# Who Migrates in a Context of Free Mobility? Assessing the Reason for Migration in Cross- <br> National Register Data from Finland and Sweden 

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#### Abstract

Free mobility allows greater diversity in motivations and settlement intentions in the migration decision by opening up migration as an opportunity to a wider range of individuals. This paper identifies the reason for migration using pre- and post-migration information available in linked register data, seeing that register data do not provide information on the reason for migration if individuals are free to move. Moreover, we analyse differences in continued migration patterns and labour market integration by reason for migration. Using linked Finnish and Swedish register data from 1988-2005, we study 20,678 Finnish migrants aged 19-30 at the time of their first move to Sweden. Our analysis reveals substantial diversity in continued migration patterns and labour market integration by reason for migration. Migrants who are classified as labour migrants have a high prevalence of return migrating to Finland, but are less likely to circulate than student and family migrants. Student migrants have the highest prevalence of return migrating and circulating out of all the groups, while family migrants have a low risk of returning. Results on labour market integration reveal that labour migrants find their first job relatively quickly after migration. However, they are overtaken by student migrants who have considerably higher earnings eight years after immigration.


## Introduction

The establishment of free mobility in Europe has spurred new research on the link between the reason for migration and settlement intensions as well as integration patterns. Considering the greater ease of movement due to open borders as well as the increasing interconnectedness between countries, scholars have advocated for the incorporation of more diverse migration motivations in empirical analyses (Favell 2008; King 2002). Indeed, empirical studies on migration from East to West Europe show that post-accession migrants are a diverse and not entirely predictable population. They exist within the same economic framework but formulate different strategies of migration and return (Burrell 2010; White and Ryan 2008). Alongside traditional circular and temporary labour migration, European Union expansion has given rise to new migrant types that are driven by experiential concerns, resulting in a more complex relationship between their economic and social integration in destination countries (Luthra, Platt, and Salamońska 2018). Especially noneconomic migrants seem to experience improvements in labour market 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. There is a clear need to expand the literature to other settings.

Many data sets lack information on pre- and post-migration characteristics. However, in an increasingly connected world it will become more important to get access to information that allows researchers to connect migrants' experiences in the home and host country. Scholars studying administrative data often rely on admission categories or the country of origin to approximate the reason for migration (Bevelander and Pendakur 2014; Bratsberg, Raaum, and Roed 2017; Kausar and Drinkwater 2010; Luik, Emilsson, and Bevelander 2016; Lundborg 2013; Ruiz and Vargas-Silva 2017; Sarvimäki 2017). This captures the legal framework along with barriers and support systems under which migrants enter, but may not always reflect the actual motivation insofar as the entry category is heavily shaped by legal constraints of the host country (Campbell 2014). In a setting of free mobility, migrants are not required to get a residence or work permit, which means that no official record on the primary purpose for moving is available. The country of origin is a problematic proxy for the reason for migration, considering that migrants from the same country of origin often have different motivations for moving. Although survey data often collect information on migrants' self-reported reason for
migration, these data sets do not provide reliable estimates on return migration risks and circular migration. The latter are important forms of migration in the context of free mobility. Migrants' self-reported reasons may also be misleading or simplify the more dynamic reasons underlying the migration decision, where factors pulling migrants to the host country and factors pushing migrants away from the home country depict the reason for migration in a complex way.

In this study we are able to analyse novel linked Finnish and Swedish register data that allow us to approximate the reason for migration in a dynamic way, building on information from before and after the move. The data cover the years 1988-2005 and provide detailed information on multiple moves undertaken by individuals. We focus on migrants aged 19-30 at the time of the first move to Sweden, thus including the bulk of movement. We distinguish between labour, student and family migrants as well as defining a residual category. We also demonstrate how the continued migration patterns differ by reason for migration. In a last step, we analyse the independent association between the groups and variation in early economic integration. In many European countries migrants constitute an increasing share of the total population and are highly represented in the working ages. Thus, labour market integration has received increasing attention among scholars and policy makers in Europe over recent decades. Finland and Sweden have been part of the Nordic common labour market since 1954 allowing Nordic citizens to move without barriers. In this way, the Nordic setting 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.

Disentangling the complex processes that drive migration and influence further movement and integration patterns among migrants is important. In Sweden, about one third of migrants were between the ages 20 and 29 in 2005. This pattern is similar in many other European countries. In France, 35\% of all migrants move between ages 20 and 29, and in Germany it is $31 \%$ (Eurostat 2018). Early adulthood includes several parallel processes such as migration, family and employment trajectories. These occur within a relatively short time and influence each other. This interplay makes it difficult to study one independently of the other (Sirniö, Kauppinen, and Martikainen 2017). However, little is known about how these processes relate to migration decisions (King 2002). There is consequently a need to gain a better
understanding of the factors that influence temporary migration and integration patterns in this age group.

In the next sections, review of previous work on the migration decision. Subsequently, we elaborate on the migration context analysed in this paper. Then, we describe our data and methods and present the empirical findings. We conclude with a summary of our results and a consideration of their practical and theoretical implications.

## Theoretical Background and Previous Literature

The large number of theories that has been developed in the field of migration indicates that the decision underlying migration is complex. However, it is instrumental in guiding predictions about both migration flows and migrants' incorporation into the host country (Zwysen 2018). Migrants moving to be closer to their partner may not have considered difficulties in entering the labour market abroad, while this may have been the main driving factor for labour migrants. Moreover, student migrants are unlikely to enter the labour market directly after immigration and if so, they may take part-time and lower earning jobs than labour migrants. For simplicity, we focus on four migration reasons in the discussion below: labour, student, family and experience migrants. This categorization is in line with the recent literature and builds on the idea that migration decisions are incorporated in life course decisions (Recchi 2005, King 2002). Moreover, they are expected to be linked to distinct temporary migration and integration patterns.

Labour migrants may move because of a job offer or because they expect to receive a higher income in the host country. Many of the traditional migration theories focus on labour migration. According to neoclassical economics, migrants relocate if the monetary benefits of moving outweigh the costs. Further, 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 host country (Harris and Todaro 1970; Sjaastad 1962). Although labour migrants are assumed to move for work, they endure psychic costs if the family stays at home. Labour migrants will therefore either initiate that their family joins them abroad, or will move back home to spend time with their family in the home country (Constant and Zimmermann 2011). According to
network theory, labour migrants have higher certainty of employment if they have contacts abroad, which may increase the likelihood of moving and further assist labour market integration in the host country (Massey et al. 1993).

There is a growing literature on student migration in Europe, which finds that student migrants are more mobile than many other migrant groups. Student migrants move to study abroad. They thereby move to accumulate human capital and to diversify their social and professional network. Student migrants are often younger than other migrant groups and tend to face fewer constraints to moving than individuals who have already formed a family. Although many student migrants return home after the completion of their studies, others remain in the host country to enter the labour market there. The migration theories that were discussed above do not explicitly include student migrants in their framework. Still, in extensions of neoclassical economics, scholars have theorized that migrants may 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. When looking for a job, migrants are also likely to move to a country in which their human capital pays off the most. If the credentials acquired have low pay off in other countries, individuals are more likely to stay. Beyond human capital, student migrants are likely to form social ties in the host country that perpetuate movement, as we would expect based on network theory. Evidence from students who participated in the Erasmus program, which provides students the opportunity to move abroad for a year and to study in another European country, shows that students who moved during their studies continue to be more mobile throughout their working career (Parey and Waldinger 2011). This result suggests that student migrants gain social contacts and experience that increases their chances of making subsequent moves.

Family migrants primarily base their decision to move on a partner or their family. Such migrants may move to be with their partner abroad or to start a family. Network theory posits that the family may join the migrant abroad, when the leading migrant has established the conditions necessary for her/his family's livelihood abroad.

Experience migrants' motive to move is founded on personal preferences, related to culture or other factors. This group has not been discussed in traditional migration theories and they are expected to be a rather diverse group. While pensioner migrants moving from the U.K.
to Spain have been discussed in a series of paper, young migrants may also be experience migrants (Klinthäll 2006)

## Migration Context

Finnish migrants constitute the second largest immigrant group in Sweden today, accounting for more than 150,000 persons (Statistics Sweden 2017). This high number is mainly the result of the large migration flow from Finland to Sweden in the decades following World War II (Hedberg and Kepsu 2003; Hedberg 2004; 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). In short, labour market opportunities were similar in Finland and Sweden. The Gini coefficient, which reflects the distribution of disposable income, is almost the same in Finland and in Sweden. Some Finns still move to Sweden to improve their economic position, but the gains made by moving are not high enough to create a strong incentive to move to Sweden for higher life-time earnings. However, considering the long history of labour migration from Finland to Sweden, many Finns have a strong in network in Sweden, which may increase their likelihood of moving. Finnish migrants, who move 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. Thus, barriers to migration between the two countries are low. The educational systems are similar in the two countries and a Swedish certificate is very likely equally recognized in Finland. However, the 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. Moreover, a minority of Finns grows up speaking Swedish (about 5\% of the
total population of Finland). Previous research reveals substantial differences in migration and integration patterns between Finnish and Swedish speaker. 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). Income and employment levels of Swedish-speaking Finns in Sweden are at parity with those of native Swedes, whereas the labour market performance of Finnish-speaking immigrants is inferior (Rooth and Saarela 2007). However, better labour market opportunities do not seem to be the sole explanation behind language-group differences in migration rates (Saarela and Scott 2017). Swedish speakers identify more with Sweden than Finnish speakers and fluency in Swedish makes Sweden more attractive as a destination country for Swedish speakers.

Previous research shows that among 19-25 year olds women have a higher risk of making the first emigration than men, while they have a lower risk of making the first return migration or circulating than men (Weber and Saarela 2019). Among 26-55 year olds, women are less likely to emigrate and to return migrate than men. Swedish speakers have a higher risk of emigrating (making the first emigration and second emigration) than Finnish speakers but a lower risk of return migrating (making the first return migration and second return migration). Unmarried persons are more likely to emigrate than married persons and are less likely to return migrate. Divorced individuals have a higher risk of emigrating than married ones. 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 but are not associated with the risk of circulating. Employment discourages migration of any type. The present paper is the first to study the reasons for migration between Finland and Sweden tries to capture the reason for migration.

## Hypotheses

The above discussion leads us to a number of expectations regarding temporary migration and labour market integration patterns by reason for migration in the Swedish-Finnish migration context. We expect that temporary migration is most common among student migrants.

Students are more likely to move back and forth between Sweden and Finland, since they tend to be younger and are more likely to have established a professional and personal network abroad.

In contrast, family migrants are expected to be the least likely to engage in temporary migration, as they move to establish, or to reunite with family. Social contacts and children have been shown to deter temporary movement (Weber and Saarela 2019). In this way, having a spouse and/or children in Sweden may contribute to lower chances of engaging in temporary migration among family migrants.

Among labour migrants, we expect that the likelihood of engaging in temporary migration falls somewhere between those two groups. Some labour migrants may return because they cannot find a job or because they have left their family behind. However, others may have low incentives to leave their job to return.

Experience migrants may 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 host 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.

When it comes to migrants' labour market integration, we expect that, Labour migrants enter the labour market faster than migrants who move for other reasons. Labour migrants' main motivation for moving is job related. Moreover, labour migrants, who did not find a job, are more likely to return home.

Student migrants are likely to enter the labour market a few years after arrival. They enter the University and enter the labour market once they complete their degree. While some return after finishing their studies, those who stay have a high likelihood of entering the labour market. Family migrants' labour market integration measured by time to first job is expected to lie between student and labour migrants. Although family migrants are expected to take longer to enter the labour market, they may find a job sooner than students. Still, their overall employment may be lower over time in the country than student migrants. Experience migrants are likely less closely linked to the labour market than other groups, as they move for the general experience of relocating.

Regarding migrants' income, we expect that labour migrants have the highest income in the first years after immigration. However, considering that student migrants attain qualifications
in the host country, their income surpasses labour migrants' over time in the country. Family migrants and experience migrants are expected to have somewhat lower incomes. They are more likely to have other contributing household members.

## Data

Our data set was constructed by integrating records of Finnish immigrants in Sweden from population registers in both Sweden and Finland. ${ }^{1}$ 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 $77.5 \%$ 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 $98 \%$ 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 immigrated 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 $10 \%$ sample of the Finnish population, we can also estimate the risk of first emigration. 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

[^0]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 is given at this age and serves as a prerequisite for entrance into university studies. We use 30 years of age as the upper age limit, seeing that more than two thirds of movement between Finland and Sweden occurs 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 moving to make new experiences present common alternatives.

## Methods and Descriptive Statistics

## Categorization

As mentioned before, our data set does not provide information on the reason for migration, because Nordic citizens moving between the Nordic countries do not have to report why they are moving. There are no official records containing information on the reason for migration among migrants in a setting of free mobility. However, considering that we have information from the sending and destination country, we have relatively good insight into characteristics 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 used in the analyses.

According to the first categorization (Approach 1), we identify labour migrants using measures of positive income before and after migration. Individuals are then 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 immigration, 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 primarily on previous work that has focused on labour migration. Disentangling labour migrants from the other groups is 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 and robust to corroboration exercises. 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 were employed in Finland before the move, and who were employed or had a positive income in Sweden in the year of the migration or the year after the migration. Student migrants (2b) are those who were registered as students in Finland prior to migration, and had 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 were married or lived with a partner and/or children in Finland prior to moving, or were recorded as married in Sweden after migrating or had 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).

Table 1 shows the number of individuals identified by 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 ( $13,203 / 20,678$, or about $60 \%$ ). About 3,000 migrants are classified as student migrants. Family migrants account for approximately 1,000 migrants and the residual category includes 3,000 migrants. The last column in the table provides the distribution based on Approach 2. We find that out of the 20,678 migrants, about 7,000 are labour migrants ( $36 \%$ ). More than 5,000 migrants are identified as student migrants and the remaining 3,000 and 4,000 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. In total, 7,244 migrants are identified as labour migrants according to both approaches and 1,914 as student migrants. 933 migrants are classified as family migrants and 1,838 migrants 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.

Below, we assess whether the classification described above is trustworthy in two different ways. First, Table 2 provides information on migrants' pre-migration characteristics by reason for migration. The last two columns show the characteristics of all migrants and of nonmovers. ${ }^{2}$ Non-movers are a sample of the Finnish population between ages 19 and 30, who have not made a previous move. Among labour migrants, we expect that employment is common the year prior to migration. We also expect that a considerable share is married. We expect that student migrants tend to be female, younger and Swedish speaking. Most are studying the year prior to migration and many have intermediate education. Few are married and are a child in the household prior to migration. Family migrants are also often female but tend to be older and more are married and are a household head or spouse in the year prior to migration. The employment is expected to be lower in the year prior to migration than labour migrants'.

Row 1 shows that about half of labour migrants are female. However, among student and family migrants, women are overrepresented and make up $70 \%$ and $65 \%$ of the groups, respectively. Migrants are on average 24 years old at first migration. Student migrants tend to be

[^1]two years younger. Swedish speakers are strongly overrepresented among all migrant groups, but especially so among labour and student migrants. The next panel show migrants' main activity in Finland in the year prior to migration. Nearly all labour migrants are employed (this is partly the result of how we define this group). Most student migrants are studying in Finland in the year before migrating (nearly 70\%). Among family migrants, more than half are outside the labour force before moving. About $25 \%$ are unemployed and $10 \%$ are employed. In the residual category, we similarly observe that a high number of migrants are outside the labour force or unemployed. However, $15 \%$ in this group also have missing information in their recorded main activity. The panel below provides migrants' education level. We find that $50 \%$ of labour migrants have intermediate education and about $25 \%$ each have low or high education. The majority of student migrants have intermediate education, while low education is the most prevalent among family migrants. In the residual category, two out of three migrants have low education. A small number of 19-30 year old Finns is married, but it is most common among family migrants. Nearly all other migrants are unmarried prior to migration. Two out of three labour migrants live in a single household or are a child in the household prior to migration. Student migrants commonly move out of their parental household, i.e., are a child in the household before moving. In contrast, nearly half of family migrants are the household head or spouse in Finland prior to migration. In sum, it seems that the groups fit with the previous literature.

As a second corroboration exercise, we analyse seasonality in temporary migration. Considering that temporary migration occurs in short time intervals, the month of the move can be informative when it comes to the reason for migration. We expect that seasonal patterns are strongest among student migrants who are expected to move in the fall when the academic year starts. In Sweden, the academic year starts in September and ends in early June. They are also more likely to return after having completed their degree in the spring. Among family and experience migrants, we expect that migration does not display any seasonal patterns, as their decision is linked to family considerations. Among labour migrants, we may observe some seasonality in movement as a large fraction of employment contracts start in the fall (ref). However, when compared to student migrants we expect to observe weaker or such patterns.

Figure 1 presents the month of migration for the four moves (emigration 1 and 2 and return 1 and 2) by reason for migration. Labour migrants are somewhat more likely to emigrate (for the first or second time) in the fall (top panel). We do not observe clear seasonal patterns in return migration. Strong seasonal patterns for student migrants. Student migrants predominantly move to Sweden (first and second emigration) in the fall, which coincides with the start of the academic year (second panel from the top). They are also more likely to return in June. Among family migrants (third panel) and migrants in the residual category (fourth panel), we observe no clear seasonal patterns.

## Outcomes

In line with previous work, we use event history analysis to capture temporary migration patterns as well as time to first job in the respective country (Weber and Saarela 2019). To study temporary migration, we estimate survival curves for four moves. We distinguish between the first emigration or the initiation of migration, the first return migration, the second emigration and the second return. We follow migrants for ten 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 emigration 1, i.e., the first move to Sweden, the risk group includes a sample of the Finnish population between ages 19 and 30, who have not made a previous move. For this move, the observation window starts when individuals become 19 years old. For subsequent moves, the observation window starts when individuals have made the previous move. For instance, for return 1, the observation window starts when individuals have emigrated for the first time. In this way, all individuals who have made a first emigration are considered under risk of returning.

We analyse two outcomes to capture migrants' labour market integration. First, we analyse time to first job using information on positive income in Sweden. We start observing migrants when they have arrived in Sweden and follow them over fifteen years in the country. Migrants are right-censored when they return to Finland, emigrate to a third country, die or at the end of the observation period in 2005. Second, we estimate income trajectories over time in the host country. We estimate OLS regressions on inflation adjusted income controlling for year since immigration, age at first migration, gender and a dummy indicator of whether the migrant
is Swedish speaking or not. Standard errors are clustered at the individual level, seeing that we analyse multiple observations per individual.

## Empirical Findings

## Temporary migration patterns

We begin by analysing temporary migration patterns by reason for migration. Figure 2 gives the survival curves by the reason for migration. The steepness of the curve indicates the timing and proportion of migrants who migrate. Panel A shows survival curves for emigration 1. We observe a gradual decline in the curves, indicating that the likelihood to initiate migration is relatively low. Among migrants who are classified as student migrants, the prevalence to move to Sweden is higher than among the other groups. Among labour migrants or those who fall into the residual category, the risk of moving is somewhat lower, but it is yet lower among persons classified as family migrants. Panel B presents the survival curves for return 1. We find that student migrants are the most prone to return migrate. Nearly 75\% return to Finland within ten years. They are followed by labour migrants represented by the solid black line. Family migrants and migrants in the residual category have a much lower risk of return migrating. Panel C shows that the prevalence of making a second emigration is highest among student migrants and lowest among labour migrants, but differences are moderate. In panel D we find that, conditional on having made the previous moves, the prevalence of making a second return is high. However, differences between the groups are small and few people make the second move.

In sum, Figure 2 reveals evidence in line with our expectation that student migrants are the most likely to engage in temporary migration. This may be the result of a number of factors. Student migrants acquire educational qualifications in Sweden and may be particularly likely to make social contacts while abroad. These provide a salient connection to Sweden and increase their likelihood to emigrate to Sweden for a second time. Student migrants also tend to be younger than other migrant groups and few have established a family prior to their first move (see Table 2). This is also a likely contributing factor to their higher mobility. Among labour migrants, the high likelihood to return suggests that many labour migrants have family or a social network at home to which they return after working some years in Sweden. Family migrants face
higher constraints to moving, as a spouse and children often add a level of complexity in realizing the move.

## Labour market integration

Next, we focus on Finnish migrants' labour market integration in Sweden. Figure 3 shows survival curves for time to first job in Sweden. We find that more than $90 \%$ of labour migrants have entered their first job within the first two years in Sweden. Student migrants take longer to enter the labour market; about $70 \%$ have entered the labour market after five years. We observe a considerable jump in the third year in the country, after which nearly $50 \%$ have entered the labour market. After ten years in the country more than $90 \%$ of those who have remained in the country have a job. Family migrants indicated by the dotted line also show a step-wise progression into the labour market. However, we also observe somewhat lower shares in the labour force 15 years after immigration. This may be due to higher engagement outside of the labour force and potentially lower preferences for working. Migrants in the residual category have the lowest share in the labour market by the end of the observation period.

This goes in line with our expectation that most study in Sweden and only get a job once they have finished their degree. This may be related to student migrants finishing a two-year Master's programs or starting to work part-time as they enter the second half of their Bachelor studies. Thereafter, student migrants enter the labour market in a step-wise fashion. Family migrants' longer time to first job may be due to higher engagement outside of the labour force and potentially lower preferences for working. This group is potentially very heterogeneous in its preferences and behaviours (experience migrants).

Beyond labour market entry, income trajectories over time in the host country provide another angle. Results from OLS regressions on inflation adjusted income are shown in Figure 4. We find considerable differences in income by reason for migration. In the first years after immigration, labour migrants tend to have a somewhat higher income than other migrants. However, after six years in the country student migrants overtake labour migrants and start to earn considerably higher wages. Family and experience migrants earn considerably lower wages than both labour and student migrants. Although their income also increases somewhat over the 15 -year period, the rise is small when compared to the other two groups.

## Conclusion

We find clear differences in temporary migration patterns by reason for migration. Students are the most prone to migrate multiple times. This finding corroborates previous results from Erasmus programs (Parey and Waldinger 2011). Among labour migrants, the likelihood to return migrate is high, but labour migrants are less prone to emigrate for a second time than the other migrant groups. In contrast, family migrants are less likely to return than labour and student migrants, but among those who have returned the prevalence of emigrating for a second time is relatively high. This may be related to social ties that family migrant establish in the host country. Experience migrants are likely to stay in Sweden after the first emigration.

Our second main finding is that labour market integration varies substantially by reason for migration. Approximating the reason for migration through the country of origin, therefore, seems problematic (Zwysen 2018). Differences may be accounted for by heterogeneity in preferences or other activities that preclude migrants from entering the labour market. For instance, student migrants move primarily to study and family migrants may be engaged in household work or have lower preference in entering the labour market. Finally, migrants in the residual category seem only loosely linked to the labour market. In sum, the motivation for migration figures centrally in distinct integration patterns and should be accounted for even when official records are not provided on this.

The analysis presented in this study has a number of limitations. First, we approximate the reason for migration using a rather traditional typology. Therefore, it may be that we do not fully capture the range of motivations that induce migrants to move in a setting of free mobility. Still, 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. Second, by using individual level information, we approximate social contacts and ties but cannot observe where the spouse lives or comes from. This will be important information in future research.

Notwithstanding, the findings presented in this study have a number of implications: First, analysing all migrants from the same country as one group is problematic. Some migrants move to stay in the host country and enter the labour market directly, while others aim to stay
only temporarily or to engage in other activities rather than working. Second, considering greater freedom of movement in the EU and seeing that the bulk of migration occurs between 19 and 30, which is a time when many individuals enter the labour market, leave their parental home, enter university, start cohabiting or form a family, analysing multiple pathways is important. This is something that would be great to look at more in future research. Third, many data sets lack information on pre- and post-migration characteristics. However, in an increasingly connected world this will become increasingly important information to get access to, allowing researchers to connect migrants' experiences in the home and host country.

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## Tables and Figures

Table 1. Overlap among Migrants

| Approach 2 | Approach 1 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Labour <br> Migrants | Student <br> Migrants | Family <br> Migrants | Experience <br> Migrants | 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 |
| Experience Migrants | 1,875 | 770 | 3 | 1,838 | 4,486 |
| Distribution based on Approach 1 | 13,023 | 3,231 | 1,153 | 3,271 | 20,678 |

Table 2. Composition of Migrant Types by Pre-migration Characteristics

|  | Labour <br> Migrants | Student <br> Migrants | Family <br> Migrants | Residual Category | All <br> Migrants | Non- <br> Movers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Female | 0.497 | 0.706 | 0.651 | 0.355 | 0.520 | 0.486 |
| Age at First Migration | 24.832 | 22.356 | 25.307 | 24.043 | 24.350 | 24.697 |
| Swedish speaker | 0.330 | 0.369 | 0.184 | 0.301 | 0.320 | 0.046 |
| Main Activity |  |  |  |  |  |  |
| Employed | 0.984 | 0.115 | 0.115 | 0.133 | 0.646 | 0.611 |
| Unemployed | 0.003 | 0.054 | 0.236 | 0.215 | 0.062 | 0.103 |
| Studying | 0.005 | 0.681 | 0.020 | 0.048 | 0.121 | 0.176 |
| Conscription | 0.001 | 0.038 | 0.014 | 0.029 | 0.012 | 0.027 |
| Outside the Labour Force | 0.006 | 0.126 | 0.548 | 0.423 | 0.132 | 0.097 |
| Missing information | 0.002 | 0.022 | 0.055 | 0.153 | 0.033 | 0.000 |
| Education |  |  |  |  |  |  |
| Low educ. | 0.260 | 0.001 | 0.718 | 0.650 | 0.314 | 0.232 |
| Intermediate educ. | 0.504 | 0.915 | 0.228 | 0.284 | 0.515 | 0.588 |
| High educ. | 0.236 | 0.084 | 0.054 | 0.066 | 0.171 | 0.180 |
| Marital Status |  |  |  |  |  |  |
| Married | 0.134 | 0.044 | 0.361 | 0.000 | 0.116 | 0.246 |
| Unmarried | 0.848 | 0.930 | 0.547 | 0.833 | 0.835 | 0.734 |
| Divorced | 0.017 | 0.003 | 0.039 | 0.014 | 0.016 | 0.020 |
| Unknown | 0.002 | 0.022 | 0.054 | 0.153 | 0.033 | 0.000 |
| Position in the Household Living in a Single |  |  |  |  |  |  |
| Household | 0.354 | 0.191 | 0.111 | 0.385 | 0.313 | 0.226 |
| Household head or spouse | 0.131 | 0.031 | 0.452 | 0.000 | 0.120 | 0.255 |
| Child in the Household | 0.320 | 0.669 | 0.132 | 0.269 | 0.353 | 0.281 |
| Living in cohabitation | 0.182 | 0.070 | 0.223 | 0.116 | 0.157 | 0.227 |
| Unknown | 0.014 | 0.040 | 0.081 | 0.231 | 0.057 | 0.010 |
| Observations | 7,244 | 1,914 | 933 | 1,838 | 11,929 | 199,193 |

Note. Zeroes reported in this table are the result of omission of the specific category from the summary statistics.

Figure 1. Month of Migration


Figure 2. Survival Estimates by Reason for the First Migration
a. Emigration 1

c. Emigration 2

Labour Migrants —— Student Migratnts $\qquad$ Family Migrants $\qquad$ Residual Cat.

Figure 3. Survival Estimates For Time to First Job


Figure 4. Inflation Adjusted Income Over Time in Sweden


Note. Results based on OLS regressions on inflation adjusted income controlling for year since immigration, age at first migration, gender, a dummy for Swedish speakers and the matriculation examination. Standard errors are clustered at the individual level as we analyse multiple observations per individual.


[^0]:    ${ }^{1}$ The permission number from Statistics Sweden is $8547689 / 181453$ and from Statistics Finland TK-52-215-11.

[^1]:    ${ }^{2}$ 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.

