates the area of operation. We acknowledge, spatial finance research faces multiple challenges (Caldecott et al. 2022), and that no consensus exists as to the spatial methods or areas which should be adopted to examine financial inclusion and financial ecologies.

Several sample selection decisions are made. Financial firms regulated under European regulations without a UK address (11,068 firms) are excluded from the analysis. We also remove those institutions likely to involve significant regional and national branching or providing financial services to a corporate clientele. This includes firms regulated under the Second Banking Coordination Directive, the 3rd Life and Non-Life Directives, to provide reinsurance or Lloyds business. Due to data collection challenges, we remove 6,347 AFSPs from Central London, 3,121 AFSPs operating in Northern Ireland, and two English local authority areas redefined during the sample period. Overall, 290 English, 22 Welsh, and 32 Scottish local authority areas, together with the Isle of Man, and the Channel Islands, are considered.

The final notices issued by the regulator are publicly available documents providing details of firms and individuals involved in financial offending, the specific breaches of regulations and the punishments imposed. All final notices, issued between 2002 and 2015 were collected, coded, and manually cross-checked using the Financial Services Register, Supervisory, Warning and Decision notices, Annual Reports and press releases issued by the FSA, FCA and appeals to the Financial Services and Markets Tribunal. The final notices were coded to classify the focus and duration of offending, and punishments, following established classifications used by the regulator and the Financial Services Register. After excluding observations from Northern Ireland, London, and larger branching institutions, and cases falling outside our frame of reference, 1079 firm level observations remain.

Table 1. Variable definitions.

Variable	Description	Data source
Bank branch change (%)	Change in the numbers of bank/building society branches – 2002–2015	Building Society Association, SNL, Individual banks
All AFSPs	All AFSPs registered to operate.	Financial Register
New AFSPs	AFSPs registered for the first time.	
Cancelled/revoked AFSPs	Cancelled or revoked AFSPs.	
Old AFSPs	All AFSPs registered in or before 2002, which continue to operate.	
Migration (%)	Net annual internal population migration to and from a local authority area.	Office of National Statistics (ONS). (Socio-economic statistics).
House price change (%)	Annual percentage change in the average price of all house transactions.	
Unemployment (%)	The annual unemployment rate	
Life expectancy (years)	The annual life expectancy of women residents.	
Income (£)	Gross average, annual income for all adults in the same employment for more than one year.	
Crime (%)	Criminal offences annually for each 1,000 persons.	
Population	The population of the local authority area	
Offences	Number of AFSPs receiving a final notice.	Final Notices
Duration of offending (days)	The duration of financial offending.	
Reporting and compliance	AFSPs committing reporting or compliance offences.	Final Notices – type of offending
Complaints handling	AFSPs committing complaints handling offences.	
Market abuse	AFSPs committing market abuse offences.	
Fraud and theft	AFSPs committing fraud or theft offences.	
Mis-selling	AFSPs committing mis-selling offences.	
Money laundering	AFSPs committing money laundering offences.	
Other offending	AFSPs committing other offences.	
Public censure	AFSPs issued with a public censure	Final Notices – punishments
Prohibition	AFSPs with employees prohibited from working in a regulated financial setting.	
Fine	AFSPs receiving a fine.	
Variation	AFSPs where regulatory permissions or approvals have been varied or cancelled.	
Disgorgement/ redress	AFSPs required to disgorge profits or make redress.	
Other punishment	AFSPs receiving punishments outside prior definitions.	

The data on bank branches were collected for 1999 and 2015. The 1999 data were hand-collected from individual banks and the Building Society Association. The 2015 data were provided by the SNL data provider. The 1999 data include 14,537 branches from 20 banks and 27 building societies. As the sample period included substantial merger and acquisition activity, these institutions combined into 9 banks and 9 building societies with 10,442 branches in 2015. Comparison of this data allows definition of areas of higher (and lower) bank branch closure where $> = 25\%$ ($< 25\%$) of branches are shut and are recorded as one (zero) for areas with a higher (lower) bank branch decline.

We use the Index of Multiple Deprivation (IMD) to quantify deprivation. As this statistic is produced separately for England, Wales, and Scotland, we individually rank English, Scottish and Welsh local authorities. We define a deprived area as being within the lowest two quartiles. Urban classifications use definitions from the English, Welsh, and Scottish governments. There is no comparable classification for rural or urban space for the Channel Islands and the Isle of Man. Finally, we use Office of National Statistics (ONS) data to compile annual variables including migration, house price change, annual unemployment, annual life expectancy, gross mean income, and crime. These variables were chosen as to they reflect characteristics underlying different financial ecologies or ecosystems (Leyshon 2021), capture social norms affecting customer vulnerability (Manski 1993), and are associated with the distribution of financial exclusion (Allen et al. 2016; Creamer and Warren 2023). These variables are also used in the development of representative local authority areas displayed in Table 3, which emulate common financial ecologies (rural, deprived areas, middle class, suburban areas and deprived, urban areas). A summary of the variable definitions used is provided in Table 1.

To address the hypotheses, we first consider AFSPs descriptively. We then test if mean values of AFSP numbers vary for areas with different levels of bank branch closure, and other characteristics, using nonparametric two tailed Kruskal–Wallis tests (Hegerty 2016). This test examines the differences between mean values of each group of observations without imposing a distributional assumption.

Choosing an inferential statistic is complicated, as count data are highly dispersed, contain outliers, and frequently do not conform to assumptions of normality. Such overdispersion is common within count data (Herbison, Robertson, and McKensie 2015), is observed in our data, and disqualifies many forms of regression analysis including ordinary least squares linear regression models (Gardner, Mulvey, and Shaw 1995) or conventional fixed effects panel data models (Parsons, Sulaeman, and Titman 2018). Following statistical theory, the Poisson model is the benchmark model to employ when considering count data (Cameron and Trivedi 1990). Notwithstanding their theoretical benefits, Poisson models impose restrictive assumptions as to the variability of the data used (Cameron and Trivedi 1990) including equidispersion, where the mean and variance are equal for a given set of covariates. This common feature of count data (Herbison, Robertson, and McKensie 2015) implies the variability around the Poisson model's fitted values is excessive potentially leading to misleading estimates (Berk and MacDonald 2008).

We therefore use a negative binomial (NB) model which introduces a random term reflecting unexplained variation between subject differences. This relaxes the assumption that the expected occurrence of an event is the same in each case (Herbison, Robertson, and McKensie 2015) and allows events to occur with a constant yet unequal probability (Cameron and Trivedi 1986). NB models assume the variance is a function of a parameter power of the mean. This accommodates overdispersion as the conditional variance of the outcome. This is assumed to be a quadratic function of the conditional mean. The NB regression model estimates this parameter assuming either constant dispersion or mean dispersion (Richardson et al. 2015). We employ a mean dispersion model assuming the number of cases in a local authority area j can be modelled by a negative binomial distribution.

$$\text{Cases}_j \sim \text{NB}(\alpha_j, \delta_j^2) \quad (1)$$

This model has two parameters, the mean α_j and the variance δ_j^2 with the probability mass function

$$f(y, \alpha, \delta) = \frac{\Gamma(y + 1/\alpha)}{\Gamma(1/\alpha)\Gamma(y + 1)} \left(\frac{1}{1 + \delta\alpha} \right)^{1/\alpha} \left(1 - \frac{1}{1 + \delta\alpha} \right)^y \quad (2)$$

with mean $E(y) = \delta$, variance $V(y) = \delta(1 + \delta\alpha)$ and $\alpha \geq 0$ is the dispersion parameter (Lawless 1987). As we employ a mean dispersion model, we introduce regressors X via $\alpha = \theta$ and $\delta = \exp(X\beta) = \mu$ so that the mean is μ , the variance is $\mu(1 + \mu\theta)$ and the dispersion is $1 + \mu\theta$ (Hardin and Hilbe 2014).

Pre-testing is reported in Tables 7 and 8 and includes a Hausman test to determine whether fixed or random effects models are preferable. Within the fixed effects model, the fixed 'effects' apply to the dispersion term (StataCorp 2021), distinctly from other fixed effects models. This precludes the use of robust standard errors and other benefits associated with fixed effects models. A Likelihood-Ratio test of $\alpha = 0$ and a joint F test of $\text{years jointly} = 0$ are used to determine if a Poisson or NB model and time fixed effects are required, respectively. Overdispersion is reported, suggesting NB regression models (Hausman, Hall, and Griliches 1984), and the need for time fixed effects are indicated. Hausman tests indicate both fixed and random effects models are suited for different models. The coefficients of these models represent the approximate percentage effect of the independent variables on the mean incidence of a AFSPs' location (Brian and Lefgren 2003). Incident rate ratios (IRR) are also reported and provide an estimate of the increase (or decline) on the number of AFSPs if an area has high bank branch loss or otherwise.

4. Results

We provide descriptive statistics within Table 2. In Table 3, we report the AFSPs' business operations for three representative areas. The numbers of AFSPs over time are recorded in Table 4. We report numbers of AFSPs in areas of high bank branch closure, and urban and deprived areas of high bank branch closure, in Tables 5 and 6.

Table 2. Descriptive statistics recorded at the local authority area level.

	Obs.	Min.	Max	Mean	Std. Dev.
Panel A: Financial Register and Socio-economic variables.					
All AFSPs	4837	0	1256	111.11	84.09
New AFSPs	4844	0	448	11.07	17.69
Cancelled and Revoked AFSP	4844	0	50	3.70	4.11
Old AFSPs (registered on or before 2002)	4844	0	445	55.93	46.84
Internal Migration (%)	4831	-3.11	2.39	0.18	0.57
Income Average (£)	4653	12703	70574	24426	5519
House price change (%)	4753	-24.01	76.29	6.62	10.54
Unemployment rate (%)	4732	0.84	7.59	2.78	1.04
Life Expectancy (years)	4802	76.4	86.67	82.1038	1.04
Crime (crimes per 1000 people)	4058	10.96	300.12	76.38	32.94
Population	4816	2155	1112950	162044	112419
Panel B: Bank branch and Final Notices characteristics.					
Bank Branch Change (%)	345	-205.26	61.11	36.13	33.39
Number of offences	346	0	31	3.29	4.33
Duration of offending (days)	346	0	20763	1707	2667
Type of offending – average number of cases					
Reporting and Compliance	346	0	27	2.42	3.49
Complaints Handling	346	0	3	0.16	0.45
Market abuse	346	0	6	0.04	0.37
Fraud and Theft	346	0	10	0.61	1.26
Mis-selling	346	0	7	0.56	1.17
Money laundering	346	0	1	0.01	0.11
Other offending	346	0	2	0.03	0.18
Punishments – average number of cases					
Public Censure	346	0	4	0.14	0.45
Prohibition	346	0	9	0.75	1.40
Fine	346	0	13	0.65	1.37
Variation/Cancellation of Authorisation/ Approval/Permissions	346	0	27	2.39	3.38
Disgorgement/Redress	346	0	2	0.04	0.22
Other punishment	346	0	1	0.00	0.05

Notes: The data are recorded for sample local authority areas. Panel A includes data from 83,064 UK regulated AFSPs for each area annually. Panel B includes characteristics from bank branch data and the 1079 final notices issued to AFSPs firms between 2002 and 2015. Socio-economic statistics are from the Office for National Statistics. Bank branch data were taken from SNL (2015) and were hand collected (1999). AFSP = Alternative Financial Services Provider.

The statistical relationships between numbers of AFSPs and areas of high bank branch closure, similar urban and deprived areas, and socio-economic variables are outlined in Tables 7 and 8.

In Table 2, we observe that an average of 111 AFSPs exist in each local authority area annually. These averages include 11 new AFSPs, 3 cancelled/revoked AFSPs, and 55 established or 'old' AFSPs. The mean decline in bank branches is 36%. We witness an average of 3.29 offences in each area, with an average duration of offending exceeding four years. Reporting and compliance is the most frequently seen financial offence with variation or cancellation of regulatory permissions/approvals/authorisation the most frequently observed punishment.

Table 3 illustrates the AFSP business areas using three example local authority areas, representing distinct financial ecologies including more deprived and urban areas (Merthyr Tydfil), deprived and rural areas (Fenland) and wealthier suburban areas (Angus). We report bank branch change declines in all areas and the number of AFSPs increases in all areas. The regulated functions include whether the firm is an appointed representative or agent acting for another financial services provider and what this AFSP is regulated to supply, including consumer credit, insurance, investments, or basic financial advice. We observe an increase in the AFSPs acting as appointed representatives and offering consumer credit. AFSPs offering insurance services have declined, whilst AFSPs offering investment services and providing basic advice have increasingly become focussed within affluent areas.

In Table 4, we record the change over time in the average numbers of all AFSP variables. We observe an increasing number of AFSPs operating in all areas, yet particularly so in areas of high bank branch closure and

Table 3. Types of AFSPs within representative local authority areas.

AFSPs	Branches		Total AFSP		Total Registered firms	Total C/R AFSPs	C/R 2002–09	C/R 2010–15
	1999	2015	2002	2015				
Merthyr Tydfil	12	7	13	50	59	8	2	6
Fenland	30	21	33	101	119	25	15	3
Angus	32	28	34	100	120	21	12	8

	Accepting deposits			Appointed representative			Consumer credit		
	2002	2015	C/R	2002	2015	C/R	2002	2015	C/R
Merthyr Tydfil	1	1	0	5	27	0	0	19	1
Fenland	0	0	0	15	65	0	0	29	1
Angus	1	1	0	14	55	2	0	37	6

	Insurance business			Investment business			Providing basic advice		
	2002	2015	C/R	2002	2015	C/R	2002	2015	C/R
Merthyr Tydfil	7	0	8	2	4	3	1	8	6
Fenland	14	1	8	9	3	3	3	0	6
Angus	13	2	6	16	17	3	11	8	3

Notes: Data are from 83,387 UK regulated AFSPs. Branch data were taken from SNL (2015) and were hand collected (1999). AFSP = Alternative Financial Services Provider. C/R = Cancelled or Revoked.

Table 4. Change in average numbers of AFSP over time.

Year	A	B	C	A	B	C	A	B	C	A	B	C
	All AFSPs			Cancelled or revoked AFSPs			New AFSPs			Old AFSPs registered on or before 2002		
2002	81.11	90.71	101.97	1.34	1.56	1.85	6.89	7.49	8.03	81.11	90.71	101.97
2003	89.78	100.81	113.13	3.25	3.72	4.46	4.45	4.88	5.37	79.77	89.15	100.11
2004	90.99	101.97	114.03	2.31	2.63	3.06	5.19	5.46	5.63	76.52	85.43	95.66
2005	93.86	104.79	116.61	4.61	5.10	5.78	23.21	25.01	25.49	74.21	82.79	92.60
2006	113.08	125.17	137.32	7.14	8.33	9.54	5.11	5.72	5.87	69.60	77.70	86.82
2007	110.99	122.54	133.61	4.87	5.47	6.45	5.33	5.59	6.28	62.41	69.35	77.23
2008	111.44	122.66	133.44	5.41	6.19	6.93	7.33	7.85	8.53	57.53	63.87	70.78
2009	113.44	124.35	135.09	5.66	6.43	7.80	7.68	8.44	8.97	52.12	57.69	63.85
2010	115.44	126.28	136.07	4.03	4.63	5.31	6.08	6.59	7.29	46.47	51.26	56.05
2011	117.55	128.36	138.32	3.27	3.73	4.22	6.27	7.37	9.17	42.43	46.63	50.74
2012	120.55	132.00	143.28	2.62	2.82	3.08	6.69	7.61	8.80	39.16	42.89	46.52
2013	124.63	136.80	149.03	3.01	3.41	3.66	7.81	9.08	10.98	36.54	40.07	43.44
2014	129.49	142.52	156.47	1.89	2.06	2.36	15.63	18.15	23.89	33.53	36.66	39.78
2015	143.23	158.62	178.00	2.32	2.54	2.92	47.38	52.03	58.34	31.64	34.60	37.43

A = Average number of AFSPs in each area, B = Average number of firms in areas of high bank branch loss, C = Average number of AFSPs in urban and deprived areas of high bank branch loss. Data are from 83,064 UK-based regulated AFSPs. Bank branch data are from SNL (2015) and were hand collected (1999). AFSP = Alternative Financial Services Provider.

similar urban and deprived areas. In certain years there are large increases in new AFSPs; a shift associated with the changing regulatory environment. Average numbers of cancelled and revoked AFSPs are greater in areas of high bank branch closure and similar urban and deprived areas. Unsurprisingly, average levels of 'old' AFSPs decline over time yet display higher averages in areas of high bank branch closure, and similar urban and deprived areas.

In Tables 5 and 6, we report AFSP numbers and socio-economic variables for areas with more bank branch closures, and similar urban and deprived areas. Greater numbers of AFSPs, new AFSPs, 'old' AFSPs, and AFSPs with a cancelled or revoked regulatory permissions, are seen in both areas. Socio-economic characteristics differ between areas with high levels of bank branch closure, and are significantly different for similar urban and deprived areas. Significantly higher numbers of final notices are issued to AFSPs in areas characterised by more bank branch closure, with offending of a greater duration. These characteristics have a greater magnitude within urban and deprived areas. AFSPs operating in high bank branch closure areas predominantly undertake reporting and compliance forms of financial misconduct, receive fines and altered regulatory permissions as

Table 5. Descriptive statistics – averages for areas of higher and lower bank branch loss.

	High Bank Branch closure areas (≥ 25%)	Lower Bank Branch closure areas (< 25%)	Kruskal–Wallis Test
Panel A Financial Register and Socio-economic variables.			
All AFSP	122.68	95.66	89.95 (0.00)**
New AFSPs	12.23	9.69	37.96 (0.00)**
Cancelled or revoked AFSPs	4.19	3.11	66.63 (0.00)**
Old AFSPs registered on or before 2002	62.06	48.65	84.21 (0.00)**
Migration (%)	0.11	0.27	115.87 (0.00)**
Annual mean income (£)	24943	24009	30.93 (0.00)**
House price change (%)	6.71	6.50	1.12 (0.29)
Unemployment (%)	2.97	2.54	223.94 (0.00)**
Life expectancy (years)	81.90	82.34	93.38 (0.00)**
Crime (crimes per 1000 people)	83.41	67.75	235.84 (0.00)**
Population	179702	140763	135.06 (0.00)**
Panel B: Final Notices characteristics.			
Number of offences	3.351	2.60	7.03 (0.01)**
Duration of offending (days)	2016	1339	4.65 (0.03)**
Type of offending			
Reporting and compliance	2.87	1.88	8.75 (0.00)**
Complaints handling	0.14	0.17	0.84 (0.36)
Market abuse	0.05	0.02	0.04 (0.84)
Fraud and theft	0.71	0.48	2.32 (0.13)
Mis-selling	0.65	0.44	1.58 (0.21)
Money laundering	0.01	0.01	0.03 (0.86)
Other offending	0.03	0.02	1.37 (0.24)
Punishments for offending			
Public censure	0.15	0.10	1.46 (0.23)
Prohibition	0.87	0.59	1.95 (0.16)
Fine	0.77	0.51	4.89 (0.03)**
Variation/cancellation of authorisa- tion /approval/ Permissions	2.82	1.887	7.63 (0.01)**
Disgorgement/redress	0.043	0.048	0.08 (0.78)
Other punishment	0	0.0063	1.19 (0.27)

The descriptive statistics are taken from 83,064 UK AFSPs and 1084 final notices issued to AFAPs between 2002 and 2015. Other variables are from the UK Office for National Statistics. Values are recorded for UK local authority areas. Cancelled/Revoked are AFSPs with a cancelled or revoked regulatory status. All AFSPs include the population of AFSPs annually. New AFSPs include firm registered each year. Old AFSPs are firms registered on or before 2002. We measure differences between variables using the Kruskal–Wallis test. The statistical significance is included in brackets with * and ** representing significance at the 0.10 and 0.05 levels.

common punishments. Significantly higher levels of fraud and theft are observed in urban and deprived areas, with common punishments including public censure, prohibition and variation or cancellation of regulatory permissions.

In Table 7, we test the relationships between the numbers of AFSPs, and all areas of high bank branch closure (A), and high bank branch closure in urban and deprived areas (B). For (A) we observe that significant relationships exist between areas with greater bank branch closure and the numbers of all AFSPs ('+'ve relationship), old AFSPs ('-'ve relationship) and AFSPs that issued a final notice ('+'ve relationship). An insignificant relationship exists between numbers of new AFSPs and AFSPs with a cancelled or revoked regulatory status and high bank branch closure areas. The IRR results indicate that high levels of bank branch closure are associated with increases the number of all AFSPs by 20 per cent, decreases the number of 'Old' AFSPs by 15 per cent and increases the number of AFSPs with a final notice by 44 per cent. For (B) we report the links between urban and deprived areas of high bank branch closure and the distribution of AFSPs. There is no significant link between these areas and new AFSPs and cancelled and revoked AFSPs. A significant association between these areas and all AFSPs ('+'ve relationship), 'old' AFSPs ('-'ve relationship) and AFSPs receiving a final notice ('+'ve relationship) is indicated. The IRR results imply being in an urban-deprived area with high bank branch loss is associated with 16 per cent more AFSPs, 22 fewer 'Old' AFSPs and 73% more AFSPs receiving a final notice.

In Table 8, we use the same methodology and dependent variables to examine the relationship between socio-economic variables and the incidence of AFSPs (C). We observe in most cases that the distribution of AFSPs is statistically significant with marginal IRR results. Significant negative relationships are reported for AFSPs,

Table 6. Descriptive statistics – averages for urban and deprived areas of higher and lower bank branch loss.

	Urban-deprived high bank branch closure areas (87)	Other areas (259)	Kruskal–Wallis Test
Panel A Financial Register and Socio-economic variable's			
All AFSP	134.74	103.18	93.81 (0.00)**
New AFSPs	13.76	10.17	29.13 (0.00)**
Cancelled or revoked AFSPs	4.82	3.32	89.76 (0.00)**
Old AFSPs registered on or before 2002	68.78	51.62	100.88 (0.00)**
Migration (%)	−0.16	0.29	75.56 (0.00)**
Annual mean income (£)	22113	25527	33.61 (0.00)**
House price change (%)	6.76	6.56	5.23 (0.02)**
Unemployment (%)	3.55	2.46	127.97 (0.00)**
Life expectancy (years)	81.13	82.52	73.31 (0.00)**
Crime (crimes per 1000 people)	101.25	66.91	113.49 (0.00)**
Population	221847	141799	444.73 (0.00)**
Panel B: Final Notices characteristics.			
Number of offences	5.16	2.66	15.41 (0.00)**
Duration of offending (days)	2491	1444	7.96 (0.00)**
Type of offending			
Reporting and compliance	4.01	1.88	20.73 (0.00)**
Complaints handling	0.14	0.17	0.00 (0.96)
Market abuse	0.05	0.03	0.22 (0.64)
Fraud and theft	0.87	0.52	3.42 (0.06)*
Mis-selling	0.75	0.50	1.76 (0.18)
Money laundering	0.01	0.01	0.00 (0.99)
Other offending	0.01	0.03	0.69 (0.40)
Punishments for offending			
Public censure	0.24	0.10	5.94 (0.01)**
Prohibition	1.01	0.66	4.74 (0.03)**
Fine	0.80	0.60	1.17 (0.28)
Variation/cancellation of authorisation/approval/ permissions	3.86	1.90	16.67 (0.00)**
Disgorgement/redress	0.03	0.04	0.00 (0.98)
Other punishment	0.00	0.00	0.34 (0.56)

The descriptive statistics are taken from 83,064 UK AFSPs and 1084 final notices issued to AFAPs between 2002 and 2015. Other variables are from the UK Office for National Statistics. Values are recorded for UK local authority areas. Cancelled/revoked are AFSPs with a cancelled or revoked regulatory status. All AFSPs include the population of AFSPs annually. New AFSPs include firm registered each year. Old AFSPs are firms registered on or before 2002. We measure differences between variables using the Kruskal–Wallis test. The statistical significance is included in brackets with * and ** representing significance at the 0.10 and 0.05 levels.

New AFSPs, Cancelled and Revoked AFSPs, and migration, house price change, unemployment and crime. All AFSPs groups other than 'Old' AFSPs have a positive relationship with life expectancy. Life expectancy increase is associated with 11 per cent more AFSPs, 21 per cent more new and 'Old' AFSPs, and 15 and 9 per cent fewer Cancelled and Revoked AFSPs and AFSPs receiving a final notice respectively. Unemployment is linked with 7 per cent fewer AFSPs. This includes 16 per cent fewer New and 'Old' AFSPs and 10% more AFSPs receiving a final notice. Throughout income and population have significant yet limited effects on AFSP location.

5. Discussion

To summarise, the descriptive statistics in Tables 2–4, and the Kruskal–Wallis tests reported in Tables 5 and 6 are supportive of both hypotheses. These findings are consistent for areas with high bank branch loss and similar urban and deprived areas. The AFSPs receiving final notices are observed in significantly higher numbers in areas of high bank branch closure, and similar urban and deprived areas. We also report that financial misconduct is significantly worse in urban and deprived areas of high bank branch closure. The results from the regression models reported in Tables 7 and 8, display a significant increase in AFSPs and New AFPPs, and a decline of 'Old' AFSPs in areas of high bank branch closure. All AFSPs, cancelled and revoked AFSPs are seen to increase and 'Old' AFSPs decline in urban and deprived areas of high bank branch closure. In both areas of high bank branch closure, urban and deprived areas of high bank branch closure, there is far higher rate of AFSPs receiving a final notice and displaying poor financial conduct.

Table 7. Distribution of AFSPs with branch closure.

A	All AFSPs (RE)		New AFSPs		Old AFSPs		Cancelled and Revoked AFSP		AFSPs receiving a final notice (RE)	
	Coeff.	IRR	Coeff.	IRR	Coeff.	IRR	Coeff.	IRR	Coeff.	IRR
High branch closure	0.18 (0.05)**	1.20 (0.06)**	0.07 (0.04)	1.07 (0.05)	-0.16 (0.053)**	0.85 (0.05)**	0.01 (0.10)	1.01 (0.103)	0.36 (0.11)**	1.44 (0.164)**
Constant	3.75 (0.04)**	42.51 (1.75)**	0.27 (0.03)**	1.31 (2.02)**	2.50 (0.04)**	12.18 (0.50)**	1.44 (0.08)**	4.21 (0.34)**	-0.70 (0.13)**	0.49 (0.06)**
Observations	4844		4844		4830		4830		4844	
Log likelihood χ^2 test	-21312		-14162		-17996		-9062		-2703	
Wald χ^2 test $t^\#$	14.13 (0.02)*		2.14 (0.14)		9.18 (0.00)**		0.00 (0.95)**		10.15 (0.00)**	
Hausman test [#]	0.66 (0.42)		3.04 (0.08)*		21.01 (0.00)**		3.89 (0.04)**		0.02 (0.88)	
LR Test of Alpha = 0	2.1e + 5 (0.00)**		5.2e + 04 (0.00)**		1.2e + 05 04 (0.00)**		6463 (0.00)**		708.23 (0.00)**	
F test years jointly = 0	9238 (0.00)**		21947 (0.00)**		25136 (0.00)**		2717 (0.00)**		248 (0.00)**	
B	Coeff.	IRR	Coeff.	IRR	Coeff.	IRR	Coeff.	IRR	Coeff.	IRR
Urban, deprived and high branch closure	0.14 (0.05)**	1.16 (0.06)**	-0.05 (0.05)	0.95 (0.05)	-0.25 (0.06)**	0.78 (0.04)**	-0.03 (0.11)	0.97 (0.10)	0.55 (0.12)**	1.73 (0.21)**
Constant	3.81 (0.03)**	45.10 (1.57)**	0.32 (0.03)**	1.38 (0.04)**	2.48 (0.03)**	11.92 (0.37)**	1.45 (0.06)**	4.26 (0.26)**	-0.67 (0.12)**	0.51 (0.06)**
Observations	4844		4844		4830		4830		4844	
Log likelihood χ^2 test	-21315		-14163		-17992		-9062		-2699	
Wald χ^2 test $t^\#$	7.39 (0.01)**		0.83 (0.36)		18.26 (0.00)**		0.06 (0.80)		20.31 (0.00)**	
Hausman test [#]	1.34 (0.25)		6.96 (0.01)**		23.40 (0.00)**		7.48 (0.01)**		0.08 (0.77)	
LR test of alpha = 0	2.1e + 05 (0.00)**		5.2e + 04 (0.00)**		1.2e + 05 (0.00)**		6356 (0.00)**		676 (0.00)**	
F test years jointly = 0	9850 (0.00)**		22920 (0.00)**		25149 (0.00)**		2696 (0.00)		249 (0.00)**	

The table reports result from a Negative binomial panel data fixed and random effects regression models. Where the null from Hausman tests are not rejected, a Negative binomial panel data random effects regression model with mean reversion (NB2) is applied. Local authority and annual time fixed effects are used. Outcomes are counts of all AFSPs, New AFSPs, 'Old' AFSPs, cancelled or revoked AFSPs, AFSPs issued with a final notice, by area. High branch closures are areas with $\geq 25\%$ of bank branches closing. Urban, deprived and high branch closure areas are within the top two quartiles of deprivation, in urban areas and have high bank branch closure. The standard errors are recorded in parentheses unless $^\# =$ Probability reported. * and ** represent statistical significance at the 0.10 and 0.05 levels. The likelihood-ratio test compares the estimator with the pooled estimator. The Wald test assesses the constraints on the statistical parameters of the model; very low results are interpreted as misleading. Hausman tests are used to assess the suitability of Fixed or Random effects models. The LR test of alpha is used to assess the suitability of NB or Poisson models. This is undertaken for a pooled estimate of the NB model. The Joint F of years is to determine if Time fixed effects are required.

Table 8. Distribution of AFSPs with socio-economic factors.

C	All AFSPs		New AFSPs		Old AFSPs		Cancelled and Revoked AFSP		AFSPs receiving a final notice	
	Coeff.	IRR	Coeff.	IRR	Coeff.	IRR	Coeff.	IRR	Coeff.	IRR
Migration (%)	-0.03 (0.01)**	0.97 (0.01)**	-0.27 (0.03)**	0.76 (0.02)**	0.05 (0.01)**	0.76 (0.02)**	-0.11 (0.04)**	1.11 (0.04)**	-0.03 (0.11)	0.96 (0.10)
House price change (%)	-0.00 (0.00)**	0.99 (0.00)**	-0.00 (0.00)	1.00 (0.00)**	-0.00 (0.00)**	1.00 (0.00)**	-0.02 (0.00)**	0.98 (0.00)**	-0.02 (0.00)**	0.98 (0.00)**
Unemployment (%)	-0.07 (0.00)**	0.93 (0.00)**	-0.35 (0.02)**	0.74 (0.02)**	-0.01 (0.01)*	0.74 (0.02)**	-0.04 (0.02)**	0.96 (0.02)**	0.10 (0.07)	1.10 (0.08)***
Life Expectancy (Years)	0.10 (0.00)**	1.11 (0.00)**	0.18 (0.02)**	1.21 (0.02)**	-0.21 (0.01)**	1.21 (0.02)**	0.16 (0.01)**	0.85 (0.02)**	-0.06 (0.08)	0.94 (0.07)
Crime (crimes per 1000 people)	-0.00 (0.00)**	0.99 (0.00)**	-0.01 (0.00)**	0.99 (0.00)**	0.00 (0.00)**	0.99 (0.00)**	-0.01 (0.00)**	1.01 (0.00)**	0.01 (0.00)**	1.00 (0.00)**
Income (£)	0.00 (0.00)**	1.00 (0.00)**	0.00 (0.00)**	1.00 (0.00)**	-0.00 (0.00)**	1.00 (0.00)**	0.00 (0.00)**	1.00 (0.00)**	0.00 (0.00)**	1.00 (0.00)*
Population	0.00 (0.00)*	1.00 (0.00)*	0.00 (0.00)**	1.00 (0.00)**	0.00 (0.00)**	1.00 (0.00)**	0.00 (0.00)**	1.00 (0.00)**	0.00 (0.00)**	1.00 (0.00)**
Constant	-2.86 (0.340)**	0.06 (0.02)**	-14.27 (1.60)**	0.00 (0.00)**	37.99 NC	0.00 NC	-14.99 (1.89)**	3.2e + 6 (6.2e + 5)**	2.08 (6.13)	8.06 (48.55)
Observations	3899		3899		3899		3889		2976	
Log likelihood χ^2 test	-12928		-11120		-11032		-6962		-1568	
Wald χ^2 test [#]	3964 (0.00)**		637 (0.00)**		16502 (0.00)**		575 (0.00)*		77 (0.00)**	
Hausman Test [#]	230.98 (0.00)**		1114 (0.00)**		169.85 (0.00)**		135.68 (0.00)		3.46 (0.75)	
LR Test of Alpha = 0	4.5e + 04 (0.00)**		3.0e + 04 (0.00)**		2.6e + 04 (0.00)***		1477.10 (0.00)**		327.90 (0.00)**	
F test years jointly = 0	994.39 (0.00)**		8146 (0.00)**		2003 (0.00)**		1055 (0.00)**		170.35 (0.00)**	

The table reports results from a Negative binomial panel data fixed effects regression model with mean reversion (NB2). Where the null from Hausman tests are not rejected a Negative binomial panel data random effects regression model with mean reversion (NB2) is applied. Local authority fixed effects and annual time effects are used. Outcomes are counts of all AFSPs, new AFSPs, 'Old' AFSPs, cancelled or revoked AFSPs, and AFSPs issued with a final notice, by area. Socio-economic variables are from the UK Office for National Statistics. The standard errors are recorded in parentheses unless [#] = Probability reported. * and ** represent statistical significance at the 0.10 and 0.05 levels. The likelihood-ratio test compares the estimator with the pooled estimator. The Wald test assesses the constraints on the statistical parameters of the model; very low results are interpreted as misleading. Hausman tests are used to assess the suitability of Fixed or Random effects models. The LR test of alpha is used to assess the suitability of NB or Poisson models. This is undertaken for a pooled estimate of the NB model. The Joint F of years is to determine if Time fixed effects are required. NC = not converged.

When we consider this distribution of AFSPs relative to socio-economic factors and without the effect of bank branch closure, we observe a negative association with crime, house price change and unemployment. The relationship between life expectancy is positive with New and 'Old' AFSPs and negative with AFSPs receiving a final notice. This result is consistent with bank branch closure affecting AFSPs behaviour and the spatial void hypothesis. Overall AFSPs appear to locate more in less deprived areas, with higher life expectancy in an area associated with more New and 'Old' AFSPs and fewer offending AFSPs.

This distribution of AFSPs, is consistent with high levels of bank branch closure imposing a significant externality on local authority areas. Specifically, high bank branch closure is associated with both the location of more AFSPs and poorer regulatory conduct by the AFSPs operating in these areas. This effect is amplified in the most deprived local authority areas. We therefore infer high levels of bank branch closure places poorer communities at greater risk of unethical financial practices by AFSPs, and that these risks are amplified within the most deprived areas. Moreover, the profile of AFSPs operating in local authority areas alters with both bank branch closure and regulatory change. 'Old' or established AFSPs appear to be retreating from high bank branch closure areas. AFSPs providing financial advice and investment services appear focussed on wealthier areas, and all areas have witnessed a decline in the provision of insurance services. Further work as to the sources of high AFSP turnover and the causes of poor regulatory behaviours within areas typified by bank branch closure is required.

6. Conclusions

This study examines the outcomes of two-tier financial services markets. Specifically, we examine whether these markets are characterised by new and predatory AFSPs entering local financial services markets after bank branch closure, using the population of UK AFSPs (83,063 firms). Notably, we report that the financial misconduct of AFSPs occurs more frequently in areas of higher bank branch closure and most severely in similar urban and deprived areas. We identify a major expansion in AFSP numbers, consistent with a spatial void being filled by AFSPs. The substantial turnover of these firms across all markets, indicates AFSPs operating in areas of high bank branch closure, are a combination of existing and new firms.

Considering these findings, we question the sufficiency of current UK regulatory arrangements for regulating bank branch closure. Following the introduction of the Financial Services and Markets Bill (2023), the FCA is required to determine if 'reasonable provision to cash access services' is provided or if local deficiencies exist in the provision of cash, deposits, and personal current accounts after bank branch closure (Browning 2022). This process requires banks to assess the access to cash to residents within the vicinity of a closing bank branch. If an insufficient ability to access cash is identified, the banks concerned are required to provide additional facilities (FCA 2024). We view these criteria, and the market definition of the services provided through bank branches as overly narrow. Bank branches provide a wider range of financial and advisory services than encapsulated within the 'cash access' criterion, and their operation and closure has multiple influences on local communities. Subsequently we propose bank branch closure decisions should be made cognisant of the externalities outlined in this study. This would move the UK closer to a US policy position, whereby banks face penalties if they insufficiently service the communities in which they operate. As the negative outcomes of persisting with flawed banking market definitions for regulatory decision making is well documented (Christophers 2014), we propose extending the scope of the product market considered in the legal mapping underpinning bank closure decisions.

It is also important to support actions which limit the deleterious effects of bank branch closure. Once bank branches have closed, and AFSPs have become established in localities, we expect the use of non-conventional financial services will increase (Friedline and Kepple 2017). Optimally we would wish people from all areas to use safer and more affordable financial services, rather than those provided by AFSPs. To interrupt the potential for predatory financial inclusion and use of non-conventional financial services, we advocate that more licences are issued to community banks (House of Commons and House of Lords 2013), which can provide access to conventional financial services in areas of high bank branch decline. It is hoped the proposed 'Simpler-Regime Firm' approaches to the prudential regulation of such small banks (Prudential Regulatory Authority 2022) may engender progress towards this end.

As the process of bank and building society closure is on-going with over 5,000 bank branches closed since 2015 (Booth 2022), further research is required. Not least, we do not fully understand why existing AFSPs alter their behaviours towards customers. These outcomes could arise from many processes, such as cultural change or partial observability. Lastly, we suggest that other national financial services markets present similar consumer protection concerns and would benefit from further investigation. Furthermore, engaging with and providing evidence pertaining to on-going and often polarised policy discussions seen in retail financial services provision has a wider importance.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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