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# No joy with banks 'round here: the geography of the usage of bank financing among UK SMEs

Samuel Mwaura and Sara Carter

Hunter Centre for Entrepreneurship

University of Strathclyde

# Bank financing for SMEs: an old thorn

- Traditionally, the key issue has been “credit rationing” – where banks turn down some creditworthy applicants (Stiglitz and Weiss, 1981)
- But theory and evidence of rationing has been questioned (Parker, 2002)
  - Financial industry quite competitive with a variety of credit products
- Past policy interventions unsuccessful (Graham Review, 2004)
- Yet, UK SMEs seeking external financing still precariously reliant on bank financing (Breedon, 2012)
  - Limited alternatives disappointing given the size/significance/sophistication of the UK finance industry
- Recently repackaged interventions (e.g. Enterprise Finance Guarantee, Merlin Agreement) getting little traction (Breedon, 2012)

# Bank financing for SMEs: research developments

- Discouraged borrowers: “a good firm, requiring finance, that chooses not to apply to the bank because it feels its application will be rejected” (Kon and Storey, 2003)
- Key assumption: customers can more or less accurately predict the probability of rejection
- Discouragement thus tantamount to credit rationing (Levenson and Willard 2000; Kon and Storey 2003)
- Bank financing still seen as a supply-side issue
- Yet, the majority of UK SMEs do not seek bank financing (BDRC 2014; Fraser 2014)

# Bank financing for SMEs: demand-side considerations

- Conceptually, discouragement's focus on the fear of rejection too narrow – other factors (such as interest rates) could also discourage potential borrowers
- Apprehensions and self-diagnoses more likely than accurate prediction of the probability of rejection
  - New innovative SMEs (Hoffman et al. 1998; Mina et al. 2013), ethnic minorities (Fraser 2009) and women (Roper and Scott 2009) more likely to be hesitant to seek bank financing
- Thus, broaden the concept of discouraged borrowers to include all potential borrowers with finance needs but do not apply for whatever (discouraging) reason
- Still, many small businesses do not seek growth, thus do not need external financing; “contentment hypothesis” (Vos et al. 2007)
  - Implicit assumption that all SMEs are entrepreneurial can thus be questioned
- Market (demand and supply) for bank credit is complex and poorly understood

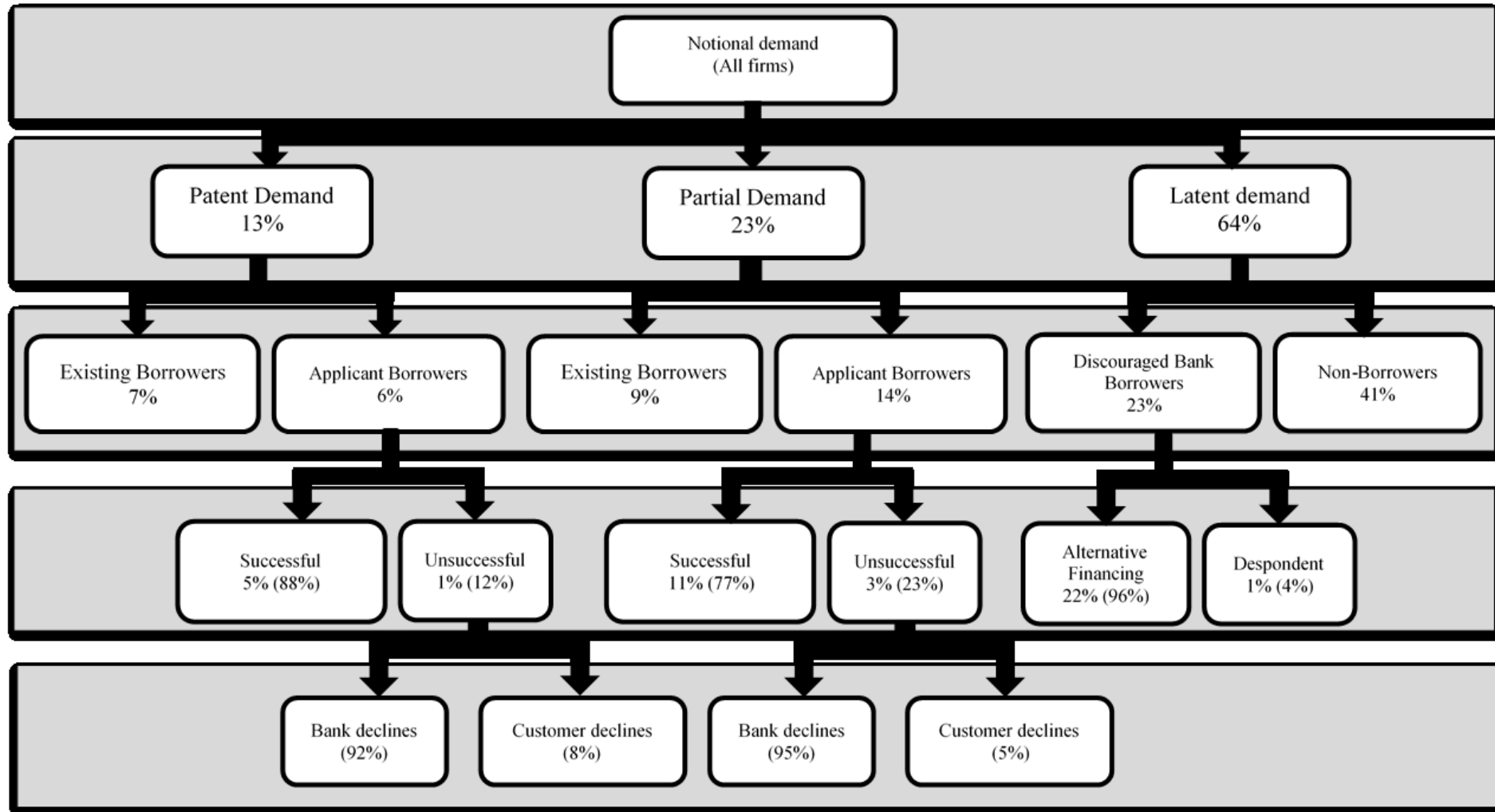
# Bank financing for SMEs: spatial considerations

- [Creditworthiness varies spatially](#)
- Postcodes a key variable in credit rating (Finlay, 2009)
- Little research on the geographical distribution of SME bank financing in the UK
- Scope for local interventions (LEP/ local authority level)
- Banks/ other financial providers (alternative financing) can target specific areas
- Scope for further investigation/ understanding of local cultures/ characteristics

# Data and methods

- SME Finance Monitor – a survey of 5000 SMEs in the UK every quarter; 10 waves to Q1 2015
- GIS mapping by post code area
- Use sampling weights to estimate “counts” of SMEs in the different borrower categories
- Obtain their shares within postcode areas
- Location Quotient = area share (e.g. success borrowers/ all SMEs) ÷ national share
- LQ classification: <0.75, 0.75-1, 1-1.25, >1.25

# A taxonomy of the market for bank credit (weighted distribution of UK SMEs)





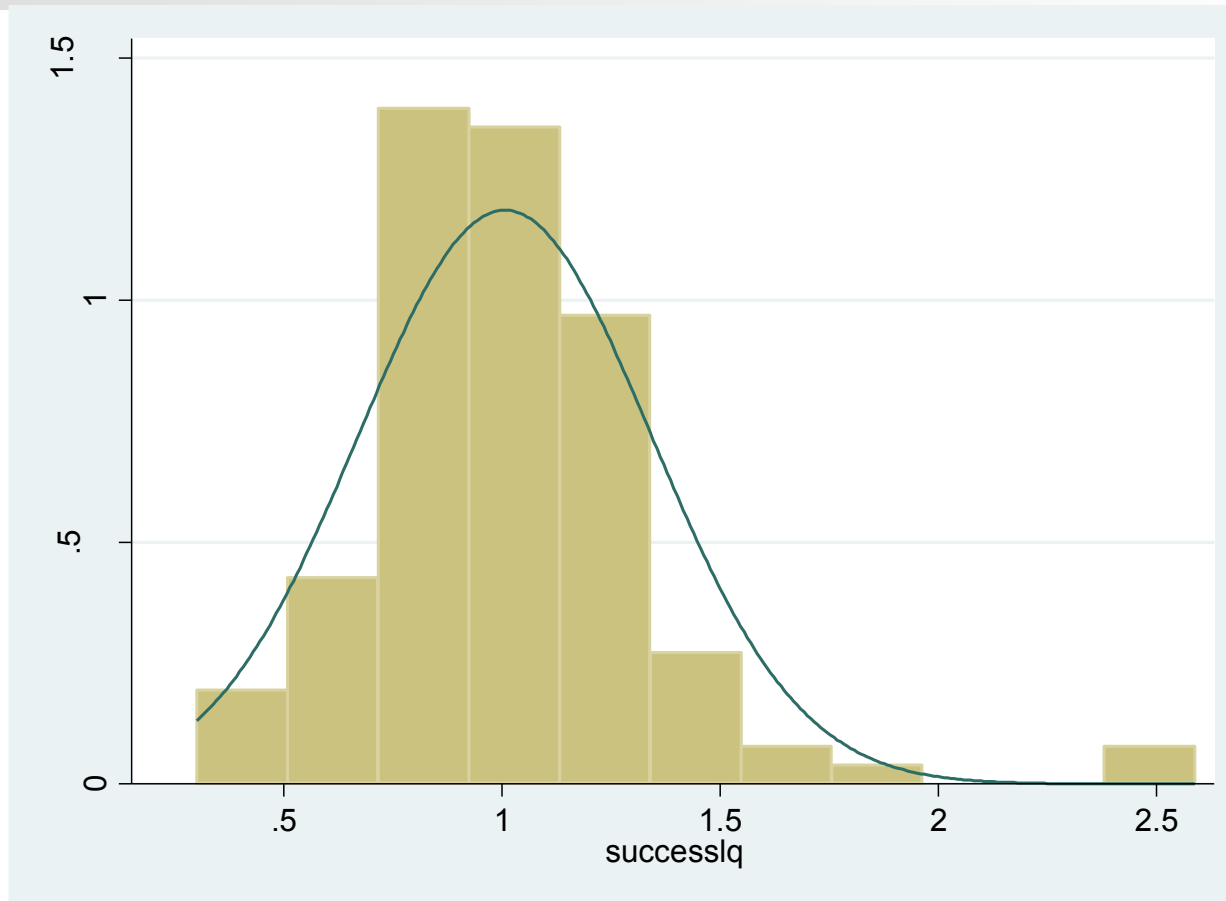
# Condensed categorisation

<b>Borrower type</b>	<b>Weighted share (%)</b>
<b>Successful (exclusive) bank borrowers</b>	<b>12%</b>
<b>Declined bank borrowers</b>	<b>1%</b>
<b>Discouraged bank borrowers</b>	<b>46%</b>
<b>Non-investors</b>	<b>41%</b>

# Location Quotients: summary stats

<b>Variable</b>	<b>Obs</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min</b>	<b>Max</b>
<b>Successful bank borrowers</b>	<b>124</b>	<b>1.01</b>	<b>0.34</b>	<b>0.30</b>	<b>2.59</b>
<b>Declined bank borrowers</b>	<b>124</b>	<b>0.89</b>	<b>1.00</b>	<b>0.00</b>	<b>4.43</b>
<b>Discouraged bank borrowers</b>	<b>124</b>	<b>1.00</b>	<b>0.14</b>	<b>0.39</b>	<b>1.61</b>
<b>Non-investors</b>	<b>124</b>	<b>1.00</b>	<b>0.15</b>	<b>0.55</b>	<b>1.46</b>

# LQ distribution: successful bank borrowers



Skewness/Kurtosis tests for Normality

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	joint Prob>chi2
successlq	124	0.0000	0.0000	39.17	0.0000

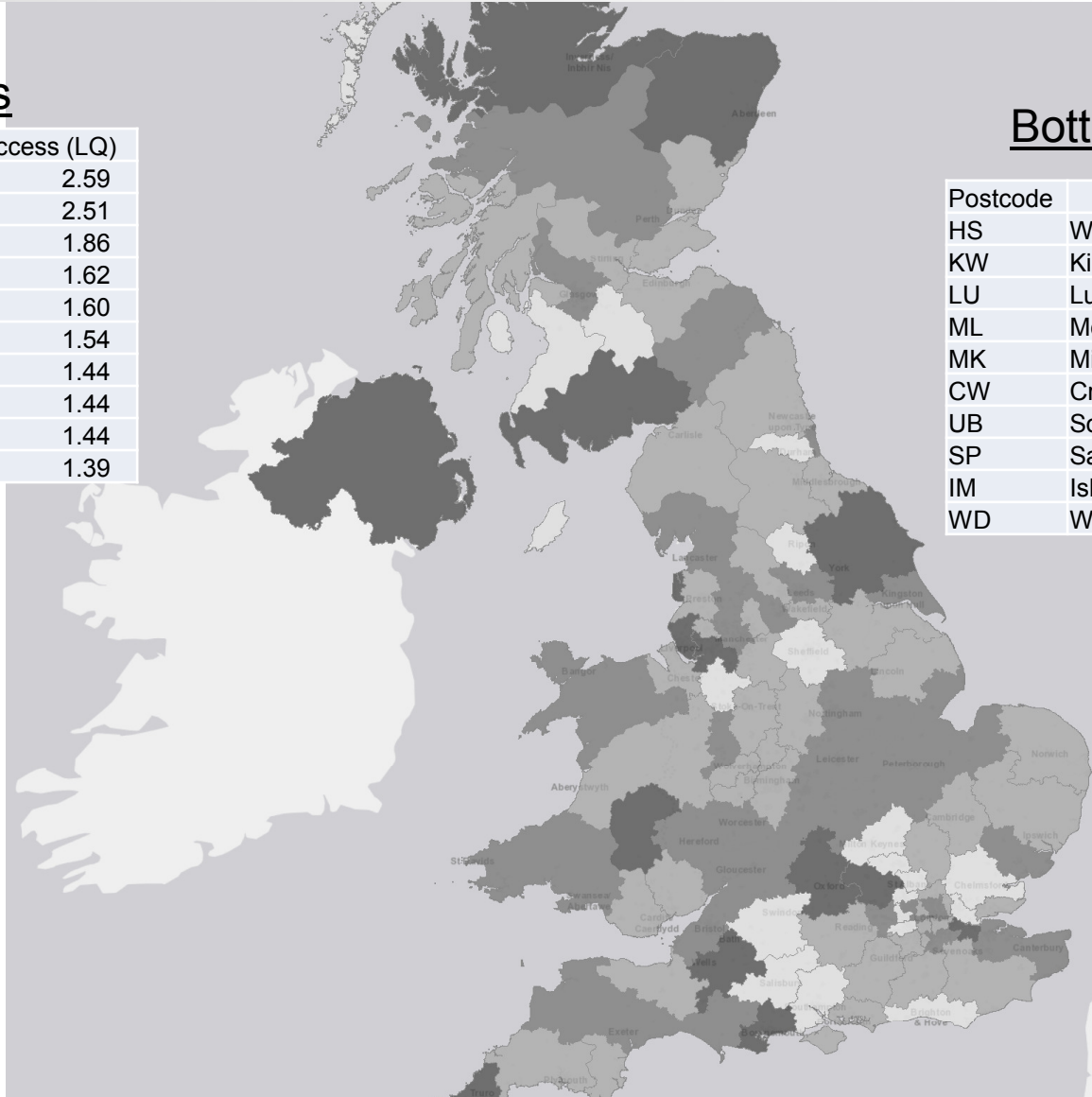
# The geography of successful bank borrowers (LQ)

## Top ten areas

Postcode	Post Town	Success (LQ)
LD	Llandrindod Wells	2.59
GY	Guernsey	2.51
EC	London EC	1.86
IV	Inverness	1.62
DG	Dumfries	1.60
WC	London WC	1.54
L	Liverpool	1.44
OX	Oxford	1.44
WA	Warrington	1.44
YO	York	1.39

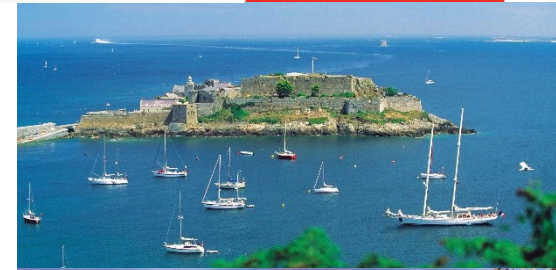
## Bottom ten areas

Postcode	Post Town	Success (LQ)
HS	Western Isles	0.30
KW	Kirkwall	0.30
LU	Luton	0.34
ML	Motherwell	0.39
MK	Milton Keynes	0.40
CW	Crewe	0.52
UB	Southall	0.54
SP	Salisbury	0.57
IM	Isle Of Man	0.58
WD	Watford	0.59

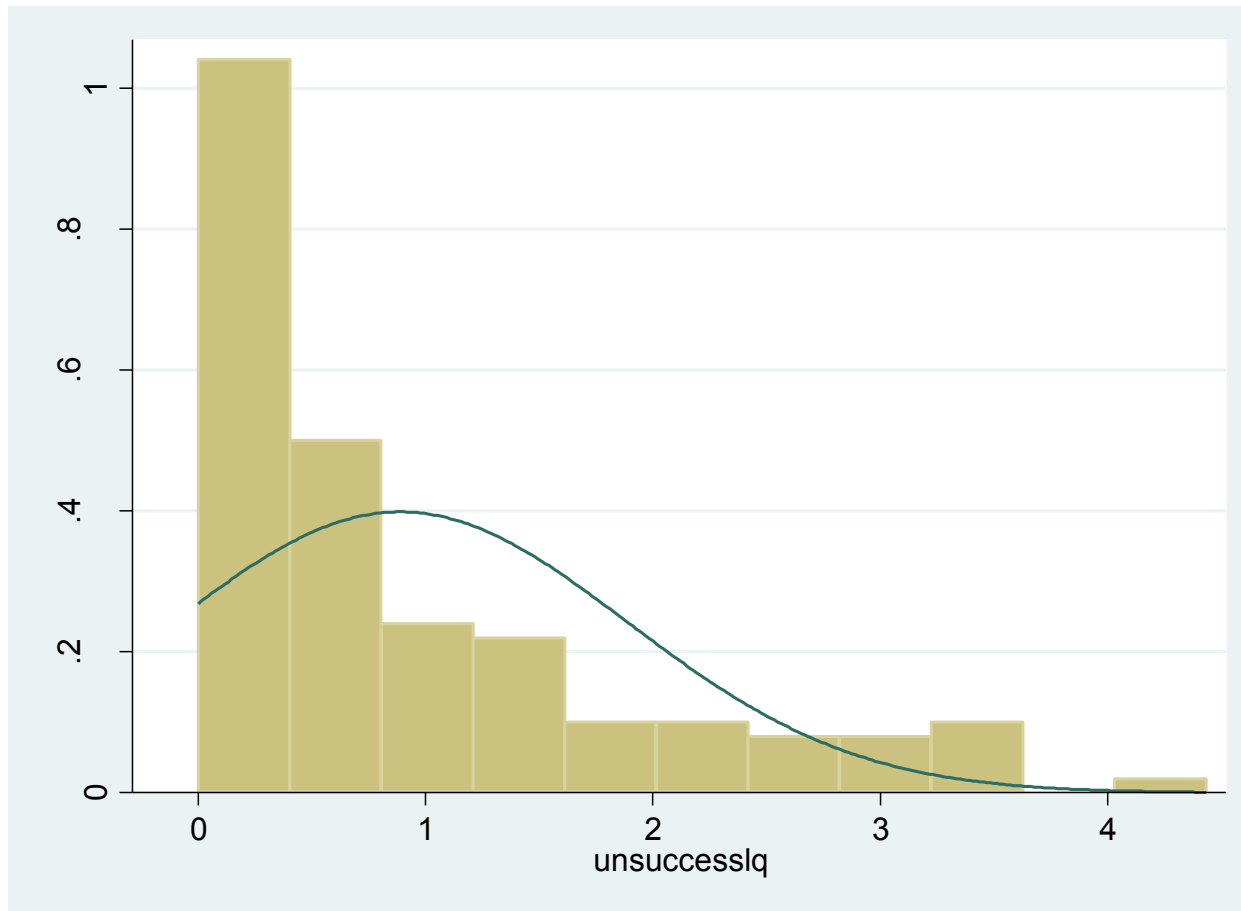


# Success with bank debt: what could be going on?

- Older SMEs (over 10 years) driving usage of bank credit in most areas
  - Localities not directly comparable still – Central London, Oxford/York, Bath/Truro, Llandrindod Wells/ Dumfries, Inverness, Aberdeen, Northern Ireland, Guernsey
- Liverpool/ Bournemouth – young SMEs (2-5 year old) driving usage of bank credit
  - But in Liverpool, there is a greater share of 2-5 year old manufacturing SMEs
    - ❖ [Strong manufacturing pedigree/ LEP interventions?](#)
  - Bournemouth – many 2-5 y/o in construction and “other”, potentially hi tech.
    - a coastal resort known for tourists and retirees but now attracting young talent in digital tech
    - [Major regeneration projects ongoing](#)



# LQ distribution: unsuccessful bank borrowers



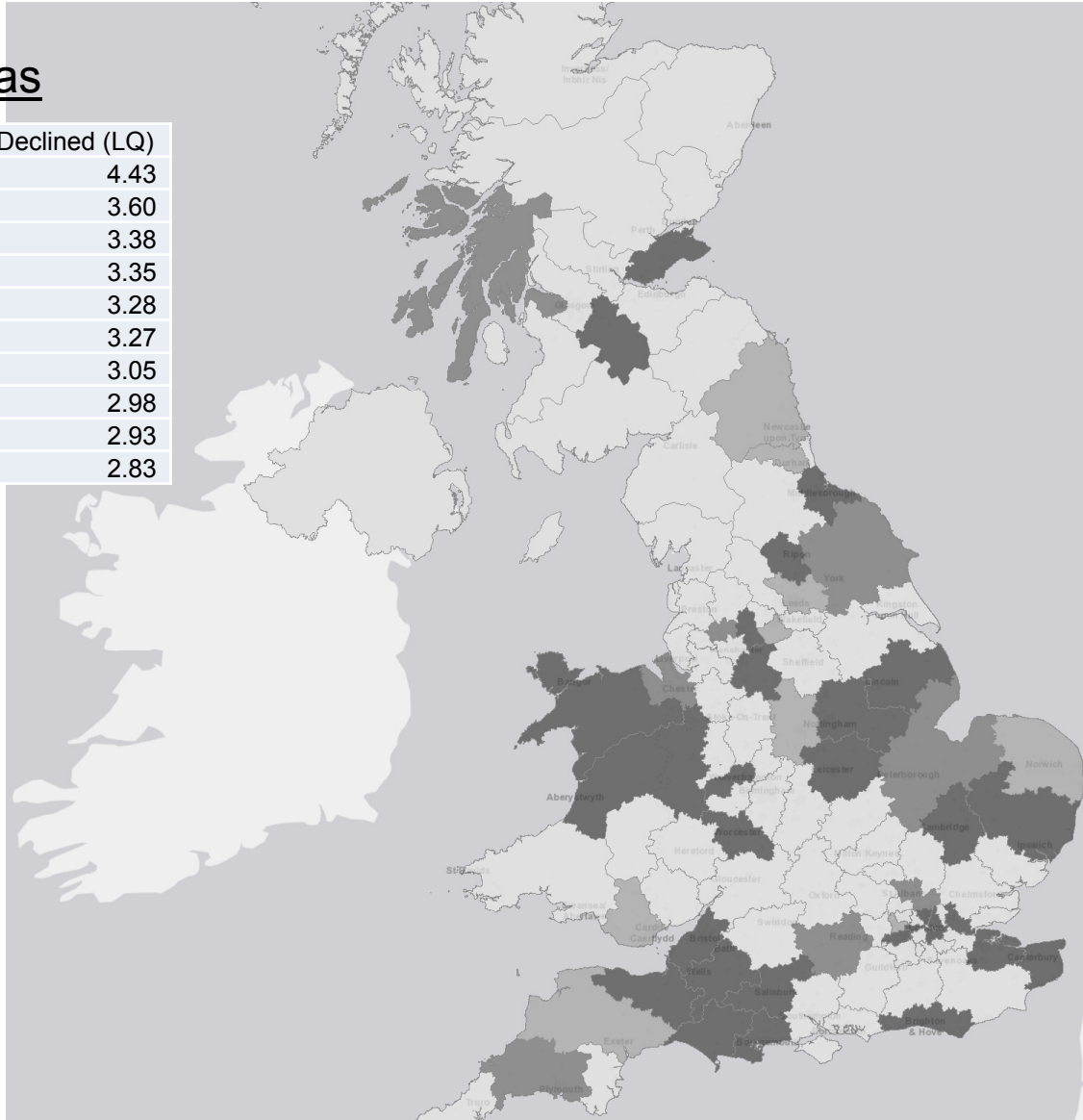
Skewness/Kurtosis tests for Normality

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	joint Prob>chi2
unsuccessfulq	124	0.0000	0.0310	23.98	0.0000

# The geography of declined bank borrowers (LQ)

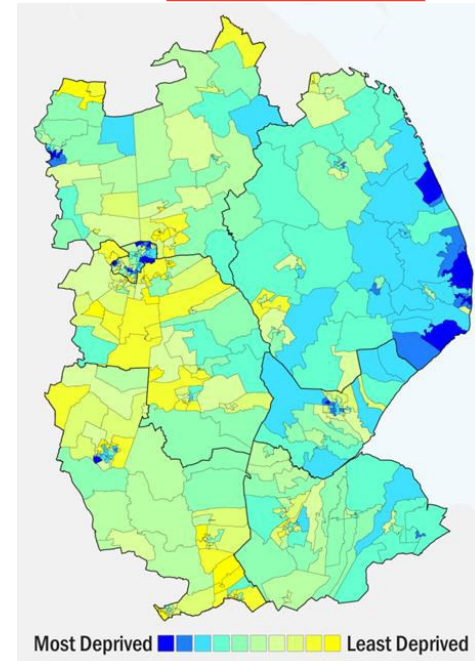
## Top ten areas

Postcode	Post Town	Declined (LQ)
LN	Lincoln	4.43
E	London E	3.60
W	London W	3.38
CT	Canterbury	3.35
SK	Stockport	3.28
ME	Medway	3.27
BH	Bournemouth	3.05
DT	Dorchester	2.98
SY	Shrewsbury	2.93
CB	Cambridge	2.83



# Declined debt applications: what could be going on?

- Lincoln area – known deprivation/unemployment/ structural (sector) issues → creditworthiness issues?
- Same of East London: Tower Hamlets, Barking, Dagenham, Newham, etc



- West London not known for high deprivation but a few older firms in wholesale/retail, real estate and manufacturing struggling to gain credit → competition; no local “immunity”

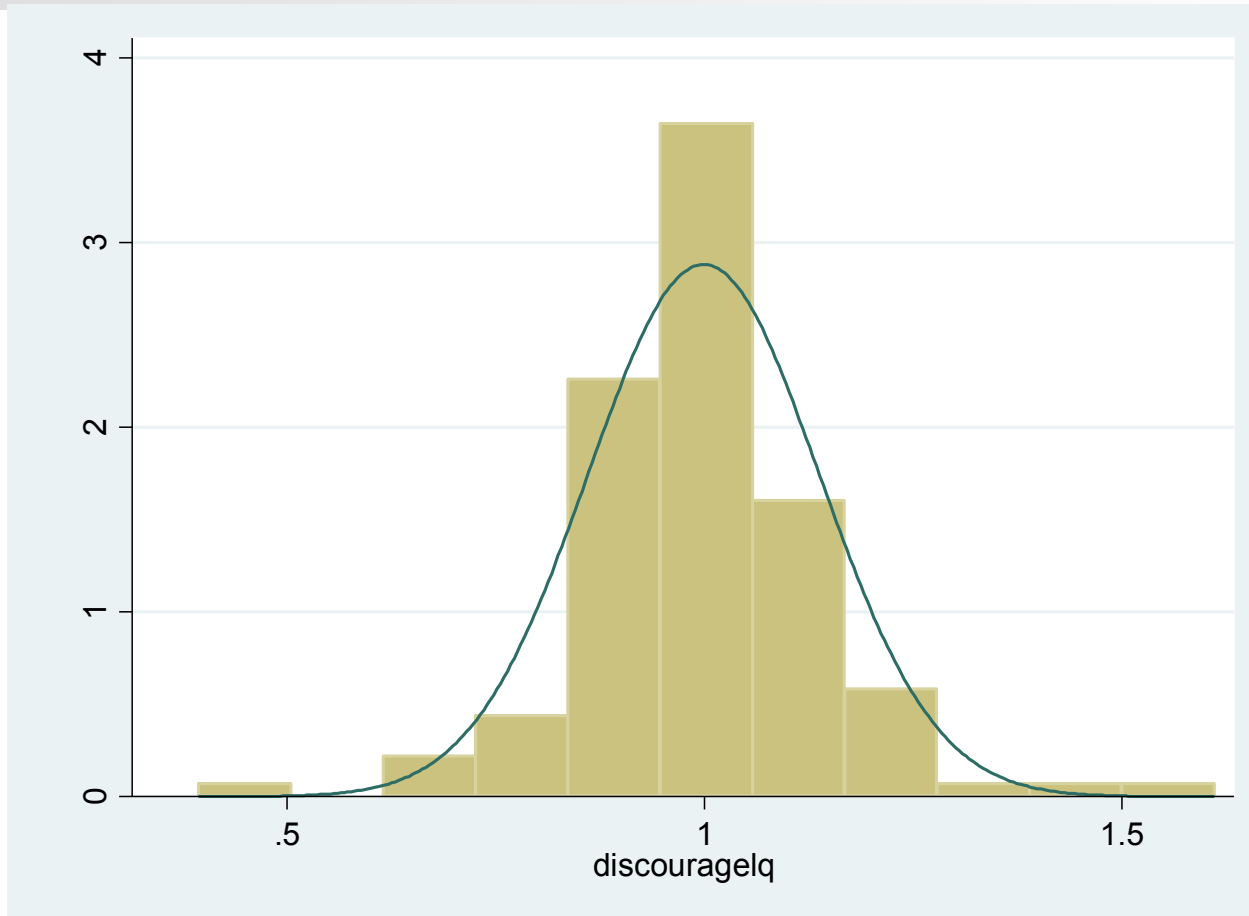




# Declined debt applications: what could be going on?

- Kirkcaldy – start-ups in construction
- Motherwell – older firms in transport
- Cambridge – older health services, real estate SMEs
- Bournemouth – “other” 2-5 yr olds  
→ risk

# LQ distribution: discouraged bank borrowers



Skewness/Kurtosis tests for Normality

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	joint Prob>chi2
discouragelq	124	0.6329	0.0000	17.51	0.0002

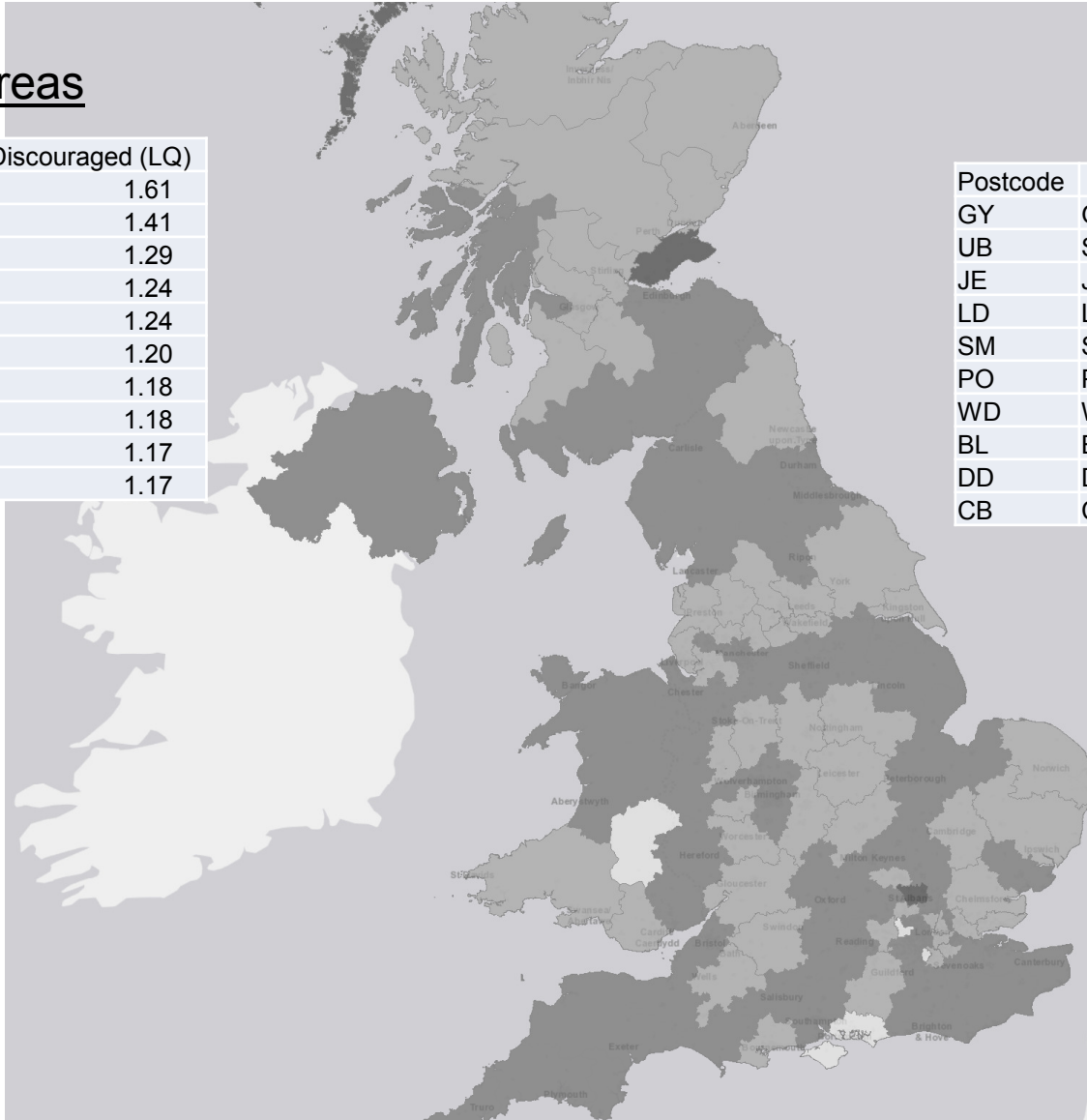
# The geography of discouraged bank borrowers (LQ)

## Top ten areas

Postcode	Post Town	Discouraged (LQ)
HS	Western Isles	1.61
AL	St. Albans	1.41
KY	Kirkcaldy	1.29
CH	Chester	1.24
SO	Southampton	1.24
EN	Enfield	1.20
TD	Galashiels	1.18
TS	Cleveland	1.18
DA	Dartford	1.17
RG	Reading	1.17

## Bottom ten areas

Postcode	Post Town	Discouraged (LQ)
GY	Guernsey	0.39
UB	Southall	0.71
JE	Jersey	0.72
LD	Llandrindod Wells	0.72
SM	Sutton	0.74
PO	Portsmouth	0.74
WD	Watford	0.80
BL	Bolton	0.82
DD	Dundee	0.82
CB	Cambridge	0.83



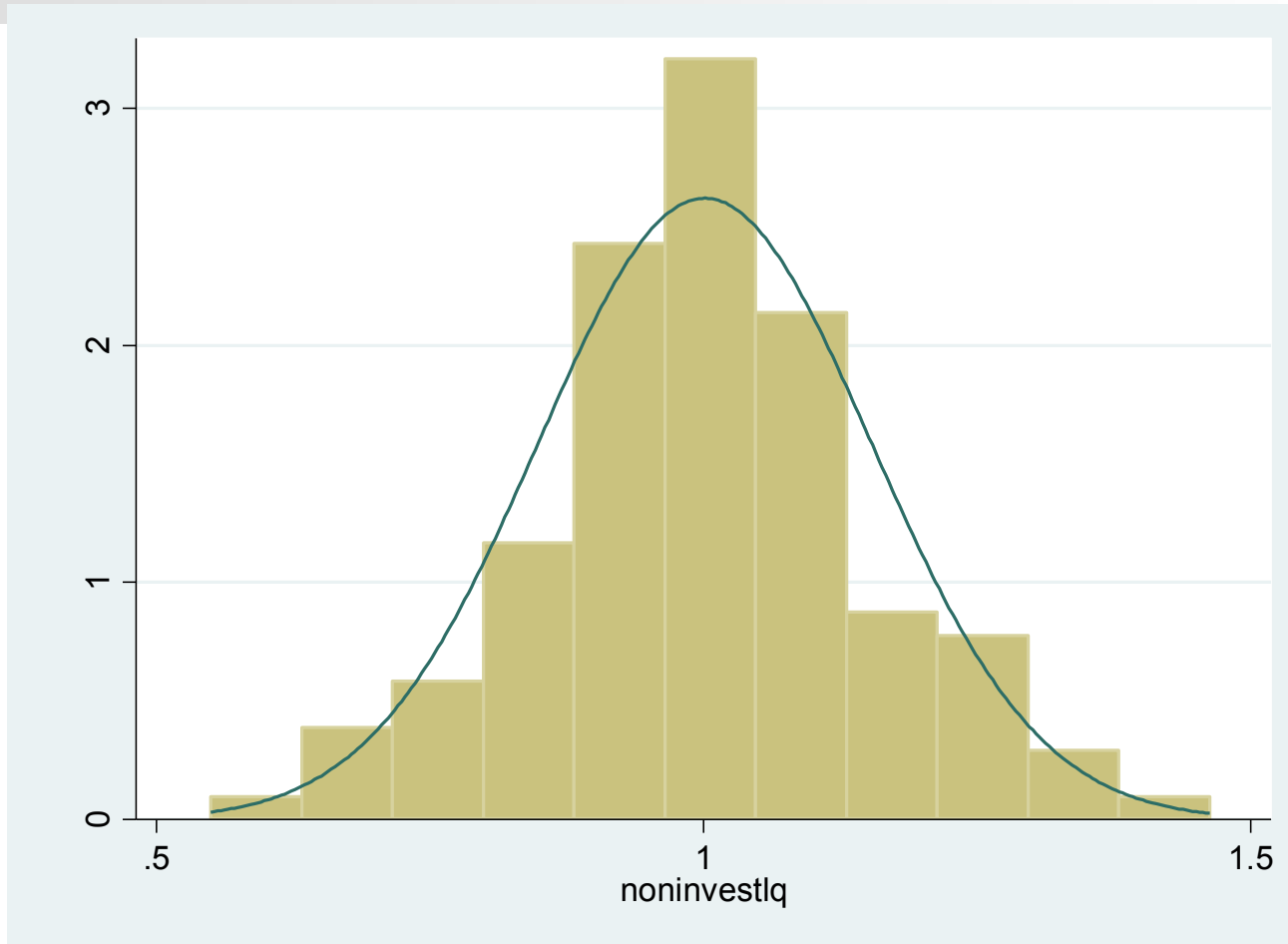
# Discouraged bank borrowers: what could be going on?



- Western Isles – transport and real estate big (due to tourism)
  - But small family firms may prefer internal sources of financing
- St. Albans – an affluent commuter town now emerging as a highly entrepreneurial hi-tech area (UK Vitality Index 2016).
  - 64% of SMEs discouraged, but more than half <5y/o, and 25% classified as “other”
  - Young innovative SMEs using own moneys, fear rejection, prefer other “patient” financing
  - [Interventions by the local LEP](#)
- Kirkcaldy – almost 60% DBBs with more than half <5 y/o across most sectors



# LQ distribution: non-investors



Skewness/Kurtosis tests for Normality

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2 (2)	joint Prob>chi2
noninvestlq	124	0.6963	0.1669	2.10	0.3492

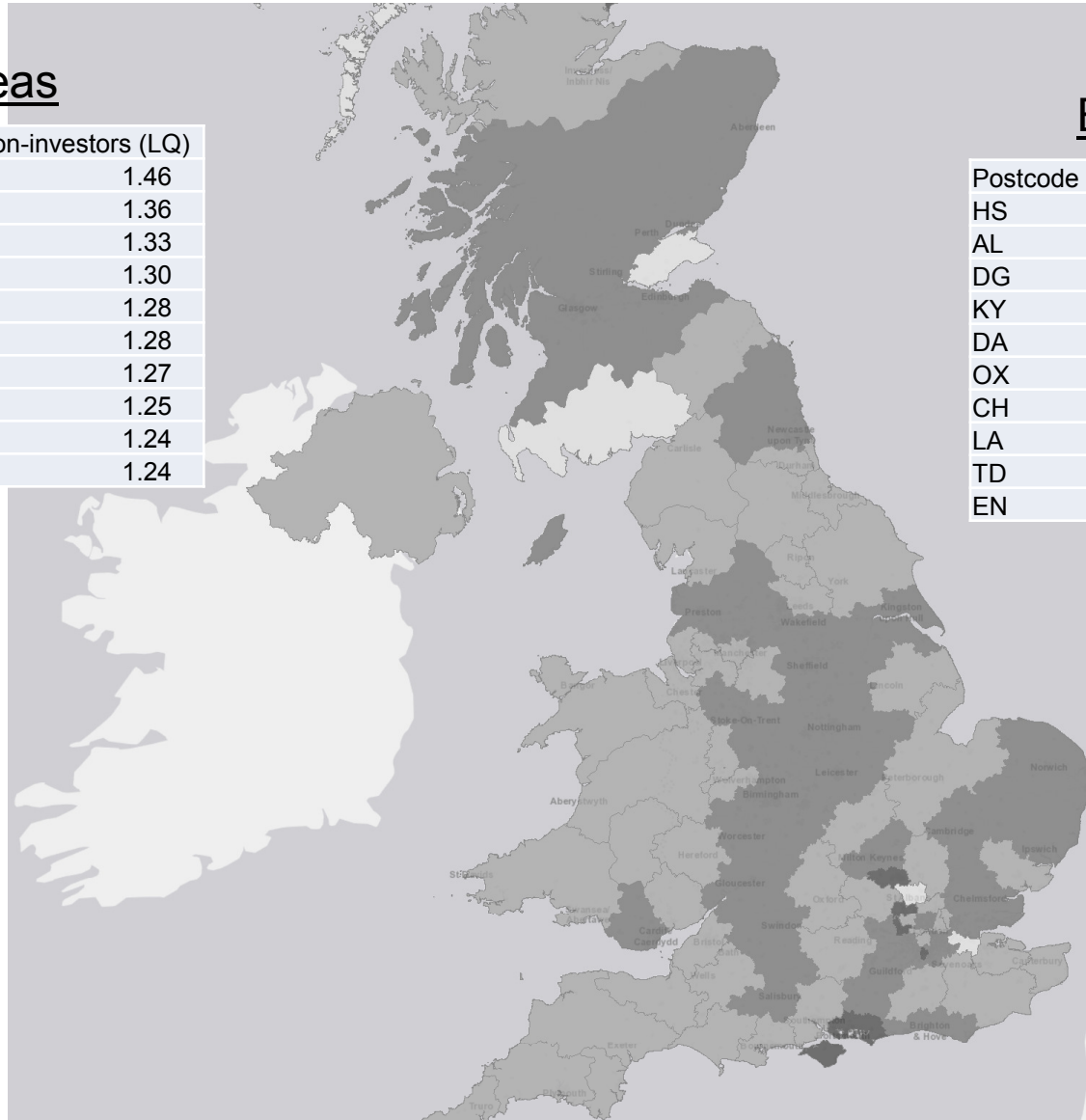
# The geography of non-investing/ non-investment minded SMEs (LQ)

## Top ten areas

Postcode	Post Town	Non-investors (LQ)
UB	Southall	1.46
WD	Watford	1.36
SM	Sutton	1.33
PO	Portsmouth	1.30
KW	Kirkwall	1.28
JE	Jersey	1.28
LU	Luton	1.27
DD	Dundee	1.25
DY	Dudley	1.24
GY	Guernsey	1.24

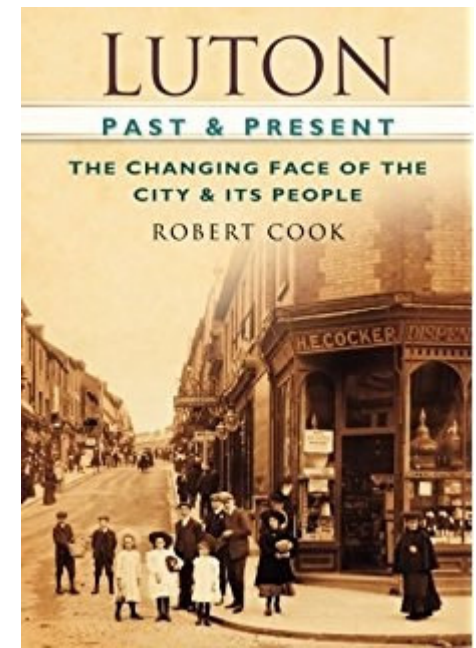
## Bottom ten areas

Postcode	Post Town	Non-investors (LQ)
HS	Western Isles	0.55
AL	St. Albans	0.65
DG	Dumfries	0.67
KY	Kirkcaldy	0.69
DA	Dartford	0.71
OX	Oxford	0.75
CH	Chester	0.75
LA	Lancaster	0.77
TD	Galashiels	0.78
EN	Enfield	0.79



# Non-investing SMEs: what could be going on?

- Southall – relatively established SMEs mostly in real estate, wholesale/retail and transport
  - High South Asian community
- Sutton – older SMEs real estate, construction, manufacturing and health services
- Portsmouth – older SMEs in manufacturing and “other”; also 15% of SMEs are non-investing 2-5 y/o
- Watford – 2-5 y/o in real estate, health and other
- Kirkwall – all ages, manufacturing, wholesale and real estate
- Jersey – older SMEs in construction and health
- ➔ Different stable established markets in different locales? 2-5 y/o not investment minded?
- Luton – startups (<1 y/o) and older firms; health and “other” sectors.
  - Bootstrapping in services?



# Correlation of relative concentrations

	SuccessLQ	UnsuccessLQ	DiscouragedLQ	NoninvestorsLQ
SuccessLQ	1.0000			
UnsuccessLQ	-0.0629	1.0000		
DiscouragedLQ	-0.3556*	0.0408	1.0000	
NoninvestorsLQ	-0.2985*	-0.1156	-0.7792*	1.0000



# Conclusions and implications

- In general, localities with higher relative concentration of discouraged bank borrowers (using alternative finance) less likely to have high concentrations of non-investors
  - Huge role for alternative finance; banks are over-rated?
- Well known determinants of success with bank financing, e.g. sector and age of business, interact uniquely with different local contexts
  - E.g. Older City of London real estate SMEs successful bank borrowers while their peers in the outskirts are declined or noninvestors for various “local” reasons; e.g. deprivation, Family Business orientation, competition, non-growing markets, etc

# Conclusions and implications

- Local (LEP) policies matter in enhancing the unique influences of local contexts on usage of bank financing (e.g. Bournemouth, Liverpool, St. Albans)
  - Such interventions thus need to consider financial interventions as part of an entrepreneurial ecosystems approach. E.g. in BH and AL, enhance/attract hi-tech but also support VC, angel financing, other AF, etc.



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**Thank you for listening.  
We welcome any questions  
or comments.**

Corresponding author:

Samuel Mwaura

[samuel.mwaura@strath.ac.uk](mailto:samuel.mwaura@strath.ac.uk)