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# Citation for published version:

Viry, G, Drevon, G, Masse, F, Gauthier, J-A, Kaufmann, V & Gumy, A 2024, 'Migration distance from birthplace and its association with relative income and employment share among heterosexual couples in Switzerland', *Population, Space and Place*. https://doi.org/10.1002/psp.2773

# **Digital Object Identifier (DOI):**

10.1002/psp.2773

Link: Link to publication record in Edinburgh Research Explorer

**Document Version:** Publisher's PDF, also known as Version of record

Published In: Population, Space and Place

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DOI: 10.1002/psp.2773

## RESEARCH ARTICLE

# Migration distance from birthplace and its association with relative income and employment share among heterosexual couples in Switzerland

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#### **Funding information**

Schweizerischer Nationalfonds zur Förderung der Wissenschaftlichen Forschung

#### Abstract

Among heterosexual couples, employment of the female partner may suffer from household migration often driven by the job of the male partner. Most research has traditionally focused on the distance moved after couple formation and has neglected how far partners live from their birthplaces. Recent life course research has shown that staying in, leaving or returning to the place of origin of one or both partners often reflects couples' work-family arrangements. This study contributes to this literature by examining the division of employment between partners and their relative contribution to household income according to migration distances. We analyse data from a national sample of economically active individuals living with heterosexual partners in Switzerland. When controlling for selectivity of migrant couples, the analysis confirms that long-distance household migration benefits men's relative earnings. Among couples who migrated within the same region, employment is more equally shared between partners than among other couples, including nonmigrant couples. The relative distance to birthplaces also matters. Women's contribution to household income is higher among couples in which men migrated close to women's birthplace and is lower among couples where women migrated close to men's birthplace compared to women in other couples. This study suggests that future research on household migration should consider important social ties and places beyond the 'last family move' and the mechanisms by which these ties and places influence couples' decisions about where to live together and economic outcomes.

#### KEYWORDS

distance, employment, gender, household, income, life course, migration, Switzerland, union formation

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## **1** | INTRODUCTION

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A long-standing literature shows that the male career takes precedence in location decisions amongst heterosexual couples. Female partners (hereafter 'women') are more likely to move than male partners (hereafter 'men') for starting co-residence, especially when partners live far apart (Van Der Wiel et al., 2023). When living together, women are also less likely to initiate the move and therefore more likely to experience 'tied' migration<sup>1</sup> than men (Boyle et al., 2009; Lersch, 2016; Shauman & Noonan, 2007). Previously employed women more often than men leave employment, sometimes temporarily, and experience earnings decline and interrupted careers following relocation. Cooke (2008) reported that the longterm negative effect of household migration on married women's earnings in the United States is similar to the effect of having a child.

Most studies on the employment consequences of household migration have compared migrant with nonmigrants couples and have neglected how far partners live from their birthplaces and support networks. A more recent life course literature argues that household migration should be understood beyond the household. within the context of the extended family and linked lives (Bailey et al., 2004; Coulter et al., 2016; Michielin et al., 2008; Mulder, 2018; Mulder & Gillespie, 2023). In this approach, it is not just the geographical distribution of labour-market opportunities that influences migration decisions of households and their work-family arrangements, but also the people and places to which they are attached. In particular, staying or returning close to the birthplace of one or both partners may reflect residential strategies that are associated with the division of labour within households, for example when dual-earner couples stay or move closer to (maternal) grandparents when having children (Blaauboer et al., 2011; Chan & Ermisch, 2015; Compton & Pollak, 2014; Van Der Wiel et al., 2023).

Building on this existing body of research, our study examines the division of employment between partners and their relative contribution to household income according to where the couple resides in relation to the birthplace of each partner and the place where the survey participant lived when the couple relationship started, before co-residence. In addition to the distance moved by the participant since the relationship started, we expect that the distances from the birthplaces are associated with the way partners share paid work and contribute to household income. Parents living close to the birthplace of one or both partners may share employment and contribute to household income more equally than those who live far away, because they may benefit from family support for childcare. Situations in which one partner moved to the other partner's birthplace for living together may however reflect more bargaining power by the partner who stayed still because of higher earnings or gender roles. The employment consequences of living far from the birthplace may also differ between men and women

because of the persistent gendered division of labour and labour market segmentation in Switzerland (see below).

The analysis focuses on a national sample of economically active individuals residing in Switzerland and living with a different-sex partner. These individuals participated in the MOSAiCH-ISSP survey and a follow-up survey in 2019. Data were therefore obtained from one member of the couple, referred hereafter as 'the participant'. Using a hierarchical clustering method, we developed a typology of five distinct patterns of couples' migration based on residential distances. We then analysed how these types of couples differ in the division of employment between partners and their relative contribution to household income, using Heckman-type selection models, controlling for selectivity of migrant couples and various covariates at both the participant and household levels.

Switzerland is an interesting country to investigate as it is characterised by a gendered division of labour, with many mothers of young children being nonemployed or having part-time jobs. Public childcare provision is under the responsibility of local authorities and can be insufficient and expensive in some areas. In this context, grandparents play an important role in informal childcare for employed mothers (Jappens & Van Bavel, 2012). Public education, childcare, health and welfare systems are organised at the local level (municipalities and cantons), which tends to discourage people, especially parents, to leave their regions of origin (Viry et al., 2008). The welldeveloped transport system reinforces this trend by facilitating interregion travel rather than relocation. At the same time, Switzerland has been characterised by pronounced international immigration since WWII, especially in metropolitan areas, fuelled by strong economic growth. As such, Switzerland has a higher percentage of population of immigrant background than any other European countries. People with one or both parents as immigrants constitutes a third of the Swiss population, while a guarter of the population was born abroad (Piguet, 2013). These national characteristics make Switzerland an interesting context to study how partners' migration is associated with their division of employment and relative earnings.

The next section begins by reviewing major approaches to household migration and discusses our contribution to literature. After describing the data and methodological approach, we present the typology of couple's migration patterns and the results of the statistical models. The final discussion returns to the key findings and the theoretical implications for studying household migration.

# 2 | APPROACHES TO HOUSEHOLD MIGRATION AND WHY DISTANCES FROM BIRTHPLACES MATTER

Sex disparities in the employment consequences of migration are often explained through three main perspectives: (1) the human capital and relative resource models; (2) the gender-role model and (3) the labour market structural model. We briefly outline each perspective before discussing the broader life course approach to household migration as the approach adopted in this study.

<sup>&</sup>lt;sup>1</sup>By migration, we refer here to moves from a different region or country. Both internal and international migration are therefore considered.

# 2.1 | Employment-focused approaches to household migration

The microeconomic model of human capital posits that couples migrate when the expected economic returns benefit the whole family, which may result in unequal benefits for both partners (Mincer, 1978). According to this model, men are prioritised in migration decisions because they often have higher wages and better job prospects. The expected gain in the man's earnings after migration must therefore outweigh the expected loss of the woman's earnings to generate higher family earnings. Noneconomic outcomes anticipated and experienced by migrant households, such as severing personal networks, are acknowledged by later versions of the human capital model as important costs or benefits of the decision to migrate (Jacobsen & Levin, 2000). These implications are, however, largely ignored in empirical applications. Evidence has shown that relative resources between men and women are insufficient explanations to account for gender inequalities in household migration decision-making. While women's high-status job and earnings attenuate the sex-based disparity, couples often move for the sake of the man's job even when women have a higher status occupation than their male partner (Boyle et al., 1999, 2009).

The gender-role model to household migration addresses the gender-blindness of the human capital model (Bielby & Bielby, 1992; Boyle et al., 2009). This approach views the influence of gender-role beliefs as central determinants of household migration decision making. Using a large sample from the British Household Panel Survey and controlling for relative resources between partners, Lersch (2016) found that women having a male partner with egalitarian gender beliefs were less likely to leave employment after household migration than those having a partner with traditional gender beliefs. No significant effects for men were however found. In support of this approach, Erickson and Kim (2021) estimated that the decline in internal migration in the United States since the 1990s is less explained by the increase of wives' income than by a shift toward egalitarianism with dual-earner couples being less willing to disrupt women's careers to benefit men's. By focusing on the gendered arrangements within the home, this approach has been criticised for ignoring the broader social and economic contexts in which households are embedded (Mulder, 2018; Shauman & Noonan, 2007).

A third approach to household migration partly addresses this issue by investigating the structure of the labour market and its association with gender inequality (Perales & Vidal, 2013; Shauman & Noonan, 2007; van Ham et al., 2001). It suggests that women's economic disadvantage after migration results from the occupational sex segregation within the labour market. Women are disproportionately employed in occupations that are geographically ubiquitous and associated with local labour markets. Conversely, men are more likely to be employed in occupations associated with national or international labour markets. Even with similar levels of income, men are therefore more likely to initiate and benefit from household migration than women. Studies that have analysed labour market characteristics remain inconclusive about the relevance of such labour market structures (Perales & Vidal, 2013; Shauman & Noonan, 2007). Moreover, while this approach departs from a focus on household arrangements, it continues to emphasise economic factors in household migration decisions – a critical point discussed in the next section on the life course approach.

# 2.2 | Life course approach to household migration

In the life course perspective, migration decisions and their employment consequences vary significantly by historical time and place, and with the timing of migration in relation to other life transitions, such as childbearing or job changes. Longitudinal panel studies have shown mixed results on the disruptive effects of household migration on women's careers. While some studies have identified long-term negative effect on women's earnings (Cooke et al., 2009), others have found no effect and sometimes even positive effect for some groups of women, depending on the geographical context, their level of qualification and their employment status before migration (Boyle et al., 2009; Lersch, 2013; Nisic & Melzer, 2016). When economic losses are observed, the disruption is sometimes short lived, with many women returning to premigration employment rates and earnings in the few years following migration (Blackburn, 2010a, 2010b; Clark & Withers, 2002). Such mixed results may be partly attributed to sample selection bias (see below).

Recent development in life course research claims that migration decisions should be understood as both economically and care-driven by incorporating the 'linked lives' of partners, children, parents and other members of the extended family and support networks of couples (Bailey et al., 2004; Coulter et al., 2016; Michielin et al., 2008; Mulder, 2018; Mulder & Gillespie, 2023). In this perspective, ties to families and friends influence migration decisions, alongside employment and other relevant factors such as cultural preferences. In turn, staying or moving for social and care needs has consequences on women's employment. Using two large datasets from the United States, Compton and Pollak (2014) found that the labour force participation by married mothers with young children increased by 4–10 percentage points when they lived near their mothers or mothers-in-law, which they interpreted as related to the availability of childcare.

While the literature on household migration has usually paid little attention to places of origin, evidence suggests that geographical proximity to parents is particularly important to location decisions, especially at the time of family formation to facilitate childcare from (maternal) grandparents (Blaauboer et al., 2011; Chan & Ermisch, 2015; Mulder et al., 2020; Van Der Wiel et al., 2023). In the United Kingdom, Chan and Ermisch (2015), however, estimated that the effect of parenthood on proximity to parents is small compared to partners' education, with less-educated partners living closer to their parents. They did not find any association between proximity to parents and partners' income share. Using a sample of parent couples of university students in Germany, Albrecht and Scheiner (2022) examined under what conditions couples stayed in, returned to or left

their hometown during the period of family formation, wherein 'hometown' is defined as the place where they spent most of their childhood and adolescence. They found that couples where both partners come from the same hometown are more likely to remain than couples coming from different hometowns. While the location of the woman's parents in the hometown is more important for returning, the location of the man's parents is more important for remaining.

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Distance from the birthplace of one or both partners is therefore likely to reflect residential strategies within households that are related to work-family arrangements and the division of employment between partners. Using a life course approach to household migration, this article integrates partners' birthplaces, which are usually not considered in studies on the economic implications of household migration. We examine partners' division of paid work and their relative contribution to household income according to where the couple resides relative to the birthplace of each partner and the place where the respondent lived before co-residence.

# 2.3 | Hypotheses

First, we expect that male partners work more hours for pay and earn more income than their female partners in couples who live far from birthplaces of both partners and from where the participant lived when the relationship started compared to other couples in the sample (H1). This is because many of these couples experienced household migration, which tends to prioritise the man's career. Second, we expect a more equal division of employment and relative contribution to household income between men and women in couples who live far from where the participant lived when the relationship started but close to the birthplace of one or both partners compared to other couples in the sample (H2). Informal childcare from support networks located at partners' birthplaces may facilitate mothers' participation in paid work. Moreover, the decision to move or stay close to the birthplace may be motivated by familyrelated reasons (e.g., living together) rather than by employmentrelated reasons, which tend to prioritise the man's career. Expectations are more uncertain for couples in which one partner lives far from her/his birthplace and the other partner close to it. Women who migrated close to the man's birthplace for educational or employment reasons before union formation may experience an economic benefit. But the woman's decision to move there may have been influenced by domestic reasons (e.g., living together) and by the priority given to the man's career, as suggested by literature. Mothers living far from their birthplace may also not benefit from their parents' support for childcare, which may affect their employment opportunities. Overall, we expect that women who live far from their birthplace and close to the man's birthplace work relatively fewer hours for pay and have a lower relative contribution to household income than other women in the sample (H3). For the same reasons, but with opposite roles between men and women, we expect that partners contribute more equally to employment and the household income when the man

lives far from his birthplace and close to the woman's birthplace than other couples in the sample (H4).

# 3 | DATA AND METHODS

#### 3.1 | Participants

We use cross-sectional data from the MOSAiCH-ISSP 2019 survey.<sup>2</sup> This data set includes a nationally representative sample of 3043 adults (18+) living in Switzerland who also completed the International Social Survey Programme (ISSP) questionnaire. Among them, 2032 respondents (66.8%) participated in a follow-up survey by returning a completed questionnaire specifically designed for this research project. Because of our focus on gender inequality and employment within heterosexual households, we selected participants who lived with a different-sex partner and who were in the economically active population, that is, excluding those in full-time education, retired or long-term sick and disabled, at time of the follow-up survey completion (N = 962). Data were obtained from one member of the couple, referred throughout the text as 'the participant'. We relied on the information reported by these participants regarding their partners and the couple relationships. Rates of missing data never exceeded 8% for all the variables examined but were particularly pronounced for the personal and household income, and, to a lesser extent, for some variables relating to the partner. Listwise deletion with couple-level variables resulted in a relatively high rate of missing data for the final models. After excluding participants with incomplete information on all the variables considered in the analysis (N = 256, 27%), the final sample consists of 706 participants.

We tested sampling bias by comparing the observations in this final sample and those of the ISSP representative sample after selecting participants living with a different-sex partner and who were not in full-time education, retired or long-term sick and disabled (N = 1480). We used binary logistic regressions (1. included in the final sample, 0. otherwise) with both individual- and couple-level predictors (see Supporting Information: Table A in Appendix). The results indicate only few statistically significant differences – most of them being commonly observed bias due to attrition in follow-up surveys. Young adults, small business owners (compared to those in service class), nonemployed people, those in couples in which neither partner has a tertiary education degree and those who moved to Switzerland more than 10 years ago (compared to those born in Switzerland) were less likely to participate in the follow-up survey and answer all the questions used in this study.

# 3.2 | Measures

The full list of variables is described in Table 1 and summarised below.

<sup>&</sup>lt;sup>2</sup>for more information, visit https://forscenter.ch/projects/mosaich.

#### TABLE 1 Descriptive statistics.

Variable	Descriptive statistics
Division of employment	Mean = 0.35; SD = 0.23; median = 0.38; Min = 0 (woman's lowest share); Max = 1 (woman's highest share)
Contribution to household income	Mean = 0.40; SD = 0.26; median = 0.38; Min = 0 (woman's lowest share); Max = 1 (woman's highest share)
Migration patterns	Nonmigrant couples = 32.01%; regional family migration = 30.03%; man migration = 13.88%; woman migration = 11.47%; highly mobile couples = 12.61%
Sex of respondent	Female = 48.44%; male = 51.56%
Age of respondent	Mean = 47.26; SD = 10.86; median = 47; Min = 23; Max = 80
Age difference	0-3 = 59.35%; 4-6 = 22.52%; 7+ = 18.13%
Children in the household	No child = 50.57%; one or more children below school age = 23.37%; all children above school age = 26.06%
Marital status	Married = 78.90%; never married = 15.58%; other = 5.52%
Relationship duration	Mean = 19.48; SD = 11.16; median = 18; Min = 0; Max = 56
Citizenship of respondent	Swiss = 74.93%; Swiss and other = 13.88%; other = 11.19%
Education (tertiary degree)	Both = 27.48%; only the man = 17.28%; only the woman = 10.62%; none = 44.62%
Social class difference	Mean = $-0.37$ ; SD = 1.67; median = 0; Min = $-5$ (man highest); Max = 5 (woman highest)
Social class	Both service class = 44.76%; service class and working class = 28.47%; both working class = 12.89%; other (small business owner) = 13.88%
Residential environment	Cities = 28.61%; towns and suburbs = 51.98%; rural and mountainous = 19.41%
Number of years in region	Mean = 28.39; SD = 17.41; median = 29; Min = 1; Max = 67
Born in Switzerland	Both = 64.02%; only the man = 15.44%; only the woman = 9.77%; none = 10.77%

Note: n = 706.

Abbreviation: SD, standard deviation.

#### 3.2.1 | Division of employment

Participants indicated the number of employment hours they and their partner usually work per week. This number was set to zero when participants reported that they or their partner were nonemployed or unemployed seeking jobs. The question specified that possible extra hours should be included, which may have increased the gap between men and women, as only in specific jobs people can decide about extra hours, and these jobs are more often performed by men than women. Division of employment was measured as the woman's share of the total number of employment hours by partners (her relative employment hours), creating a variable ranging from 0 to 1 (or 100%). In line with previous studies (e.g., Flèche et al., 2020), we considered this measure as a continuous outcome.

# 3.2.2 | Contribution to household income

Participants were asked to report their personal and household monthly net income, including all sources (e.g., employment wage, welfare benefits, investment earnings) in eleven categories, with one category being no income. Using the middle value for each category, we converted income ranges to income levels. Since the highest category had no upper boundary, we used the same interval as the second highest. Relative contribution to household income was measured as the woman's share of the total household income, creating a variable ranging from 0 to 1 (or 100%). In line with previous studies (e.g., Vidal et al., 2017), we considered this measure as a continuous outcome. This measure may poorly capture the relative contribution to household income of the two partners when other household members receive income. Although this information was not available, we think that there are few such households in the sample given the selection of individuals in the economically active population and common types of family living arrangements in Switzerland (e.g., few multigenerational households). Because participants could report income from other sources than employment, it is possible that women's lower contribution to household income may be partly explained by gender differentials in inheritance and properties.

## 3.2.3 | Migration patterns

Participants provided information on four residential locations: (i) where they were born; (ii) where their partner was born; (iii) where they lived when the relationship started (information not available for partners); and (iv) where they currently live. The location of parents was unknown. Participants reported the municipality for locations in Switzerland, and the place and country for locations abroad. Switzerland has more than 2000 municipalities and the area covered

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by each is generally small (median: 7.3 square kilometres). We geocoded all locations, using the centroid of municipalities for Switzerland, and calculated four residential distances in kilometres to characterise the couples' migration patterns: (i) the distance between the man's and the woman's birthplaces; (ii) the distance between the current place of residence and the place where the participant lived when the relationship started; (iii) the distance between the current place of residence and the man's birthplace (man's migration distance); and (iv) the distance between the current place of residence and the woman's birthplace (woman's migration distance). We transformed distances to logarithmic form to correct for the skewed distribution of distance (many relatively short distances and a few long distances) and to reduce the effects of outliers. We ran a principal component analysis (PCA) on log distances using the library FactoMineR in the statistical environment R (Lê et al., 2008; R core team, 2022). As a data reduction technique, PCA aims to identify a reduced set of latent variables, called principal components, which contain most of the variation present in the original variables. We then performed a Hierarchical Clustering on Principal Components integrated into FactoMineR to group participants into homogeneous clusters (according to Ward's criterion) representing typical migration patterns (see PCA results based on the first four principal components in Supporting Information: Figure A in Appendix). We chose a 5-cluster solution based on inertia gains and interpretability of the clusters: (1) Nonmigrant couples; (2) Regional migration; (3) Man migration; (4) Woman migration and (5) Highly mobile couples. We interpreted the patterns based on the summary statistics of distance scores by cluster and by visually inspecting the geographical distribution of the residential locations of the paragons and distinctive cases on maps. Paragons are the individuals closest to the gravity centre or centroid of their cluster (the most 'typical' case). They are the best representatives of their cluster in terms of the log distances examined. Distinctive cases are the individuals farthest from the centres of the other clusters and represent ideal types of their cluster. We created dummy variables corresponding to each migration pattern for inclusion in the statistical models. Two important limitations of this approach deserve to be mentioned. First, we have no information about when the moves occurred, whether there were multiple moves and which partner moved towards the other partner for co-residence. For example, if we observe that the man migrated close to their female partner's birthplace (Man migration type), we do not know if he migrated close to her, as she could be living elsewhere when the relationship started. Second, we have partial information about the first move for the couple to form a co-resident couple, because we only know where the participant lived when the relationship started, not the partner. This first location decision is already indicative of the relative importance of both partners' ties to employment and family. In our previous example, we know whether the man's migration occurred after union formation (e.g., for starting co-residence) or before it only if the man was the survey participant, because we know where he lived when the relationship started. Similarly, if the couple lives far from where the participant lived when the relationship started, we

cannot be certain that these couples moved together from this place (and therefore experienced household migration), or whether the participant moved alone. Household migration is however likely when the participant lived close to the partner's birthplace and far from where the couple will eventually reside. This scenario is supported by literature from the Netherlands and Sweden showing that most partners live close to each other before cohabitation (median distance of 6–9 km), with only a few living a long distance apart, especially in peripheral areas (Haandrikman et al., 2008; Haandrikman, 2019).

## 3.2.4 | Sociodemographic variables

The study controlled for a range of sociodemographic characteristics of the participants and their partners. Where possible and relevant, the variables were measured at the couple level and on a continuous scale. Participants' age was recorded as age at time of survey completion. Age difference between partners was included in three categories: 0-3, 4-6, 7+ years, since couples where men are significantly older than women are expected to be less egalitarian due to men's higher labour market experience. Participants' gender was included as a binary indicator (female/male) to control for sex differences in reporting the couple situation and adjust for any such reporting bias. There is evidence from Switzerland that gender norms may influence how participants report women's income share (Roth & Slotwinski, 2019). Controlling for sex differences in reporting may be particularly important for couples in which either the man or the woman is an international migrant, as the native partner may be more likely to participate in the survey. The presence of children in the household was measured using three categories: no child present in the household, one or more children below school age present in the household, all children above school age present in the household. Marital status was a 3-category indicator: married, never married and other (widowed, divorced or separated but still married). Relationship duration was included as a continuous variable (median of 18 years). Citizenship of respondents included Swiss, Swiss and other citizenship, and other. Citizenship information was not available for partners. Completed education was measured at the couple level in four categories: both partners have a tertiary degree (university or vocational tertiary degree, ISCED 5+), only the man, only the woman and none. We used information about the last occupation of participants and their partners to build two variables of social class at the couple level. We first stratified individuals into five classes according to Oesch's class scheme (Oesch, 2006): 0. never been employed; (1) unskilled workers; (2) skilled workers; (3) small business owners; (4) lower-grade service class; (5) higher-grade service class. The first variable measured social class difference between partners as a score ranging from -5 (man highest) to 5 (woman highest), with 0 meaning that both partners are of the same class. The second variable combined the social class of both partners in four categories: both partners in the service class, one partner in the service class and the other partner in the working class, both partners in the working

class, and other (one or both partners as small business owners). Those who had never been employed were grouped with workingclass people.

# 3.2.5 | Residential variables

We controlled for residential environment because women's participation in the labour market is higher in city centres than in suburban and rural areas (e.g., Boterman & Karsten, 2014), using the Eurostat Degree of Urbanisation Classification<sup>3</sup> in three categories: cities, towns and suburbs, and rural and mountainous areas. Since our measure of couples' migration patterns does not specify when migration events occurred, the analysis controlled for the number of years participants had lived in their current region as a continuous indicator. We defined a region within a radius of 20 km, which corresponds to a standard employment area in Switzerland based on commuting flows (OFS, 2019). This information was not available for partners. Finally, we controlled for whether participants and their partners were born in Switzerland or abroad to evaluate the effects of migration patterns net of the effects of national border crossing. This was included in four categories: both partners were born in Switzerland, only the man, only the woman, none.

The descriptive statistics of the sample are reported in Table 1. On average, participants were 47 years old and in couple relationships for 19 years. Women contributed to an average 40% share of the total number of employment hours and 35% of the household income. Said differently, on average, men earn about 86% more than women. Approximately 52% of the sample were male and 79% were married. In almost two thirds of the couples, both partners were born in Switzerland and 89% of the respondents had a Swiss nationality, including 14% of binational residents.

#### 3.3 | Analyses

We estimated a series of regression models to test the association between migration patterns and the two economic indicators, namely division of employment and contribution to household income, adjusting for various covariates at both the respondent and household levels. We used treatment effect models implemented in the package sampleSelection in R (Toomet & Henningsen, 2008). These models are an extension of standard Heckman selection models and a version of Tobit-5 models (Amemiya, 1984; Heckman, 1976), which are used to correct the endogeneity issue resulting from sample selection bias, such as self-selection of migrants (see e.g., Sun et al., 2021). Research has clearly established that migrants differ from nonmigrants in unobserved characteristics that affect women's participation in labour market and earning (Boyle et al., 2009). Said differently, couples characterised by specific migration patterns could be selected couples in terms of partners' desire and ability to be employed, and in their way of sharing employment. For example, there is clear evidence that household migration is more likely when women are not employed before moving compared to when they are (Erickson & Kim, 2021). Rather than migration reducing women's labour market participation and relative earnings, women who were previously nonemployed or earned significantly less than their male partners may be more likely to engage in household migration than well-paid women. The disruptive effects of household migration on women's employment may also be overstated when migration decisions are associated with fertility intentions, as observed by Vidal et al. (2017). Failing to control for these differences may cause researchers to confuse migration effects and self-selection bias. This is especially true when using cross-sectional data, due to the vast amount of unobservable data, such as women's employment status before migration.

We ran a series of models testing the effect of each migration pattern (except nonmigrant couples) on the division of employment between partners and their relative contribution to income. Since men tend to earn more and work more hours for pay than women. these variables are fairly right-skewed (employment: skewness = 0.4; kurtosis = 3.8; income: skewness = 0.5; kurtosis = 2.8), which represents a mild violation of the assumption of normal distribution required in regression models. Like other Heckman-type selection models, a treatment effect model consists of a two-stage regression. As a first stage, the selection equation is a probit regression that predicts the probability of a couple to follow a specific migration pattern (dummy variable: migration pattern: 1 = yes; 0 = no) using sex, age, citizenship, couple's education and couple's social class, as these sociodemographic factors proved to be important predictors of migration. In the second stage, we regress the division of employment or contribution to household income on the migration patternspecific dummy variable, controlling for the complete set of covariates (outcome equation). A positive estimated coefficient indicates that, after controlling for other factors, couples with this migration pattern are associated with women's higher share of employment or higher contribution to household income compared to other couples in the sample (reference group), including nonmigrant couples who form the largest group. Conversely, a negative coefficient indicates a lower contribution to employment or income by women in couples with this migration pattern.

As in Heckman-type selection models, the treatment effect procedure accounts for the endogeneity issue by adding a correction term (inverse Mills ratio) calculated from the selection equation to the outcome equation. However, contrary to a standard Heckman selection model where we observe the outcome variable only for the self-selected subsample, here we observe the division of employment or contribution to household income for both couples with and without a given migration pattern. To account for endogeneity, we assume a possible correlation between the error terms of the selection equation and the outcome equation due to unobserved heterogeneity. The significance of the estimated correlation coefficient (denoted rho) for half of the models indicated

<sup>&</sup>lt;sup>3</sup>See http://ec.europa.eu/eurostat/ramon/miscellaneous/index.cfm?TargetUrl=DSP\_ DEGURBA.

a systematic selection bias and justified the use of such models. A negative rho indicates that the migration self-selection effect is underestimated by an ordinary model where selection mechanisms are not considered. All models are estimated with the maximum likelihood method using the Newton-Raphson algorithm. Results are reported with regression coefficient estimates and standard errors for the selection and outcome equations.

# 4 | RESULTS

# 4.1 | Migration patterns

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The PCA-based hierarchical clustering in FactoMineR identified five distinct clusters, hereafter 'migration patterns', based on the log distances between the four residential locations of partners. Table 2 displays the median scores of the four residential distances by migration patterns. The table also includes the proportion of Swissborn (vs. foreign-born) men and women by migration patterns. Figure 1 displays the boxplots of the four log distances by migration patterns. Figure 2 presents the geographical maps of the four residential places of the paragons for each pattern and Figure 3 displays the first five paragons of the 'Regional migration' pattern, as the most heterogeneous group. Median distances for the full sample indicate that couples live, on average, closer to the man's birthplace than to the woman's birthplace (25 km against 40 km). This is similar to findings from the Netherlands (Blaauboer et al., 2011) and Norway (Løken et al., 2012), but contrasts with findings from the United Kingdom and United States (Chan & Ermisch, 2015; Compton & Pollak, 2014) where couples lived closer to the woman's parents than to the man's parents.

The first pattern, 'Non-migrant couples', constitute about a third of the sample. This group is characterised by low residential mobility

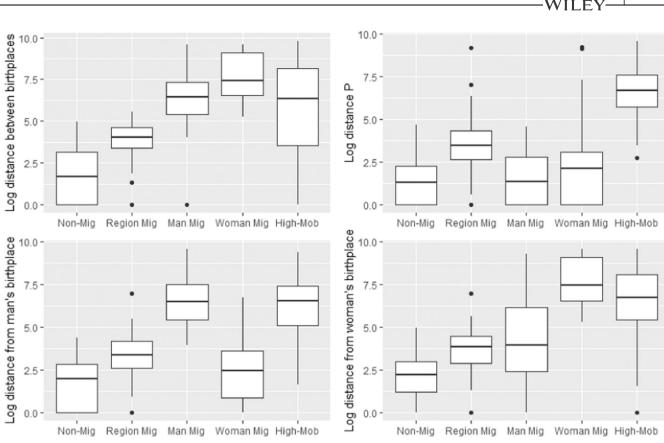
of both partners, with all median distances situated within the range of 10 km. These couples live near their birthplaces located in Switzerland and to the place where the participant lived when the couple relationship started (denoted P in the tables and figures). The paragon of this pattern is a couple where both partners were born and remained in the city centre and suburbs of Geneva (Figure 2). Couples of the second pattern, 'Regional migration', constitute the second largest group accounting for 30% of the sample. They have two main characteristics. First, they live relatively far from the place where the participant lived when the relationship started with a median distance of 32 km, the second highest of the sample. Some of these couples may have moved together from this place, experiencing household migration, but the participant may also have moved towards their partner to start co-residence. Second, they live relatively close to both birthplaces (both located in Switzerland for most couples), although not as close as in the previous pattern. The geographical maps of the first five paragons of this pattern (Figure 3) show that these couples tend to live in the birth region of both partners. Some couples live in a place located between the two partners' birthplaces, while other couples live closer to the man's or the woman's birthplace, but not within either location. On average, they tend to live closer to the man's birthplace (median distance of 29 km) than to the woman's birthplace (46 km). The paragon of this pattern illustrates this tendency (Figure 2). The third 'Man migration' category is a smaller group (14% of the sample) constituted by couples in which the man migrated close to the woman's birthplace (median migration distance of 667 km) and the woman lives within a short or middle-distance from her birthplace (median distance of 53 km, although there is a high dispersion of distance scores as indicated by the boxplot). These couples live close to the place where the participant lived at the start of the relationship (median distance of 4 km). About 28% of men and 66% of women in this group were born in Switzerland. The paragon of this pattern is a couple where the

TABLE 2	Description of migration patterns	by residential distances	(median, in km) and	d proportion of Swiss	-born men and women (%).

	l Non-migrant couples	ll Regional migration	III Man migration	IV Woman migration	V Highly mobile couples	Total
Ν	226	212	98	81	89	706
% Sample	32.01	30.03	13.88	11.47	12.61	100
Man's birthplace – woman's birthplace	5.3	55.0	624.1	1649.9	561.5	62.2
P - current residence	3.6	31.6	3.9	8.2	793.4	12.8
Man's birthplace – current residence	7.2	28.6	667.0	11.4	673.0	24.6
Woman's birthplace – current residence	9.1	46.3	52.5	1736.1	842.0	39.8
Man born in Switzerland	100	97.6	27.6	95.1	27.0	79.4
Woman born in Switzerland	99.6	96.2	66.3	3.7	27.0	73.8

*Note: n* = 706. Figures rounded to one decimal place.

Abbreviation: P, place where the participant lived when the relationship started.



n = 706. P = place where the participant lived when the relationship started.

**FIGURE 1** Boxplots of residential log distances by migration patterns.

man was born in Rotterdam. Netherlands, and the woman was born in Lucerne in central Switzerland, where she lived when the relationship started (Figure 2). At the time of the interview, they lived in a small town about 75 km away from Lucerne. The fourth pattern, 'Woman migration', is like the previous group but with opposite roles between men and women. The man lives close to his birthplace (median distance of 11 km) while the woman migrated a median distance of 1736 km. Like in the previous group, these couples live close to the place where the participant lived at the start of the couple relationship (median distance of 8 km). Almost all the men (95%) were born in Switzerland and all the women (96%) were born abroad. The paragon of this pattern is a couple where the woman was born in a city in Western Ukraine and the man was born in the city of Zurich, where he lived when the relationship started. They moved to the suburbs of Zurich (Figure 2). The final pattern named 'Highly-mobile couples' is characterised by couples where both partners migrated long distances. They live far from both birthplaces and far from the place where the participant lived when the relationship started (median distance of 793 km, the highest of the sample). Like in the previous two groups, partners tend to come from different regions or countries with a median distance of 562 km between their birthplaces, although the boxplot indicates a high dispersion of distance scores. A minority were born in Switzerland: 27% for both men and women. Many of these couples likely

experienced household migration when the participant lived close to the partner's birthplace when the relationship started, as illustrated by the paragon of this group (Figure 2). The woman was born in a small village in Thuringia, Germany, and the man was born in Berlin, about 270 km farther north-east, where the woman lived when the relationship started. They then migrated to a small town in Switzerland, about 40 km away from Zurich.

# 4.2 | Multivariate treatment effect models

Table 3 displays the results of the treatment effect models. The results of the selection equations in the top part of the table show that female participants, Swiss citizens and couples where only the woman has a tertiary education degree (compared to couples with two tertiary degrees) are more likely to be in the 'Regional migration' class (pattern II), whereas couples where one partner has a service-class job and the other has a working-class job are less likely to follow this migration pattern compared to those with two service-class jobs. Respondents with a dual citizenship or a non-Swiss citizenship are more likely to be in the 'Man migration' category (pattern III). Couples in the 'Woman migration' group (pattern IV) are associated with male participants (the native partner), dual citizens and couples with two working-class jobs,

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Source : MOSAiCH 2019 survey.

Woman

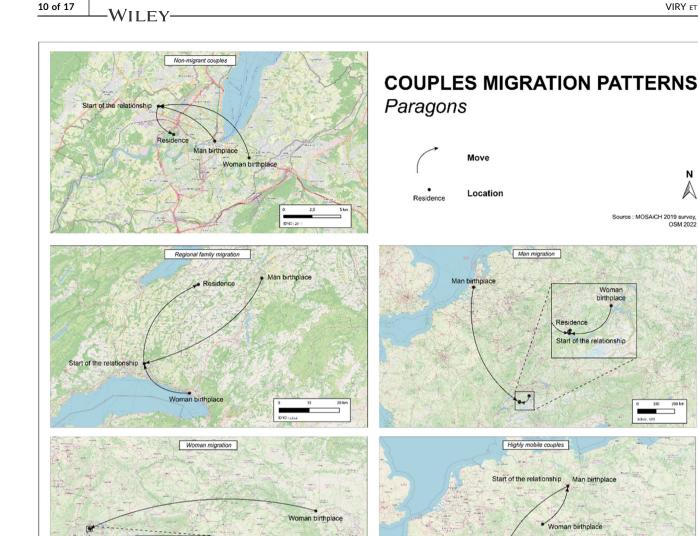


FIGURE 2 Geographical maps of the first paragon for each migration pattern.

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Residence

whereas couples with no tertiary education degree and those where only the man has a tertiary education degree are less likely to be in this category. Finally, non-Swiss or dual citizens, older respondents, those in couples with two tertiary education degrees and couples with one working-class job and one service-class job (compared to couples with two service-class jobs) are more likely to be in the highly mobile couple category (pattern V). In sum, couples in the 'Regional migration' group (pattern II) are characterised by two service-class jobs and the woman tend to be more educated than the man. The 'Woman migration' and 'Highlymobile' categories (patterns IV and V) are characterised by highly educated partners who are not both in the service class: one partner has often a working-class job. Couples in the 'Man migration' group (pattern III) do not differ from the rest of the sample with respect to occupations and education levels.

The results of the outcome equations in the bottom part of Table 3 show significant associations between partners' migration patterns, their relative earnings and the division of employment. Compared to the rest of the sample, women in the 'Regional migration' group (pattern II) work more hours for pay relative to their partner (b = 0.210, SE = 0.056), but do not contribute a higher share of the household income. Women in highly mobile couples (pattern V) contribute a lower share of household income (b = -0.249, SE = 0.082), even though their share of employment hours is not significantly different from other women in the study. The relative distance to partners' birthplaces also matters. Compared to women in other types of couples, women contribute more to household income when the man migrated close to the woman's birthplace (pattern III) (b = 0.302, SE = 0.065), while women contribute less to household income when they migrated

Residence

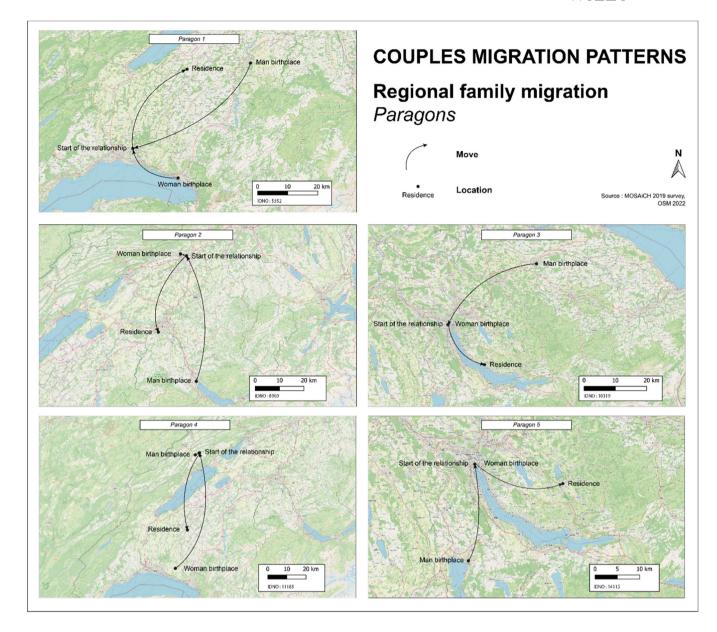


FIGURE 3 Geographical maps of the first five paragons of the 'Regional family migration' pattern (pattern II).

close to the man's birthplace (pattern IV) (b = -0.180, SE = 0.082). No significant difference in the division of employment was observed for these two migration patterns.

Beside migration effects, there is strong evidence that female participants reported contributing a higher share of the household income and employment hours than male participants. It remains unclear whether this sex difference in reporting varied with the division of employment and earnings between partners. The analysis also shows that a range of sociodemographic, household and residential characteristics are associated with partners' relative contribution to employment and household income. These effects are in line with existing literature. Women's share of employment is higher among never-married couples, those living in cities, without children, with two tertiary education degrees, when the woman is of a higher social class than the man and when participants are dual citizens. Women's higher contribution to household income is found among couples living without children, when only the woman was born in Switzerland, when both partners have working-class jobs or when one or both partners are small business owners, whereas women contribute less to household income among couples with no tertiary university degree.

# 5 | DISCUSSION

This research examined the role of migration distances on the division of employment between partners and their relative contribution to household income among co-resident heterosexual couples living in Switzerland. Considering geographical distances between their current place of residence, the birthplace of each

b Variables Reg Selection equation	U.										Contribution to nousehold income					
Selection equation	Regional migration		<i>b</i> SE Man migration		<i>b</i> Woman miş	SE <i>k</i> migration H	b SE Highly mobile couples	SE e couples	b SE Regional migration		<i>b</i> SE Man migration		b SE Woman migration		<i>b</i> SE Highly mobile couples	SE e couples
Constant –C	-0.664*** (	(0.257)	-1.394*** (0.311)	* (0.311)	-1.421*** (0.331)	(0.331)	-2.158***	(0.377)	-0.579**	(0.258)	-1.251*** (0.303)	(0.303)	-1.424*** (0.325)	(0.325)	-2.202***	(0.371)
Woman (ref. man) C	0.230*** (	(0.104)	0.103	(0.124)	-0.371***	(0.135)	0.012	(0.142)	0.199*	(0.105)	-0.057	(0.125)	-0.453*** (	(0.138)	-0.026	(0.141)
Age C	0.005 (	(0.005)	0.000	(900:0)	0.006	(900.0)	0.016**	(0.007)	0.003	(0.005)	0.000	(900.0)	0.005	(900.0)	0.017**	(0.007)
Swiss and other –C citizen (ref. Swiss citizen)	-0.607*** (	(0.160)	0.615*** (0.158)	* (0.158)	0.633***	(0.167)	0.799***	(0.179)	-0.568***	(0.160)	0.636*** (0.154)	* (0.154)	0.642*** (	(0.167)	0.811***	(0.178)
Other citizen –1	-1.501*** (	(0.292)	0.605*** (0.180)	* (0.180)	0.115	(0.207)	1.823***	(0.183)	-1.594***	(0.312)	0.635*** (0.174)	(0.174)	0.154	(0.202)	1.821***	(0.181)
Education (tertiary C degree): Only man (ref. both)	0.145 (	(0.164)	0.302	(0.188)	-0.689***	(0.238)	-0.319	(0.212)	0.164	(0.166)	0.274	(0.185)	-0.689*** (	(0.236)	-0.417*	(0.217)
Education (tertiary C degree): Only woman	0.377** (	(0.188)	0.066	(0.223)	-0.042	(0.227)	-0.624**	(0.272)	0.370*	(0.191)	0.105	(0.214)	-0.019	(0.224)	-0.668**	(0.265)
Education (tertiary C degree): None	0.122 (	(0.146)	-0.078	(0.177)	-0.352*	(0.180)	-0.717***	(0.202)	0.122	(0.149)	-0.023	(0.171)	-0.323*	(0.176)	-0.770***	(0.200)
Class: Service class -C - working class (ref. both service class)	-0.320**	(0.133)	0.099	(0.156)	0.287	(0.176)	0.318*	(0.190)	-0.314**	(0.136)	0.042	(0.151)	0.334*	(0.174)	0.360*	(0.190)
Class: Both working class	-0.196 (	(0.163)	-0.299	(0.224)	0.674***	(0.194)	0.052	(0.245)	-0.216	(0.169)	-0.356*	(0.210)	0.726*** (0.193)	(0.193)	0.119	(0.232)
Class: Other (small –C business owner)	-0.202 (	(0.185)	0.119	(0.211)	0.325	(0.238)	0.234	(0.249)	-0.181	(0.194)	-0.028	(0.207)	0.399* (	(0.229)	0.296	(0.245)
Outcome equation																
Constant C	0.296*** (	(0.064)	0.372*** (0.060)	(090.0)	0.367*** (0.060)	(090.0)	0.365***	(0.059)	0.304***	(0.079)	0.289*** (0.068)	(0.068)	0.311*** (0.067)	(0.067)	0.304***	(0.067)
Regional migration C	0.210*** (	(0.056)							0.004	(0.139)						
Man migration			-0.011	(0.120)							0.302*** (0.065)	(0.065)				
Woman migration					0.000	(0.125)							-0.180** (	(0.082)		

**TABLE 3** Results from the multivariate treatment effect models.

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	CE CE	JL le couples	(0.082)	(0.019)	(0.001)	(0.022)	(0.025)	(0.027)	(0.022)	(0.029)	(0.044)	(0.001)	(0.001)	(0.021)	(0.028)	(Continues)
	2	Highly mobile couples	-0.249***	0.229***	0.001	-0.012	-0.019	-0.060**	-0.054**	0.018	0.015	0.001	0.000	-0.008	0.033	
	£	ы gration		(0.019)	(0.001)	(0.022)	(0.025)	(0.027)	(0.022)	(0.029)	(0.044)	(0.001)	(0.001)	(0.021)	(0.028)	
	2	Woman migration		0.216***	0.001	-0.009	-0.021	-0.056**	-0.049**	0.022	0.016	0.000	0.000	-0.009	0.029	
	ų			0.225*** (0.020)	(0.002)	(0.022)	(0.025)	* (0.026)	(0.022)	(0.029)	(0.044)	(0.001)	(0.001)	(0.021)	(0.028)	
	hold incom	Man migration		0.225**	0.001	-0.013	-0.019	-0.069*** (0.026)	-0.056**	0.021	0.023	0.000	0.000	-0.013	0.021	
	n to nouse SF	ы gration		(0.020)	(0.001)	(0.022)	(0.025)	(0.027)	(0.022)	(0.029)	(0.044)	(0.001)	(0.001)	(0.021)	(0.028)	
	Contribution to household income	Regional migration		0.230***	0.001	-0.012	-0.021	-0.063**	-0.054**	0.021	0.021	0.000	0.000	-0.011	0.024	
	£	эс e couples	(0.075)	(0.016)	(0.001)	(0.019)	(0.023)	(0.024)	(0.020)	(0.026)	(0.039)	(0.001)	(0.001)	(0.019)	(0.025)	
	-	Highly mobile couples	-0.019	0.086***	0.001	-0.015	0.017	-0.146***	-0.087***	0.086***	0.005	0.000	0.000	-0.032*	-0.031	
	CE CE			(0.018)	(0.001)	(0.019)	(0.023)	(0.024)	(0.020)	(0.026)	(0.039)	(0.001)	(0.001)	(0.019)	(0.025)	
	2	Woman migration		0.088***	0.001	-0.015	0.019	-0.147*** (0	-0.088*** (0	0.087*** (0.	0.009	0.001	0.000	-0.032*	-0.032	
	CE CE			0.086*** (0.016)	(0.001)	(0.019)	(0.023)	* (0.024)	-0.088*** (0.020)	0.084*** (0.026)	(0.039)	(0.001)	(0.001)	(0.019)	(0.025)	
	L 4	Man migration		0.086**	0.001	-0.015	0.018	-0.147*** (0.024)	-0.088**	0.084**	0.001	0.000	0.000	-0.032*	-0.031	
	employmer SF	ы igration		(0.018)	(0.001)	(0.019)	(0.023)	(0.024)	(0.020)	(0.026)	(0.039)	(0.001)	(0.001)	(0.019)	(0.025)	
	UIVISION OT EMPIOYMENT	Regional migration		0.073***	0.001	-0.014	0.016	-0.147***	-0.087*** (0.020)	0.090*** (0.026)	0.006	0.000	0.000	-0.030	-0.029	
		Variables	Highly mobile couples	Woman (ref. man)	Age	Age difference: 4-6 (ref. 0-3)	Age difference: 7+	Children in household: child below school age (ref. no child)	Children in household: All children above school age	Marital status: Never married (ref. married)	Marital status: Other	Relationship duration	Number of years in region	Residential environment: Towns and suburbs (ref. cities)	Residential environment: Rural and mountainous	

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Variables	b SE Regional migration	SE nigration	<i>b</i> SE Man migration		b SE Woman migration	SE iigration	b SE Highly mobile couples	SE le couples	b SE Regional migration	SE igration	<i>b</i> SE Man migration	ы п	b SE Woman migration	SE gration	b SE Highly mobile couples	SE le couples
Swiss and other citizen (ref. Swiss citizen)	0.088***	* (0.029)	0.055*	31)	0.040	(0.029)	0.051*	(0.027)	0.010	(0.038)	-0.038	(0.032)	0.043	(0.031)	0.047	(0.031)
Other citizen	0.075*	(0.039)	0.017	(0.037)	0.002	(0.033)	0.016	(0.048)	-0.001	(0.058)	-0.046	(0.040)	0.004	(0.038)	0.117**	(0.053)
Born in Switzerland: Only man (ref. both)	-0.018	(0.027)	-0.018	(0.025)	0.018	(0.036)	-0.017	(0.025)	-0.022	(0.030)	-0.021	(0.028)	-0.065	(0.040)	-0.030	(0.028)
Born in Switzerland: Only woman	0.024	(0.031)	0.005	(0.034)	0.027	(0.029)	0.025	(0.030)	0.077**	(0.034)	0.080**	0.080** (0.036)	0.074**	(0.033)	0.070**	(0.033)
Born in Switzerland: None	0.018	(0.036)	0.006	(0.035)	0.023	(0.034)	0.017	(0.036)	-0.028	(0.040)	-0.034	(0.038)	-0.035	(0.038)	-0.023	(0.039)
Education (tertiary degree): Only man (ref. both)	-0.080***	* (0.028)	-0.066**	-0.066** (0.027)	-0.063**	(0.029)	-0.070***	(0.026)	-0.040	(0.030)	-0.061*	(0.032)	-0.066**	(0.032)	-0.056*	(0.031)
Education (tertiary degree): Only woman	-0.074**	(0.033)	-0.048	(0.029)	-0.046	(0.029)	-0.050*	(0.030)	-0.018	(0.037)	-0.023	(0.036)	-0.020	(0.034)	-0.043	(0.035)
Education (tertiary degree): None	-0.089***	* (0.025)	-0.082	-0.082*** (0.023)	-0.078***	* (0.024)	-0.084***	(0.025)	-0.079***	(0.026)	-0.076	-0.076*** (0.028)	-0.097	(0.028)	-0.108***	(0.028)
Class: Service class - working class (ref. both service class)	0.014	(0.023)	-0.007	(0.020)	-0.010	(0.021)	-0.007	(0.020)	-0.003	(0.027)	-0.009	(0.025)	0.008	(0.024)	0.007	(0.024)
Class: Both working class	-0.009	(0:030)	-0.022	(0.028)	-0.024	(0.029)	-0.022	(0.028)	0.064**	(0.032)	0.057*	(0.034)	0.076**	(0.033)	0.067**	(0.032)
Class: Other (small business owner)	0.026	(0.028)	0.009	(0.026)	0.005	(0.031)	0.010	(0.025)	0.038	(0.030)	0.052*	(0.031)	0.070**	(0.032)	0.040	(0.030)
Class difference	0.029**	0.029*** (0.005)	0.029**	0.029*** (0.005)	0.029***	* (0.005)	0.029***	(0.005)	0.007	(0.006)	0.008	(0.005)	0.007	(0.005)	0.007	(0.006)

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J	<b>Division of employment</b>	nent				Contribution to household income	to house	hold income			
9	SE	b SE	b SE	q	Щ	9	SE	щ	b SE	q	SE
Variables R	Regional migration	Regional migration Man migration	Woman migration	migration Highly mobile couples	couples	Regional migi	ration	Regional migration Man migration	Woman migration Highly mobile couples	Highly mobi	le couples
Error terms											
Sigma	0.224*** (0.012)		0.204*** (0.006) 0.204*** (0.006)	0.203*** (0.005)	0.005)	0.229*** (0.006)	0.006)	0.252*** (0.011)	0.240*** (0.010)	0.238***	(0.009)
Rho	-0.579*** (0.115)	0.115 (0.312) -0.132	2) -0.132 (0.311)	0.053	(0.186)	0.014 (	0.361)	-0.673*** (0.104)	0.014 (0.361) -0.673*** (0.104) 0.520*** (0.149)	0.529***	(0.154)
Observations 7	706	706	706	706		706		706	706	706	

income.

\*\*\*p < 0.01; \*\*p < 0.05; \*p < 0.1.

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partner and where the survey participant lived before co-residence, we tested hypotheses guided by a life course approach highlighting the importance of 'linked lives' and support networks beyond the household. We used a national sample of economically active individuals living with a heterosexual partner and controlled for selectivity of migrant couples and a range of sociodemographic, household and spatial characteristics. Both internal and international migration were considered.

We found that women contribute less to household income among highly mobile couples who live far from birthplaces and from where the participant lived when the relationship started compared to other women in the study. Many of these couples experienced household migration, which may have benefited men's relative earnings. However, H1 was only partially confirmed, as the division of employment within highly mobile couples did not differ from the rest of the sample, showing no evidence of a disruptive effect of household migration on women's employment.

A second finding is that women work relatively more hours for pay within couples with a regional migration pattern compared to women in other types of couples, while their relative contribution to household income is not significantly different, partially confirming H2. Staying or moving relatively close to one or both partners' birthplaces may reflect residential strategies to facilitate women's participation in the labour force, such as informal childcare from grandparents and support networks that may help mothers balance paid and unpaid work. Interestingly, these couples report a more equal division of paid labour than other couples, including nonmigrant couples who live even closer to the birthplaces of both partners.

The results partially confirm H3 that women who migrated close to their male partner's birthplace contribute a lower share of the household income than other women. However, these women contribute a similar share of employment hours. We can think of three reasons for this finding. First, the migration decision may have been made for family reasons (e.g., starting co-residence) rather than for employment or educational reasons, as women are more likely to move for co-residence than men (e.g., Van Der Wiel et al., 2023). Second, mothers who live far from their birthplace may receive less childcare support from their family, which may have reduced their career aspirations and earnings. This effect may however be compensated by the proximity and involvement of the man's support network. Third, most of these women are international migrants who may have been disadvantaged in their access to employment and income. Labour-market disadvantages among migrants and ethnic minorities, after accounting for qualifications and individual characteristics, are consistently found in European countries (for ex. Cantalini et al., 2022). This could also be related to differences in gender norms between partners with different national origins. However the fact that the difference was found in the contribution to household income and not in the division of employment makes this last explanation less likely.

Finally, the results partially confirm H4 that women contribute more to household income among couples where the man migrated close to the woman's birthplace than women in other types of Q

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couples. The hypothesis is again only partially supported, as there is no significant association with the division of employment. The geographical proximity to the woman's support network may have helped some mothers balance domestic labour and employment, although not all these women lived near their birthplace. Among the women who migrated (over shorter distances than their male partner), they possibly moved for the sake of their job or education, which may have resulted in income benefits. It is also possible that these men have a lower relative income for reasons of migrantrelated disadvantage mentioned above. It is however unlikely that this factor alone explains the difference in relative income. While many of these migrant men were born abroad, a fair proportion were born in Switzerland (28%), and we controlled for national border crossing. Although the exception, some of these men may also have moved closer to, or in together with, women upon starting coresidence. In these couples, women might have more bargaining power because of higher earnings than other women in the sample their job having priority over their male partner for this reason.

Overall, our findings show that distances from birthplaces are an important aspect to consider when analysing how migration relates to labour market outcomes for couples. Living close to birthplaces may facilitate women's participation in the labour market but may not eliminate the disruptive effect of past household migration experiences on women's earnings. This has important implications for policy that should aim at equalising the conditions under which men and women benefit from migration and promoting gender equality in the household.

Future research on household migration should consider the relationships to family and friends, and the mechanisms by which these relationships influence migration decisions and labour market outcomes for couples. Our measure of couples' migration patterns relied on some retrospective questions about residential information. These findings should be replicated using more detailed information on the sequence of migration events and the reasons for both partners to migrate, ideally using panel data. Another aspect of this research must be considered critically: we did not have any information on the division of domestic labour between partners, gender ideology, the residential location of parents and their support with childcare. In some families, staying in or returning to the birthplace may be associated with no or little support from grandparents but more elderly care responsibilities than those living farther away, which may negatively impact women's employment. Moreover, the data only represent the perspective of one member of the couple, resulting in missing information and possible reporting bias about their partner, especially with respect to their level of income and number of employment hours. We also did not know where the partner lived when the couple relationship started, therefore having only partial knowledge about the first moves at the start of coresidence. Future work would therefore benefit from interviews with both partners. Finally, the impact of migration on labour market outcomes should not be seen and analysed as static, but as processual. We need more longitudinal data, both quantitative and qualitative, to better understand how employment and

decision-making about where to live together are negotiated within couples and how they change over time and as couples move away or return closer to their family and intimate relationships.

#### ACKNOWLEDGEMENTS

This work is supported by the Swiss National Centre of Competence in Research LIVES-Overcoming Vulnerability: Life Course Perspectives (NCCR-LIVES), funded by the Swiss National Science Foundation (SNSF). The authors thank the anonymous reviewers and journal editor for their valuable comments and suggestions on earlier versions of the manuscript.

#### CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

#### DATA AVAILABILITY STATEMENT

The data that support the findings of this study are openly available in SWISSUBase at https://www.swissubase.ch/en/.

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# SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

How to cite this article: Viry, G., Drevon, G., Masse, F., Gauthier, J.-A., Kaufmann, V., & Gumy, A. (2024). Migration distance from birthplace and its association with relative income and employment share among heterosexual couples in Switzerland. *Population, Space and Place,* e2773. https://doi.org/10.1002/psp.2773