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Banking on exclusion: Data disclosure and geographies of UK personal lending markets

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Abstract

In 2013 the UK Government announced that seven of the nation's largest banks had agreed to publish their lending data at the local level across Great Britain. The release of such area based lending data has been welcomed by advocacy groups and policy makers keen to better understand and remedy geographies of financial exclusion. This paper makes three contributions to debates about financial exclusion. First, it provides the first exploratory spatial analysis of the personal lending data made available; it scrutinises the parameters and robustness of the dataset and evaluates the extent to which the data increases transparency in UK personal lending markets. Second, it uses the data to provide a geographical overview of patterns of personal lending across Great Britain. Third, it uses this analysis to revisit the analytical and political limitations of 'open data' in addressing the relationship between access to finance and economic marginalisation. Although a binary policy imaginary of 'inclusion-exclusion' has historically driven advocacy for data disclosure, recent literatures on financial exclusion generate the need for more complex and variegated understandings of economic marginalisation. The paper questions the relationship between transparency and data disclosure, the policy push for financial inclusion, and patterns of indebtedness and economic marginalisation in a world where 'fringe finance' has become mainstream. Drawing on these literatures, this analysis suggests that data disclosure, and the transparency it affords, is a necessary but not sufficient tool in understanding the distributional implications of variegated access to credit.

Key Words:

Financial geographies, personal lending, financial exclusion, data disclosure

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Introduction

In July 2013 the UK Government announced that seven of the nation's largest banks had agreed to publish their lending data at the local level across Great Britain. The release of such area based lending data has been welcomed by advocacy groups and policy makers keen to better understand and remedy geographies of financial exclusion. This paper makes three contributions to debates about financial exclusion. First, it provides the first exploratory analysis of the personal lending data made available; it scrutinises the parameters and robustness of the dataset and evaluates the extent to which the new data increases transparency in UK personal lending markets. Second, it uses the data to provide a geographical overview of patterns of personal lending across Great Britain¹. Third, it uses this analysis to revisit the analytical and political limitations of 'open data' in addressing the relationship between access to finance and economic marginalisation. Although a binary policy imaginary of 'inclusion-exclusion' has historically driven advocacy for data disclosure, recent literatures on financial exclusion generate the need for more complex and variegated understandings of economic marginalisation. The paper draws on recent literatures to question the relationship between transparency and data disclosure, the policy push for financial inclusion, and patterns of indebtedness and economic marginalisation in a world where 'fringe finance' has become mainstream (Aitken, 2015). Drawing on these literatures, this analysis suggests that data disclosure, and the transparency it affords, is a necessary but not sufficient tool in understanding the distributional implications of variegated access to credit.

The paper is organised as follows. Section 2 discusses the genealogy of the recent data release and section 3 then describes the methodology and the data, and some of its limitations. In section 4 we generate the geography of personal lending in Great Britain. Section 5 uses the results to revisit debates about financial inclusion, the move to more

complex and variegated understandings of lending patterns, indebtedness and economic marginalisation, and the role of lending data disclosure in supporting transparency.

‘Disclosing’ geographies of financial exclusion

As geographies of finance began to make headway in the literatures of economic geography and urban and regional studies in the mid-1990s, a number of key texts outlined the uneven geographies of access to financial products and services (Dymski and Veitch, 1996; Jones and MacLennan, 1987; Leyshon and Thrift, 1994; Leyshon and Thrift, 1995; Marshall and Wood, 1995; Pollard 1996). More recently, the continued ramifications of the global financial crisis have further demonstrated the geographically uneven and sometimes devastating consequences of the relationship between access to finance and economic marginalisation for individuals, households and enterprises (Aalbers, 2009; Hutton and Lee, 2012; Lee et al. 2009; Pollard, 2013; Degryse et al., 2015). In the UK, there are major concerns about the economic and social repercussions for those seeking, but unable to find, affordable credit (Centre for Social Justice, 2014; Financial Inclusion Committee, 2015). Small and medium sized enterprises (SMEs), for example, championed as ideological and political symbols of neoliberalism (Dannreuther and Perren, 2013) and employing 15.7 million people (FSB, 2016) face longstanding problems accessing finance (Bolton Committee, 1971; Bank of England, 2002; Cowling et al. 2012; Lee et al., 2015; van der Schans, 2015). In the housing market, tightened lending criteria and a disjuncture between wage and house price inflation are ‘pricing out’ a generation of would-be buyers (Osborne, 2015), reducing owner occupation levels (DCLG, 2016) and marking ‘the death of a dream’ (HOA, 2015) for some constituencies. Although the subprime crisis and the austerity and technology-fuelled growth of ‘fringe finance’ (Aitken 2015, Brown, 2015; CMA, 2015) reveal an exploitative underbelly of ‘financial inclusion’, there are other developments in financial provision - credit unions,

community development finance institutions, Islamic banks and crowdfunding platforms (Appleyard, 2011; Henry and Craig, 2013; NESTA, 2014; Pollard and Samers, 2007; Sinclair, 2014, Gray and Zhang, 2017) – that have more progressive potential.

Given such patterns of provision and their potential consequences for citizens, communities and the economy, there are those who advocate the benefits of greater transparency in understanding the service and lending activities of financial institutions. As NEF/Woodstock (2006) set out, as a process of transparency, data disclosure supports the ability to target financial exclusion by providing the area-based lending data and information necessary to identify local lending markets and finance providers and, crucially, to identify market gaps. A key international benchmark here is the USA, where the Home Mortgage Disclosure Act (HMDA 1975) - introduced amidst concerns about uneven credit provision – mandates most lenders to provide annual data with detail of home mortgage applications (see CFPB, 2016). The HMDA data has been widely used to identify and respond to exclusion: through the actions of banks themselves; through new competition and financial partnerships with alternative and community-based providers; by the activism of empowered communities; and through more effective policy interventions (National Community Reinvestment Coalition, 2013, 2015; Sakaue and Stansbury, 2015).

In the UK, Kempson and Whyley (1999) and the Policy Action Team reports, which formed the basis of the National Strategy for Neighbourhood Renewal (HM Treasury, 2001), reflected some of the early work on financial exclusion. Evidence of low lending levels in low income and disadvantaged communities remains since the financial crisis as banks have accelerated their retreat from the high street closing over 500 bank branches in 2015 (Cadman and Dunkley, 2015). Recent years have seen substantial policy interventions also to overcome the ‘patchiness’ of credit union (DWP, 2011) and community development finance provision in the UK (BIS/CO/GHK, 2010) and, most recently, to create the British Business Bank to

increase the supply and diversity of finance to SMEs, including on a regional basis (van der Schans, 2015).

Yet, despite such examples, the reality of most mainstream financial markets - especially in the UK where just four institutions supply over 75 per cent of personal current accounts and over 80 percent of loans to SMEs (CMA, 2014) - is that achieving data disclosure and transparency, even whilst generally accepting existing market and institutional structures, is an ongoing battle for those organisations, groups and communities seeking to overcome financial exclusionⁱⁱ. In 2000, the UK Social Investment Task Force (SITF), as one of five Recommendations, argued for the voluntary disclosure by individual banks of lending in underinvested communities; if this was not to be achieved quickly, they advocated the need for legislation equivalent to the USA's Community Reinvestment Act (SITF, 2000). By 2003, SITF noted some progress with one or two banks on individual level data disclosure, whilst the British Bankers Association had co-ordinated an industry-level aggregated data response on financial inclusion (SITF, 2003). By 2005, a 'dire need' for banks to engage in disclosure was noted even as it was suggested that the disclosure debate should be extended to cover a broader range of financial services (SITF, 2005). By 2010 the SITF called once again for a UK version of the Community Reinvestment Act noting that: 'Since the call by the Task Force for voluntary disclosure of lending, some banks have improved their transparency, but the sector as a whole still does not systematically disclose lending. It is thus impossible to undertake meaningful analysis and comparison.' (Social Investment Task Force, 2010, p12)

Moreover, this renewed call for legislation, to introduce a UK equivalent of an act which uses transparency to require banks and financial institutions to help meet the credit needs of the communities in which they operate, came in the aftermath of the global financial crisis. In the UK, this aftermath followed a taxpayer funded bail out of the UK banking system and growing questioning of the nature, efficacy and purpose of the UK banking sector, including a number of more radical calls for stakeholder and community banks (NEF, 2012;

Clarke, 2012; CCBS, 2015). Whilst the banking industry moved to put in place the Business Finance Taskforce, amongst other initiatives, in recognition of ‘the special responsibilities we carry...in the wake of the economic crisis’ (BFT, 2010, p.2), parliamentary pressure for more transparency remained, fuelled by pressure groups, a policy environment led by an interventionist business Minister, and Government-launched ‘industry working groups’ and ‘learning seminars’ on the US experience of the Community Reinvestment Act.

Within this context, a warm welcome was given when, in July 2013, the UK Government announced that seven of the nation’s biggest lenders had agreed to publish how much they lend at the local level across Great Britainⁱⁱⁱ in the markets of unsecured personal loans (excluding credit cards), loans and overdrafts to small- and medium-sized enterprises (SMEs) and mortgages. On announcement of this ‘lending by postcode’ data release the British Bankers Association (BBA) Chief Executive Anthony Browne noted:

‘The banking industry is committed to transparency and is actively supporting the government, business and community groups in understanding the borrowing landscape for individuals and SMEs across the UK. This landmark voluntary agreement between the industry and government makes the UK industry one of the most transparent in the world and builds on our earlier commitments. The publication of thousands of post codes level figures will help promote greater competition between finance providers and lead to better evidence-based policy making’ (HM Treasury, 2013).

In a slightly different vein the Parliamentary Commission on Banking Standards’ report ‘Changing Banking for Good’ noted:

‘Increased disclosure of lending decisions by the banks is crucial to enable policy-makers more accurately to identify markets and geographical areas poorly served by the mainstream banking sector. The industry is currently working towards the

provision of such information. We welcome this. It will be important to ensure that the level of disclosure is meaningful and provides policy-makers with the information necessary accurately to identify communities and geographical areas poorly served by the mainstream banking sector. The devil will be in the detail of the disclosure regime that is put in place...The Commission therefore supports the Government's proposal to legislate if a satisfactory regime is not put in place by voluntary means' (See House of Commons, 2013, p 201).

Study methodology and the BBA data

In December 2013, the BBA published net total lending data by postcode sector for Great Britain drawn from participating lenders for unsecured personal loans (excluding credit cards) (BBA, 2013). The participating lenders were Barclays, Lloyds Banking Group, HSBC, RBS Group, Santander UK, Clydesdale and Yorkshire Banks and Nationwide Building Society. Detailing close on £30bn of lending per quarter, the market coverage of participating lenders for the unsecured personal loans (excluding credit cards) data released represented an estimated 60 per cent of all personal loans, but only 30 per cent of the total national unsecured credit market, in Great Britain.

At the time of this analysis, the BBA had released three sets of quarterly postcode sector lending data for Great Britain – on 17 December 2013, 8 April 2014 and 11 July 2014. The data covered Quarters 2, 3 and 4 of 2013 and, in principle, the almost 11,000 postcode sectors available in the UK. The analysis that follows used the data released for Quarter 4 2013 and was downloaded on 15th July 2014. The datasets were accompanied by a brief commentary and accompanying notes describing their coverage and content (BBA, 2014). This data release also included columns providing data for Quarters 2 and 3 2013 which we used to calculate change over time and averages.

Data quality and robustness

As this was the first public release of personal lending data, a number of initial assessments of the overall data quality were undertaken prior to analysis; these focused on data redaction, data consistency across quarters and missing data. The personal lending data were released as a single variable of total lending amounts at the postcode sector level for a particular quarter. The totals are a sum of lending figures for each postcode sector for each of the participating lenders (who also publish their individual data). The definition of the total lending variable is:

‘drawn-down amounts from agreed borrowing facilities. They will comprise borrowing agreements made in the past, new borrowing agreements, repayments and borrowing written off.’ (BBA, 2014).

The process of redaction

Given the use of postcode sectors and the need to ensure customer confidentiality, filters were applied to the personal lending dataset by the BBA and individual lenders prior to release. These filters mean that:

‘Borrowing stocks in a sector postcode is not disclosed where customer confidentiality would be compromised (i.e. where fewer than 10 borrowers exist in the sector or where borrowing is highly concentrated in a small number of the largest borrowers in the sector)’; and,

‘Individual lenders are not obliged to publish borrowing at sector level if they hold less than 3 per cent of personal loans in a sector.’

The wording of these filters is ambiguous. For example, the definition of ‘highly concentrated’ that is applied is not clear. There is also no system of markers within the dataset to show which postcodes have been subject to redaction. Overall, however, the BBA reported that the impact of filters on the personal lending data release was small, with redactions

estimated at around 1 per cent of the total value of personal loans (of participating institutions). Thus, the BBA reported that for Quarter 4, 366 postcode sectors were affected by redactions, equating to £0.4bn of lending. This is around 4 per cent of postcode sectors covered by the data.

Data consistency across quarters

Data quality across quarters was checked by looking at the correlation between data values of a postcode sector from one quarter to the next: what was the level of value fluctuation? Of course, we are unable to judge fully what fluctuation might be expected between quarters and what could be due to market forces (for example, customers moving to providers not covered by data disclosure). Alternatively, the filtering process might account for some levels of fluctuation, as might any error in the dataset.

The data release provided headline figures showing that total personal loan lending values decreased by around £310 million between Quarter 3 and Quarter 4 2013; this equates to roughly 1 per cent of total lending. A similar pattern was apparent at the postcode sector level, with a mean percentage change of -0.79. Change at the 10th percentile of postcode sector was -10.3, while at the 90th percentile it was +7.1. For some of the outlying observations, however, the change was very large. Growth in excess of 100 per cent was observed in a small number of postcode sectors; at the other end of the scale declines of 50 per cent or more were observed. In some of the high change sectors the absolute values of change were relatively small; however, in others, the values ran into millions meaning the changes cannot be the result of changes to a small number of loans. It is unclear whether these very large changes reflect change in lending patterns or if a small number of postcode sectors were affected by filtering processes and/or suffer from errors in the dataset.

Missing postcode sector data

The full BBA dataset included a significant proportion of postcode sectors for which there was no data recorded. Looking across the three sets of data released, around 1,900 of the 10,839 postcode sectors (17.5 per cent) had no lending values attached in any one set of data. The vast majority of missing postcode sectors were the same for each quarter of data (i.e. they tended to be missing consistently across the three quarters of data). A number of reasons for this missing data can be surmised, although only blank cells are released. First, some postcode sectors may no longer be in use. Second, some postcode sectors may have been filtered for confidentiality issues leading to blank returns (in Q4 2013 release the number was 366). Third, some of the remaining postcode sectors had no lending during that quarter and were a zero rather than a blank cell return.

An analysis of postcode sectors with missing returns was run against Census data (for population) structured by postcode sector to determine if there were any unexpected or systematic levels of missing data across postcode sector. Generally, data was jointly missing from the lending data and Census data, and in only just over 1 per cent of postcode sectors were data available from one data source but not the other. In those instances where postcode sectors had Census data but not lending data, these tended to have small populations. Overall, then, the issue of missing postcode sectors appears to relate mainly to postcodes no longer in use and to areas of zero or very low population.

Redacted postcode sector data reported at higher geographical level

Some of the data that were redacted were released in the form of an aggregate of postcode sectors, which is referenced to the larger postcode area in which the postcode sector falls. This allows total lending levels to be reported at that wider geographical scale. In the large majority of postcode areas this amount is less than 2 per cent of total lendingⁱⁱ. There are, however, some postcode areas where this proportion can be as much as 10 per cent or even

over 40 per cent in the case of East Central London – limiting the value of the data for detailed geographical analysis.

Spatial variations in personal lending in Great Britain

Notwithstanding these data limitations, an analysis of the geography of personal lending patterns by postcode sector for Great Britain can be undertaken.

Aggregate personal lending per postcode sector

Total lending figures varied greatly across postcode sectors. Using the Quarter 4 (2013) data, at the extremes lending ranges from almost thirteen million pounds in postcode sectors in South East London, Glasgow, Edinburgh and Reading to less than fifty thousand pounds (for those postcode sectors with non-zero values), also in Glasgow and Edinburgh as well as places like Liverpool.

Of course, as Rae (2015) notes, what this data provides is only a supply-side perspective for a geographical area (postcode sector); there is no data provided to suggest demand – or variations in demand – within any postcode sector. Moreover, postcode sectors are of very different population sizes (with the adult population ranging from fewer than 500 people to in excess of 10,000 across sectors) – and, clearly, population size is reflected in (demand for) total lendingⁱⁱⁱ. The level of personal lending per capita (the level of lending adjusted for postcode sector population size) allows for more meaningful comparison. Table 1 uses a measure of the total adult population of each postcode sector^{iv} which is derived from matching the bank lending data (using the average of the three quarters of data released) against the 2011 Census (see also BBA, 2013)^v.

Table 1 Percentile distribution of lending per adult*

Postcode Sector Percentile	5	10	25	50	75	90	95
£ per adult lent	346	416	510	602	691	774	836

**Lending per adult, average of three Quarters of data (Q2-Q4, 2013)*

The median figure for lending per adult across postcode sectors was £602. At the 10th percentile, per head lending figures were £416 (close to two thirds of the median); and at the 90th percentile per head the lending figure was £774.

The individual postcode sectors with the largest and smallest per head values are provided in Table 2.

Table 2 Largest and lowest per adult head loan borrowing figures by Postcode Sector

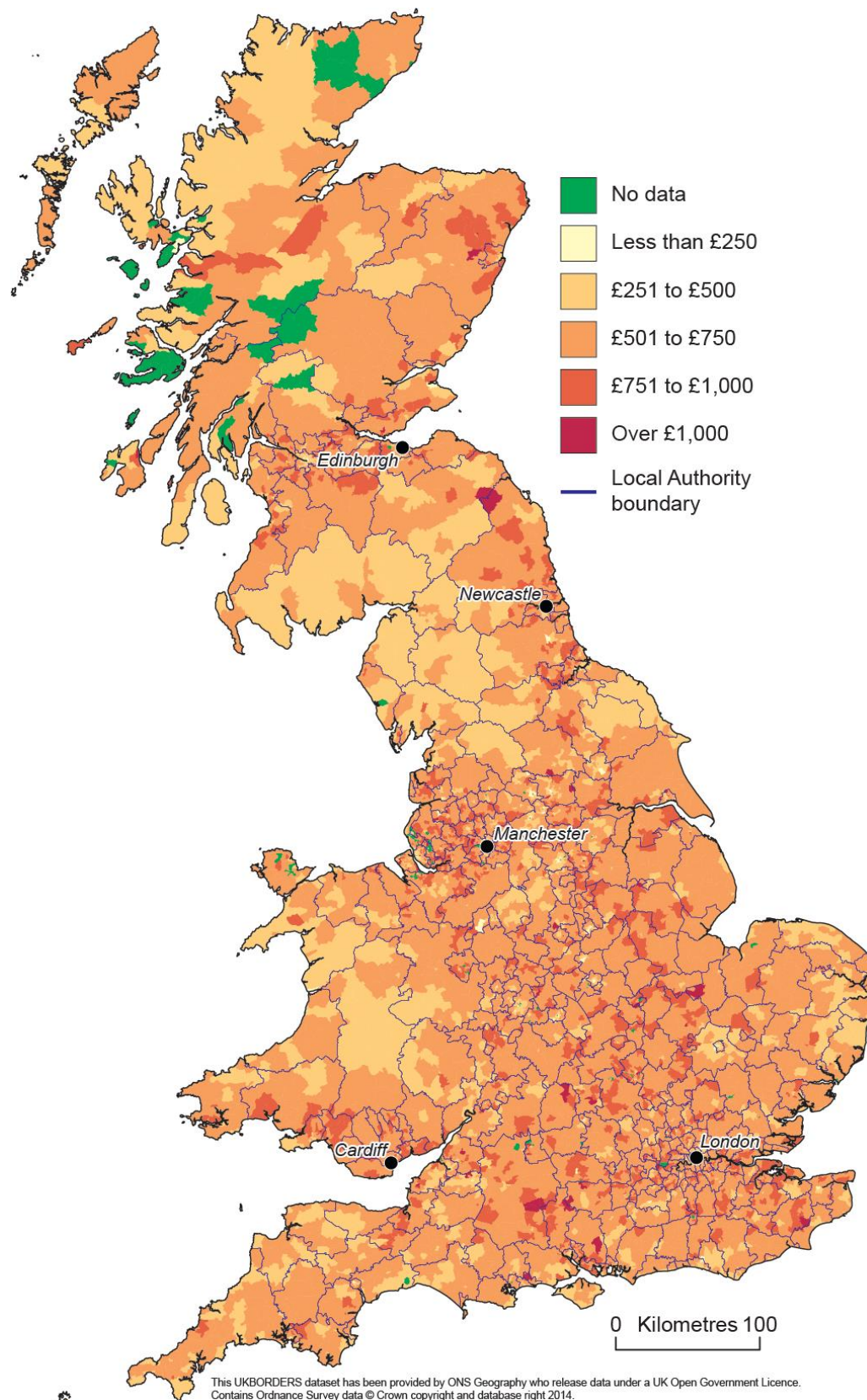
Postcode Sector	Postcode Area (within which Postcode Sector sits)	Lending per head adult population (£)
G2 1	Glasgow	13,405
EC1A 4	East Central London	8,937
G72 6	Glasgow	2,182
PE7 0	Peterborough	2,009
LS17 0	Leeds	1,846
NE13 9	Newcastle upon Tyne	1,805
MK42 6	Milton Keynes	1,749
PR7 7	Preston	1,725
SA7 0	Swansea	1,719
EC1V 2	East Central London	1,666
S3 7	Sheffield	84
LS6 1	Leeds	84
DD1 5	Dundee	84
LS2 9	Leeds	81
WV1 1	Wolverhampton	74
BS1 1	Bristol	72
L3 5	Liverpool	66
S1 4	Sheffield	64
DD1 1	Dundee	56
L7 7	Liverpool	33

**Lending per adult, average of three Quarters of data (Q2-Q4, 2013)*

At the very top of the range are two observations which seem implausibly large. Lending per head was £13,405 in postcode sector G2 1 and £8,937 in postcode sector EC1A 4^{vi}. Both of these postcode sectors refer to financial localities of city centres which have very small population sizes (Glasgow and London). It may be that in these two observations loan data are recorded to some addresses other than home addresses (for example, work addresses). At the other end of the scale, the rate of lending per head was less than £100 in postcode sectors across a range of areas. Whether at the top or the bottom of the range there is no strongly evident geographical pattern although, for example, both lending level extremes can be seen to exist within different postcodes of the same city.

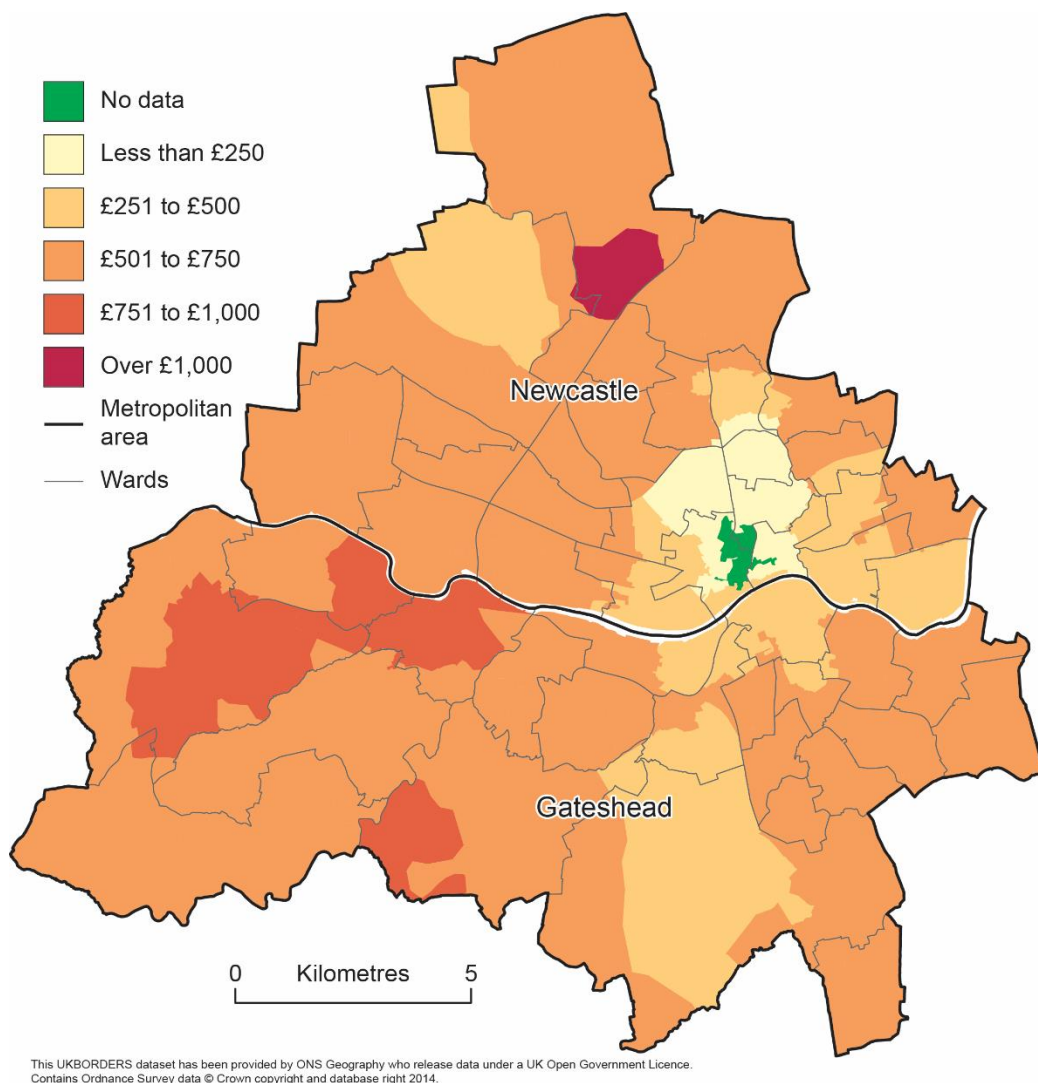
Figure 1 illustrates patterns of personal lending for Great Britain by mapping the distribution of lending per head of population by postcode sector for the published bank personal lending data, overlain by Local Authority area. Data exists for all Local Authorities but it is striking that whilst substantial spatial variation is evident, it is again difficult to discern any area-based patterns in lending. There is, for example, no evidence of a ‘North-South divide’ nor particular regional bias nor barely even of urban spatial structure. On average, there are lower levels of personal lending in parts of rural Great Britain, although rural postcode sectors tend to cover larger areas making their patterns more visible than urban areas on this map. A more accurate map of levels of local lending would be possible if the data at least provided the number of loans per postcode sector as well as total value but, currently, per capita is the closest approximation to possible demand that can be made given the data released.

Figure 1: Average Bank Personal Lending per Head of Adult Population by Local Authority (GB)



If we move to the level of individual Local Authorities, patterns for different wards may start to be delineated, but only through local knowledge of the socio-economic characteristics of the area (see Brown, 2014). Figure 2, for example, takes the case of Newcastle and Gateshead.

Figure 2: Average Bank Personal Lending per Head of Adult Population for Newcastle and Gateshead (GB)



In this example:

- The area with no lending data (green) is Newcastle city centre;
- The adjacent areas with low lending values spread along the River Tyne are where deprivation levels tend to be high;

- Higher values characterise most of the outlying suburbs; and,
- The highest (deep-red) area covers a new-build area of higher prestige housing.

In the past, work on the geographies of finance – of redlining, exclusion, abandonment and the flight to quality – have identified the association of discriminatory and exclusionary lending practices with a variety of socio-economic variables and, especially, indicators of deprivation. Here, the postcode sector lending patterns could be overlain with a ward-based mapping of deprivation (i.e. formal knowledge of socio-economic area characteristics and, for example, using the (English) Index of Multiple Deprivation or Rae's (2014) use of the 2011 National Statistics Socio-Economic Classification). If, however, as in past analyses, a relationship were to be found between lower lending patterns and particular socio-economic variables the limitations of the postcode sector data mean that using this data alone would still not allow us to infer if, say, lower lending was due to lower demand, lending practices by financial institutions or possibly the use of other finance providers by residents. In fact, as will be taken up later in the paper, more recent evidence of new consumer lending, especially by a raft of new subprime lenders, suggests greater complexity than just inclusion or exclusion in the relationship between lending patterns and socio-economic variables. For example, poorer households may be deliberately drawn in to 'predatory' lending whilst, potentially, wealthier households have no need to borrow. But the same issue remains for analysis and interpretation – the dataset provision of only one indicator of total lending for a postcode sector severely restricts insight into local lending markets and lending behaviour.

A comparison of personal lending data with area-based deprivation Census data

Further use of Census 2011 data does make it possible to undertake some basic preliminary comparisons of the bank personal lending data with area level characteristics of populations in

different postcode sectors. What follows, however, is necessarily descriptive. The analysis does not test for causality or any processes which underlie the patterns observed because there is no data about who applies for loans, the loan acceptance rate, interest rates and how these differ by individual or area characteristics. Moreover, in the sets of measures presented, personal lending and Census variables are area-based and thus ‘average’ across households and individuals.

Area-based Census analysis was undertaken for the postcode sectors that had full information (i.e. those with Census data and bank lending data at each of the three quarters released). This left 8,864 postcode sectors, with a further two postcode sectors being omitted which were obvious outliers (G2 1 and EC1A 4, see Table 2 above). The Census variables presented describe dimensions of different characteristics of postcode sectors. These variables are:

- Proportion of households with one of more deprived characteristics^{vii};
- Proportion of households which are owner-occupied;
- Unemployment rate (among the population aged 16-74);
- Proportion of the population who are non-UK born; and,
- Proportion of the population categorised as ethnic minority.

Table 3 provides simple bivariate correlations between the variables listed and a postcode sector’s personal lending per adult head of population^{viii}.

Table 3 Bivariate correlation of personal lending and Postcode Sector characteristics (Spearman's rho)

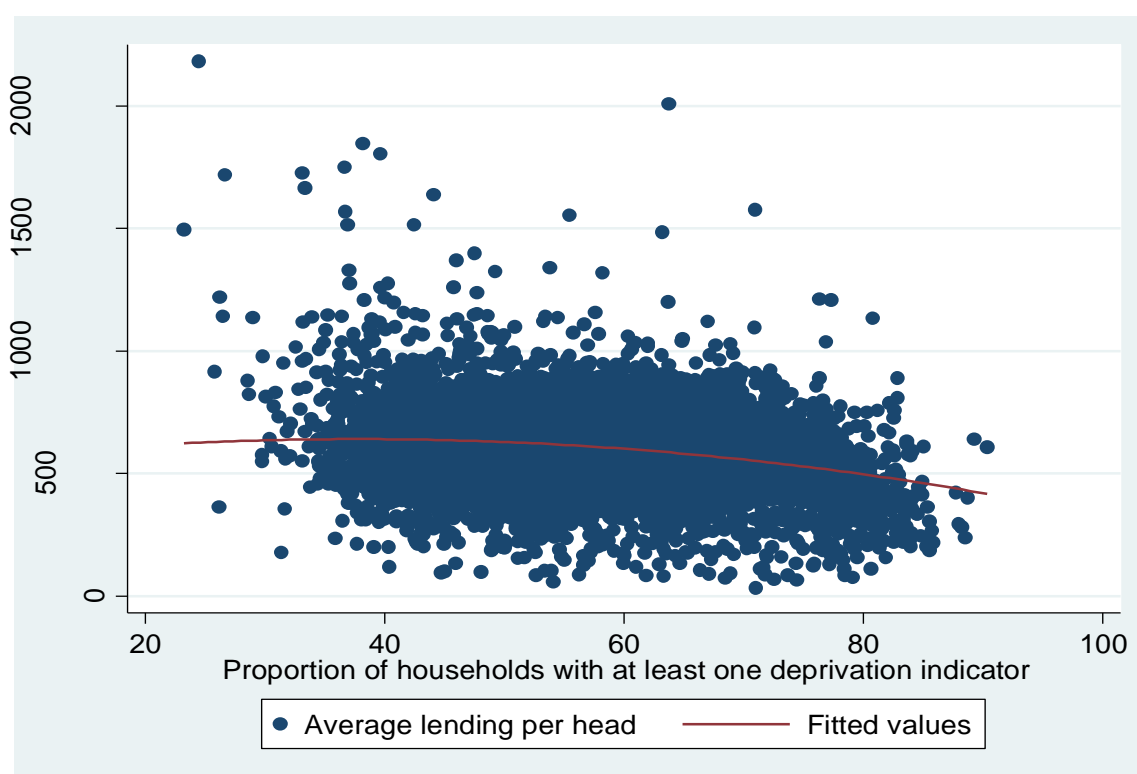
	Lending per adult
Proportion of population non UK Born	-0.2119***
Proportion of population ethnic minority	-0.1105***
Unemployment rate	-0.0706***
Proportion of households deprived on at least one measure	-0.1555***
Proportion of households owner-occupied	0.2437***

Number of observations: 8,862; *** Significant at 0.001

In all cases these individual relationships are relatively weak, although all are statistically significant and move in the direction that might be expected. The strongest single relationship with personal lending is that of owner occupation rate.

Figure 3 presents a scatterplot of one of these relationships – lending and deprivation.

Figure 3 Bank personal lending per head by deprived household for Postcode Sectors



In general, the data suggest that average levels of personal lending tend to decline as an area's deprivation level increases (although the decline appears to begin only after a certain point). The association between deprivation and lending levels at the postcode sector level is, however, relatively weak. This weakness may in part reflect the nature of the deprivation measure used which does not capture income directly, as well as the fact that a per head area based measure does not capture differences in proportions of borrowers between areas. Alternatively, it could reflect patterns in the use of different types of finance by socio-economic circumstance which are not captured by bank personal loans data.

Beyond geographies of financial exclusion?

Research into geographies of lending in most nations beyond the USA has been severely hampered by the lack of data on lending from financial institutions^{ix}. For campaigners and policymakers the lack of transparency and data disclosure remains a major concern and, as such, the release of this new area-based lending data has been widely welcomed. So, how valuable is this data? And in what sense(s) does it 'deliver', for those interested in financial inclusion and exclusion?

Empirically, this exploratory analysis of the new data can only be described as underwhelming; it reveals substantial spatial variation in lending across Great Britain, but little by way of discernible patterns of area-based personal lending. Combining the data with area based socio-economic data from the 2011 Census suggests that average levels of personal lending tend to decline as an area's deprivation level increases, but the association between deprivation and lending levels at the postcode sector level is relatively weak. One reading of these findings is, of course, to argue that there *are* no clear spatial patterns of financial exclusion in Britain. We could argue that the banking industry's historic lack of transparency

is an irrelevance, with no detrimental effect on governments' and advocacy groups' attempts to geographically 'target' financial exclusion. This reading, however, would be premature on several grounds. First, and staying with the empirical parts of our argument, the scrutiny and initial analysis reveals basic technical shortcomings in the data that profoundly limit its usefulness in interrogating area-based lending patterns; it is difficult to use this data either to support or challenge any but the most cursory of suppositions about geographies of personal lending in Britain. It is also important to re-state that this data represents an estimated 60 per cent of all personal loans, but only 30 per cent of the total national unsecured credit market in Great Britain. Second, and beyond its evident empirical limitations, the release of this data is a timely and significant invitation to consider the analytical and political limitations of 'open data' and its role (or not) in addressing the relationship between finance and economic marginalisation. As Walks (2013) has observed, much of the scholarly interest in the socio-spatial implications of high levels of household debt emanates from experiences in the US and the UK. The US HMDA data has enabled sophisticated analysis of mortgage lending patterns that allow policy makers to identify where subprime mortgage lending becomes predatory in its targeting of racial and ethnic minorities (Wyly et al. 2006). Yet, for all its relative 'transparency', the US has also been at the forefront of innovations in housing policy, deregulation, securitisation and risk-hedging derivatives that have incentivised the expansion of household debt (Immergluck, 2009; Engel and McCoy, 2011). In both the US and the UK, government policies have worked to normalise indebtedness as middle and lower income households are incorporated into mortgage markets, pension plans and other mass marketed financial products (Martin 2002, Aitken 2007). With the steady erosion of the redistributive elements of social welfare policy in both countries, individuals have been encouraged to become 'financially literate', to reimagine themselves as self-interested, responsible investor subjects (Langley, 2006: 919) as they – and not the state – become responsible for their welfare (Finlayson, 2009; Watson, 2009). In these contexts, 'risk' is being reconfigured from

something potentially damaging into an investment opportunity and ‘the motivating force to enter financial markets for protection against possible unemployment, poor health or retirement’ (van der Zwan 2014:112). So, the availability of ‘transparency’ and good quality area-based lending data in the US is laudable, but it does not, in and of itself, translate into policies designed to reduce socio-economic marginalisation and unevenness.

Third, and more broadly, research on growing levels of household debt in the UK and North America challenges how we are to interpret patterns of lending and borrowing. In essence, research points to an increasingly variegated debt landscape (see Walks 2013, 2014) characterised by complex and differentiated forms of financial (dis)incorporation. For example, credit rationing by banks may have squeezed out lending to low income groups and those with no or damaged credit histories, yet such exclusion has, in turn, been linked with the capitalisation of these self-same groups by a new breed of subprime finance organisations (French, 2014), engaged in predatory ‘inclusion’. Thus, for example, Kear (2013) has written about the creation of a new financial subject, ‘*homo subprimicus*’, identified and then targeted by the rise of fringe finance and testimony to a financial system expert at efficiently extracting value from these ‘newly included’. As such,

‘It makes little sense to think of this new subprime subject as either excluded, included, or the bearer of [financial] rights. It populates a market built by new technologies and rationales that have made it possible to imagine and manage the poor in asset-like ways’ (Kear, 2013, p. 941, parentheses added)

Whether labelled as ‘exploitative greenlining’ (Newman and Wyly, 2004), ‘exploitative inclusion’ (Sokol, 2013), ‘financial precarity’ (French, 2014), or ‘adverse incorporation’ (Aitken, 2015), this literature illustrates the complexity of ‘fringe finance going mainstream’ (Aitken, 2015). We have moved beyond the binary of inclusion and exclusion in

understanding how new financial infrastructures are constructing lending patterns, indebtedness and economic marginalisation.

To map and understand such patterns, however, we need good quality personal lending data. To move beyond ‘inclusion’ and ‘exclusion’ and understand variegation, to ask if low levels of lending (and borrowing) in some areas suggest economic deprivation, or, conversely, are they markers of relative affluence, we need much more in-depth and disaggregated analyses of geographies of debt. Furthermore, given the expanding role of financial markets in everyday life in contexts like the UK, it is important that such analyses are able to explore how personal lending interacts with other economic and social axes of differentiation, most notably housing and labour markets and age, gender, race and ethnicity (see, for example, Walks 2013).

Conclusions

This paper has provided the first exploratory spatial analysis of the postcode sector personal lending data made available by the BBA in 2013. The paper has interrogated the parameters and robustness of the dataset and generated an overview of personal lending patterns across Great Britain. More broadly, the paper has used this analysis to revisit the analytical and political limitations of ‘open data’ disclosure and transparency in addressing the relationship between access to finance and economic marginalisation. What the analysis really shows, however, is that any analysis of area-based lending patterns using this new dataset is substantially constrained. First, and on a technical dimension, uncertainty on data content and levels of imprecision are introduced by the processes of data construction undertaken by the BBA and its participating members. Such uncertainty and imprecision could be easily dealt with by greater clarity around the filter rules used, and the process of data construction by members could be tightened and made transparent through explanatory notes and / or a technical report, including the application of quality assurance processes. Whilst it is early

days for the dataset, with a limited number of releases to date, the detail provided should allow the ability for analysts to confidently apply like-for-like comparisons of postcode data cells over time and space. Second, for geographers, the publication of the data at postcode sector level increases the technical requirements and costs of meaningful data analysis. The underlying data is based on postcodes and if made available at this level would have substantial scope for development in to other more useful and commonly used units of analysis (such as Lower-layer Super Output Areas/Scottish Data Zones), allowing subsequent data fusion with other major socio-economic datasets in the UK. In turn, this would enable the process of bringing together geographies of supply and of demand to greater understand financial access and the potential inequities of differential and / or exclusionary practices. Third, and relatedly, a substantial driving force of the need for data fusion is the very limited number of lending metrics and indicators that are released in the dataset – essentially, one indicator, total lending, for a postcode sector. Useful further (aggregated) metrics of the supply of lending which would allow more substantial analysis – beyond merely that of total lending – would include content such as: number of transactions, including number of declines; individual loan amount bands; costs of gaining lending; and characteristics of the borrower (for example, age, gender, ethnicity, income bracket). Whilst acknowledging the importance of data protection, there remains considerable scope to enhance understanding through a greater breadth of release of lending data that is collected^x.

Heralded by the BBA and its membership as placing the UK financial sector at the forefront of international efforts in data disclosure and transparency, the voluntary release of the postcode lending data saw those calling for such data disclosure subsequently challenged to ‘show its value’. There is no doubt that provision of substantially greater amounts of comprehensive area-based lending data can provide a major opportunity to identify a further piece in the jigsaw puzzle of localised patterns of financial provision in Great Britain, as the basis for understanding uneven financial access, and potential policy responses^{xi}. In contrast,

the conclusion to be drawn here on the BBA postcode data release can only mirror that of Rae (2015) in his analysis of the sister database on mortgages:

‘This initial data offering is both very welcome and highly useful, yet it remains some way short of meeting its transparency objectives. At present, the situation is more one of opaqueness than transparency. If the government wish to provide analysts, activists and communities with the tools to properly assess the fairness, equity and spatial justice of [mortgage] lending in Great Britain, they must go one step further’ (p.192).

In the case of this paper, for the residential mortgage sector and mortgage lending read ‘personal lending’. Or, in other words, the Parliamentary Commission’s challenge to the banking industry to undertake meaningful disclosure has not yet been met.

Putting aside the technical deficiencies of the data, ultimately, this data release is voluntary, by a certain number of providers, and simply does not cover the full personal lending market. A variety of (especially new) lenders are undertaking relevant annual data collection and reporting exercises, but do not do so in a manner that seeks to support area-based lending disclosure (Henry et al., 2014). To gain a comprehensive coverage of lending activity in any geographically defined area, further voluntary agreements or regulatory compulsion is required such that all finance providers release data^{xii}. Moreover, individuals also sit in households, which may in turn be part of other lending markets – mortgage, credit card, etc. – and it is only through knowledge of such intersections and interactions that the true extent of household lending (and area-based debtscales, Walks, 2013; 2014) can be truly discerned. New forms of financial precarity and debt-related vulnerability are being outlined and which are creating further challenges to policy responses to financialisation which, arguably, move well beyond that of ‘inclusion’.

Yet the point remains clear. Data disclosure, and the transparency it affords, remains central to understanding the distributional implications of finance's penetration of the 'nooks and crannies of social life' (Lee et al., 2009: 728), the various spatial and social relationships produced by the expanding use of credit in modern society, and its effects on citizens and their subjectivities, institutional behaviours, community political action and policy (Walks, 2013). Given the analysis here, and in the absence of legislation to mandate a satisfactory regime of data disclosure across the financial services, the question remains how further advances in transparency are possible or likely despite the increasingly urgent need to understand and respond to the distributional and differential implications of lending and debt across the UK.

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- ⁱ Rae (2014, 2015) has analysed the mortgage lending data released under this initiative.
- ⁱⁱ Analysis run on Q4 2013 personal lending dataset.
- ⁱⁱⁱ It would be helpful to be able to also calculate a measure based on a ratio to local income, however both the underlying local income data and the quality of match between postcode sectors and the Middle Layer Super Output Area geography at which income data is released in the UK would introduce a considerable degree of uncertainty into such estimates.
- ^{iv} Defined as the total population aged 18 or over.
- ^v The Office for National Statistics via NOMIS has published estimates of population and many other Census variables at the Postcode Sector level. These Postcode Sector estimates are best-fitted to Postcode Sector boundaries from Output Areas. For details on this best-fitting see <https://geoportal.statistics.gov.uk/geoportal/catalog/search/resource/details.page?uuid=%7BA7562082-D57B-4ACE-BB37-D14036AAF813%7D>. For Scotland data were downloaded separately from <http://www.scotlandscensus.gov.uk/census-results>. Where Postcode Sectors are split, in cases where they cross council boundaries, the Postcode Sector parts have been combined to give a whole Postcode Sector estimate (see <http://www.gro-scotland.gov.uk/files2/geography/2011-census/2011-census-geography-background-info.pdf>).
- ^{vi} The total value of loans at these two Postcode Sectors is, however, well below the average.
- ^{vii} The Census deprivation variable was first released to accompany the 2011 Census. The four dimensions of household deprivation it measures are: 'Employment - any member of a household not a full-time student is either unemployed or long-term sick; Education - no person in the household has at least level 2 education, and no person aged 16-18 is a full-time student; Health and disability - any person in the household has general health 'bad or very bad' or has a long term health problem; and, Housing - Household's accommodation is either overcrowded, with an occupancy rating -1 or less, or is in a shared dwelling, or has no central heating'. See <http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcn%3A77-286348> Table QS119EW.
- ^{viii} The measure used is Spearman's Rank to allow for relationships to be non-linear. For simplicity we only present the coefficients for the relationship with bank lending; of course many of the variables are correlated with each other, in some cases very strongly (for example, unemployment and deprivation).
- ^{ix} See in France, for example, http://www.lelabo-ess.org/IMG/pdf/Propositiondeloi_mars2013.pdf.
- ^x See Henry et al. (2014) for a full checklist of recommended developments to the BBA Postcode Lending Data.
- ^{xi} See Open Data Institute (2013) for an example of how data made available by new digital platform based peer-to-peer lenders makes possible mapping and visualisation of geographical lending patterns in almost real-time.
- ^{xii} Indeed, in 2015, the national and very high profile Financial Inclusion Commission Report (2015) included as one of its recommendations that 'Government to lead a collective effort with retail banks and others to promote wider data disclosure...'.