How to enter high-opportunity places?
The role of Social Contacts for Residential Mobility in Sweden

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Introduction

Spatial divergence of economic opportunity

- o Spatially selective concentration of jobs (Iammarino et al., 2019)

- o Inter-regional mobility, related: housing

- o High- vs. low-skilled workers to high-income cities (Bjerke and Mellander, 2019; Autor, 2020; de la Roca and Puga, 2017)

Objective

- o Focus on factors that can improve the chances of upward mobility in the regional hierarchy

- o What extent social networks promote can inter-regional residential mobility and provide access to high-opportunity places

- o Swedish administrative data

Background

Social contacts

- labor market (Saygin et al., 2019; Hensvik & Skans, 2016; Boza & Ilyés, 2020)
- Housing - Direct help, knowledge (Massey, 1988; Edin et al. 2003; Dekker and Engbersen, 2014)
- Support-exchange and preferences (Mulder and van der Meer, 2009)

Swedish context

- Highly mobile younger generation (Lundholm, 2007)
- Widening regional differences
- Affordable housing

Empirical setting

Contacts' effect on movement decision

1) Migration decision
2) Location decision

One-step approach – composite effect of contacts

- o the effect of having social contacts in a given location on the probability of moving (versus staying) and on the probability of choosing that target as the destination location (versus other options) when the migration decision has been already made

Movement probabilities are modelled as:

$$m_{pij,i \neq j} = \beta_0 X_{pij} + \beta_1 \boldsymbol{LINK}_{pj} + \beta_{ik} PUSH_{ik(p)} + \beta_{jk} PULL_{jk(p)} + \beta_{ijk(p)} PATH_{ijk(p)} + \varepsilon_{pij} \quad (1)$$

$m_{pij,i \neq j}$: the probability that person p move from region i to region j

X_{pij}: person-specific traits of person p

$LINK_{pj}$: presence of social ties at given destinations

$PUSH_{ik(p)}$: source-specific push factors

$PULL_{jk(p)}$: target-specific pull factors

$PATH_{ijk(p)}$: factors related to given target-source paths

Models

Baseline model

$$m_{pij,i \neq j} = \beta_0 X_{pij} + \beta_1 \boldsymbol{LINK}_{pj} + \delta_{ijk} + \varepsilon_{pij} \quad (2)$$

$$m_{pij,i \neq j} = \beta_0 X_{pij} + \beta_1 \boldsymbol{LINK}_{pj} + \beta_2 PREV_{pj} + \beta_3 PREV_{pj} \boldsymbol{LINK}_{pj} + \delta_{ijk} + \varepsilon_{pij} \quad (3)$$

δ_{ijk}: sending-target municipality-occupation FE
$PREV_{pj}$: indicator of whether the individual previously lived at target j
$LINK_{pj}$: dummies indicating if specific contacts of person p are present at potential target destination j
$PREV_{pj}LINK_{pj}$: interaction terms

Interactions

$$m_{pij,i \neq j} = \beta_0 X_{pij} + \beta_1 \boldsymbol{LINK}_{pj} + \beta_2 \tilde{C}_{pij} + \beta_3 \tilde{C}_{pij} \boldsymbol{LINK}_{pj} + \delta_{ijk} + \varepsilon_{pij} \quad (4)$$

$\tilde{C}_{pij}$: represent either individual-specific (C_p), target municipality-specific constraints (C_j), or source-target relation-specific constraints (C_{ij})

Data & Definitions

Subsample

- o   Swedish matched employer-employee data
- o   1 year (2015-2016)
- o   10 percent sample
- o   18-35 individual

Definitions

- o   Movers: changed their municipality of living from 2015 to 2016
  - o   217,207 individuals, 22,091 persons (10.2%) moved
- o   Family:
  - o   Close (parents, siblings and adult children)
  - o   Distant (grandparents, half-siblings, uncles, aunts, first cousins
- o   Former co-workers
  - o   shared co-working experience at max. 100 establishments
- o   University peers
  - o   graduated in the same, previous or subsequent years as the individual, at the same university and field-of-study

Baseline results

	(1) Singles	(2) Couples - Both	(3) Couples - Female	(4) Couples - Male
Close family	0.0143***	0.0038***	0.0053***	0.0023**
	(0.0006)	(0.0006)	(0.0010)	(0.0008)
Distant family	0.0012***	0.0000	0.0000	0.0000
	(0.0001)	(0.0001)	(0.0002)	(0.0002)
Former co-workers	0.0004***	-0.0000	-0.0001	-0.0000
	(0.0000)	(0.0001)	(0.0001)	(0.0001)
University peers	0.0004***	0.0000	-0.0001	0.0001
	(0.0001)	(0.0000)	(0.0001)	(0.0001)
Partners' close family	-	0.0031***	0.0022**	0.0041***
		(0.0006)	(0.0007)	(0.0010)
Partners' distant family	-	0.0003*	0.0002	0.0005*
		(0.0001)	(0.0002)	(0.0002)
Partners' co-workers	-	0.0000	0.0001	-0.0000
		(0.0000)	(0.0001)	(0.0001)
Partners' university peers	-	0.0000	0.0001	-0.0001
		(0.0000)	(0.0001)	(0.0001)
Constant	0.0000	0.0002***	0.0001	0.0003***
	(0.0000)	(0.0001)	(0.0001)	(0.0001)
Observations	47 087 926	10 444 749	5 121 947	4 945 946
R-squared	0.063	0.090	0.095	0.123
Baseline movement prob.	0.0003	0.0003	0.0003	0.0003

Constrained scenarios

	(1)	(2) Lower Income (indicator)	(3) Lower education (indicator)
C_p	-		
C_p x Link (*additional effects*)			
Close family	-	0.0103***	0.0010
		(0.0012)	(0.0013)
Distant family	-	0.0014***	-0.0014***
		(0.0002)	(0.0003)
Former co-workers	-	0.0002*	-0.0005***
		(0.0001)	(0.0001)
University peers	-	0.0003***	-
		(0.0001)	
Link (*benchmark group*)			
Close family	0.0143***	0.0067***	0.0140***
	(0.0006)	(0.0009)	(0.0011)
Distant family	0.0012***	0.0005*	0.0023***
	(0.0001)	(0.0002)	(0.0002)
Former co-workers	0.0004***	0.0002***	0.0007***
	(0.0000)	(0.0001)	(0.0001)
University peers	0.0004***	0.0001**	0.0003***
	(0.0001)	(0.0001)	(0.0000)
Constant	0.0000	0.0002***	0.0000
	(0.0000)	(0.0000)	(0.0000)
Observations	47 087 926	38 543 380[a]	45 058 461[a]
R-squared	0.063	0.060	0.052
Baseline movement prob.	0,0003	0,0002	0,0002

	(1)	(2)	(3)	(4)	(5)
c_i	-	Stockholm (indicator)	Av. house prices (standardized)	Target with higher av. income level (indicator)	Target with higher population (indicator)
c_i x Link					
Close family	-	0.0027	0.0020***	0.0054***	0.0068***
		(0.0020)	(0.0005)	(0.0015)	(0.0016)
Distant family	-	0.0010*	0.0004***	0.0004	0.0002
		(0.0005)	(0.0001)	(0.0003)	(0.0003)
Former co-workers	-	0.0008***	0.0001	-0.0000	0.0001
		(0.0002)	(0.0001)	(0.0001)	(0.0002)
University peers	-	0.0009***	0.0003***	0.0005**	0.0001
		(0.0003)	(0.0001)	(0.0002)	(0.0002)
Link					
Close family	0.0145***	0.0148***	0.0123***	0.0122***	0.0121***
	(0.0006)	(0.0008)	(0.0006)	(0.0010)	(0.0008)
Distant family	0.0013***	0.0013***	0.0010***	0.0011***	0.0012***
	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Former co-workers	0.0004***	0.0004***	0.0003***	0.0004***	0.0003***
	(0.0000)	(0.0001)	(0.0000)	(0.0001)	(0.0001)
University peers	0.0003***	0.0002***	0.0001	0.0001	0.0002***
	(0.0001)	(0.0001)	(0.0000)	(0.0001)	(0.0001)
Constant	0.0001**	-0.0000	0.0001**	-0.0000	-0.0000
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Observations	46 948 770	35 176 269	46 948 770	32 013 593	32 013 593
R-squared	0.051	0.055	0.051	0.057	0.057
Baseline movement prob.	0.0002	0.0002	0.0003	0.0002	0.0002

	(1)	(2)	(3)	(4)	(5)
C_j	-	Stockholm (indicator)	Av. house prices (standardized)	Av. income level (standardized)	Population (standardized)
C_p	Low Income (indicator)				
$C_p \times C_j \times Link$					
Close family		0.0054	0.0020*	0.0050	0.0011**
		(0.0043)	(0.0009)	(0.0055)	(0.0004)
Distant family		-0.0004	0.0002	0.0018	-0.0000
		(0.0007)	(0.0002)	(0.0012)	(0.0001)
Co-workers		0.0014**	0.0002*	0.0005	0.0002**
		(0.0004)	(0.0001)	(0.0004)	(0.0001)
University peers		0.0013**	0.0004***	0.0002	0.0004**
		(0.0005)	(0.0001)	(0.0003)	(0.0001)
$C_p \times Link$					
Close family	0.0103***	0.0092***	0.0079***	0.0025	0.0072***
	(0.0012)	(0.0015)	(0.0013)	(0.0050)	(0.0012)
Distant family	0.0014***	0.0018***	0.0011***	-0.0002	0.0011***
	(0.0002)	(0.0003)	(0.0002)	(0.0011)	(0.0002)
Co-workers	0.0002*	0.0000	0.0000	-0.0004	-0.0002
	(0.0001)	(0.0001)	(0.0001)	(0.0004)	(0.0001)
University peers	0.0003***	0.0001	-0.0001	-0.0001	-0.0001
	(0.0001)	(0.0001)	(0.0001)	(0.0003)	(0.0001)
Constant	0.0002***	0.0000	0.0002***	0.0001**	0.0001***
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Observations	38 543 380	28 558 928	38 543 380	38 543 380	38 543 380
R-squared	0.060	0.065	0.060	0.060	0.060
Baseline prob. of moving	0.0002	0.0002	0.0003	0.0002	0.0003

Robustness

	(1) Without FE	(2) Sending-Target municipality FE	(3) Sending-Target municipality and occupation FE
Panel A) Robustness test on co-workers			
Former co-workers	0.0021***	0.0005***	0.0004***
	(0.0001)	(0.0001)	(0.0000)
Placebo co-workers	0.0005***	0.0000	0.0000
	(0.0001)	(0.0001)	(0.0001)
Constant	0.0000*	0.0001*	0.0001**
	(0.0000)	(0.0000)	(0.0000)
Observations	47 569 078	47 569 078	46 948 770
R-squared	0.003	0.013	0.051
Panel B) Robustness test on peers			
Peers, who graduated with 0-2 years difference	0.0007***	0.0003***	0.0002***
	(0.0001)	(0.0000)	(0.0000)
Peers, who graduated with 3-5 years difference	0.0002***	0.0001*	0.0001
	(0.0000)	(0.0000)	(0.0000)
Constant	0.0002***	0.0002***	0.0002***
	(0.0000)	(0.0000)	(0.0000)
Observations	16 756 806	16 756 806	16 129 824
R-squared	0.002	0.015	0.078

Conclusion

o People are more likely to move to regions where they have contacts, compared to any random region

o Couples
  o mainly influenced by the presence of close family ties,
  o role of the women's family seems more essential compared to family of the men.

o Single individuals
  o both weak and strong ties matter

o Less privileged people, hardly accessible regions
  o stronger effects

o Social ties might be essential assets for people with lower socioeconomic status in gaining access to opportunity-rich places and might compensate for their limited economic resources

Thank you for your attention!

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	(1)	(2)	(3)	(4)	(5)		(1)	(2)	(3)	(4)	(5)
C_j	-	Stockholm (indicator)	Av. house prices (standardized)	Av. income level (standardized)	Population (standardized)	C_j	-	Stockholm (indicator)	Av. house prices (standardized)	Av. income level (standardized)	Population (standardized)
C_p	Low Income (indicator)					C_p	Low Income (indicator)				
C_p x Link						**C_p x C_j x Link**					
Close family	0.0103***	0.0092***	0.0079***	0.0025	0.0072***	Close family	0.0054	0.0020*	0.0050	0.0011**	
	(0.0012)	(0.0015)	(0.0013)	(0.0050)	(0.0012)		(0.0043)	(0.0009)	(0.0055)	(0.0004)	
Distant family	0.0014***	0.0018***	0.0011***	-0.0002	0.0011***	Distant family	-0.0004	0.0002	0.0018	-0.0000	
	(0.0002)	(0.0003)	(0.0002)	(0.0011)	(0.0002)		(0.0007)	(0.0002)	(0.0012)	(0.0001)	
Co-workers	0.0002*	0.0000	0.0000	-0.0004	-0.0002	Co-workers	0.0014**	0.0002*	0.0005	0.0002**	
	(0.0001)	(0.0001)	(0.0001)	(0.0004)	(0.0001)		(0.0004)	(0.0001)	(0.0004)	(0.0001)	
University peers	0.0003***	0.0001	-0.0001	-0.0001	-0.0001	University peers	0.0013**	0.0004***	0.0002	0.0004**	
	(0.0001)	(0.0001)	(0.0001)	(0.0003)	(0.0001)		(0.0005)	(0.0001)	(0.0003)	(0.0001)	
Link						**C_j x Link**					
Close family	0.0067***	0.0073***	0.0058***	0.0138**	0.0066***	Close family	0.0001	0.0009	-0.0081	0.0001	
	(0.0009)	(0.0011)	(0.0009)	(0.0049)	(0.0009)		(0.0031)	(0.0008)	(0.0055)	(0.0004)	
Distant family	0.0005*	0.0001	0.0002	0.0021	0.0002	Distant family	0.0016*	0.0004*	-0.0018	0.0004***	
	(0.0002)	(0.0002)	(0.0002)	(0.0011)	(0.0002)		(0.0006)	(0.0002)	(0.0012)	(0.0001)	
Co-workers	0.0002***	0.0003***	0.0003***	0.0009*	0.0003***	Co-workers	-0.0001	-0.0000	-0.0008*	0.0001*	
	(0.0001)	(0.0001)	(0.0001)	(0.0004)	(0.0001)		(0.0002)	(0.0001)	(0.0004)	(0.0001)	
University peers	0.0001**	0.0002**	0.0001*	0.0007**	0.0001	University peers	0.0003	0.0001	-0.0006*	0.0003*	
	(0.0001)	(0.0001)	(0.0000)	(0.0002)	(0.0001)		(0.0003)	(0.0001)	(0.0003)	(0.0001)	
Constant	0.0002***	0.0000	0.0002***	0.0001**	0.0001***						
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)						
Observations	38 543 380	28 558 928	38 543 380	38 543 380	38 543 380						
R-squared	0.060	0.065	0.060	0.060	0.060						
Baseline prob. of moving	0.0002	0.0002	0.0003	0.0002	0.0003						