



University of St Andrews  
*from first to foremost*

600 YEARS  
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# Self-employment and Place: Are the self-employed less spatially mobile than paid workers?

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## Starting point

- place in general, and the regional context in particular, matter for entrepreneurship (e.g. *Delgado et al. 2010, Bönte et al. 2009*)
- surprisingly few studies have investigated how place shapes entrepreneurship/self-employment and vice versa
- notion of entrepreneurship as a ‘local event’ (e.g. *Audretsch et al. 2010, Stam 2007*)
- People ‘simply’ launch business in the place where they had lived (*Hanson 2003, Bathelt/Glückler 2002*)



## Starting point – literature review

- entrepreneurs/the self-employed are strongly ‘rooted’ in place / ‘place sticky’ (*Hanson 2003, 2009*)
- agglomeration economies and cluster theory highlight location-specific capital for start-ups (e.g. *Feldmann 2001, Figueiredo et al. 2001*) :
  - business networks, localised social ties, market contacts, knowledge of local labour market etc.
- strong ties and the geographical proximity to family members (e.g. *Ekinsmyth 2011, Hanson 2009*)



## Starting point – research desiderata

- studies explore entrepreneurship in relation to the place/regional environment in which business founders/the self-employed reside
  - Lack of comparative and longitudinal approaches
- population and migration research neglect relations between internal migration and the employment status
  - International migration and immigrant entrepreneurs (*Lunn/Steen* 2000, 2005)



## Research questions

1. Are the self-employed more 'rooted' in place than paid workers with respect to their geographical mobility over time?
2. How does moves relate to individuals' probability to enter self-employment?



## Data and methodology

- representative annual household panel surveys:
  - German Socio-economic Panel Study (SOEP)
  - British Household Panel Survey (BHPS)
- subsamples of 10 waves:
  - SOEP 2000-2009
  - BHPS 1999-2008
- distinction between self-employment and paid employment relies on self-reported statement



## Data and methodology (cont.)

- Self-employed are those who consider themselves first and foremost (main job) as being self-employed
- Moves are captured on a wave-to-wave basis
- Interregional moves = moves across regional borders
  - Federal States in DE
  - Standard Regions in GB



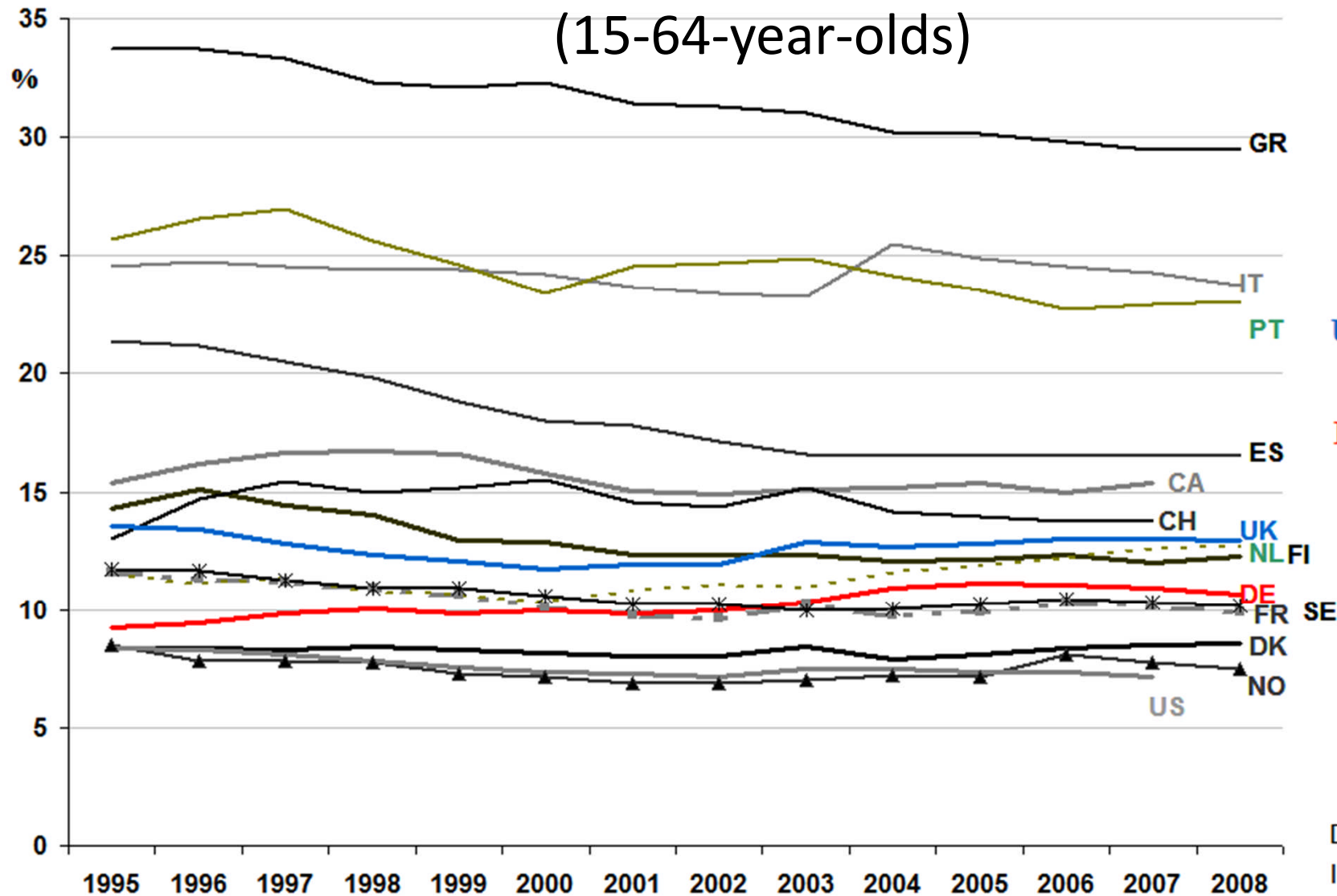
## Self-employment in DE and GB – outline

1. Brief overview of self-employment in DE and GB
2. Descriptive tables of moves by employment status
3. Estimation results:
  - Probability of becoming self-employed  
(moves as explanatory variable)
  - Probability of having moved and of moving over time  
(employment status as explanatory variable)





# Self-employed workers as percentage of total labour force (15-64-year-olds)



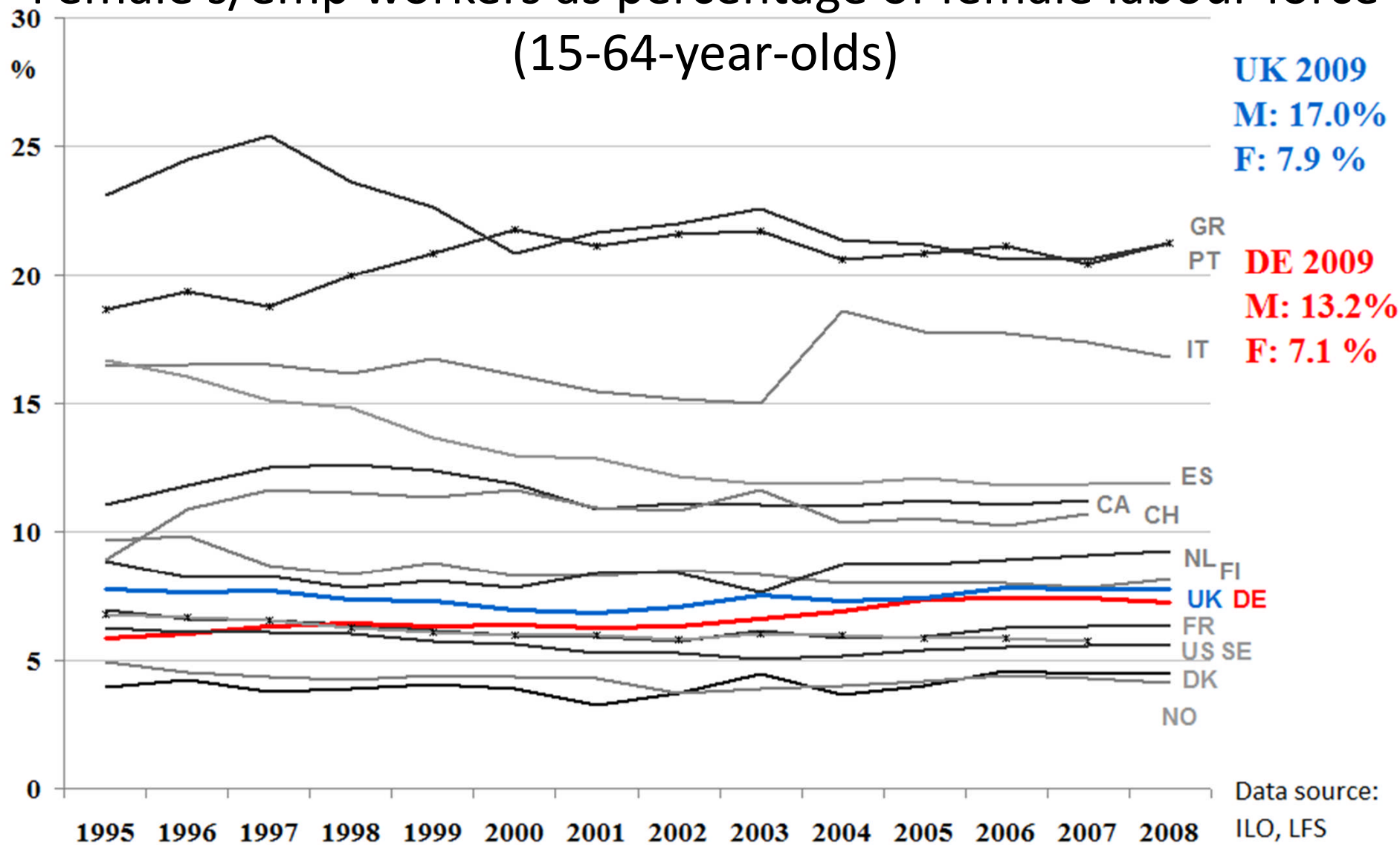
UK 2009:  
12,8%

DE 2009:  
10,4%

Data source:  
ILO, LFS



# Female s/emp workers as percentage of female labour force (15-64-year-olds)





# Solo self-employment

	solo self-employed workers as percentage of the self- employed (%)			solo self-employed workers as percentage of total labour force (%)		
	total	Males	Females	total	Males	Females
<b>DE</b>	55.3	51.0	64.6	5.7	6.8	4.5
FR	57.0	53.4	66.0	6.0	7.6	4.2
DK	57.4	52.6	69.7	5.0	6.3	3.6
SE	61.7	58.2	70.6	6.0	7.8	4.0
ES	64.9	63.0	68.9	10.2	11.9	8.0
FI	66.9	62.9	74.8	8.6	10.6	6.5
BE	67.8	64.8	74.7	9.2	11.3	6.7
NL	69.8	65.1	78.8	8.7	10.0	7.3
NO	70.3	68.5	74.9	5.2	7.1	3.3
PT	71.3	64.8	81.2	13.1	13.6	12.6
GR	72.3	69.1	80.5	21.2	24.3	16.5
IT	72.3	70.3	77.5	16.0	18.8	12.0
<b>UK</b>	80.0	78.9	82.5	10.3	13.6	6.6

Countries  
ranked by 1<sup>st</sup>  
column



## Moves by employment status, column percentages

		Self-employed workers			Employees
	All	Professionals	farm s/emp	Non-farm solo s/emp	
<i>Germany</i>					
<i>Britain</i>					
No move $t_{+1}$	90.4	89.5	93.2	89.4	89.0
	91.2	91.2	89.2	91.0	88.6
Move $t_{+1}$	9.6	10.5	6.8	10.6	11.0
	8.8	8.8	10.8	9.0	11.4
Inter-regional move	0.9	1.9	0.1	1.1	1.0
	0.9	1.3	-	1.1	1.2

Note: SOEP pooled data 2000-2009, BHPS pooled data 1999-2008, cross-sectional weights, people aged 18-64. Moves are defined on a year-on-year basis.



# Employment status at $t$ by employment and moving status at $t-1$ (row percentages)

Wave  $t-1$

Wave  $t$

*Movers (all moves)*

*Non-movers*

Employed      Self-employed      Employed      Self-employed

**DE**    **GB**      **DE**    **GB**      **DE**    **GB**      **DE**    **GB**

*Males*

→ Employed	93.9	<b>92.7</b>	1.1	<b>2.9</b>	94.1	<b>94.7</b>	1.1	<b>2.2</b>
Self-employed	6.5	<b>15.3</b>	90.7	<b>79.7</b>	5.9	<b>7.6</b>	91.4	<b>89.7</b>
Unemployed	27.6	<b>40.4</b>	2.4	<b>11.7</b>	26.4	<b>40.3</b>	2.2	<b>6.5</b>
Other, inactive	30.6	<b>11.3</b>	4.3	<b>3.4</b>	29.1	<b>7.8</b>	4.2	<b>2.1</b>

*Females*

→ Employed	91.1	<b>92.0</b>	0.9	<b>1.2</b>	91.7	<b>92.7</b>	0.8	<b>0.9</b>
Self-employed	11.0	<b>21.7</b>	81.4	<b>63.7</b>	10.2	<b>15.3</b>	82.5	<b>81.7</b>
Unemployed	25.4	<b>48.4</b>	1.6	<b>3.0</b>	24.4	<b>40.4</b>	1.5	<b>1.6</b>
Other, inactive	17.6	<b>11.4</b>	1.3	<b>0.9</b>	16.8	<b>11.3</b>	1.2	<b>1.5</b>

*Interregional Movers*

*Males & Females*

Employed	79.8	<b>86.3</b>	3.2	<b>5.0</b>
Self-employed	45.8	<b>22.2</b>	51.3	<b>64.4</b>
Unemployed	56.9	<b>73.8</b>	*	<b>6.1</b>
Other, inactive	35.7	<b>25.4</b>	*	<b>5.2</b>

Note: SOEP 2000-2009  
BHPS 1999-2008  
cross-sectional weights



## Probability of becoming s/emp at $t$ , random effects, odd ratios

features measured at $t-1$	Germany		Britain	
	Exp(B)	S.E.	Exp(B)	S.E.
Age (yrs.)	0.988 ***	0.004	0.994	0.004
Sex (women)	0.494 ***	0.046	0.359 ***	0.034
→ Moved residence between $t-1$ and $t$	1.347 ***	0.149	1.254 **	0.141
Couple household (with or without children)	0.933	0.098	1.411 ***	1.537
→ employed at $t-1$ (ref.: unemployed, other/inactive)	0.300 ***	0.026	0.402 ***	0.041
<i>not shown: owner occupation, education/training</i>				
N observations (entry into self-employment)	103,081 (1,314)		64,341 (1,126)	
Log likelihood (Chi-Square)	-6,399.947 (337.61)		-5,279.393 (200.90)	
rho (within subject correlation)	0.675		0.567	
Pseudo R <sup>2</sup>	0.034		0.023	

Note: SOEP 2000-09, BHPS 1999-2008, unweighted data, significance \*\*\* 1%, \*\* 5%, \*10%.





# Probability of having moved, working people, random effects, odd ratios

features measured at $t$	Move between $t-1$ and $t = 1$							
	Model 1		Model 2		Model 3		Model 4	
	Males & females		Females		Males & females		Males & females	
	DE	GB	DE	GB	DE	GB	DE	GB
Sex (women)	0.932 ***	0.927 ***			0.931 ***	0.925 **	0.930 ***	0.926 ***
Self-employed ( <i>ref.: employed</i> )	1.068	1.047	1.142 *	1.003				
Types of self-employed workers ( <i>ref.: all other working people</i> )								
Non-farm solo s/emp worker					1.158 **	1.032	-	
S/emp professionals							1.173 **	0.925
<i>Not shown: age, owner occupation, household composition, education/training</i>								
N observations	98,825	124,202	46,432	61,215	98,825	124,202	98,825	124,202
Log likelihood	-23,312	-39,516	-10,892	-19,050	-23,310	-39,517	-23,311	-39,784
rho (within subject correlation)	0.027	0.106	0.049	0.101	0.027	0.106	0.028	0.106
Pseudo R <sup>2</sup>	0.103	0.157	0.107	0.165	0.103	0.157	0.103	0.157

Note: SOEP 2000-09, BHPS 1999-2008, unweighted data, significance: \*\*\* 1%, \*\* 5%, \* 10%



# Probability of having moved across regions, working people, random effects, odd ratios

features measured at $t$	Interregional move between $t - 1$ and $t = 1$					
	Model 1		Model 2		Model 3	
	DE	GB	DE	GB	DE	GB
Sex (women)	0.932	0.977	0.928	0.978	0.930	0.974
Self-employed ( <i>ref.: employed</i> )	1.141	1.137				
types of self-employed workers ( <i>ref.: all other working people</i> )						
Non-farm solo s/emp worker			1.312 *	1.216		
S/emp professionals					1.490 **	1.560 **
<i>Not shown: age, owner occupation, household composition, education/training</i>						
N observations	98,825	114,472	98,825	114,472	98,825	114,472
Log likelihood	-3,565	-5,592	-3,564	-5,592	-3,564	-5,592
rho (within subject correlation)	0.289	0.375	0.289	0.375	0.289	0.375
Pseudo R <sup>2</sup>	0.127	0.084	0.127	0.084	0.127	0.084

Note: SOEP 2000-09, BHPS 1999-2008, unweighted data, significance: \*\*\* 1%, \*\* 5%, \* 10%.





## Moves of business starters vs. workers in continuous paid employment over time

- people are traced over five years
- those who (1) became self-employed (2) were employed resp. at  $t$  and who remained in the same labour market status until  $t+4$



# Probability of moving across $t$ to $t+4$ , binary logit, odd ratios

features measured at $t$	Move between $t$ and $t+4 = 1$							
	Model 1				Model 2			
	DE		GB		DE		GB	
	OR	p	OR	p	OR	p	OR	p
Sex (women)	0.913	0.13	0.974	0.71	0.910	0.12	0.973	0.69
<b>Self-employed</b> ( <i>ref.: pers. in continuous paid empl.</i> )	1.341	0.11	1.325	0.13				
<b>Solo self-employed pers.</b> ( <i>ref.: employer s/emp &amp; pers. in continuous paid empl.</i> )					1.389	0.14	1.330	0.18
<i>Not shown: age, household composition, education/training. Owner occupation</i>								
N persons	8,164		5,877		8,164			
thereof: movers	1,863		1,412		1,863			
Log likelihood	-3,607		-2,734		-3,607			
Pseudo R <sup>2</sup>	0.165		0.153		0.165			

Note: SOEP 2000-09, BHPS 1999-2008, unweighted data



## Conclusion

1. Probability of a move/an interregional move do not differ between s/emp and employed workers
2. Spatially immobile employees are not more likely to enter s/employment than (non-)movers in other labour market states
3. Probability of becoming s/emp is higher for movers vs. non-movers
4. Solo s/employment & s/emp professionals are associated with a higher relative chance to have moved across regions



## Discussion

- Literature overemphasised residential ‘rootedness’ of the self-employed
- Little empirical evidence that confirms ‘stickiness’ of the geography of self-employment
- Relation between self-employment and place needs to be re-examined
- More attention should be paid to the solo s/emp
  - Impact on urban labour markets
  - Contribution to the equilibrating of regional LM



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# Thank you for your attention!

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