Who Migrates in a Setting of Free Mobility?

Assessing the Reason for Migration and Integration Patterns using Cross-national Register Data from Finland and Sweden

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Abstract: Free mobility provides greater diversity in migration motives and settlement intentions by opening up migration as an opportunity to a wider range of individuals. This paper identifies migration motives by using pre- and post-migration information available in linked Finnish and Swedish register data covering the period 1988–2005. Finland and Sweden have been part of the Nordic common labour market since 1954 allowing Nordic citizens to move without barriers. Results reveal substantial diversity in temporary migration and labour market integration by the reason for migration. Migrants who are classified as student migrants have a high prevalence of return migration and circulation. Individuals classified as labour migrants often return migrate, but they are less likely to circulate than student and family migrants. Findings on economic integration show that the majority of labour migrants enter employment within the first two years after immigration. Student and family migrants enter the labour market in a step-wise fashion, but student migrants' income surpasses that of labour migrants about five years after immigration. The results underscore that focusing solely on one country provides only a partial understanding of the dynamics underlying migration and integration.

Keywords: migration; labour market integration; reason for migration; free mobility; linked register data

Introduction

The establishment of free mobility in Europe has lowered barriers to movement and spurred diversity in migration. This increased variety in migration motives has given rise to complex patterns in temporary migration as well as integration. Prior studies show that, migration driven by experiential concerns has become more common since the expansion of the European Union (EU) (Luthra, Platt, and Salamońska 2018). Non-economic migrants tend to enter the labour market more slowly when compared to labour migrants, but they experience improvements in economic outcomes with years of residence abroad (Zwysen 2018). The literature to date focuses on migration from East to West Europe, and in particular on Polish migration to the U.K. However, considering differences in migration and integration across geographic contexts, there is a clear need to expand the literature to other settings.

Another implication of the establishment of free mobility in the EU is that no official records document the primary migration motive for intra-EU migrants. Considering that migrants are not required to get a residence or work permit in a setting of free mobility, administrative data do not provide information on entry categories for these migrants. Admission categories are often used to proxy the reason for migration, as they capture the legal framework along with barriers and support systems under which migrants enter the country (Bevelander and Pendakur 2014; Bratsberg, Raaum, and Røed 2014; Campbell 2014; Kausar and Drinkwater 2010; Luik, Emilsson, and Bevelander 2016; Lundborg 2013; Ruiz and Vargas-Silva 2017; Sarvimäki 2017). However, considering that entry categories are shaped by the legal framework in the destination country, they may not always reflect the actual migration motive. Moreover, in an open border setting, this information is not available, as migrants are free to move without a permit. The country of origin is also often used as a proxy for the reason for migration, but it is likewise problematic. Migrants from the same country of origin often have different motivations for moving (e.g., Burrell 2010). By

contrast, survey data often collect information on migrants' self-reported reason for migration, but they generally cannot provide reliable estimates on return migration risks and circular migration. The latter are important forms of migration in an open border setting (Poot 2010; White and Ryan 2008). Migrants' self-reported reasons may also be misleading or simplify the more dynamic reasons underlying the migration decision, where factors pulling migrants to the destination country and factors pushing migrants away from the home country depict the reason for migration in a complex way.

This study analyses novel linked Finnish and Swedish register data that provide information on pre- and post-migration characteristics. This allows us to connect migrants' experiences in the home and destination country and to approximate the reason for migration in an open border setting. Finland and Sweden have been part of the Nordic common labour market since 1954 allowing Nordic citizens to move without barriers. The Nordic setting thus provides insight into migration trends in a context of free movement that has been in place for more than fifty years and may be interpreted as a precursor to European migration. The data cover the years 1988–2005 and provide detailed information on multiple moves undertaken by individuals. In the empirical analysis, we distinguish between four different migration motives: labour, student, family and experience migrants. We also demonstrate how temporary migration, estimated by return migration risks and circular migration, and economic integration, measured by time to first job and income trajectories over time in the destination country, differ by migration motives.

Disentangling the processes that drive migration and influence return and circular migration as well as integration is particularly complex in a setting of free mobility. Yet, this interplay is generally intricate, not least, because the majority of migrants are young adults. In 2017, half of migrants coming to the EU were under the age of 28 (Eurostat 2017). During early adulthood several parallel processes, such as migration, family and employment

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trajectories, occur within a relatively short time span and influence each other. This interaction makes it difficult to study one trajectory independently of the others. Although these parallel processes have been analysed, international migration is rarely incorporated (Sirniö, Kauppinen, and Martikainen 2017). The free mobility context provides a novel setting in which we can study this interplay in an accentuated form, thus gaining a deeper understanding of the variety in temporary migration and integration patterns.

In the next section, we review the literature on migration decisions and discuss the Swedish-Finnish migration context analysed in the empirical part of the paper. Then, we describe our data and methods and present the empirical findings. We conclude with a summary of the results and a consideration of their practical and theoretical implications.

Theoretical Background and Previous Literature

The migration motive is important in guiding predictions about both migration flows and migrants' incorporation into the destination country (Zwysen 2018). The factors impacting the decision to move are manifold and a breadth of migration theories has been developed. In the interest of space, we focus on three theories: neoclassical economics, network theory and transnational migration theory. According to *neoclassical economics*, migrants are assumed to relocate because of higher expected lifetime earnings in the destination country (Harris and Todaro 1970; Sjaastad 1962). While the theory has received much attention and is compelling for its simplicity, empirical evidence from Europe and the U.S. shows that cost benefits alone cannot account for migration flows (Kalter 2011; Massey 1987). *Network theory* fills this gap and argues that non-migrants draw on social capital embedded in connections to migrants (Hugo 1981; MacDonald and MacDonald 1964; Massey 1990). These connections lower the uncertainties involved in migration and can assist the newly arrived in organising housing and work at the destination (Hagan 1998; Menjívar 2000). *Transnational migration theory*

similarly focuses on migrants' ties but incorporates migrants' ties to the home country, arguing that migrants simultaneously establish new ties at the destination while maintaining ties in the home country (Faist 2012; Glick Schiller, Basch, and Blanc 1995; Kivisto 2001).

Our discussion of these theories focuses on four migration motivations: labour, student, family and experience migrants. This categorization is in line with recent literature and builds on the idea that migration decisions are incorporated in life course decisions (King 2002; Recchi 2005). Moreover, they are expected to be linked to distinct temporary migration and integration patterns.

Labour Migrants

Labour migrants' primary motive in moving is work-related. They may have a job offer or expect to earn higher wages in the destination country. According to *neoclassical economics*, migrants relocate if the monetary benefits of moving outweigh the costs. The choice of destination is a result of migrants' expected income, which in turn is contingent on the remuneration of migrants' human capital in the destination country (Dustmann 1996). According to *network theory*, labour migrants are also more likely to move to a destination where they have contacts, who can help the newly arrived organise housing and locate work (Munshi 2003). Consequently, labour migrants are expected to enter the labour market faster than other migrants.

Although stable employment makes it more beneficial to stay in the destination country, labour migrants endure psychic costs if family or close friends stay in the home country (Dustmann and Kirchkamp 2002). Labour migrants may be joined by their spouse and children in the destination country or decide to move back to spend time with their family in the home country. Previous research shows that family and friends are important reasons for returning, whereas labour market attachment to the destination country keeps migrants abroad (Constant and Zimmermann 2011, 2012; DaVanzo 1981; Lidgard and Gilson 2002).

However, unmet expectations, i.e., a negative shock, may also induce labour migrants to return. For instance, labour migrants may return, if they do not find a job or earn lower wages than they expected. Based on this perspective, return migration is often assumed to result from "mistakes" in the initial migration decision (Borjas and Bratsberg 1996; Duleep 1994; Rooth and Saarela 2007b).

Student Migrants

Student migrants move to study abroad. In this way, they accumulate human capital in the destination country and diversify their social and professional network. In contrast to a job, university education is temporally restricted and once students finish their degree many transition into the labour market, which can be combined with return migration. Student migrants are also often younger than other migrant groups and fewer have formed a family in the home country prior to migration. In this way, they tend to face a lower threshold to moving than older migrants who have children.

In extensions of *neoclassical economics*, scholars have theorized that migrants move in order to acquire human capital that makes them attractive on the home country labour market. Namely, migrants are more likely to move to a country where they can acquire human capital that will be valued at home upon their return. While some skills that are acquired abroad are easily transferrable to other countries, other resources are not. For instance, language skills are likely useful in the destination country, but they are not necessarily transferrable to other settings (Dustmann 1999). If the skills and credentials acquired have low pay off in other countries, individuals are more likely to stay. Access to destination specific human capital suggests that student migrants have resources that promote labour market integration if they stay in the destination country.

Beyond human capital, student migrants are likely to form social ties in the destination country, as we would expect based on *network theory*. These are similar to

destination specific human capital and often difficult to transfer to other settings. All the same, friendships and networks that student migrants from abroad are likely linked to educational institutions. Similar to the student migrants themselves, their social contacts are expected to be young and international, thus encouraging temporary migration. According to *transnational migration theory*, migrants' ties are a direct consequence of migration but can also perpetuate movement (Levitt and Jaworsky 2007). With every move, migrants gain contacts, skills and knowledge specific to the migration process and the destination (Kalter 2011; Massey and Espinosa 1997). These resources make it easier to make another move. Evidence from students who participated in the Erasmus program, which provides students the opportunity to move abroad to study in another European country, shows that students who moved during their studies continue to be more mobile throughout their working career (King and Ruiz-Gelices 2003; Parey and Waldinger 2011). These results suggest that student migrants gain social contacts and experience that increases their chances of making subsequent moves.

Family Migrants

Family migrants primarily base their decision to move on a partner or their family. They may join their partner and start a family abroad, or move while their children are still young. The importance of social ties in migration decisions has been highlighted in *network theory*. Forming a family tends to constrain migration, as a spouse and children tend to make it more difficult to realize a move (Dustmann 2003). Still, *transnational migration theory* underscores that migrants often maintain ties to the home country while establishing new ties at the destination. In this way, family migrants may return home to spend time with friends or to take care of ageing parents, even after having moved to join their partner or formed a family abroad.

Social contacts provide migrants with information on job openings and other resources that facilitate labour market entry (Kanas et al. 2012; Lancee 2010; Lin 2001; Portes and Sensenbrenner 1993). However, feminist scholarship reveals clear differences in access and returns on social contacts along gender lines (Greenwell, Valdez, and DaVanzo 1997; Hagan 1998). Prior research shows that women, who move to Sweden as family reunion migrants, tend to have lower employment rates than other migrants (Adsera and Chiswick 2006; Bevelander and Pendakur 2014). Studies on internal migration in Sweden also reveal that women are more likely to move and move longer distances to reunite with a partner or their family than men, despite potential negative impacts for their career progression (Brandén 2013, 2014). Family migrants may thus have lower ambitions to enter the labour market and may be more likely to relocate even when faced with uncertainties about their labour market situation in the destination country, as their primary aim is to join a partner or family. Responsibilities in the home, such as taking care of children, may also constrain family migrants' job search. Consequently, family migrants' labour market attachment is expected to be weaker than that of other migrant groups.

Experience Migrants

Experience migrants' motive to move is founded on personal preferences, among others related to culture, adventure (Favell 2009) and self-development (Cook, Dwyer, and Waite 2011). This group has not been discussed in traditional migration theories and is typically considered to comprise of tourists or a privileged minority. However, in a setting of free mobility, they may be a sizeable group and in this way shed light on the range of migration motives. They are likely a diverse group and may include pensioner migrants moving to sunny locations as well as younger migrants moving abroad for a gap year (Klinthäll 2006; Luthra et al. 2018). Experience migrants are expected to have low ambitions to enter the labour market, as their motivation for migrating is more flexible than that of other migrant

groups. This may make them less motivated to integrate into the destination country, but also less concerned about how they fare. Whereas some experience migrants may have high ambitions to continue moving and to make new experiences, others may have relocated to the destination for culture-specific or country-specific factors, which make them more likely to stay abroad.

Expectations

The above discussion leads us to a number of expectations regarding variation in temporary migration and labour market integration by reason for migration.

1. We expect that temporary migration is most common among student migrants. Student migrants are likely to continue moving, since many are expected to return once they have completed their degree. They also tend to be younger and more often have a professional and personal network abroad than other migrants.

2. Family migrants are expected to be the least likely to engage in temporary migration.

Family and children often deter temporary movement, thus having a spouse and/or children in the destination country may contribute to lower chances of engaging in temporary migration among family migrants, when compared to other migrant groups.

3. Among labour migrants, the likelihood of engaging in temporary migration is expected to fall between student and family migrants'.

Some labour migrants may return because they cannot find a job or because their family stayed in the home country. However, others may have stable employment and high attachment to labour market in the destination country may present a barrier to temporary migration.

4. Experience migrants are expected to comprise a heterogeneous group.

Some experience migrants may move abroad for the specific culture or other country-specific characteristics and are likely to stay in the destination country. Other experience migrants simply move for the experience, as the name suggests. They are likely to return or move onward to a third country quickly after arrival.

5. When it comes to integration, we expect that labour migrants experience a smoother transition into employment than migrants who move for other reasons.

Labour migrants are expected to have high attachment to the labour market, considering that their main motivation for moving is work-related and those who did not find a job are also more likely to return. In line with this, labour migrants' income is expect to be higher than that of other migrants in the first years after immigration.

6. Student migrants' labour market integration measured by time to first job is expected to succeed university. With time in the country, student migrants' income is expected to be surpass that of labour migrants.

Student migrants move abroad to study and are expected to enter the labour market once they have completed their degree. While many return after finishing their studies, those who stay have good chances of getting a well-qualified job. Once student migrants enter the labour market, their income is expected to exceed labour migrants'.

7. Among family migrants, time to first job is expected to fall between student and labour migrants, but their income is expected to be lower than that of labour and student migrants.

Although family migrants are expected to take longer to enter the labour market than labour migrants, they may find a job sooner than student migrants. However, over time in Sweden, their employment and income is expected to be lower than student migrants', due to responsibilities outside of the labour market.

8. Experience migrants are expected to have low attachment to the labour market.

Due to varied motivations for migrating in this group, experience migrants' time to first job is expected to be longer and their income is expect to be lower than that of other migrants.

Migration Context

Finnish migrants constitute the second largest immigrant group in Sweden today, after Syrians and Iraqis. They account for about 145,000 persons (Statistics Sweden 2020). This high number is mainly the result of the large migration flow from Finland to Sweden in the decades following World War II (Hedberg 2004; Hedberg and Kepsu 2003; Korkiasaari 2003; Korkiasaari and Söderling 2003). While the Swedish economy needed labour during this period, the living standards in Finland were comparatively low with a lack of employment opportunities. The migration flow from Finland to Sweden peaked in the early 1970s and has continued at a lower rate since then. During our study period, 1988–2005, migration rates between the two countries were modest. Both Finland and Sweden were hit by the economic recession starting in the early 1990s, and migration rates plummeted in the first half of the decade (Finnäs 2003; Pedersen, Røed, and Wadensjö 2008; Saarela and Finnäs 2013). Labour market opportunities were similar in Finland and Sweden and the Gini coefficient, which reflects the distribution of disposable income, was almost the same in the two countries. Some Finns still moved to Sweden to improve their economic position, but the gains made by moving were not high enough to create a strong incentive to move to Sweden for higher life-time earnings. Considering the long history of labour migration from Finland to Sweden, many Finns had a large network in Sweden, which increased their likelihood of moving. Finnish migrants, who moved between Finland and Sweden, are the focus of the empirical analysis in this paper. The reverse flow, of Swedes to Finland, has been consistently small.

Sweden and Finland are geographically, culturally and historically close. The labour market structure, educational system and parental leave benefits are also similar in the two countries, indicating that barriers to migration are low (Saarela and Scott 2019). In contrast, the main languages spoken in the two countries differ considerably from each other. While Swedish is a North Germanic language and similar to Norwegian and Danish, Finnish is distinct from most other languages. However, a minority of Finns grows up speaking Swedish. About 5 percent of the total population of Finland has Swedish as their registered mother tongue in the population register. Previous research reveals substantial differences in migration and integration patterns between Finnish and Swedish speakers. For many decades, emigration rates among Swedish speakers have been higher than among Finnish speakers, while their return migration rates have been lower (Hedberg 2004; Saarela and Finnäs 2011; Saarela and Scott 2017).

Previous research on Finnish-Sweden migration shows that women have a higher risk of making the first emigration than men, but they have a lower risk of making the first return migration or circulating than men (Weber and Saarela 2019). Unmarried individuals are more likely to emigrate than those who are married and are less likely to return migrate. Being a parent is associated with a depressed risk of emigration. Higher educational levels are associated with a higher risk of emigration and return migration, whereas employment discourages migration of any type.

Data

Our data set was constructed by integrating records of Finnish migrants in Sweden from population registers in both Sweden and Finland. The permission number from Statistics Sweden is 8547689/181453 and from Statistics Finland TK-52-215-11. The two data sets were linked by the identification of migrants based on their unique personal identity numbers

(PIN). Linkage was fully successful, but since Statistics Finland had a policy of not providing data on total populations, the data at hand constitute a 77.5 percent random sample. Through the linkage we have detailed information on pre- and post-migration characteristics. We measure migration by registration and deregistration from the population registers in each country. Nordic citizens, who move between the Nordic countries, are required to register a move if they intend to stay abroad for more than twelve months (Fpa 2017; Statistics Sweden 2018). However, many register even shorter sojourns, as there are high incentives to do so. For instance, one needs a PIN to open a bank account, rent a flat, or to receive income. We can thus identify migrants who move back and forth between Finland and Sweden and assess the reliability of these records by verifying that migrants who deregister in Finland appear in the Swedish register, and vice versa. Comparing the month of exit from Finland and entry in Sweden, we find that for 98 percent of all moves, the timing of the migration in each country's register differs by less than two months.

The raw data from Sweden cover the period 1985–2005 and contain rich information on socioeconomic, demographic, and labour market characteristics of individuals who migrated to Sweden. The raw data from Finland cover the years 1987–2007 and contain information on analogous variables of the same persons, who are linked to the Swedish registers. Using a similarly constructed 10 percent sample of the Finnish population, we can also compare migrants to non-movers. Records on each individual's previous moves (to any country) in the Swedish data set allow us to establish the first move of each migrant, even if it occurred before 1985. In order to avoid problems of left truncation, we focus on individuals who make their first move during the study period. First emigration is consequently defined as the first move from Finland to Sweden, occurring between 1988 and 2005. Restricting our analyses to these years ensures that we have information from both countries.

We focus on individuals aged 19 through 30 at first migration. The lower age limit is 19 in order to include information on the matriculation examination, which serves as a prerequisite for entrance into university studies and is given at this age. The upper age limit is 30 years of age, seeing that more than two thirds of moves between Finland and Sweden occur between ages 19 and 30. In this way, we aim to analyse the bulk of movement while simultaneously focusing on an age group where labour market participation, studies, family formation and experience migration present common alternatives.

Methods and Descriptive Statistics

Categorization

As mentioned before, our data do not provide information on the reason for migration, because Nordic citizens moving between the Nordic countries do not have to report the reason for their move. However, considering that we have information from the home and destination country, we have relatively good insight into migrants' situation prior to and following the move. We build on this information to differentiate between four groups and focus on labour, student, family and experience migrants. We clearly do not capture the complete range of motivations to migrate, but aim to get a better understanding of the heterogeneity of the migrant group by focusing on the reasons that are argued to be the most common. We use two alternative strategies to identify the reason for migration. Migrants who fall in the same category based on both approaches are the ones used in the categorization presented in the empirical analysis.

According to the first categorization (Approach 1), individuals are classified as labour migrants (1a) if they have positive income in Finland the year prior to migration and positive income in Sweden in the year of the move or one year after migration, as it may take some time for migrants to enter the labour market. Student migrants (1b) are individuals who

passed the matriculation examination in Finland and for whom we observe an increase in their educational level up to four years after migration, or for whom we observe no income in Sweden over the first two years in Sweden. Family migrants (1c) are individuals who get married or are parents the year before or after migration. Some individuals belong to two or more of these three categories. We use mutually exclusive categories and classify individuals as labour migrants if they fulfil the above-mentioned criteria, irrespective if they may also be classified as student or family migrants. Student migrants who are also family migrants are classified as student migrants. Family migrants are those who are coded as family migrants but do not fall into any other category. Individuals who fall outside any of these three groups are assigned into a residual category (1d). The rationale behind classifying migrants as labour migrants if they fall into multiple categories is based on previous work that has focused on labour migration (Borjas and Bratsberg 1996; Rooth and Saarela 2007a). Disentangling labour migrants from the other groups is therefore a prerequisite in finding out more about the other groups.

The other categorization (Approach 2) to identify migrants' reason for migration is based on a different set of indicators, so as to make sure our categories are not driven by the specific indicators used. The Finnish register provides information on the main activity, which we can use to distinguish between individuals who were employed, unemployed, studying and outside of the labour force in the year prior to migration. We use this variable to differentiate between labour and student migrants. Namely, labour migrants (2a) are individuals who are employed in Finland before the move, and who are employed or have a positive income in Sweden in the year of the migration or the year after the migration. Student migrants (2b) are those who are registered as students in Finland prior to migration, and have no income or were not employed in Sweden in the year of the migration or the year after the migration. Family migrants (2c) are those who are married or live with a partner

and/or children in Finland prior to moving, or are recorded as married in Sweden after migrating or have children in Sweden after migrating. Again, those who fall in multiple categories are classified as labour migrants. Those who are classified as student and family migrants are classified as student migrants. Individuals who fall outside any of these three groups are assigned into a residual category (2d). The number of migrants who are recorded as labour or student migrants but overlap with other categories is reported in Table A1 in the Appendix.

Table 1 shows the number of individuals classified in the different reasons for migration according to the Approach 1 and Approach 2. The last row of the table shows the distribution based on Approach 1 and reveals that labour migrants make up more than half of the migrant group (63 percent). About 15 percent or 3,000 migrants are classified as student migrants. Family migrants account for 6 percent of migrants and the residual category includes 16 percent. The last column in the table provides the distribution based on Approach 2. We find that 36 percent or about 7,000 are labour migrants. More than 25 percent of migrants are identified as student migrants and the remaining 16 percent and 22 percent are family migrants and migrants in the residual category, respectively. The main diagonal shows the number of migrants classified as labour, student, family migrants and the residual category in both approaches (indicated in bold). In total, 7,244 migrants are identified as labour migrants according to both approaches. Nearly 2,000, or 1,914, are classified as student migrants. Family migrants account for 933 migrants and the remaining 1,838 fall in the residual category. In the analyses, we analyse migrants who are in the groups based on the main diagonal, so as to have a more robust classification (total of 11,929 migrants).

Table 1 Number of individuals classified as labour, student and family migrants
and a residual category according to Approaches 1 and 2

	Approach 1				
Approach 2	Labour migrants	Student migrants	Family migrants	Residual category	Distribution based on Approach 2
Labour migrants	**7 244**	33	28	54	7 359
Student migrants	2 514	**1 914**	189	850	5 467
Family migrants	1 390	514	**933**	529	3 366
Residual category	1 875	770	3	**1 838**	4 486
Distribution based on Approach 1	13 023	3 231	1 153	3 271	20 678

Note. The overlap in the classifications (indicated in bold, along the main diagonal) is used in the empirical analysis.

Corroboration Exercises

Below, we assess whether the classification described above is trustworthy in two ways. First, Table 2 provides information on migrants' pre-migration characteristics by reason for migration. The last four columns show the characteristics of all migrants on the main diagonal in Table 1, non-movers, migrants off the main diagonal and all 20,678 migrants. Non-movers are a sample of the Finnish population between ages 19 and 30, who have not made a previous move. We measure migrants' pre-migration characteristics one year prior to migration. Considering that we do not have a year of migration for non-movers, we analyse their characteristics in a randomly chosen year.

Distributions are very much in line with expectations. Table 2 shows that about half of labour migrants are female. Among student and family migrants, women are overrepresented and constitute 70 percent and 65 percent of the groups. Migrants are on average 24 years old at first migration, whereas student migrants tend to be two years younger. Swedish speakers are overrepresented among all migrant groups, but especially so among student migrants. One in three labour migrants lives in a single household or is a child in the household prior to migration. Student migrants commonly move out of their parental

home, i.e., are a child in the household before moving. In contrast, nearly half of family migrants are a household head or spouse in Finland prior to migration. Regarding migrants' main activity in Finland, one in two family migrants and migrants in the residual category are outside the labour force before moving. Low education is the most prevalent among family migrants and those in the residual category. One in three family migrants is married, while nearly all other migrants are unmarried prior to migration.

Table 2 Composition of Migrant Types by Pre-migration Characteristics

	Migrants on the main diagonal				All migrants on the main diagonal	Non-movers	All migrants off the main diagonal	All migrants
	Labour migrants	Student migrants	Family migrants	Residual category				
Demographic Characteristics								
Female	0.50	0.71	0.65	0.36	0.52	0.49	0.56	0.54
Mean age at first migration	25	22	25	24	24	25	23	24
Swedish speaker	0.33	0.37	0.18	0.30	0.32	0.05	0.35	0.33
Position in the Household								
Living in a single household	0.35	0.19	0.11	0.38	0.31	0.23	0.24	0.28
Household head or spouse	0.13	0.03	0.45	N.A.	0.12	0.26	0.07	0.10
Child in the household	0.32	0.67	0.13	0.27	0.35	0.28	0.54	0.43
Living in cohabitation	0.18	0.07	0.22	0.12	0.16	0.23	0.11	0.14
Unknown	0.01	0.04	0.08	0.23	0.06	0.01	0.05	0.05
Main Activity								
Employed	0.98	0.12	0.11	0.13	0.65	0.61	0.09	0.41
Unemployed	0.01	0.05	0.24	0.26	0.06	0.10	0.20	0.12
Studying	0.01	0.68	0.02	0.05	0.12	0.18	0.43	0.25
Outside the labour force	0.01	0.17	0.56	0.45	0.14	0.13	0.30	0.21
Missing information	0.01	0.02	0.05	0.15	0.03	N.A.	0.03	0.03
Education								
Low education	0.26	0.01	0.72	0.65	0.31	0.23	0.30	0.31
Intermediate education	0.50	0.92	0.23	0.28	0.51	0.59	0.57	0.54
High education	0.24	0.08	0.05	0.07	0.17	0.18	0.13	0.15

Continued.

Table 2 Continued

	Migrants on the main diagonal				All migrants on the main diagonal	Non-movers	All migrants off the main diagonal	All migrants
	Labour migrants	Student migrants	Family migrants	Residual category				
Marital Status								
Married	0.13	0.04	0.36	N.A.	0.12	0.25	0.07	0.10
Unmarried	0.85	0.93	0.55	0.83	0.84	0.73	0.89	0.86
Divorced	0.02	0.01	0.04	0.01	0.02	0.02	0.01	0.01
Unknown	0.01	0.02	0.05	0.15	0.03	N.A.	0.03	0.03
Observations	7 244	1 914	933	1 838	11 929	199 193	8 749	20 678

Note. Proportion within each group reported. Pre-migration characteristics are measured one year before migration. Considering that we do not have a year of migration for non-movers, we analyse their characteristics in a randomly chosen year.

Second, we assess seasonality in temporary migration. Considering that temporary migration occurs in short time intervals, analysing the month of the move can be informative. Seasonal patterns are expected to be strongest among student migrants, as they are likely to move at the start of the academic year and return when the academic year ends. Among labour migrants, we may also observe some seasonality in migration, seeing that many employment contracts start in the fall (Swedish Public Employment Service 2020). Migration is not expected to follow an equally strong seasonal pattern among family migrants and migrants in the residual category.

Figure 1 presents the month of migration for four moves by reason for migration: first emigration or the initiation of migration (Emigration 1), first return migration (Return 1), second emigration (Emigration 2) and the second return (Return 2). Labour migrants are somewhat more likely to emigrate (for the first and second time) in August, September and October (top panel). The likelihood of returning does not seem to be seasonal. Student migrants predominantly move to Sweden (first and second emigration) in August and September, which coincides with the start of the academic year (second panel from the top). Return migration among student migrants is most common in June. Among family migrants (third panel) and migrants in the residual category (fourth panel), we observe no clear seasonal patterns. In sum, results from these two corroboration exercises lead us to believe that our categorization is reliable and we will build on it in the pursuing empirical analysis.
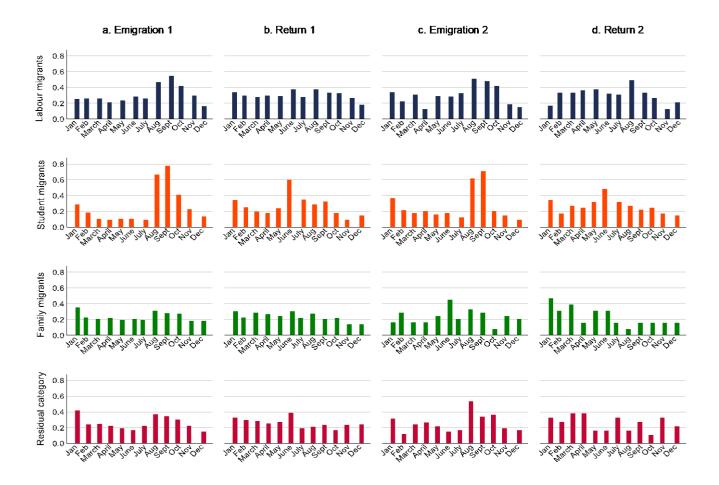
Fig. 1 Month of migration by reason for migration

Outcomes

In line with previous work (Kalter and Kogan 2014; Monti 2020), we use event history

analysis to capture temporary migration and labour market entry. We estimate survival curves

for the three types of moves: Return 1, Emigration 2, and Return 2. We follow migrants for

15 years and capture the timing and likelihood of moving. We right-censor individuals who

have not experienced the event before the time of their death, if they move to a third country,

or at the end of the observation period in 2005. For Return 1, i.e., the first return to Finland,

the risk group includes all individuals who have moved to Sweden. For this move, the

observation window starts when individuals have emigrated for the first time. For subsequent

moves, the observation window starts when individuals have made the previous move. For

instance, the observation window for emigration 2 starts when migrants have made return 1. In this way, all individuals who have made a first emigration are considered under risk of returning.

In order to capture migrants' labour market integration, we estimate survival curves for time to first job. The observation window starts when migrants arrive in Sweden. We follow migrants over 15 years in the country and measure entry into employment using positive income in Sweden. We right-censor individuals who have not experienced the event before they return to Finland, if they move to a third country, at the time of their death, or at the end of the observation period in 2005.

We also estimate income trajectories over time in Sweden, considering that the level of income provides important additional information on migrants' economic situation in the destination country. We use inflation adjusted income (in 2005 prices) and estimate OLS regressions. We present results from stratified analyses by reason for migration. Control variables include year since immigration, age at first migration and binary indicators for gender, whether the migrant is Swedish speaking or not and completion of the matriculation examination. Standard errors are clustered at the individual level, considering that we analyse one observation per calendar year.

Empirical Findings

Temporary migration

We begin by analysing survival curves for three moves by reason for migration (Figure 2). The steepness of the curve indicates the timing and proportion of individuals who migrate. For Return 1, we find that the prevalence to move to Sweden is higher among migrants who are classified as student migrants than among the other migrant groups. This is indicated by the steeper decline in the dashed curve. Among labour migrants, the risk of moving is

somewhat lower than among student migrants. Family migrants and migrants in the residual

category have the lowest risk of making return 1. The prevalence of making a second

emigration is highest among student migrants and lowest among labour migrants, but

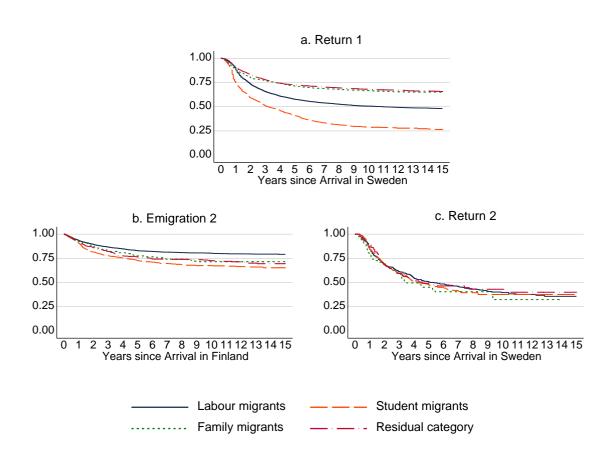differences are moderate. Differences in the prevalence of making a second return are small.

Fig. 2 Survival estimates for time to the next move by reason for migration

In sum, Figure 2 reveals evidence in line with our expectation that student migrants

are the most prone to engage in temporary migration. A Swedish educational degree may

provide student migrants with transferrable human capital skills. Student migrants' friends

from university are also expected to encourage temporary migration, as they are likely young

and have an international background similar to the student migrants themselves (King and

Ruiz-Gelices 2003; Parey and Waldinger 2011). Among labour migrants, the high likelihood to return suggests that labour migrants return to spend time with family after having worked for some years in Sweden, or that many labour migrants return when they cannot locate work. The latter could have been relatively common in the economic recession of the 1990s and would explain the low prevalence of making a second emigration to Sweden. Family migrants tend to face higher constraints to moving, as a spouse and children often add a level of complexity in realizing the move. This likely explains the low prevalence to make Return 1. Experience migrants have a relatively low likelihood of engaging in temporary migration. This suggests that many experience migrants move abroad for the specific culture or other country-specific characteristics, rather than having high ambitions to continue moving.

Labour market integration

Figure 3 shows survival curves for time to first job in Sweden. More than 90 percent of labour migrants have entered a job within the first two years in Sweden. By comparison, student migrants take longer to enter the labour market, but there is a considerable jump three years after immigration. Nearly 50 percent have entered the labour market after three years in Sweden. Family migrants indicated by the dotted line also reveal a step-wise progression into the labour market. Still, family migrants have lower employment 15 years after immigration than student migrants. Throughout the 15-year period, the share in the labour market is lowest among migrants in the residual category.
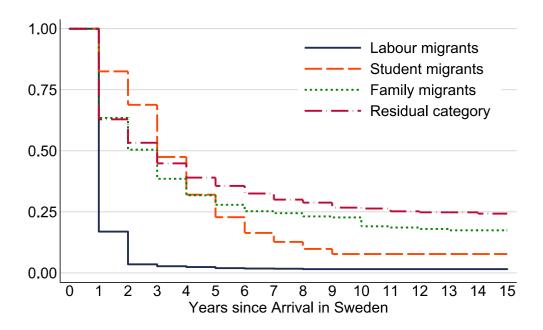
Fig. 3 Survival estimates for time to first job by reason for migration

Note that employment is measured by positive income in Sweden.

This goes in line with our expectation that labour migrants enter employment more quickly than migrants who move for other reasons. Labour migrants may move to Sweden after having informed themselves about vacancies, which facilitates the transition into the labour market. Labour migrants are also more likely to move abroad if they have contacts who can assist their job search. Student migrants are expected to enter the labour market after having finished their university degree. The jump observed three years after immigration may follow the completion of a two-year Master's program or indicate that many students start working part-time in the second part of the Bachelor program. Family and experience migrants may have lower ambitions to enter the labour market and may be more likely to relocate even when faced with uncertainties about their labour market situation in the destination country. Family migrants may also have responsibilities at home, such as taking care of children, which may restrict their job search.

We have run additional analyses where we restrict our indicator of having entered employment in Sweden to having earned 1,000 SEK (in 2005 prices) in the calendar year. The results (available upon request) do not reveal an equally large jump three years after migration among student migrants, suggesting that student migrants predominantly enter part-time employment rather than securing a full-time position.

Beyond labour market entry, income trajectories over time in Sweden provide insight into migrants' economic situation in the destination country. Results from OLS regressions on inflation adjusted income are shown in Figure 4. The models control for year since immigration, age at first migration and binary indicators for gender, whether the migrant is Swedish speaking or not and completion of the matriculation examination. In the first years after immigration, labour migrants tend to have a higher income than other migrants. However, five years after immigration student migrants overtake labour migrants. Student migrants' income trajectory increases rapidly over the first nine years in the country. Subsequently, the curve flattens out and remains above 200,000 SEK. In the latter part of the observation period, the income gap between student and labour migrants is estimated around 100,000 SEK. Family migrants and migrants in the residual category earn similar incomes over time in Sweden. Their income is lower than both student and labour migrants'. The gap between labour migrants and family migrants and migrants in the residual category is also considerable at roughly 50,000 SEK.
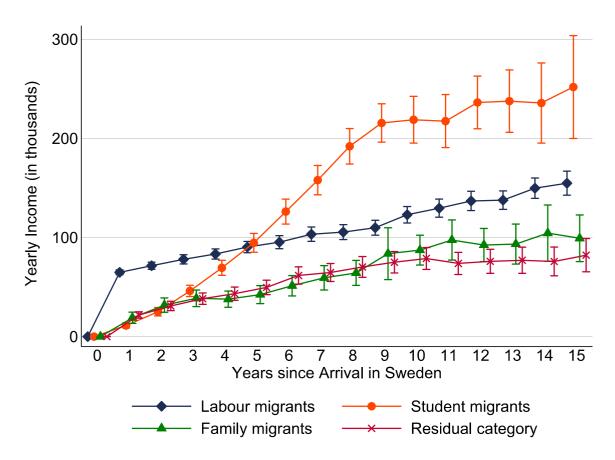
Fig. 4 Income trajectories over time in Sweden by reason for migration

Note that results are based on OLS regressions including controls for year since immigration, age at first migration, gender, a binary indicator for Swedish speaker and completion of the matriculation examination. Standard errors are clustered at the individual level, seeing that one observation per calendar year is analysed.

The results show that student migrants' income increases with time in the country and even surpasses that of labour migrants. This suggests that destination specific human capital and a social and professional network provides student migrants with valuable resources that pay off over time in the destination country. Additionally, student migrants become an increasingly selected group over time, seeing that many engage in temporary migration (see Figure 2). By contrast, labour migrants seem to lack such resources and have a more stable income trajectory over time in the destination country. Family and experience migrants have considerably lower incomes than student and labour migrants over time in Sweden. This may be accounted for by heterogeneity in preferences or other activities that preclude migrants

from working. For instance, family migrants may be engaged in household work or have lower preference in entering the labour market.

Conclusion

In settings of free mobility, the threshold to moving is low. This allows for a wider range of migration motives, settlement plans and integration patterns. Although the interplay between migration motives, temporary migration and integration is generally intricate, free mobility provides a novel setting where the interaction between these processes is particularly complex. Individuals relocate in higher numbers to enter university or to gain new experiences abroad and choose the destination and length of stay abroad in a different way from labour and family migrants. Such differences in motivation and ambition are reflected in temporary migration decisions and integration patterns. Studying the reason for migration in a context of free mobility thus allows us to gain a deeper understanding of dynamics underlying temporary migration and integration.

This paper used linked Finnish and Swedish register data to approximate the reason for migration using pre- and post-migration information. Information from some years before and after migration allowed us to determine individuals' main activities in the home and destination country and to gain insight into the migration motive. Moreover, the data allowed us to estimate return migration risks and circular migration and to capture migrants' long-term integration. Distinguishing between four different migration motives – labour, student, family and experience migrants – we demonstrated how temporary migration and economic integration differed between these groups.

We found clear differences in temporary migration patterns by reason for migration. Students were the most prone to migrate multiple times. This finding corroborates previous results on continued mobility among students, who participated in the Erasmus program

(King and Ruiz-Gelices 2003; Parey and Waldinger 2011). Among labour migrants, the likelihood to return migrate was high. However, labour migrants were less prone to emigrate for a second time than migrants who moved for other reasons. In the economic recession of the 1990s, labour migrants may have often returned when they could not locate work, which would explain the low prevalence of making a second emigration to Sweden. Family and experience migrants were less likely to return than labour and student migrants.

Our second main finding revealed that migrants, whose main motivation for relocating was work-related, tended to experience a smooth transition into employment. Migrants, who had other migration motives, followed more varied patterns of labour market integration. While some appeared to complete their schooling before entering employment, others moved for family or experience reasons and may have had lower overall ambitions to locate work in the destination country. Income trajectories showed that student migrants overtook labour migrants about five years after immigration. Access to destination specific human capital in addition to a social and profession network seem to promote student migrants' labour market integration.

This study has some limitations that we want to highlight. We approximated the reason for migration using a rather traditional typology. It may therefore be that we do not fully capture the breadth of migration motives. We also proxied the reason for migration at first migration and did not incorporate a dynamic set-up that would re-estimate the reason for migration separately for each move. Even though the reason for migration may change over time, such a dynamic framework would be increasingly complex to incorporate into the empirical analyses. We aimed at providing a framework that categorizes the most prevalent reasons for migration and hope that this can guide future research in analysing the broader scope of migration decisions in contexts of free mobility. It is important to stress also that we used individual level information and approximated social contacts. We could not observe

family members explicitly, nor did we have information on their personal characteristics. Including such information in data of this kind will be important for future research in this field.

Nonetheless, the findings more broadly underscore that it will be important to expand the focus of quantitative migration studies in a number of respects. First, investigating selection processes in circular migration will be important for gaining a deeper understanding of long-term integration, which is strongly impacted by selective return migration (Abramitzky, Boustan, and Eriksson 2014; Lubotsky 2007). Second, the intended and unintended consequences of institutions and policies governing migration between the home and destination country should receive more attention in the field and can be important for developing our understanding of the considerable heterogeneity observed in migration and integration experiences across contexts and between migrant groups (see also Drouhot and Nee 2019). Third, it will be important to incorporate both the home and destination country more prominently in empirical and theoretical research. Migration and integration are inherently linked and extend beyond the national context. In this way, focusing solely on one country provides only a partial understanding of these dynamics.

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Appendix

Table A1 Number of migrants who are recorded as labour or student migrants but overlap with other categories in Approaches 1 and 2

Approach 1	N	Approach 2	N
Student and **labour** migrants	5 215	Student and **labour** migrants	784
Family and **labour** migrants	2 981	Family and **labour** migrants	3 145
Family and **student** migrants	492	Family and **student** migrants	2 361
All migrants	20 678	All Migrants	20 678

Note. The category used in the analysis is indicated in bold.