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To cite this article: Brian Joseph Gillespie , Clara H. Mulder & Michael J. Thomas (2020): Migration for family and labour market outcomes in Sweden, Population Studies, DOI: [10.1080/00324728.2020.1800068](https://doi.org/10.1080/00324728.2020.1800068)

To link to this article: <https://doi.org/10.1080/00324728.2020.1800068>



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Published online: 13 Aug 2020.



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Migration for family and labour market outcomes in Sweden

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Using information on stated motives for migrating among working-age individuals in the 2007 Swedish Motives for Migration survey (N = 1,852), we use multinomial logistic regression to examine whether and how moves for family reasons are linked to labour market outcomes in ways that differ from migration initiated for other motives, including more overtly labour-related factors. The results indicate that family-based migration is associated with worse labour market outcomes than migration for employment or other reasons. Additionally, family-motivated migrants with co-resident children are more likely to experience labour market deterioration than those without children. Among those who were unemployed before moving, those who reported family as a motive for moving were significantly more likely to be employed after the move. These results help us better assess how families and social networks impact economic outcomes—negatively in some circumstances and positively in others.

Keywords: family; internal migration; labour market outcomes; migration motives; reasons for moving

[Submitted November 2019; Final version accepted June 2020]

Introduction

Internal migration—a permanent or semi-permanent relocation within national borders—is an important mechanism for facilitating human capital development and labour market flexibility. Traditional models assume that long-distance moves are motivated by employment and educational considerations (e.g. higher wages, better labour market prospects, and educational opportunities), while shorter-distance moves are associated with life course transitions, such as family formation/dissolution and housing adjustments (Clark and Huang 2003; Kulu and Milewski 2007). Recent research has pointed to a more nuanced picture, though, with social and family considerations appearing to be important factors underpinning migration (Gillespie and Mulder 2020), even at distances of 100 km or more (Thomas et al. 2019).

Following calls for a more thorough examination of the family in decisions to move (Mulder 2018), we examine whether and how migrating for family-related reasons is associated with labour market outcomes that differ from those of other forms of migration, including work-led migration. Since occupational improvements represent more than just

wage increases, we also assess changes in individuals' career opportunities and work tasks. Unlike previous studies that have considered returns to migration generally (e.g. Ham et al. 2011; Newbold and Brown 2012) or labour migration in particular (e.g. Yankow 2003; Jinkins and Morin 2018), we consider individuals' stated reasons for migrating and how such reasons uniquely impact migrants' subsequent labour market outcomes.

Human capital models of migration

Human capital models of migration generally focus on individuals' decisions to move and how decisions to do so are contingent on economic cost–benefit analyses of moving vs. staying. This suggests, to some extent, that changes in labour market circumstances—typically measured by income or employment status—are the primary reason that working-age individuals decide to migrate. These 'investment models' have dominated classical and contemporary models of internal migration (see Korpi and Clark 2017, p. 238, for a discussion).

The classical theoretical model of migration treats the decision to migrate as an investment in human

capital: individuals migrate if the present value of real income in a destination, minus the cost of moving, exceeds what could be earned at the place of origin (Sjaastad 1962). In support of this approach, research has indeed found a wage growth premium to migration, especially among men (Rodgers and Rodgers 2000; Yankow 2003; Mulder and van Ham 2005; Ham et al. 2011; Korpi and Clark 2017), and large cities tend to yield higher rewards to human capital than rural areas (Ahlin et al. 2014). Also, in line with human capital perspectives, the highly educated are much more likely to migrate than less educated individuals (e.g. Lundholm 2007).

Yet, it is also true that migration patterns within many Western countries appear to run counter to the expectations of these neoclassical models. In the United Kingdom, the most dominant contemporary migration flows are from urban cores to suburban and rural peripheries (Lomax et al. 2014), while in the United States the positive relationship between regional income and population growth turned negative in the 1970s and has failed to return to significance ever since, suggesting little evidence of a disproportionate flow of migrants towards high-income locations (Glaeser and Gottlieb 2009). Recent studies have demonstrated how the growing affordability crises that characterize many of the most economically dynamic locations may discourage movement of potential employees to places of high productivity and wages (Glaeser and Gyourko 2018; Hsieh and Moretti 2019).

From the perspective of micro-level studies, the likelihood of experiencing positive pecuniary returns appears to be strongly differentiated by migrants' age and education (Yankow 1999, 2003; Korpi and Clark 2015), with economic gains most common among the young and highly educated, as well as those who explicitly state that their migration was for labour market purposes, as opposed to other reasons (Böheim and Taylor 2007; Morrison and Clark 2011).

According to the family migration literature, sex differences also exist. Partnered women typically have a higher propensity to suffer negative labour market outcomes after migration, in terms of employment or earnings, than their husbands—although these negative effects tend to be short-lived (Clark and Davies Withers 2002). These sex differences go beyond differences in human capital (Cooke 2003), and are likely related to gendered socialization, which in turn might be associated with gendered motivations for migration. In a separate paper using the same data (but a different subsample), men's propensity to report employment-

related migration was indeed found to be higher, while women reported other motives, including proximity to family (Gillespie and Mulder 2020). Thus, incorporating motives into analyses of migration and labour market outcomes might help to explain some of the sex differences observed in the literature.

Family ties

Although economic perspectives have provided important contributions to the explanation of internal migration and its interactions with human capital and labour market outcomes, it is important to recognize how migrants might be willing to forego purely economic gains in return for other more social or family-related benefits. As Rodgers and Rodgers (2000, p. 118) noted: 'There may also be nonmonetary benefits, such as access to a more pleasant environment, and nonmonetary costs, such as time required to learn about the new location, loss of social and family support groups, and disruption to children's schooling'. Sjaastad (1962, p. 85) also identified the importance of non-monetary factors, particularly among those who are 'generally reluctant to leave familiar surroundings, family, and friends'. However, he mentioned that these psychic costs would be 'difficult to quantify' and were therefore left out of his theoretical framework.

As family ties are a crucial source of emotional and instrumental support, and recognizing that lives are lived within networks of social relationship and exchange, recent theoretical developments have called for the incorporation of family ties into research on migration behaviour (Mulder 2018). Previous studies have noted how individuals might sacrifice economic returns in order to improve other returns, such as the quality of their environment. In a similar way, family ties can be understood to act as an important 'compensating differential' (Rosen 1986). Indeed, survey studies have suggested that migrants are as much concerned about adjusting consumption or realigning social relationships as they are about making specific economic gains (Chen and Rosenthal 2008; Morrison and Clark 2011; Niedomysl 2011). In many cases, while 'employment may enter the decision-making matrix ... it is not necessarily the primary motivation' (Korpi and Clark 2017).

It stands to reason that migrants moving explicitly for work-related reasons will experience more positive labour market outcomes than migrants who cite other, less overtly economic, reasons for

moving. Among these non-economic motives (e.g. housing, environmental), migration for family might be thought especially detrimental to labour market outcomes, with social and familial roles and responsibilities constraining individual choices and potentially restricting opportunities for migrations that could otherwise prove beneficial from an employment or occupational perspective.

The role of wider family ties in influencing individual migration decisions and outcomes has been observed, for example, in the case of adult children migrating in response to the care needs of older parents (Artamonova et al. *in press*; Mason 2004), siblings paving the way (Mulder et al. *in press*), or individuals migrating towards family in response to their own care needs (e.g. after a birth, separation, or widowhood) (Thomas and Dommermuth 2020). In each of these cases, despite the various potential emotional, instrumental, and care-related benefits, migration for family might require economic sacrifices and costs. Thus, at least in the short term, we could expect migration for family reasons to be associated with negative labour market returns.

Hypothesis 1: Among employed men and women, migration for family will be associated with worse labour market outcomes than migration for work-related and other reasons.

That said, family ties to a location can strengthen place-based utility (Lansing and Mueller 1967), whereby social resources can increase individuals' chances of improving their social status (Lin 1999). Family members are often tied to specific geographical locations, and may bolster the advantages of moving if they can help migrants access resources at that location. This location-specific capital—resources that are bound to a specific area—might form a benefit for migrating to that area, especially for individuals with co-resident children.

On one hand, potentially mobile parents can tap their family network as a social resource. Moving towards family might lead to more or better childcare, meaning that individuals can express more workplace flexibility and engagement (e.g. working more hours). On the other hand, those with co-resident children may particularly value contact with family or family care, and moving close to family might compete with their labour market performance, or they might be more inclined to sacrifice good jobs for family care or contact. Therefore, we propose competing hypotheses for the role of co-resident children in moderating the association between family-related moves and labour market outcomes:

Hypothesis 2a: Family-motivated migration will be associated with improved labour market outcomes for migrants with co-resident children compared with moves for work or other reasons.

Hypothesis 2b: Family-motivated migration will be associated with worse labour market outcomes for migrants with co-resident children compared with moves for work or other reasons.

In addition to general labour market outcomes, some researchers have identified social and familial networks as an important source of information for finding and securing employment (Lin 1999; Bähr and Abraham 2016). Unemployed individuals in particular might strengthen ties to their close family in order to access job-related resources that are not available through professional channels (Spilimbergo and Ubeda 2004). Thus, in contrast to Hypothesis 1, among the unemployed, we expect movement for family reasons to mitigate barriers to employment.

Hypothesis 3: For unemployed individuals, the likelihood of post-migration employment will be higher if they report moving for family reasons than for other motives.

Data and method

Data for this study are based on the Swedish Motives for Migration survey (see Nedomysl and Malmberg 2009; Nedomysl 2011). Data were collected through a postal questionnaire in 2007, in collaboration with Statistics Sweden. The survey was designed to tap into household-level migration experiences in Sweden, by collecting information including primary, secondary, and location-based migration motivations, employment status, and demographic characteristics. Because of the use of multiple measures to assess migration motives, this unique survey is among the most comprehensive treatments of the topic.

The questionnaire was sent to a stratified sample of 10,000 Swedish adults who had moved at least 20 km in the previous year. The sample was drawn from a total population of 244,704 Swedish individuals who had made such moves. The sample groups were stratified by sex, age (four groups between 18 and 74 years old), and migration distance (four categories). After two reminders, 49 per cent of the migrants returned a completed questionnaire. Register information from Statistics Sweden was linked to the data and a data weight assigned for each

respondent, thus giving them an appropriate weight based on their share of the total migrant population in 2006.

With the use of sampling weights, we controlled—as much as possible—for disproportionate distributions on important demographic characteristics in the sample. In terms of representativeness, females were more likely than males to complete the survey; older individuals were more likely to complete it than younger people; native-born Swedes were more likely than foreign-born individuals; lower-income respondents were less likely than those with higher incomes; and unmarried people were less likely than other marital groups. The sample weights were designed by Statistics Sweden in order to correct for these unequal representations. Data from the Swedish population register at the time of the survey were matched to the survey data at the individual level by Statistics Sweden. From the register data, we derived information about household income and immigrant status.

There were several restrictions on the full data set ($N = 4,909$). For the first models, we restricted the sample to individuals of working age (18–65) who reported having been employed before and after the move (i.e. students and currently unemployed or retired individuals were excluded). This yielded an analytic sample of 1,852 individuals. Subsequent analyses were based on a different subset of individuals who reported being unemployed before moving ($N = 232$); this did not include those in other labour force classifications, such as retirement, disability, or enrolled in education.

Dependent variable

The dependent variable measured changes in labour market outcomes associated with the move. A survey item asked, ‘How has the move affected your work conditions regarding ...?’ Three items were provided: (1) Salary; (2) Work opportunities; and (3) Interesting work tasks. The Likert-type response options were: (1) Much better; (2) Somewhat better; (3) Unchanged; (4) Somewhat worse; and (5) Much worse. The responses were reverse coded so that higher scores indicated improvements in labour market outcomes. The responses were collapsed into three overall categories, representing labour market deterioration (coded as ‘1’), no change (coded as ‘2’), or improvement (coded as ‘3’). The responses were then summed to create a scale, ranging from ‘3’ to ‘9’, with higher scores indicating better labour market outcomes. Confirmatory

factor analysis validated the use of the composite measure ($\alpha = 0.78$).

Primary independent variables

Respondents’ reasons for moving were based on three items that asked about primary, secondary, and directional reasons for moving. The first item asked, ‘What was *the most important reason* for your move?’ A second item followed up on the first and asked about ‘*other important reasons* for moving’. Later in the survey, a third item assessed directional reasons for the move by asking individuals about their particular reasons for moving ‘to this specific place/region’. All three questions were open-ended, allowing respondents to report any number of reasons in their own words. The reasons were then coded and classified into four groups: work only (the reference category), family only, neither work nor family, and both work and family.

Subsequent models on the subsample of individuals who were unemployed before moving considered whether or not family was mentioned as *any* reason for moving (i.e. primary, secondary, or location-based) and coded as ‘1’, else ‘0’.

Control variables

At the individual level, we included measures for age and sex (female = ‘1’, male = ‘0’). Education was an ordered variable classifying individuals as having an elementary school education, high school, some college, or a college degree. A dichotomous measure for marital status indicated whether the respondent was married after the migration took place, coded as ‘1’, else ‘0’. Housing tenure marked individuals’ post-migration housing situation as owner-occupied (the reference category), renting, or some other type of housing situation. Income was based on information on respondents’ logged household income (in Swedish krona) in 2005 (before moving).

Based on aggregate data from Statistics Sweden, regional variables identified post-migration attractions at the municipal level. The continuous variables included logged average municipal housing cost, unemployment rate, and average gross income (logged). An urbanicity measure was based on the Swedish Association of Local Authorities and Regions (SKL) classification, which categorizes areas based on their population and commuting patterns. The nine categories were: large city, suburban

municipality, medium-sized town, medium-sized commuter municipality, medium-sized commuter town with low commuter population, small town, commuting municipality near a small town, rural municipality, and rural municipality with visitor industry. Higher values correspond to more rural areas. A dichotomous measure indicated whether or not there was a higher education institution in the post-migration municipality.

Analytic strategy

We first employed a Heckman model for selection into post-move employment using the unemployment rate at the post-migration municipality as the selection instrument. The Rho for the model was non-significant ($\rho = 0.04$, $p = 0.68$), indicating that the selection model did not improve on standard regression models. Therefore, the analyses in this paper are based on multinomial logistic regression, assessing whether individuals' reasons for moving are associated with improvement or deterioration in labour market outcomes compared with the reference category (no change in labour market outcomes). An additional model includes an interaction between having co-resident children and motives for moving. Subsequent analyses use logistic regression to examine whether family-motivated migration among the unemployed is associated with post-migration employment. To facilitate intuitive interpretation, we present and discuss the results with 'work-related' motives as the reference category. However, when comparisons with 'other' motives are either theoretically interesting or statistically significant, we also discuss—but do not present in the tables—results with 'family' motives as the reference category.

Results

Descriptive statistics

When compared with previous research on labour market outcomes of migration, our results differ somewhat from previous findings from New Zealand. Morrison and Clark (2011) found that 39.6 per cent of their sample reported no change in salary after moving, but our results indicate that a majority (56.4 per cent) reported no change in labour market outcome. Nearly 29 per cent of the New Zealand sample reported a decrease in

income, while only 8.7 per cent in the Swedish sample reported labour market deterioration.

Labour market improvement was similar in the two samples, with Morrison and Clark (2011) noting that 31.1 per cent of their sample experienced a rise in income compared with 33 per cent of the Swedish sample who reported improved labour market outcomes. The differences might be related to the different operationalization of labour market outcomes between the two studies. They might also reflect the different income distributions, statutory wages, and labour market organization/expectations in the two countries.

Bivariate analyses

Table 1 presents descriptive statistics as well as results of bivariate analyses, comparing different migrant groups across the three overall categories of the dependent variable. The lowest section of the table shows clear differences between individuals' reasons for moving—work only, family only, work and family, or neither—and their labour market outcomes ($\chi^2 = 239$, $df = 6$, $p < 0.001$). Meanwhile, those who reported family as a reason for moving (across all questions) appear to differ from migrants with other motives across the categories of the outcome variable ($\chi^2 = 9.2$, $df = 2$, $p < 0.01$).

Regarding sex, the results are partially in line with the family migration literature: women experienced slightly more labour market deterioration but also slightly more improvement than men ($\chi^2 = 9.2$, $df = 2$, $p < 0.01$). There were also significant differences between men and women in their reported motives for moving (results not shown in table). For example, the propensity to report employment-related migration was higher among men, while women reported other motives more often, including family, work and family in combination, or some other reason ($\chi^2 = 12.71$, $df = 3$, $p = 0.005$).

Multivariate analyses

Table 2 presents the results of a multinomial logistic regression predicting changes in labour market outcomes associated with migration motives, with the reference category being that labour market outcomes stayed the same. Individuals who moved for family reasons only were more likely than those who moved for work only to experience labour market deterioration. Those who moved for family only or for other reasons (neither work nor family)

Table 1 Sample characteristics: internal migrants in Sweden, 2007 ($N = 1,852$)

	Full sample: mean (SD) or column percentage	Labour market outcome: mean (SD) or row percentage			Difference
		Deteriorated	Stayed same	Improved	
<i>Labour market outcomes</i>					
Deteriorated	8.7				
Stayed the same	56.4				
Improved	34.9				
<i>Individual-level variables</i>					
Sex					***
Male	51.8	8.02	57.6	34.4	
Female	48.2	9.42	55.2	35.4	
Age	40.7 (13.3)	42.3 (13.7)	43.6 (13.3)	35.5 (11.5)	***
Education	2.8 (1.1)	2.8 (1.1)	2.8 (1.1)	2.9 (1.1)	*
Marital status					***
Unmarried	65.4	8.8	53.0	38.3	
Married	34.6	8.6	63.0	28.4	
Parental status					
No children	68.6	8.5	55.5	36.0	
Children	31.4	9.1	58.4	32.5	
Housing tenure					***
Own	57.0	8.7	63.8	27.5	
Rent	38.6	8.0	47.9	44.1	
Other	4.5	14.5	36.1	49.4	
Household income (log)	12.5 (0.68)	12.4 (0.74)	12.6 (0.64)	12.4 (0.71)	***
<i>Municipal-level variables</i>					
Average housing cost (log)	7.5 (0.6)	7.3 (0.6)	7.4 (0.6)	7.5 (0.6)	***
Unemployment rate	10.7 (2.5)	11.1 (2.8)	10.6 (2.6)	10.8 (2.3)	***
Average gross income (log)	8.7 (1.6)	8.4 (1.4)	8.5 (1.5)	9.1 (1.6)	***
Universities in the municipality					***
No universities	58.6	9.2	62.4	28.4	
Universities	41.4	8.0	48.0	44.1	
Urbanicity	4.1 (2.4)	4.5 (2.3)	4.2 (2.4)	3.8 (2.4)	***
<i>Migration motives</i>					
Primary reason					–
Work	24.7	3.9	34.5	61.6	
Partner's work	3.1	13.8	43.1	43.1	
Area	17.8	10.9	58.4	30.7	
Housing	22.8	7.8	78.4	13.7	
Love	15.2	11.0	57.3	31.7	
Relationship dissolution	5.6	6.8	67.0	26.2	
Family ties	4.6	17.4	50.0	32.6	
Other social	2.9	9.3	55.6	35.2	
Education	0.3	–	–	–	
Age and health	0.4	–	–	–	
Other	2.6	14.6	60.4	25.0	
Family reasons (across all questions)					**
No family reason	81.2	7.8	57.5	34.8	
Any family reason	18.8	12.6	52.0	35.3	
All reasons					***
Family ties only	11.6	15.0	60.3	24.8	
Work only	34.2	6.6	38.3	55.1	
Family ties and work	7.2	9.0	38.8	52.2	
Other	46.9	8.6	71.4	20.0	

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Notes: Unweighted and unimputed data. Empty cells (indicated by –) contain fewer than five cases. SD refers to the standard deviation. Further details on variables can be found in the 'Data and method' section.

Source: Authors' analysis using data from Swedish Motives for Migration survey, 2007.

Table 2 Multinomial logistic regression for labour market outcomes, internal migrants in Sweden, 2007 ($N = 1,852$)

	Labour market outcome (reference: Stayed the same)	
	Deteriorated	Improved
<i>Individual-level variables</i>		
Female	1.02	1.03
Age	0.99	0.96***
Education	1.02	0.97
Marital status	0.88	1.32
Children	1.09	0.87
Housing tenure		
Own (reference)	–	–
Rent	1.31	1.23
Other	1.55	2.66**
Household income (log)	0.86	0.79*
<i>Municipal-level variables</i>		
Average housing cost (log)	1.25	1.48
Unemployment rate	1.14	1.04
Average gross income (log)	0.84	0.99
Universities	2.20*	1.04
Urbanicity	1.04	1.38
<i>Migration motives</i>		
Family ties only	2.11*	0.44***
Work only (reference)	–	–
Family ties and work	1.62	1.21
Other	0.73	0.23***

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Notes: Unweighted and unimputed data. Clustered at the municipal level.

Source: As for Table 1.

were also less likely than those who moved for work only to experience a labour market improvement. These findings are in line with Hypothesis 1—that family moves would be associated with worse labour market outcomes for those who move for family-related reasons than those who move for employment or other reasons. Regarding the control variables, those who moved to an area with universities were more likely to experience labour market deterioration than those who moved to areas without universities. Older individuals were less likely to experience labour market enhancements and those who moved into rental situations were more likely to do so.

The results of the interactions presented in Table 3 provide support for Hypothesis 2b, with migrants with co-resident children who reported family as a reason for moving being much more likely to report a labour market deterioration than those migrating without children and citing family reasons. Along the same lines, in results not shown, employment-motivated migrants with co-resident children were significantly less likely to report labour market improvement than those without children. The results for covariates are similar to those in Table 2.

The findings in Table 4 provide support for our third hypothesis—that the likelihood of post-move employment among unemployed individuals would be higher for those moving for family reasons than those who moved for reasons other than family. In the logistic model, individuals who reported family as a reason for moving were more than three times more likely to report being employed after the move. Only one control variable was significantly associated with post-migration employment—better educated individuals were more likely to be employed after moving.

Discussion

Long-distance moves, which are often undertaken for employment-related reasons, are an important mechanism behind social mobility and offer possibilities for career advancement and opportunities to avoid unemployment. A common suggestion in early models of internal migration was that migrants make rational assessments of their circumstances and move to capitalize on skill-specific wages at other destinations, motivated by higher wages or the promise of better labour market prospects.

Table 3 Multinomial logistic regression for labour market outcomes with interaction between motives for migration and co-resident children, internal migrants in Sweden, 2007 ($N = 1,852$)

	Labour market outcome (reference: Stayed the same)	
	Deteriorated	Improved
<i>Individual-level variables</i>		
Female	1.06	1.01
Age	0.99	0.95***
Education	1.01	0.98
Marital status	0.89	1.35 [†]
Children	0.95	0.22
Housing tenure		
Own (reference)		
Rent	1.31	1.21
Other	1.63	2.53**
Household income (log)	0.85	0.82 [†]
<i>Municipal-level variables</i>		
Average housing cost (log)	1.22	1.50
Unemployment rate	1.14*	1.04
Average gross income (log)	0.84	0.99
Universities	2.16*	1.37
Urbanicity	1.04	1.05
<i>Migration motives</i>		
Family ties only	1.24	0.52*
Work only (reference)	–	–
Family ties and work	1.58	2.15*
Other	0.65	0.23***
<i>Interactions</i>		
Reason × Children		
Family ties only × Children	4.22*	0.61
Work only × Children	–	–
Family ties and work × Children	1.68	0.23**
Other × Children	1.69	1.07

[†] $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Notes: Unweighted and unimputed data. Clustered at the municipal level.

Source: As for Table 1.

However, following calls for broader perspectives that incorporate family members outside the household (Cooke 2008; Mulder and Cooke 2009), recent theories about migration have highlighted the importance of other factors in individuals' decisions to move, particularly the family (Mulder 2018).

Our findings suggest that, compared with those who move for employment reasons or other non-family reasons, migrants who move for family-related reasons are more likely to experience deterioration in their labour market outcomes and less likely to experience labour market improvements. Individuals who choose to migrate towards family might prioritize family or environmental amenities over occupational advancement. In other words, there might be a self-selection of individuals with low labour market commitment and low earnings potential into family-motivated migration. We therefore find broad support for the notion that

family plays an important role in labour market outcomes. Without accounting for the effects of family ties, estimates of the effects of migration on labour market outcomes might be biased.

We did not find a main effect for sex, although based on the literature on 'trailing spouses', we might have expected a negative effect of migration on labour market outcomes for women. This finding might be linked to women's tendency to report different motives from men, in this case family-related motives (see also Gillespie and Mulder 2020).

In support of Hypothesis 2b, we also found negative labour market outcomes for family-motivated individuals with co-resident children. Migrants with co-resident children may particularly value contact with family or they might be more inclined to sacrifice good jobs for family contact. At the same time, individuals with children might take a longer time

Table 4 Logistic regression for post-migration employment among internal migrants who were unemployed before moving, Sweden 2007 ($N = 232$)

	Employed after migration
<i>Individual-level variables</i>	
Female	0.85
Age	1.00
Education	1.91***
Marital status	1.44
Children	1.08
Housing tenure	
Own (reference)	–
Rent	1.12
Other	0.47
Household income (log)	0.92
<i>Municipal-level variables</i>	
Average housing cost (log)	2.40
Unemployment rate	1.07
Average gross income (log)	0.94
Universities	1.06
Urbanicity	1.13
<i>Migration motive</i>	
Family (across all questions; reference = all other reasons)	3.39*

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Notes: Unweighted and unimputed data. Clustered at the municipal level.

Source: As for Table 1.

to settle or to find a suitable job that allows them to balance work and family commitments. However, our short observation window does not allow us to test this possibility.

We also found support for our third hypothesis—that the likelihood of employment for previously unemployed individuals will be higher if they move for family reasons vs. other reasons. The family seems to be a source of information for finding and securing employment. Individuals might be accessing family-based job resources that are not available through professional channels. In this context, family-motivated migration mitigates barriers to employment.

From a policy perspective, these results help us better assess how families and social networks attract labour and impact economic outcomes. It also gives us a better sense of the mechanisms behind social mobility. In the context of population ageing and welfare state retrenchment in many Western nations, this finding should be heeded by academics and policymakers alike. The assumption that migration is primarily motivated by economic factors, and is a key mechanism in the efficient functioning of labour markets, requires a bit more nuance. Family-related factors bear similar prominence to work-related factors as motives for migrating (Thomas et al. 2019) and, importantly, it

seems that the labour market outcomes following the two motives are different. This need not be interpreted as a negative for governments, as family-led migration involves non-monetary benefits for individuals and governments (e.g. provision of informal care) and could be a crucial factor as we seek to address current and future pressures on care provision among an ageing population.

Limitations and directions for future research

The results should be interpreted in the context of the Swedish housing and labour market, which likely differs from those in other countries. We did not have information on actual wage differentials before and after moving; rather we used self-reported labour market outcomes. However, because a better job is reflected in more than just a higher salary, we included two additional measures to tap into labour market outcomes: career opportunities and interesting work tasks. Our findings on the relationship between family moves and self-reported labour market outcomes are correlational only. The New Zealand survey used by Morrison and Clark (2011) asked respondents whether or not their economic and labour market changes were a result of the move.

Insofar as the effects take longer than one year to set in, we could not capture long-term effects in our cross-sectional data. For example, Glaeser and Mare (2001) found that income gains due to migration were not always instantaneous, but often took several years. Pecuniary benefits, in particular, are mostly long-term, if defined as the resulting increase in lifetime earnings of movers and their families net of any immediate and temporary income losses associated with the move (see, e.g. Yankow 1999; Mulder and van Ham 2005). Of course, this notion might also hold for those who move for family reasons. In other words, negative labour market outcomes might stabilize over time for family-motivated migrants (e.g. as children grow up).

Migration for family reasons might also be associated with a higher likelihood of unemployment or dropping out of the labour force. We were unable to investigate labour market outcomes in such cases, since people would not mention work as a motive for moving. Thus, labour market deterioration among employed individuals tells only part of the story. It would be useful for future research to explore the population of migrants who forego employment.

An entirely separate literature has examined the impact of moving on individual-level behavioural, health, and educational outcomes (Gillespie 2017). However, some of these processes might indeed be instigated by changes in labour market outcomes associated with migration. Future research should explore this possibility.

Notes and acknowledgments

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- 2 The authors would like to thank Thomas Niedomysl and Karen Haandrikman.
- 3 Funding: This paper is based on research funded by the European Research Council under the European Union's Horizon 2020 research and innovation programme (Grant 740113).

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References

- Ahlin, Lina, Martin Andersson, and Per Thulin. 2014. Market thickness and the early labour market career of university graduates: An urban advantage? *Spatial Economic Analysis* 9(4): 396–419. doi:10.1080/17421772.2014.961534
- Artamonova, Alyona, Brian Joseph Gillespie, and Maria Brandén. In Press. Geographic mobility among older people and their adult children: The role of parents' health issues and family ties, *Population, Space, & Place*. doi:10.1002/psp.2371
- Bähr, Sebastian, and Martin Abraham. 2016. The role of social capital in the job-related regional mobility decisions of unemployed individuals, *Social Networks* 46: 44–59. doi:10.1016/j.socnet.2015.12.004
- Böheim, René, and Mark P. Taylor. 2007. From the dark end of the street to the bright side of The road? The wage returns to migration in Britain, *Labour Economics* 14(1): 99–117. doi:10.1016/j.labeco.2005.04.004
- Chen, Yong, and Stuart S. Rosenthal. 2008. Local amenities and life-cycle migration: Do people move for jobs or fun? *Journal of Urban Economics* 64(3): 519–537. doi:10.1016/j.jue.2008.05.005
- Clark, William A. V., and Youqin Huang. 2003. The life course and residential mobility in British housing markets, *Environment and Planning A: Economy and Space* 35: 323–339. doi:10.1068/a3542
- Clark, William A. V., and Suzanne Davies Withers. 2002. Disentangling the interaction of migration, mobility, and labor-force participation, *Environment and Planning A: Economy and Space*, 34(5): 923–945. doi:10.1068/a34216
- Cooke, Thomas J. 2003. Family migration and the relative earnings of husbands and wives, *Annals of the Association of American Geographers* 93(2): 338–349.
- Cooke, Thomas J. 2008. Gender role beliefs and family migration, *Population, Space and Place* 14(3): 163–175. doi:10.1002/psp.485
- Gillespie, Brian Joseph. 2017. *Household Mobility in America: Patterns, Processes, and Outcomes*. New York: Palgrave Macmillan.
- Gillespie, Brian Joseph, and Clara H. Mulder. 2020. Nonresident family as a motive for migration, *Demographic Research* 42: 399–410. doi:10.4054/DemRes.2020.42.13
- Glaeser, Edward L., and Joshua D. Gottlieb. 2009. The wealth of cities: Agglomeration economies and spatial equilibrium in the United States, *Journal of Economic Literature* 47(4): 983–1028. doi:10.1257/jel.47.4.983
- Glaeser, Edward L., and Joseph Gyourko. 2018. The economic implications of housing supply, *Journal of*

- Economic Perspectives*, 32(1): 3–30. doi:10.1257/jep.32.1.3
- Glaeser, Edward L., and David C. Mare. 2001. Cities and skills, *Journal of Labor Economics* 19(2): 316–342. doi:10.1086/319563
- Ham, John C., Xianghong Li, and Patricia B. Reagan. 2011. Matching and semi-parametric IV estimation: A distance-based measure of migration, and the wages of young men, *Journal of Econometrics* 161(2): 208–227. doi:10.1016/j.jeconom.2010.12.004
- Hsieh, Chang-Tai, and Enrico Moretti. 2019. Housing constraints and spatial misallocation, *American Economic Journal: Macroeconomics* 11(2): 1–39. doi:10.1257/mac.20170388
- Jenkins, David, and Annaïg Morin. 2018. Job-to-job transitions, sorting, and wage growth, *Labour Economics* 55: 300–327. doi:10.1016/j.labeco.2018.10.008
- Korpi, Martin, and William A. V. Clark. 2015. Internal migration and human capital theory: To what extent is it selective? *Economics Letters* 136: 31–34. doi:10.1016/j.econlet.2015.08.016
- Korpi, Martin, and William A. V. Clark. 2017. Human capital theory and internal migration: Do average outcomes distort our view of migrant motives? *Migration Letters* 14(2): 237–250. doi:10.33182/ml.v14i2.329
- Kulu, Hill, and Nadja Milewski. 2007. Family change and migration in the life course: An introduction, *Demographic Research* 17(19): 567–590. doi:10.4054/DemRes.2007.17.19
- Lansing, John B., and Eva Mueller. 1967. *The Geographic Mobility of Labor*. Ann Arbor, MI: Institute for Social Research, University of Michigan.
- Lin, Nan. 1999. Building a network theory of social capital, *Connections* 22(1): 28–51.
- Lomax, Nik, John Stillwell, Paul Norman, and Phil Rees. 2014. Internal migration in the United Kingdom: Analysis of an estimated inter-district time series, 2001–2011, *Applied Spatial Analysis and Policy* 7(1): 25–45. doi:10.1007/s12061-013-9098-3
- Lundholm, Emma. 2007. Are movers still the same? Characteristics of interregional migrants in Sweden 1970–2001, *Journal of Economic and Social Geography* 98(3): 336–348. doi:10.1111/j.1467-9663.2007.00401.x
- Mason, Jennifer. 2004. Personal narratives, relational selves: Residential histories in the living and telling, *The Sociological Review* 52(2): 162–179. doi:10.1111/j.1467-954X.2004.00463.x
- Morrison, Philip S., and William A. V. Clark. 2011. Internal migration and employment: Macro flows and micro motives, *Environment and Planning A: Economy and Space* 43: 1948–1964. doi:10.1068/a43531
- Mulder, Clara H. 2018. Putting family centre stage: Ties to nonresident family, internal migration, and immobility, *Demographic Research* 39(43): 1151–1180. doi:10.4054/DemRes.2018.39.43
- Mulder, Clara H., and Thomas J. Cooke. 2009. Family ties and residential locations, *Population, Space and Place* 15(4: Special Issue: Family Ties and Residential Locations): 299–304. doi:10.1002/psp.556
- Mulder, Clara H., and Maarten van Ham. 2005. Migration histories and occupational achievement, *Population, Space and Place* 11(3): 173–186. doi:10.1002/psp.365
- Mulder, Clara H., Emma Lundholm, and Gunnar Malmberg. In Press. Young adults' migration to cities in Sweden: Do siblings pave the way? *Demography*.
- Newbold, K. Bruce, and W. Mark Brown. 2012. Testing and extending the escalator hypothesis: Does the pattern of post-migration income gains in Toronto suggest productivity and/or learning effects? *Urban Studies* 49(15): 3447–3465. doi:10.1177/0042098012443859
- Niedomysl, Thomas. 2011. How migration motives change over migration distance: Evidence on variation across socio-economic and demographic groups, *Regional Studies* 45(6): 843–855. doi:10.1080/00343401003614266
- Niedomysl, Thomas, and Gunnar Malmberg. 2009. Do open-ended survey questions on migration motives create coder variability problems? *Population, Space and Place* 15: 79–87. doi:10.1002/psp.493
- Rodgers, Joan R., and John R. Rodgers. 2000. The effect of geographic mobility on male labor-force participants in the United States, *Journal of Labor Research* 21(1): 117–132. doi:10.1007/s12122-000-1007-2
- Rosen, Sherwin. 1986. The theory of equalizing differences, in O. Ashenfelter and P. Layard (eds), *Handbook of Labor Economics, Vol. 1*. New York: Elsevier, pp. 641–692.
- Sjaastad, Larry A. 1962. The costs and returns of human migration, *Journal of Political Economy* 70(5.2): 80–93. doi:10.1086/258726
- Spilimbergo, Antonio, and Luis Ubeda. 2004. Family attachment and the decision to move by race, *Journal of Urban Economics* 55(3): 478–497. doi:10.1016/j.jue.2003.07.004
- Thomas, Michael J., and Lars Dommermuth. 2020. Internal migration and the role of intergenerational family ties and life events, *Journal of Marriage and Family*. doi:10.1111/jomf.12678
- Thomas, Michael, Brian Joseph Gillespie, and Nik Lomax. 2019. Variations in migration motives over distance, *Demographic Research* 40(38): 1097–1110. doi:10.4054/DemRes.2019.40.38
- Yankow, Jeffrey J. 1999. The wage dynamics of internal migration within the United States, *Eastern Economic Journal* 25(3): 265–278. Available: <https://www.jstor.org/stable/40325930>
- Yankow, Jeffrey J. 2003. Migration, job change, and wage growth: A new perspective on the pecuniary return to geographic mobility, *Journal of Regional Science* 43(3): 483–516. doi:10.1111/1467-9787.00308