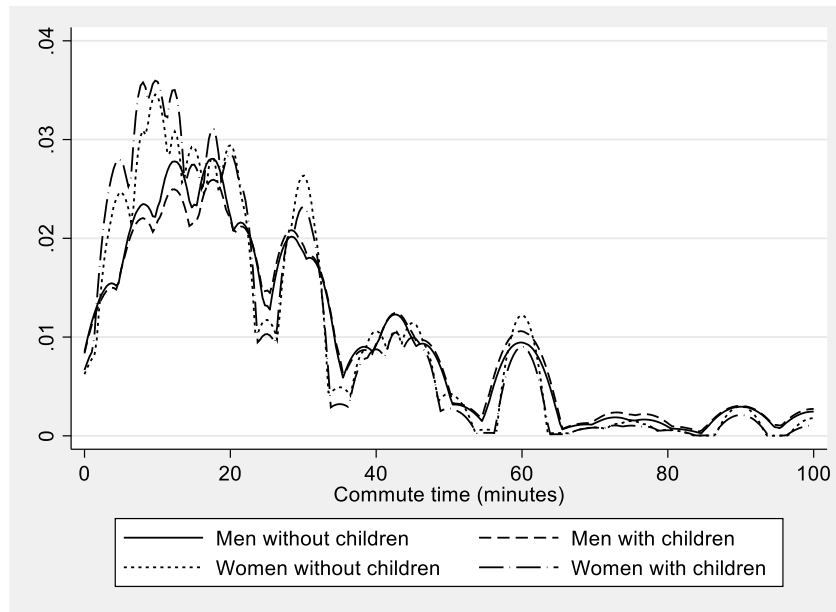


Supplement to:

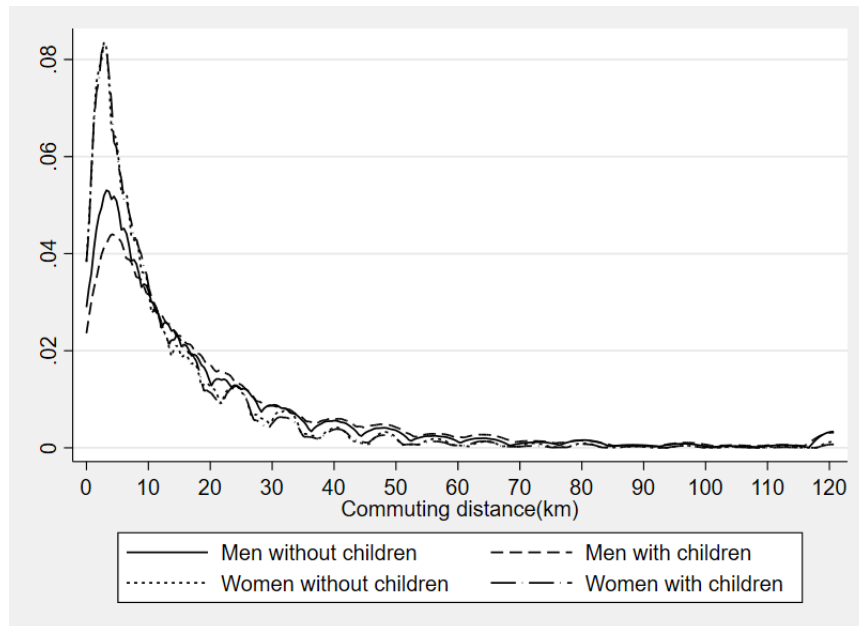
Avram, Silvia. 2025. "Commuting and Gender Differences in Job Opportunities" *Sociological Science* 12: 158-179.

Fig A1: Distribution of commuting times by sex and parenthood status, 2009-2019



Source: Own calculations based on UKHLS 2009-2020.

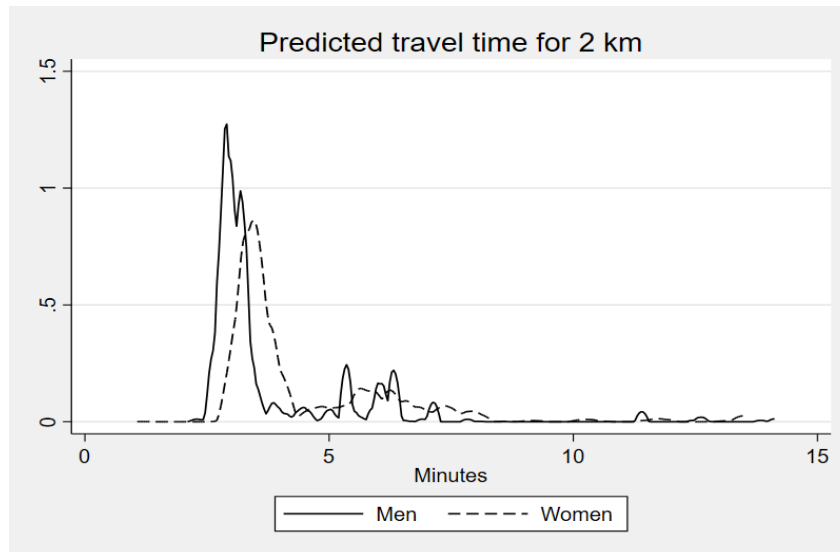
Figure A2: Distribution of commuting distance by sex and parenthood status, 2009-2019



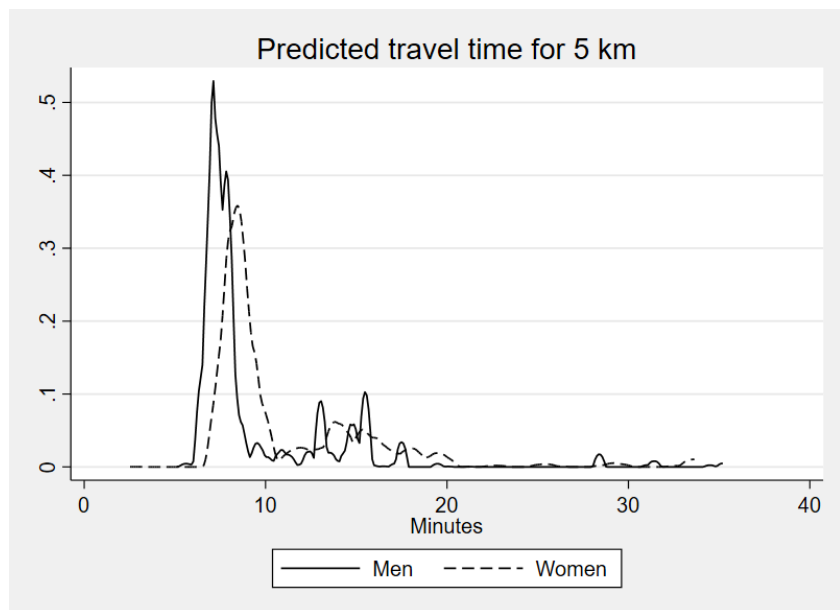
Source: Own calculations based on UKHLS Waves 1-10

Figure A3: Distribution of predicted travel time for various commuting distances, by sex

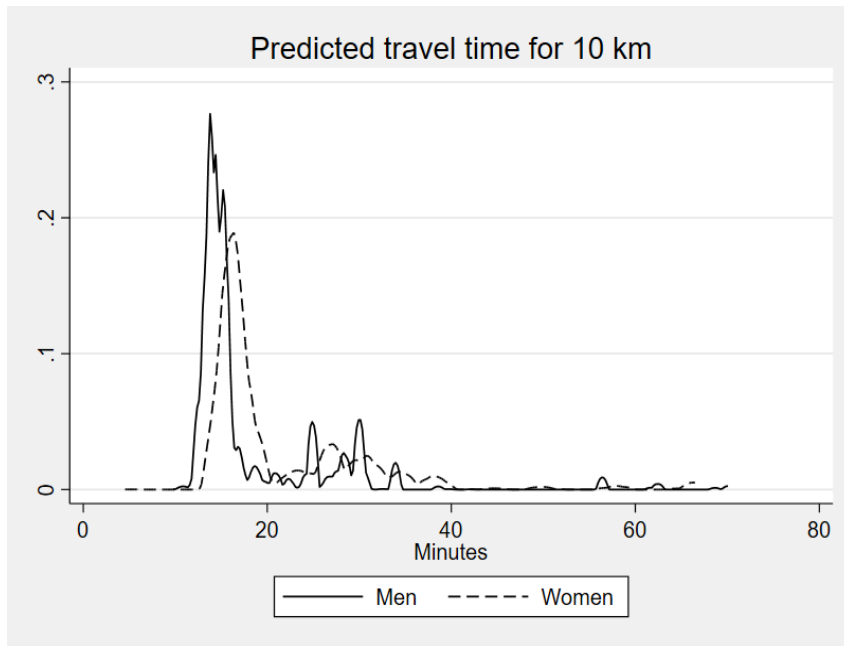
(a) 2km



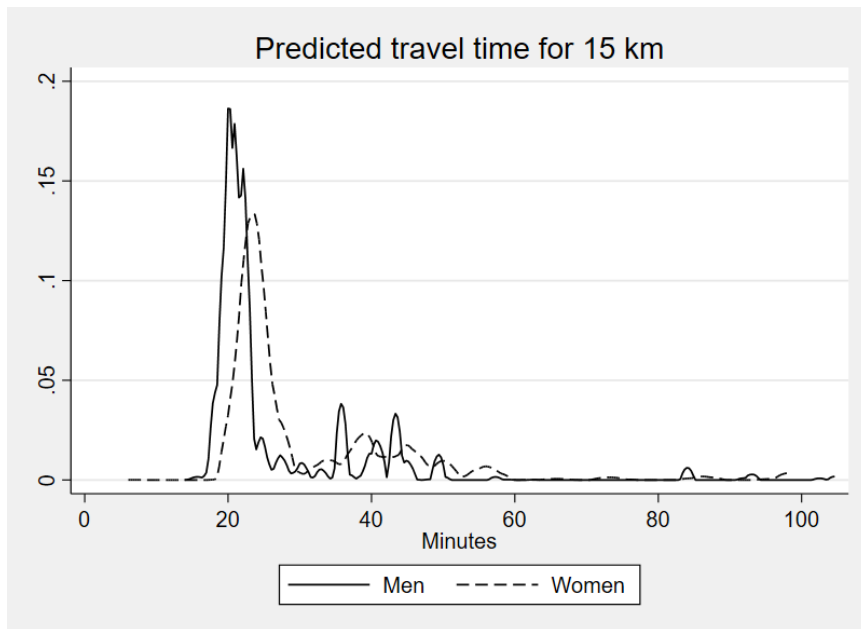
(b) 5km



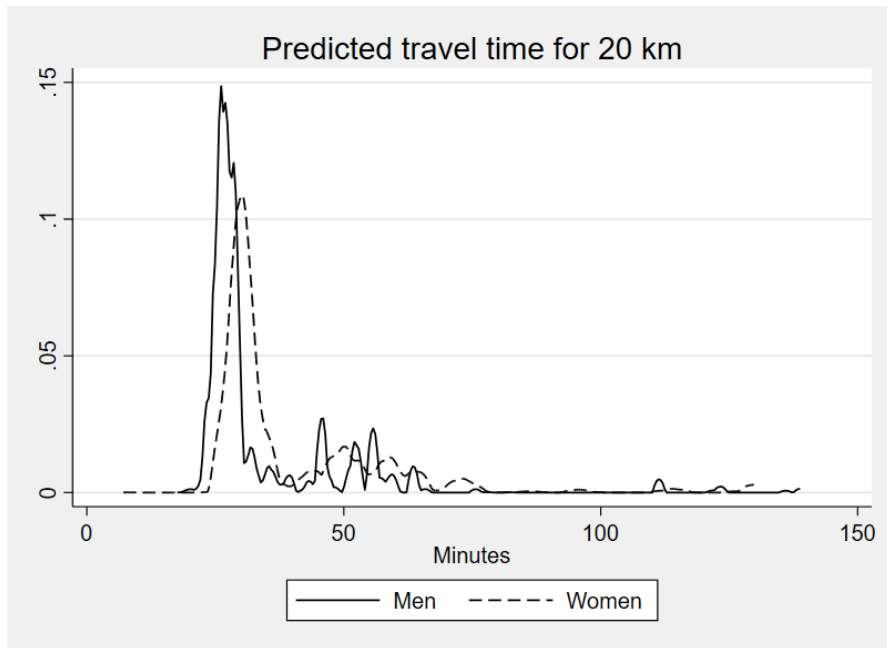
(c) 10 km



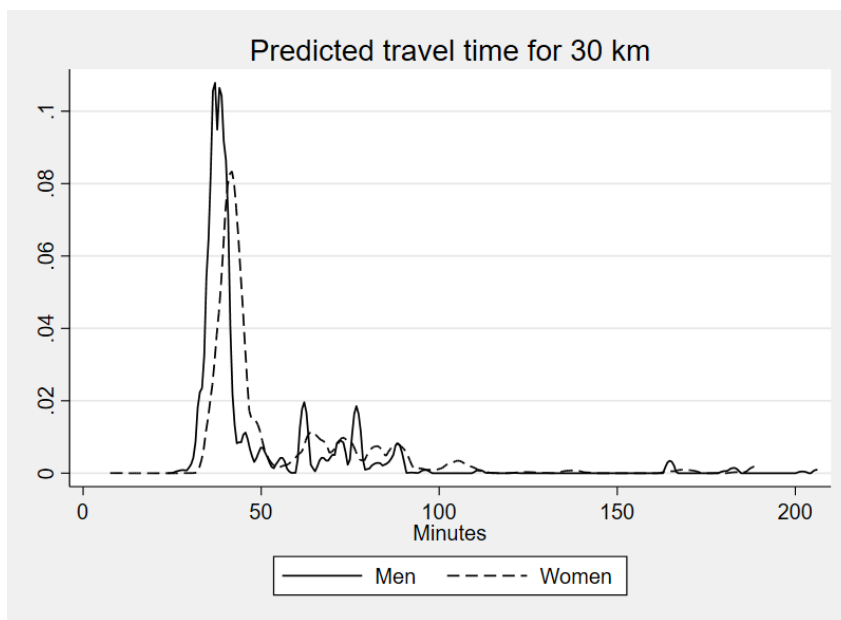
(d) 15 km



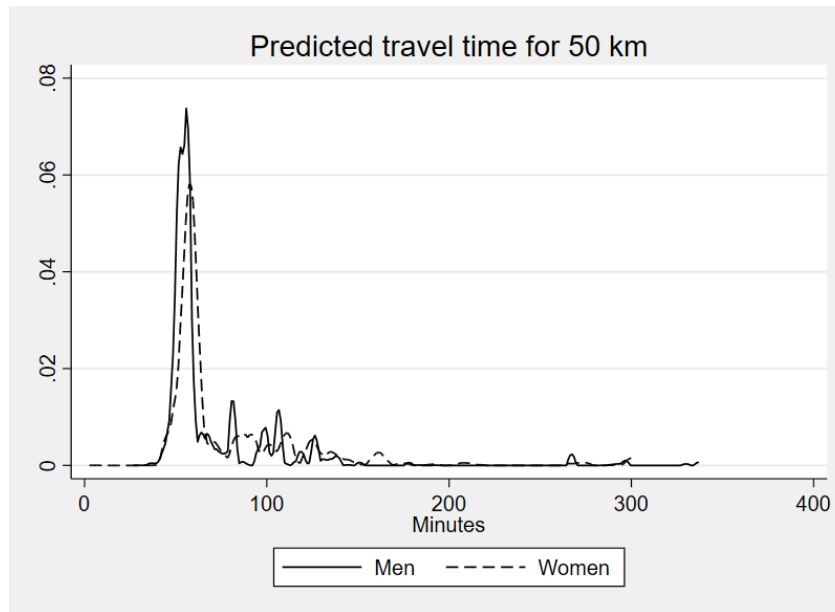
(e) 20 km



(f) 30 km



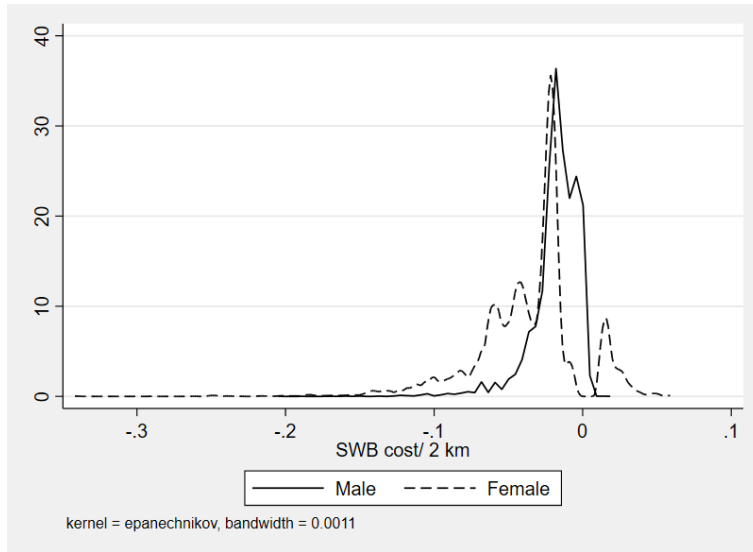
(g) 50 km



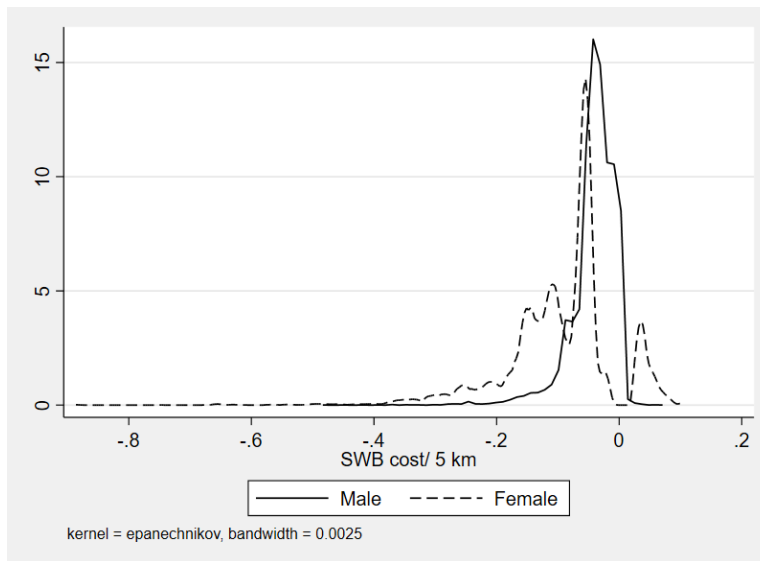
Source: Own calculations based on UKHLS Waves 1-10

Fig A4: Distribution of wellbeing losses associated with commuting various distances

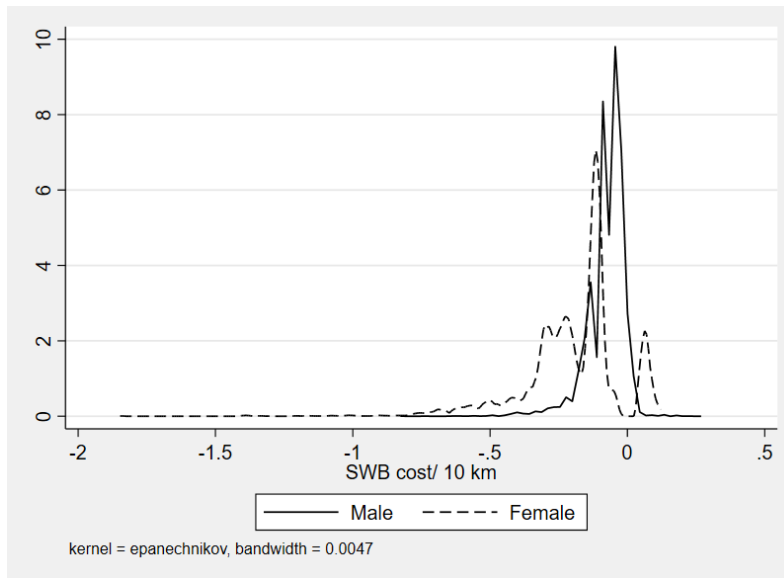
(a) 2km



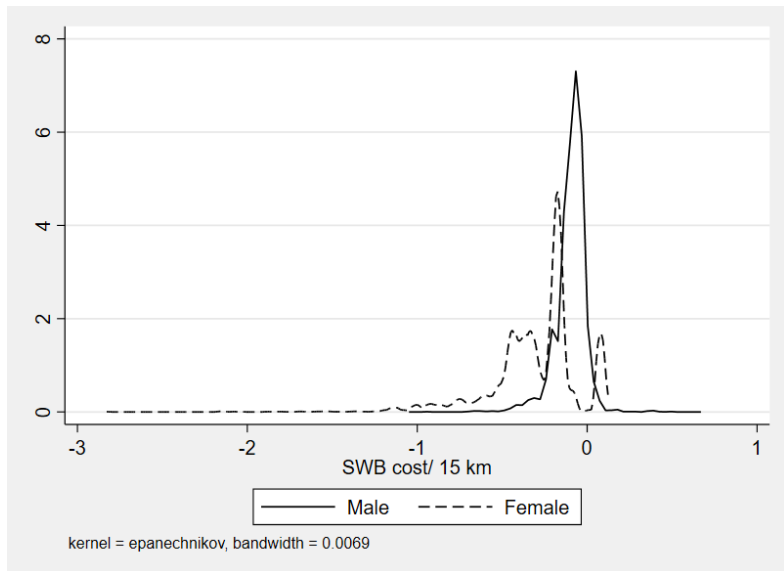
(b) 5km



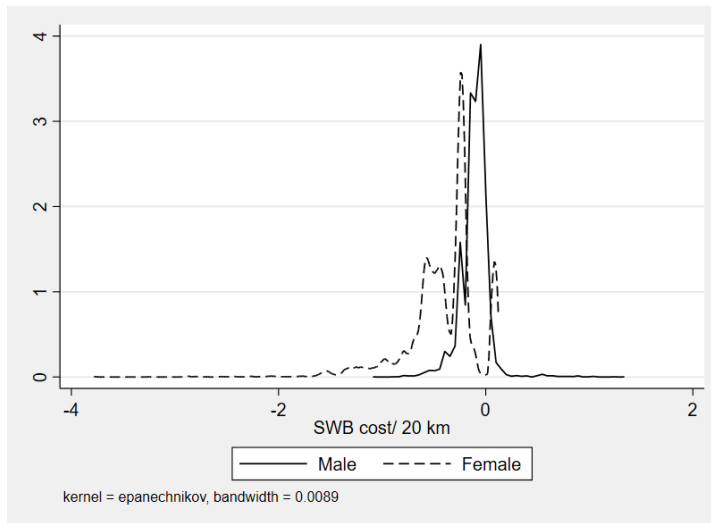
(c) 10km



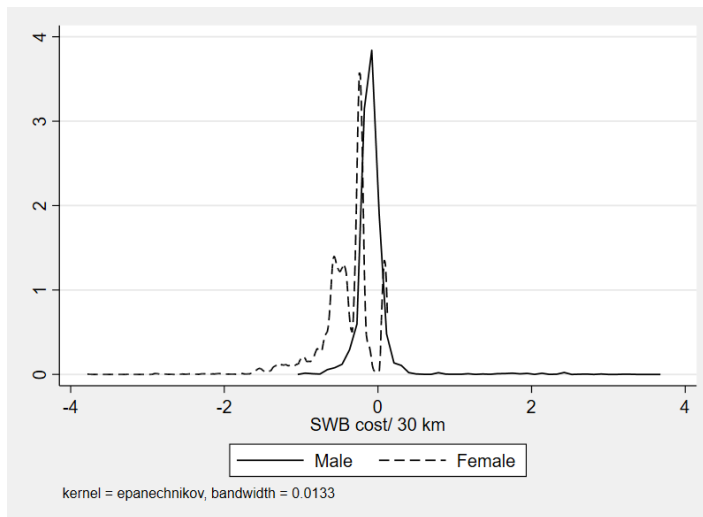
(d) 15km

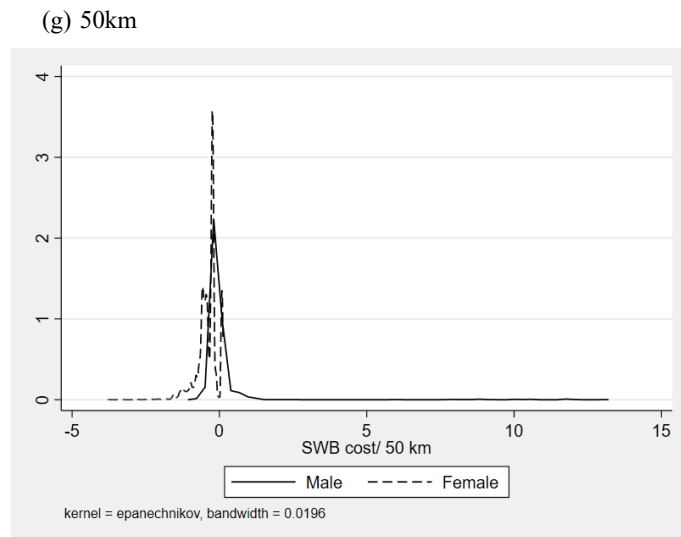


(e) 20km



(f) 30km

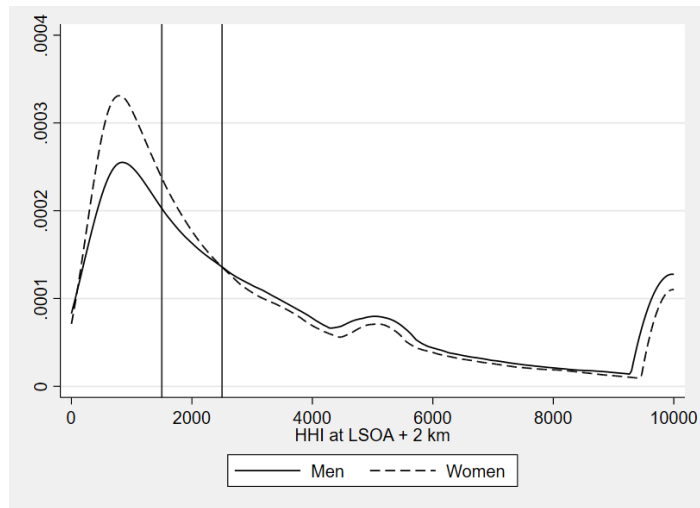




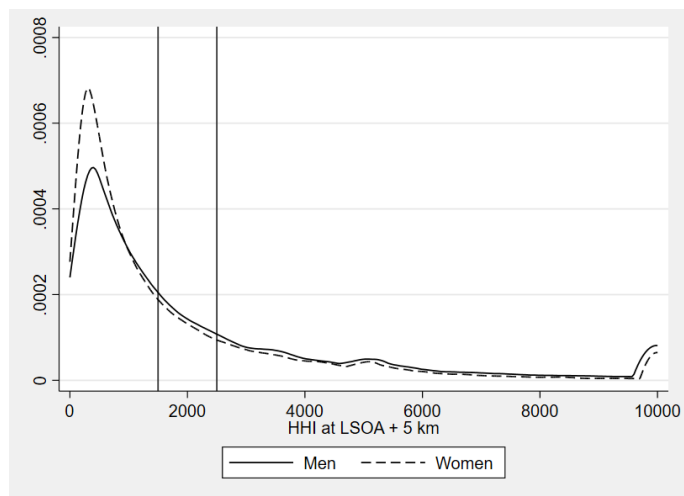
Source: Own calculations based on UKHLS Waves 1-10

Fig A5: Distribution of Herfindahl Hirschman Index by sex at various geographical levels

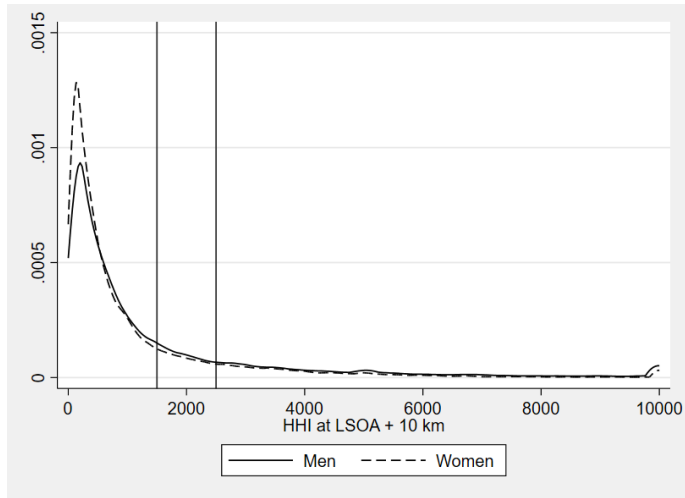
(a) LSOA + 2 km



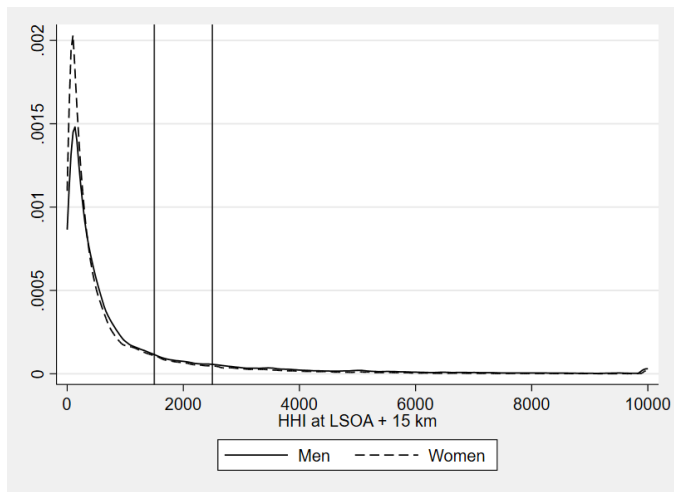
(b) LSOA + 5 km



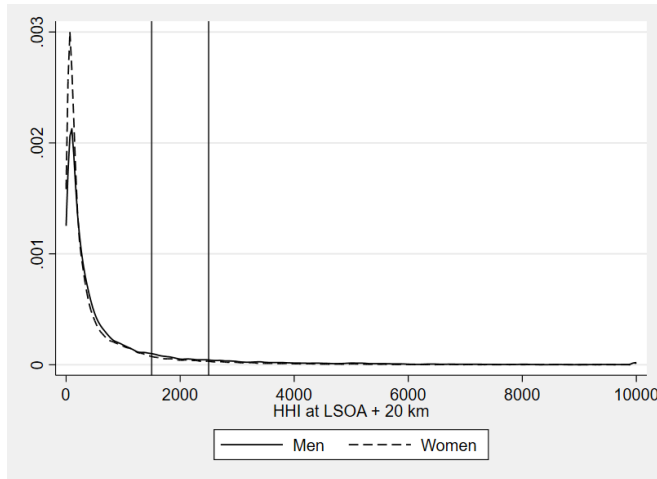
(c) LSOA + 10 km



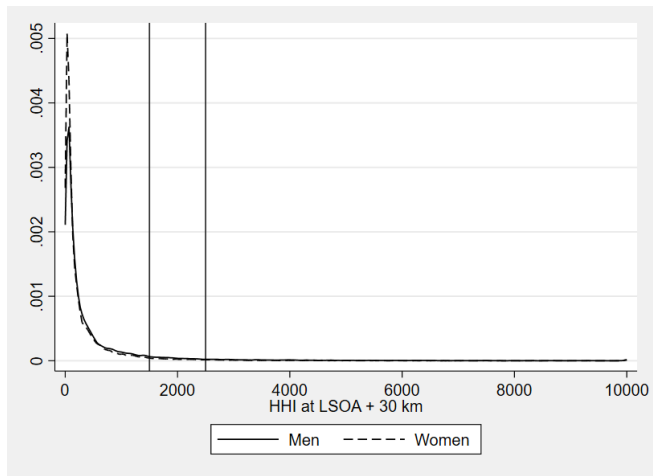
(d) LSOA+15 km



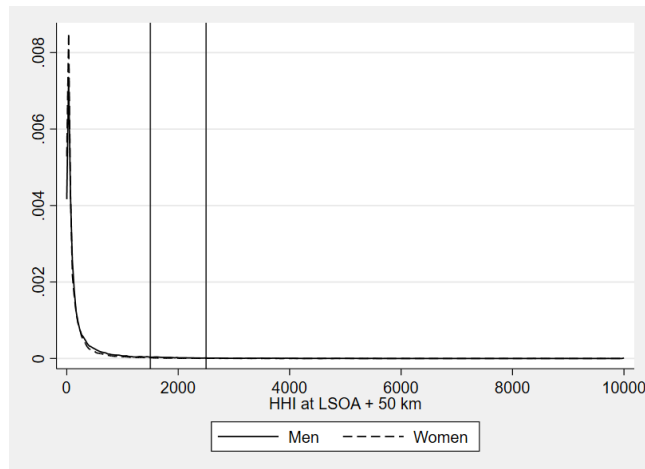
(e) LSOA+20 km



(f) LSOA+30km



(g) LSOA+50 km



Note: The HHI index ranges from 0 to 10000. The two vertical lines mark the threshold values for moderate (1500) and severe (2500) concentration.

Source: Own calculations based on BSD 2009-2019.

The three tables show estimated coefficients from three regressions. Table A1 shows estimated coefficients from a regression of well-being (GHQ-12) on commuting time. These coefficients underpin the predicted effects shown in Figure 1. Table A2 shows regression coefficients from a regression of commuting time on commuting distance. These coefficients underpin the average marginal effects shown in Figure 2. Table A3 shows estimated coefficients from a regression of weighted concentration on sex and parenthood status. Coefficients underpin the predicted marginal effects shown in Figure 10.

Table 1: Estimated regression coefficients from a regression of changes in subjective wellbeing on changes in commuting time

	Men		Women		
	Coef.	S.E.	Coef.	S.E.	
Travel time	-0.01	(0.01)	0.00	(0.01)	
Travel time ^2	0.00	(0.00)	-0.00	(0.00)	
Travel time ^3	0.00	(0.00)	0.00	(0.00)	
Age	0.11**	(0.04)	-0.01	(0.04)	
Age^2	-0.00**	(0.00)	0.00	(0.00)	
	2010	(.)	(.)	(.)	
	2011	0.18	(0.25)	-0.12	(0.31)
	2012	-0.23	(0.25)	-0.10	(0.29)
	2013	-0.13	(0.26)	-0.21	(0.29)
	2014	-0.09	(0.26)	0.05	(0.29)
	2015	0.01	(0.26)	-0.04	(0.29)
	2016	0.10	(0.26)	-0.05	(0.29)
	2017	-0.29	(0.25)	-0.33	(0.30)
	2018	-0.25	(0.27)	-0.18	(0.30)
	2019	-0.34	(0.34)	-0.19	(0.38)
North East	(.)	(.)	(.)	(.)	
North West	0.35	(0.27)	-0.10	(0.27)	
Yorkshire and Humber	0.32	(0.29)	-0.14	(0.29)	
East Midlands	0.64*	(0.30)	-0.06	(0.29)	
West Midlands	-0.14	(0.29)	-0.29	(0.28)	
East of England	0.20	(0.29)	-0.01	(0.29)	
London	0.09	(0.26)	0.09	(0.25)	
South-East	0.31	(0.26)	0.06	(0.27)	
South-West	0.49	(0.28)	0.03	(0.30)	
Wales	0.10	(0.31)	0.31	(0.30)	
Scotland	0.22	(0.27)	0.03	(0.27)	
N Ireland	0.31	(0.28)	-0.34	(0.28)	
Poor health	-0.34*	(0.15)	-0.56***	(0.15)	
Couple status	0.45	(0.44)	0.25	(0.39)	
Has children <5	-0.16	(0.24)	0.38	(0.28)	
Has children <16	-0.07	(0.26)	0.69*	(0.32)	

	Men		Women	
	Coef.	S.E.	Coef.	S.E.
Part-time worker	-0.69*	(0.33)	0.14	(0.18)
Carer	-0.01	(0.18)	-0.10	(0.17)
HH income	0.35*	(0.17)	0.29*	(0.12)
No partner#Travel time	(.)	(.)	(.)	(.)
Has partner#Travel time	0.00	(0.01)	-0.00	(0.01)
No children#Travel time	(.)	(.)	(.)	(.)
Has children#Travel time	-0.00	(0.00)	-0.01*	(0.01)
Not carer#Travel time	(.)	(.)	(.)	(.)
Is carer#Travel time	0.00	(0.01)	-0.01	(0.01)
Full time#Travel time	(.)	(.)	(.)	(.)
Part-time#Travel time	-0.01	(0.01)	0.01	(0.01)
Low education#Travel time	(.)	(.)	(.)	(.)
Medium education#Travel time	0.00	(0.00)	-0.01	(0.01)
High education#Travel time	-0.00	(0.00)	-0.01	(0.01)
Constant	-3.11***	(0.81)	-0.03	(0.92)
N	8604		10087	

Note: Standard errors in parentheses

* p<0.05 ** p<0.01 *** p<0.001

Source: Own estimation based on UKHLS, wave 1-10

Table 2: Estimated regression coefficients from a regression of commuting time on commuting distance

	Men		Women	
	Coef.	S.E.	Coef.	S.E.
Distance	1.50***	(0.05)	1.89***	(0.09)
Distance ^2	-0.01***	(0.001)	-0.02***	(0.003)
No children#Distance	(.)	(.)	(.)	(.)
Parent#Distance	-0.001	(0.01)	-0.00	(0.01)
Drive#Distance	0.00	(.)	0.00	(.)
Lift from hh member #Distance	0.14	(0.18)	0.22	(0.13)
Lift from outside hh#Distance	0.26	(0.17)	0.01	(0.12)
Motorcycle#Distance	0.86***	(0.23)	-0.24***	(0.04)
Taxi#Distance	0.89***	(0.05)	0.46*	(0.21)
Bus#Distance	1.97***	(0.39)	1.16***	(0.25)
Train#Distance	-0.08	(0.16)	0.67**	(0.23)
Metro#Distance	1.41***	(0.21)	1.15***	(0.19)
Cycle#Distance	1.60***	(0.12)	2.24***	(0.51)
Walk#Distance	-0.19	(0.15)	3.27***	(0.67)
Other#Distance	-0.22	(0.14)	1.63***	(0.21)
Urban#Distance	(.)	(.)	(.)	(.)
Rural#Distance	-0.13*	(0.06)	0.14	(0.07)

	Men		Women	
	Coef.	S.E.	Coef.	S.E.
North East#Distance	0.00	(.)	0.00000	(.)
North West#Distance	0.13*	(0.06)	-0.02	(0.10)
Yorkshireand Humber#Distance	0.15*	(0.06)	0.15	(0.10)
East Midlands#Distance	-0.08	(0.06)	-0.16	(0.10)
West Midlands#Distance	0.01	(0.06)	-0.14	(0.10)
East of England#Distance	-0.02	(0.06)	-0.25**	(0.10)
London#Distance	1.21***	(0.08)	1.04***	(0.12)
South East#Distance	0.07	(0.06)	-0.16	(0.10)
South West#Distance	-0.09	(0.06)	-0.13	(0.10)
Wales#Distance	-0.08	(0.07)	-0.33**	(0.11)
Scotland# Distance	0.20**	(0.07)	-0.05	(0.11)
N Ireland#Distance	-0.05	(0.07)	-0.21*	(0.10)
North East#Distance^2	(.)	(.)	(.)	(.)
North West#Distance^2	-0.00	(0.00)	0.01	(0.00)
Yorkshire and Humber#Distance^2	-0.00	(0.00)	0.00	(0.00)
East Midlands#Distance^2	0.00	(0.00)	0.01*	(0.00)
West Midlands#Distance^2	0.00	(0.00)	0.01**	(0.00)
East of England#Distance^2	0.00*	(0.00)	0.01**	(0.00)
London#Distance^2	-0.01***	(0.00)	-0.01	(0.00)
South East#Distance^2	0.00	(0.00)	0.01**	(0.00)
South West#Distance^2	0.00	(0.00)	0.01**	(0.00)
Wales#Distance^2	0.00	(0.00)	0.01**	(0.00)
Scotland#Distance^2	-0.00**	(0.00)	0.01*	(0.00)
N IRreland#Distance^2	0.00*	(0.00)	0.01***	(0.00)
North East#Drive#Distance	(.)	(.)	(.)	(.)
North East#Lift from hh member#Distance	(.)	(.)	(.)	(.)
North East#Lift from outside hh#Distance	(.)	(.)	(.)	(.)
North East#Motorcycle#Distance	(.)	(.)	(.)	(.)
North East#Taxi#Distance	(.)	(.)	(.)	(.)
North East#Bus#distance	(.)	(.)	(.)	(.)
North East#Train#Distance	(.)	(.)	(.)	(.)
North East#Metro#Distance	(.)	(.)	(.)	(.)
North East#Cycle#Distance	(.)	(.)	(.)	(.)
North East#Walk#Distance	(.)	(.)	(.)	(.)
North East#Other#Distance	(.)	(.)	(.)	(.)
North West#Drive#Distance	(.)	(.)	(.)	(.)
North West#Lift from hh member#Distance	0.02	(0.20)	-0.02	(0.17)
North West#Lift from outside hh#Distance	-0.51*	(0.20)	0.14	(0.16)
North West#Motorcycle#Distance	-0.99***	(0.26)	(.)	(.)
North West#Taxi#Distance	-1.27***	(0.08)	-0.27	(0.34)
North West#Bus#distance	-0.57	(0.49)	0.90*	(0.37)

	Men		Women	
	Coef.	S.E.	Coef.	S.E.
North West#Train#Distance	0.42*	(0.18)	-0.19	(0.25)
North West#Metro#Distance	-0.04	(0.48)	-0.11	(0.40)
North West#Cycle#Distance	-0.70***	(0.19)	-0.86	(0.53)
North West#Walk#Distance	0.07	(0.21)	-2.59***	(0.73)
North West#Other#Distance	0.66***	(0.19)	-1.37***	(0.28)
Yorkshire and Humber#Drive#Distance	(.)	(.)	(.)	(.)
Yorkshire and Humber#Lift from hh member#Distance	-0.27	(0.25)	-0.45	(0.24)
Yorkshire and Humber#Lift from outside hh#Distance	-0.32	(0.19)	-0.14	(0.19)
Yorkshire and Humber#Motorcycle#Distance	-0.67**	(0.24)	-0.16	(0.14)
Yorkshire and Humber#Taxi#Distance	-0.37***	(0.09)	-0.13	(0.35)
Yorkshire and Humber#Bus#distance	-0.55	(0.51)	0.86*	(0.40)
Yorkshire and Humber#Train#Distance	0.42*	(0.18)	-0.37	(0.24)
Yorkshire and Humber#Metro#Distance	-0.41	(0.37)	-1.12**	(0.35)
Yorkshire and Humber#Cycle#Distance	-0.09	(0.25)	0.34	(0.63)
Yorkshire and Humber#Walk#Distance	0.46	(0.45)	1.50*	(0.75)
Yorkshire and Humber#Other#Distance	-0.17	(0.18)	-0.74*	(0.37)
East Midlands#Drive#Distance	(.)	(.)	(.)	(.)
East Midlands#Lift from hh member#Distance	-0.18	(0.19)	-0.18	(0.16)
East Midlands#Lift from outside hh#Distance	-0.35	(0.19)	-0.16	(0.20)
East Midlands#Motorcycle#Distance	-0.67**	(0.26)	0.95***	(0.15)
East Midlands#Taxi#Distance	-1.01***	(0.06)	-0.69*	(0.28)
East Midlands#Bus#distance	-0.29	(0.66)	0.92*	(0.38)
East Midlands#Train#Distance	0.33	(0.18)	-0.12	(0.25)
East Midlands#Metro#Distance	1.22*	(0.56)	0.64	(0.59)
East Midlands#Cycle#Distance	-0.32	(0.33)	-0.36	(0.57)
East Midlands#Walk#Distance	0.16	(0.33)	-3.00***	(0.78)
East Midlands#Other#Distance	0.28	(0.20)	-1.56***	(0.36)
West Midlands#Drive#Distance	(.)	(.)	(.)	(.)
West Midlands#Lift from hh member#Distance	-0.36	(0.30)	-0.04	(0.18)
West Midlands#Lift from outside hh#Distance	-0.08	(0.19)	0.13	(0.19)
West Midlands#Motorcycle#Distance	-0.58	(0.31)	-0.04	(0.06)
West Midlands#Taxi#Distance	-1.22***	(0.07)	-0.57	(0.42)
West Midlands#Bus#distance	-0.66	(0.65)	-0.16	(0.64)
West Midlands#Train#Distance	0.37*	(0.17)	-0.36	(0.24)
West Midlands#Metro#Distance	1.38	(1.47)	-0.78	(0.45)

	Men		Women	
	Coef.	S.E.	Coef.	S.E.
West Midlands#Cycle#Distance	-0.53	(0.39)	0.64	(0.60)
West Midlands#Walk#Distance	0.01	(0.25)	-2.22*	(0.93)
West Midlands#Other#Distance	0.12	(0.24)	-1.48***	(0.23)
East of England#Drive#Distance	(.)	(.)	(.)	(.)
East of England#Lift from hh member#Distance	-0.18	(0.21)	-0.24	(0.15)
East of England#Lift from outside hh#Distance	-0.28	(0.19)	-0.07	(0.15)
East of England#Motorcycle#Distance	-0.83***	(0.24)	0.27	(0.26)
East of England#Taxi#Distance	-0.76***	(0.06)	0.16	(0.28)
East of England#Bus#distance	-1.19**	(0.42)	0.00	(0.29)
East of England#Train#Distance	0.22	(0.16)	-0.35	(0.23)
East of England#Metro#Distance	-0.96***	(0.27)	-0.67**	(0.23)
East of England#Cycle#Distance	-0.76**	(0.24)	0.11	(0.54)
East of England#Walk#Distance	1.85*	(0.76)	-1.67	(1.00)
East of England#Other#Distance	-0.09	(0.19)	-1.62***	(0.23)
London#Drive#Distance	(.)	(.)	(.)	(.)
London#Lift from hh member#Distance	-0.06	(0.35)	-0.46	(0.25)
London#Lift from outside hh#Distance	0.32	(0.22)	1.02	(0.82)
London#Motorcycle#Distance	-1.26***	(0.24)	0.16	(0.15)
London#Taxi#Distance	-1.27***	(0.08)	0.52	(1.12)
London#Bus#distance	-1.08*	(0.43)	-0.37	(0.37)
London#Train#Distance	0.43*	(0.17)	-0.34	(0.25)
London#Metro#Distance	-0.90***	(0.22)	-0.63**	(0.21)
London#Cycle#Distance	-1.11***	(0.32)	-1.09*	(0.54)
London#Walk#Distance	0.47	(0.34)	-3.10***	(0.71)
London#Other#Distance	0.73**	(0.23)	-1.74***	(0.47)
South East#Drive#Distance	(.)	(.)	(.)	(.)
South East#Lift from hh member#Distance	-0.23	(0.22)	-0.14	(0.16)
South East#Lift from outside hh#Distance	-0.14	(0.20)	0.30*	(0.15)
South East#Motorcycle#Distance	-0.92***	(0.24)	0.70***	(0.19)
South East#Taxi#Distance	-1.11***	(0.06)	-0.37	(0.39)
South East#Bus#distance	-1.59***	(0.41)	0.55	(0.41)
South East#Train#Distance	0.31	(0.16)	-0.36	(0.23)
South East#Metro#Distance	-0.97***	(0.26)	-0.60**	(0.20)
South East#Cycle#Distance	-0.67	(0.36)	-0.70	(0.66)
South East#Walk#Distance	0.37	(0.31)	-1.90*	(0.95)
South East#Other#Distance	-0.	(0.16)	-1.50***	(0.30)
South West#Drive#Distance	(.)	(.)	(.)	(.)
South West#Lift from hh member#Distance	-0.07	(0.22)	-0.21	(0.16)

	Men		Women	
	Coef.	S.E.	Coef.	S.E.
South West#Lift from outside hh#Distance	-0.10	(0.18)	-0.11	(0.14)
South West#Motorcycle#Distance	-0.85***	(0.23)	0.52*	(0.24)
South West#Taxi#Distance	-0.46	(0.44)	0.54	(0.49)
South West#Bus#distance	0.55	(0.45)	-0.34	(0.62)
South West#Train#Distance	0.22	(0.18)	-0.50*	(0.25)
South West#Metro#Distance	-0.67	(0.61)	(.)	(.)
South West#Cycle#Distance	-0.26	(0.28)	-0.16	(0.56)
South West#Walk#Distance	4.50**	(1.45)	-2.66**	(0.86)
South West#Other#Distance	0.46**	(0.17)	-1.09**	(0.39)
Wales#Drive#Distance	(.)	(.)	(.)	(.)
Wales#Lift from outside hh#Distance	0.08	(0.26)	-0.08	(0.17)
Wales#Motorcycle#Distance	-0.29	(0.18)	-0.01	(0.15)
Wales#Taxi#Distance	-0.98***	(0.27)	1.83*	(0.74)
Wales#Bus#distance	-0.59**	(0.20)	0.48	(0.27)
Wales#Train#Distance	-1.28	(0.75)	-0.35	(0.39)
Wales#Metro#Distance	0.23	(0.20)	-0.21	(0.24)
Wales#Cycle#Distance	(.)	(.)	2.77***	(0.19)
Wales#Walk#Distance	-1.51**	(0.47)	-0.75	(0.56)
Wales#Other#Distance	5.10***	(0.77)	-1.66	(1.11)
Scotland#Drive#Distance	0.23	(0.18)	-2.59***	(0.31)
Scotland#Lift from outside hh#Distance	(.)	(.)	(.)	(.)
Scotland#Motorcycle#Distance	-0.21	(0.21)	-0.16	(0.14)
Scotland#Taxi#Distance	-0.36	(0.18)	0.13	(0.16)
Scotland#Bus#distance	-0.97***	(0.24)	(.)	(.)
Scotland#Train#Distance	-0.97***	(0.08)	-0.27	(0.23)
Scotland#Metro#Distance	-1.45***	(0.43)	-0.12	(0.33)
Scotland#Cycle#Distance	0.43*	(0.17)	-0.43	(0.26)
Scotland#Walk#Distance	3.28***	(0.87)	1.14	(0.60)
Scotland#Other#Distance	-1.08*	(0.50)	-0.50	(0.58)
N Ireland#Drive#Distance	0.21	(0.29)	-2.39**	(0.91)
N Ireland#Lift from outside hh#Distance	0.40*	(0.17)	-1.06***	(0.25)
N Ireland#Motorcycle#Distance	(.)	(.)	(.)	(.)
N Ireland#Taxi#Distance	0.03	(0.21)	-0.02	(0.14)
N Ireland#Bus#distance	-0.20	(0.18)	-0.10	(0.15)
N Ireland#Train#Distance	-0.87***	(0.24)	(.)	(.)
N Ireland#Metro#Distance	-0.66	(0.43)	0.28	(0.44)
N Ireland#Cycle#Distance	-1.34**	(0.42)	-0.21	(0.34)
N Ireland#Walk#Distance	0.36	(0.19)	-0.41	(0.25)
N Ireland#Other#Distance	(.)	(.)	(.)	(.)
N Ireland#Drive#Distance	-0.62	(0.33)	-2.10***	(0.51)

	Men		Women	
	Coef.	S.E.	Coef.	S.E.
N Ireland#Walk#Distance	5.81***	(0.47)	1.00	(0.84)
N Ireland#Other#Distance	0.20	(0.26)	-1.57***	(0.31)
North East#Urban#Distance	(.)	(.)	(.)	(.)
North East#Rural#Distance	(.)	(.)	(.)	(.)
North West#Urban#Distance	(.)	(.)	(.)	(.)
North West#Rural#Distance	0.06	(0.09)	-0.09	(0.10)
Yorkshire and Humber#Urban#Distance	(.)	(.)	(.)	(.)
Yorkshire and Humber#Rural#Distance	-0.06	(0.08)	-0.32***	(0.08)
East Midlands#Urban#Distance	(.)	(.)	(.)	(.)
East Midlands#Rural#Distance	0.20**	(0.07)	-0.15	(0.09)
West Midlands#Urban#Distance	(.)	(.)	(.)	(.)
West Midlands#Rural#Distance	0.11	(0.08)	-0.14	(0.09)
East of England#Urban#Distance	(.)	(.)	(.)	(.)
East of England#Rural#Distance	0.11	(0.06)	-0.18*	(0.08)
London#Urban#Distance	(.)	(.)	(.)	(.)
London#Rural#Distance	-0.97***	(0.09)	-1.01***	(0.13)
South East#Urban#Distance	(.)	(.)	(.)	(.)
South East#Rural#Distance	0.10	(0.07)	-0.18*	(0.08)
South West#Urban#Distance	(.)	(.)	(.)	(.)
South West#Rural#Distance	0.13	(0.07)	-0.24**	(0.08)
Wales#Urban#Distance	(.)	(.)	(.)	(.)
Wales#Rural#Distance	0.04	(0.08)	-0.17*	(0.08)
Scotland#Urban#Distance	(.)	(.)	(.)	(.)
Scotland#Rural#Distance	0.04	(0.07)	-0.39***	(0.09)
N Ireland#Urban#Distance	(.)	(.)	(.)	(.)
N Ireland#Rural#Distance	-0.01	(0.07)	-0.28***	(0.08)
N	27664		34653	
Standard errors in parentheses				
* p<0.05		** p<0.01		*** p<0.001"

Source: Own estimation based on UKHLS, wave 1-10

Table 3: Estimated regression coefficients from a regression of weighted concentration index on sex and parenthood status

	Coef.	S.E.
Female	3.5e+02***	(12.93)
Parent	1.1e+02***	(16.09)
Female#Parent	32.20	(21.02)
2010	-3.5e+01	(23.33)

2011	-4.5e+01	(23.72)
2012	74.41**	(24.24)
2013	94.36***	(24.55)
2014	85.99***	(24.99)
2015	83.68***	(25.41)
2016	88.78***	(25.76)
2017	2.9e+02***	(26.54)
2018	3.6e+02***	(32.34)
2019	3.8e+02***	(67.46)
North West	-1.2e+02***	(26.87)
Yorkshire and Humber	-5.9e+01*	(27.98)
East Midlands	1.3e+02***	(28.48)
West Midlands	-5.1e+01	(28.00)
East of England	96.36***	(27.41)
London	-1.1e+03***	(26.75)
South-East	-4.7e+01	(26.21)
South-West	1.3e+02***	(28.02)
Wales	4.8e+02***	(31.96)
Age	17.42***	(3.79)
Age^2	-0.24231***	(0.05)
Other higher degree	45.06**	(16.69)
A-levels	-3.7e+02***	(14.28)
GCSE	1.3e+02***	(14.28)
Other qualification	2.2e+02***	(21.29)
No qualification	56.59*	(27.96)
Poor health	-2.20272	(11.91)
Constant	1.2e+03***	(79.95)
N	112707	

Standard errors in parentheses

=** p<0.05 ** p<0.01 *** p<0.001"

Source: Own estimation based on UKHLS, wave 1-10