The intergenerational transmission of international migration and formation of migration capital during childhood

Growing empirical evidence shows that decisions to emigrate are influenced by parents' international-migration experiences, with 2nd-generation immigrants being more likely to emigrate than the native-born population. However, the factors underpinning this intergenerational transmission of emigration behaviour remain poorly understood. This study extends evidence in two main ways: (i) it assesses the relative contribution of two transmission pathways (family-migration history and childhood migration experience), and (ii) it considers both the probability of emigrating as an adult and the direction of migration (onwards vs. return). To accomplish this, we apply survival analysis to retrospective survey data for baby-boomers in 15 European countries. Compared with native-born individuals with no childhood-migration experience, 2nd-generation immigrants are only marginally more likely to emigrate during adulthood. In contrast, native-born individuals with childhood migration experience and individuals from the '1.5 generation' who emigrated during childhood are significantly and substantially more likely to emigrate as adults. Building on these findings, we refine the concept of migration capital as a set of general and location-specific attitudes, skills, and resources that accumulate within and across generations through family migration history and lived migration experiences and which facilitate future migration by altering individuals' perceptions of its monetary and non-monetary costs and benefits.

Keywords: immigrants, emigration, life course, childhood, Europe, immigration

1. Introduction

Emigrating is the result of a complex process of maximizing opportunities and meeting personal aspirations. As such, the decision to emigrate is shaped by multiple macro-level economic and political factors, meso-level factors such as networks and institutions, individual-level factors, including age and education. Despite the demonstrated influence these factors exert over migration behaviour, the low level of emigration aspirations remains a scholarly puzzle (Esipova, Ray and Pugliese 2011). As a result, attention has turned to determinants of emigration other than traditional socio-demographic attributes and a literature on parent-to-child transmission of migration behaviour is rapidly emerging.

Often focused on second-generation migrants, this new line of inquiry has revealed that descendants of immigrants have greater emigration intentions (Ivlevs and King 2015) and are more likely to realise these intentions (de Jong and de Valk 2023) than the native-born. This finding echoes longer-term accounts of the role of family norms and expectations in the decision to migrate internally (Myers 1999). Of particular interest is the fact both ethnic-minority (de Jong 2022) and ethnic-majority (Wessendorf 2007) groups are more likely to emigrate than native-born individuals. This suggests that the heightened emigration rates of second-generation migrants are not only driven by a lack of integration or limited economic opportunities in destination countries, but are rather the result of a unique set of skills, resources and transnational ties that foster international migration in later life.

Findings within this literature have typically been interpreted through the theoretical lens of migration capital. Although definitions of migration capital remain loose and varied, they generally allude to the central role of family—including family-migration history, migration norms and transnational networks—in facilitating subsequent international migration (Ivlevs and King 2012). Some definitions place an emphasis on individuals' lived experiences of migration, particularly their first international migration (Moret 2020). Such experiences are argued to help develop skills, networks and resources that can be mobilised for future emigration or to remain immobile by choice (Kõu and Bailey 2014).

In this paper, we draw on a range of multidisciplinary theories—including social learning theory, prospect theory, and experiential learning theory—to refine the concept of migration capital in three main ways. First, we argue that there are two interlinked processes though which children may accumulate migration capital: (a) *indirectly* through family migration history and (b) *directly* through their owned lived experiences. We further propose that these two processes compound to cumulatively enhance migration capital. Second, we explicitly distinguish between two of its components: (a) *location-specific* migration capital that enables migration to countries where prospective migrants have established ties, and (b) *general* migration capital that facilitates migration to new destination countries. Third, we propose that the mobilisation of migration capital is contingent on one's economic resources. Economically disadvantaged groups may face resource constraints that preclude them from drawing on their migration capital. Building on these refinements, we propose a unified definition of migration capital as *a set of general and location-specific attitudes, skills, and resources that accumulate within and across generations through family migration history and lived migration experiences and which facilitate future migration by altering individuals' perceptions of its monetary and non-monetary costs and benefits.*

We provide an initial empirical validation of this definition by comparing the adult-life emigration behaviour of four population sub-groups: (i) native-born individuals *without* childhood international-migration experience; (ii) native-born individuals *with* childhood international-migration experience; (iii) "1.5-generation" individuals who migrated during childhood (who have both family-migration history and lived experience of migration); and (iv) second-generation migrants (who have a family-migration history, but no lived experience). Doing so enables us to disentangle the contributions of family-migration history and personal experience of migration during childhood to subsequent adult-life emigration behaviour. Empirically, the examination of childhood migration experiences and the

distinction between return and onward emigration in adulthood are important innovations of this study. These are made possible by leveraging complete migration histories since birth retrospectively collected as part of the *Survey of Health, Ageing and Retirement in Europe* (SHARE) and analysing these data through survival analysis.

2. Theoretical framework

The intergenerational transmission of demographic behaviour is a well-established phenomenon, with a large body of work focusing on the parent-to-child transmission of marriage, fertility and divorce behaviours. However, evidence for migration is more limited. We argue that a similar process of intergenerational continuity is likely to manifest for migration behaviour, with adult children emulating their parents. Specifically, we argue that socialisation into a higher propensity to migrate is the result of two intertwined factors that facilitate adult-life migration: family migration history and children's own lived migration experience. In this section, we conceptualise each component in turn and outline the mechanisms through which intergenerational transmission of migration behaviour occurs. We then explain how both processes contribute to the creation of migration capital, including general and location-specific resources, skills and attitudes that facilitate future migration. Finally, we draw on this framework to propose research hypotheses.

2.1 Family migration history

Empirical studies have begun to observe parent-child similarities in migration behaviour. For example, second-generation immigrants with a Western European background are more likely to emigrate from the Netherlands than the native-born population (de Jong and de Valk 2023). Similarly, second-generation immigrants from majority ethnic groups in Kosovo and Latvia hold greater emigration intentions than the native-born (Ivlevs and King 2015). While these findings align with the notion that adult children emulate their parents' migratory behaviours, the mechanisms implicated have not been fully theorised. We argue that intergenerational correlations in migration behaviour are the result of a two-step process: (i) parental acquisition of migration capital through migration and (ii) parental transmission of such capital onto their children.

First, through their own migration experience, parents form views and attitudes toward migration and gain knowledge of 'how to' migrate. For parents, migration can be a transformative experience. Migrants acquire hands-on knowledge on 'how to' migrate with respect to, for example, visa requirements, potential destinations, or the costs and resources required to emigrate (Paul 2015). Through the process, they may also develop social networks at both origin and destination countries (Manchin and Orazbayev 2018). The experience of emigrating both reflects and influences immigrants' views on subsequent migration: its desirability, its feasibility, its implications, and even whether they would endorse or recommend migration. In short, people who migrate internationally retain knowledge on 'how to emigrate' and may have more optimistic views about migration as a life-course option, particularly if it led to an improvement in their personal circumstances (Ivlevs and King 2012).

Second, parents transmit these resources, skills and attitudes to their children through a process of socialisation. This process is best understood through the lens of social learning theory, which posits that the formation of social and cultural attitudes, knowledge, and ensuing behavioural practices takes place during childhood and adolescence (Bandura and Walters 1977). Among the different social agents contributing to children's social learning, parents occupy a privileged position due to their close contact with—and capacity for influence over—their offspring. Parents play a critical role in their children's socialisation through both role modelling and direct teachings (Perales et al. 2023). Children have ongoing opportunities to learn from their parents through repeated interactions and by observing parental behaviours that align with parental beliefs. As a result, children progressively internalise parental beliefs, attitudes and values as normative behaviour. In the context of migration,

this model suggests that parents transmit their attitudes, skills and knowledge of migration to their children in a way that shapes their children's migratory behaviour as adults.

Because of their own migration experience, parents can transmit positive attitudes toward migration that reduce the psychological barriers to emigrating. For example, whether immediate family members consider migration as acceptable behaviour has been shown to be a strong predictor of internal migration behaviour (De Jong 2000). It is likely that these family views also influence international migration. Similarly, positive parental attitudes towards migration, reflected or acquired through their migration history, may also expand their children's 'horizon of opportunities' regarding their own migration. They may do so by characterising migration as a viable and desirable option. This is visible, for instance, in Mexican primary-school children: those with family members involved in migration to the US are more likely to aspire to emigrate than those without such family influences (Kandel and Massey 2002). This process is so powerful that it that has been demonstrated even among parents who were forcibly displaced (Brunarska and Ivlevs 2022). Alternatively, parents without past migration experiences may discourage their children from migrating—a process that may be more pronounced in countries where intergenerational care is the social norm (Bordone 2012).

Parents may also transmit their acquired knowledge about potential destinations, and guidance on how to initiate and conduct an international move or how to live in a foreign country, including practical skills and networks to handle the logistical and administrative hurdles of changing country of residence (Cairns 2021). In addition, children with foreign-born parents are often exposed to influences from their parents' native culture. This process of transnational socialisation facilitates the acquisition of location-specific skills, such as fluency in a foreign language and social ties with friends and relatives in parents' countries of origin, which are reinforced through international visits (Groenewold and De Valk 2017).

Altogether, the literature drawn upon within this section suggests that family migration history should contribute to parental accumulation of both location-specific and general migration-facilitating attitudes, skills and resources that they can then transmit to their children. Critically, these attitudes, skills and resources acquired from one's parents throughout childhood and can be drawn upon later in life to emigrate, particularly to the parents' country of origin.

2.2 Childhood migration experiences

For some individuals, the processes of intergenerational transmission outlined in the previous section are reinforced by the lived experience of emigration during childhood. While there is growing interest on the international migration of children (Böhlmark 2009), research examining the impact of childhood migration on later-life emigration choices is limited. However, we know from the internal migration literature that individuals who migrated in childhood are more likely to migrate both internally (Myers 1999) and internationally (Bernard and Perales 2021) in adulthood. This is because migrants 'learn by doing' (Bailey 1993). As Morrison wrote about internal migration 'decision thresholds are initially high for persons who have never moved in their adult life. Once a move has been made, though, the experience may foster a learning process that blunts subsequent inertia' (Morrison 1971:179). This learning process is even more relevant to international migration, as it represents a riskier, more costly and more regulated endeavour than internal migration, and one that requires additional investments, skills and resources (King and Skeldon 2010).

This learning process is not restricted to childhood: migration-facilitating skills, attitudes and resources are acquired continuously throughout one's migration career, including during adulthood (Bernard and Perales 2021). However, migrating during childhood is unique and different to adult migration in several ways. First, as tied migrants, children have little say in their migration experiences and, in most cases, they simply follow their parents. In other words, children do not enact a preference they already

hold when they migrate, but they are rather exogenously exposed to migration. Second, migrations that occur early in life likely leave a significant and long-lasting imprint on children by exposing them to a new and life-changing event. In the internal migration literature, this manifests empirically in the observed impact of pre-school-age migration on the odds of adult-life migration (Bernard and Vidal 2020). Third, because it occurs in the family context, childhood migration facilitates the intergenerational passing of preferences, attitudes, and norms on ideal migratory behaviours. In other words, lived migration experiences occurring during childhood reinforce socialisation into migration behaviour.

Through the process of leaving and entering new social contexts, child migrants may develop social skills that they can mobilise for future migration. These experiences may for example reduce the stress and psychological costs of moving (caused, among others, by the severance of social ties), which are important deterrents of mobility (Oishi et al. 2012). Indeed, evidence from social psychology suggests that repeat internal migrants are more socially skilled and more adaptive to new environments than both immobile individuals and one-off internal migrants (Oishi 2010). The simple knowledge that one did migrate in the past makes future migration less frightening (Aslany et al. 2021), supporting the idea of 'learning by doing' through the development of migration-facilitating skills. Further, this process may be compounded by the acquisition of location-specific skills from social agents other than parents. This includes linguistic skills acquired while being abroad (Carlson, Gerhards and Hans 2017) and direct ties to friends or relatives living abroad (Frändberg 2014), both of which can be mobilised in later life to facilitate mobility. Finally, experiences of childhood migration can also shape one's attitudes towards immigration. Children who have reaped the benefits of migration—either directly, through better living conditions or educational opportunities, or indirectly, thanks to better employment opportunities for their parents—are more likely to view migration as a fulfilling and enriching endeavour than other individuals (Ivlevs and King 2012). This process benefits both children who emigrated permanently with their parents—the so called "1.5 generation", as well as those who emigrated temporarily during childhood and returned to their country of birth (Laoire, Carpena-Méndez and White 2016).

Altogether, the literature reviewed over the last two sections suggests two intertwined processes though which individuals accumulate migration capital during childhood: (a) indirectly through their family migration history and (b) directly through their owned lived migration experience. While it is possible to accumulate (a) without (b), it is not possible to accumulate (b) without (a). Thus, (a) and (b) should not be seen as competing processes, but rather as cumulative processes. It follows that having both a family migration history and migration experiences during childhood may exert a particularly strong impact on adult emigration. Experiential learning theory posits that 'knowledge is created through the transformation of experience' (Kolb 1984:41). It also emphasises the role of concrete experiences as the basis for reflections that support abstract conceptualisation from which new implications for action can be drawn. While recognising that there are different learning styles, lived migration experiences may provide children with the opportunity to engage with the four components of the experiential learning cycle: (1) concrete experience, (2) reflective observation, (3) abstract conceptualisation and (4) testing implications of concepts in new situations. The last step feedbacks into new concrete experiences by stimulating future migration. In contrast, family migration history mainly supports abstract conceptualisation. Therefore, individuals who experienced migration as children may be more like to migrate in adulthood than those only exposed to family migration history. In the next section, we integrate the literature discussed so far into a unified definition of migration capital.

2.3 Migration capital: Towards a unified definition

The idea that individuals progressively develop and acquire skills, knowledge and resources that facilitate subsequent migration has been previously encapsulated in the amorphous term of

'migration capital'. There are various iterations of this concept, which differ in their theoretical underpinnings, terminology, and empirical operationalization. These include notions such as 'migration-facilitating capital' (Kim 2018), 'mobility capital' (Moret 2020), 'migration-specific capital' (de Jong and de Valk 2023) and 'family migration capital' (Ivlevs and King 2012). Some iterations of the concept emphasise the intergenerational transmission of positive attitudes toward migration that reduce the psychological barriers to emigrating (Ivlevs and King 2012:119). Others focus on individuals' personal lived migration experiences, particularly their first international migration in adulthood (Cairns 2021). They often separate 'personal migration capital' or lived experiences from 'family migration capital' (De Jong 2000), with empirical applications typically focusing on one or the other process. This disjuncture is problematic, as it overlooks the links and interactions between the two processes discussed in the previous sections. A strand of work has linked migration capital to other, broader forms of capital. For example, Murphy-Lejeune (2002:51) defines mobility capital as a 'sub-component of human capital, enabling individuals to enhance their skills because of the richness of the international experience gained by living abroad'. In contrast, Bourdieusian approaches underscore the role of state actors in the production, conversion and legitimization of migration capital (Kim 2018). The role of state actors is also central to Moret (2020)'s 'mobility capital'. This is defined as the accumulation of cross-border mobility experiences than can be leveraged to decide when and how to move or to remain put, and is deemed to be conditioned by migration policies that shape emigration decisions.

We argue that these various definitions focus on selected aspects of migration capital, offering fragmented perspectives on the concept. Further, they largely overlook the distinct role of childhood migration experiences. Drawing on the previous sections, we refine and enhance the concept of migration capital by proposing a unified and more comprehensive definition. Our approach is grounded in neo-classical approaches to human migration behaviour, which emphasise the monetary and non-monetary costs of and returns to migration (Sjaastad 1962). From this perspective, prospective migrants weight up the expected costs of and returns to migration to maximise net returns (Todaro 1969). Prospect theory (Kahneman and Tversky 1979) further helps understand the role of non-pecuniary factors in the migration decision-making process, positing that individuals are risk averse and place greater emphasis on potential losses than potential gains. Thus, risk aversion leads people to value what they already have beyond their economic value (the so-called 'endowment effect'), which underscores the psychological costs of migration (Morrison and Clark 2016).

The preceding section showed how migration capital enables prospective migrants to face lower monetary and non-monetary costs of migration by drawing on location-specific skills and resources (such as transnational social networks and linguistic skills) or, more generally, by having developed social and practical skills that facilitate future migration. At the same time, we offered evidence that migration capital helps maximise the economic benefits of migration. For example, students with an international migration experience are more successful in securing employment upon graduation that students who did not study in a foreign country (Findlay et al. 2006), including international jobs (Wiers-Jenssen 2008). Thus, one's migration experience can be used as a strategy to strengthen one's socio-economic position (Murphy-Lejeune 2002). It follows that individuals who have experienced migration are more likely to view migration as a fulfilling and enriching endeavour than individuals without such experience (Ivlevs and King 2012) and thus perceive greater the potential benefits to migration. We therefore propose that the skills, attitudes, and resources acquired in childhood contribute to the accumulation of migration capital that can be mobilised in later life to emigrate or stay immobile by choice.

On the basis of these propositions, we define migration capital as *a set of general and location-specific attitudes, skills, and resources that accumulate within and across generations through family migration history and lived migration experiences and which facilitate future migration by altering*

individuals' perceptions of its monetary and non-monetary costs and benefits. Figure 1 depicts the processes underlying this definition. The greyed-out cells represent the part of the process involving the formation of migration capital. This outlines how some individuals will acquire migration capital during their childhood only through family migration history, whereas others will also accrue it through lived migration experiences. The feedback loop between emigration and migration capital (arrow 1) stresses that this a is dynamic process that develops over the life course. That is, migration-facilitating skills, attitudes and resources are acquired continuously throughout one's migration career, including during adulthood (Bernard and Perales, 2021). The framework also recognises the influence that other individual and household factors (arrows 2 and 5) as well as macro and meso-level factors (arrows 3 and 4) exert on the decision to emigrate.

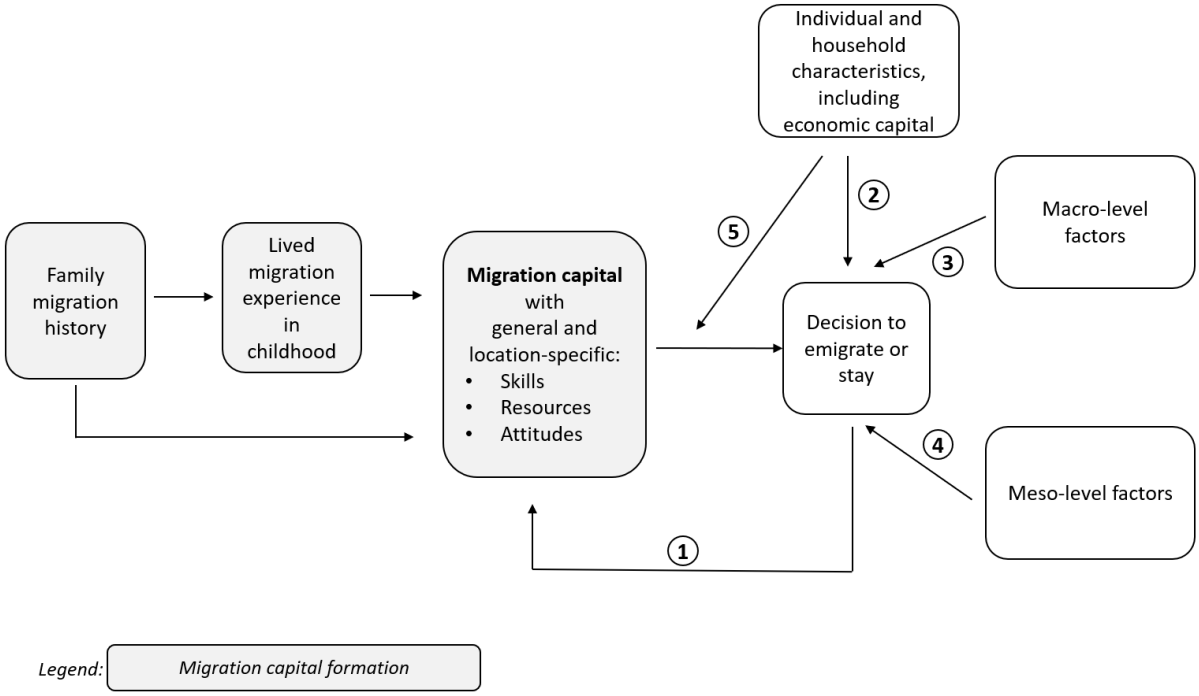


Figure 1 The formation of migration capital during childhood and its impact on adult-life emigration

2.4 Contributions and research hypotheses

Our definition of migration capital introduced in the previous section refines the concept in three main ways, each of which leads to a series of testable hypotheses that can be used to assess the usefulness of these additional components.

First, we have argued that there are two interlinked processes though which children may accumulate migration capital: (a) indirectly through family migration history and (b) directly through their owned lived experiences. Based on these tenets, we expect that *individuals with a family migration history are more likely to emigrate than individuals without it* (Hypothesis 1a). Empirically, this should manifest in second-generation immigrants being more likely to emigrate in adulthood than native-born individuals. Further, we expect that *the impact of family migration history l increases with the number of foreign-born parents* (Hypothesis 1b). If this is true, then individuals with two foreign-born parents should exhibit a greater likelihood to emigrate during adult life than individuals with only one parent. Based on the discussions in earlier sections, we also anticipate that *family migration history and lived experience are mutually beneficial and synergise to cumulatively enhance migration capital* (Hypothesis 2). Empirically, this should manifest in members of the 1.5 generation, who combine both family migration history and lived migration experience, exhibiting a greater propensity to emigrate than second-generation immigrants with no first-hand childhood migration experiences.

Our second contribution is to explicitly distinguish between two components of migration capital: (a) location-specific migration capital, which enables migration to selected destinations, and (b) general migration capital, which facilitates migration to a broader range of destinations. Depending on the relative strength of each process, we expect different emigration outcomes, such that *individuals who possess location-specific capital are more likely to engage in return migration, while individuals who possess general migration capital are more likely to migrate onward to a country where they or their family have not previously resided* (Hypothesis 3). While we cannot directly measure general and location-specific migration capital, we can gauge which is more influential by examining the destination choices of 1.5-generation and second-generation immigrants. If the majority return to a parent's country of origin, this would signal that parents tend to transmit location-specific migration capital. On the other hand, if most emigrate onwards to a third country, we will conclude that family migration history largely contributes to the generation of general migration capital. Similarly, individuals returning to a country in which they resided during their childhood would indicate a preponderance of location-specific capital, whereas onward migration would indicate that general migration capital prevails. The latter can be tested by comparing the emigration behaviour of native-born individuals with a childhood migration experience and members of the 1.5 generation to that of native-born and second-generation individuals with no lived migration experience in childhood.

Our third contribution is to build on Bourdieusian formulations of migration capital (Kim 2018) to unveil connections between migration capital and broader forms of capital that can also contribute to migration, particularly economic capital. Kim (2018) criticized earlier formulations of migration capital as 'sub-component of human capital' (Murphy-Lejeune 2002), which downplayed interactions with other forms of capital. Central to the Bourdieusian perspective is the idea of 'conversion' between different forms of capital—e.g., between economic, social and cultural capital (Bourdieu and Wacquant 1992). Of particular relevance here is economic capital, which constitutes a critical pathway for individuals to fund an international relocation. Thus, a minimum level of economic capital is required for one's migration capital to facilitate an international move. This is represented by arrow 2 on Figure 1, and it means that some of the economically disadvantaged individuals may not be able to draw on their migration capital to emigrate. Indeed, prospective migrants who lack economic resources tend to first emigrate to less desirable destinations (Paul 2015) or migrate internally (Skeldon 2006) to accumulate the required resources to fund more costly international moves. This interplay between economic and migration capital is represented in Figure 1 by arrow 5 and leads to our final research hypothesis. Specifically, we expect that *economically disadvantaged individuals are less able to draw on their migration capital to emigrate, particularly for migration to third countries for which migration costs are greater than for return moves* (Hypothesis 4).

3. Data and Methods

3.1. The Survey of Health, Ageing and Retirement in Europe (SHARE)

In most longitudinal surveys and administrative datasets used in migration research, sampling frames are based on national borders. Therefore, international migrants are lost to attrition because participants are no longer part of the study cohort after they cross international borders. This issue of 'national methodologism' has largely precluded longitudinal analyses of international migration—for notable exceptions, see Durand and Massey (2004) and Beauchemin (2018). To overcome this issue and test our research hypotheses, we draw on data from the Survey of Health, Ageing and Retirement in Europe (SHARE). SHARE is a compendium of nationally representative surveys of the adult population aged 50 and older in 27 European countries (Börsch-Supan 2020a, 2020b). In 2007-08 (Wave 3), SHARE retrospectively collected information on the complete life histories—including residential histories—of respondents from 11 countries. In 2017 (Wave 7), this retrospective data-collection process was repeated for new survey participants—that is, for individuals from the 14

countries that joined SHARE after 2008 and individuals from refreshment samples. Thus, SHARE has collected information on each participant's life history at least once. To maximise sample size, we use both survey waves containing this retrospective information (Waves 3 and 7). We make two sets of exclusions on this sample. First, we exclude respondents from Eastern European countries (Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovenia and Slovakia). This is because of significant border changes within the region over the 20th century that hinder the measurement of international migration. Second, to safeguard our international-migration measures against potential biases stemming from mass displacement due to World War II, we exclude from the analysis individuals born before 1946 (*n*=14,632).

In the life-history modules, SHARE respondents were asked to report each place where they had resided for longer than 6 months since birth and for a maximum of 30 places. For each place, the start and end dates, region and country were recorded. We use this information to identify international-migration events occurring during childhood and adulthood. Education, employment, partnership, and fertility histories were also collected using life-history grids to facilitate recall (Brüderl et al. 2017).

In Wave 5, SHARE began collecting information on the country of birth of respondents' parents, which is necessary to identify first, 1.5- and second-generation migrants. Thus, our analyses further exclude individuals who died between survey waves 3 and 5 (*n*=152). We also excluded first-generation immigrants who migrated to the survey county as adults (*n*=1,357) because of censoring: their risk of emigrating from the survey country cannot be observed from the age of 18. However, we include individuals who migrated to the survey country during childhood, the so-called '1.5 generation'. Finally, we excluded respondents from Portugal because of the high number of missing values for parent's country of birth. The final analytic sample comprises 19,420 respondents with no missing information coming from 15 countries, namely Austria, Germany, Sweden, the Netherlands, Spain, Italy, France, Denmark, Greece, Switzerland, Belgium, Luxembourg, Cyprus, Finland and Malta.

3.2. Key measures

To ensure migration histories are of comparable length for all respondents, we consider residential trajectories from birth to age 50, the age of the youngest SHARE respondents surveyed in 2017. Therefore, to obtain life-courses of comparable lengths, we do not consider moves occurring after the age of 50. We construct separate variables capturing childhood migration (taking place before age 18) and adult migration (taking place between the ages of 18 and 50). In our weighted sample, 2.9% of respondents experienced at least one international migration during childhood (unweighted *n*=565) and 3.7% experienced at least one international migration during adulthood (unweighted *n*=852). The modal age at first adult international migration, our outcome of interest, sits at 24 years and the median age at 25. We also develop international-migration measures that take into account the destination country, distinguishing between return and onward international migration. Return migration is defined as a move to any country where the respondent previously lived as a child, or to a country where at least one of their parents was born. Conversely, onward migration is a move to a country with which an individual has no such ties. In our sample, 44% of first adult international migrations are return moves and 56% are onward moves.

We combine individuals' international-migration histories during childhood and their parents' countries of birth to classify respondents into discrete groups, as shown in Table 2. The first group includes native-born individuals with no childhood migration. This is by far the largest group, comprising over 90% of the sample. We separate them from native-born individuals with an international-migration experience before 18 years of age, who account for 1.3% of the sample. A second group brings together members of the 1.5 generation, who emigrated during childhood. These individuals are exposed to both family migration history (through foreign-born parents) and lived migration experiences (from when they emigrated to survey country during childhood). This group

accounts for close to 1.7% of the sample and 80% of them have two foreign-born parents, which we hypothesized to increase subsequent mobility compared to having only one parent foreign-born. The final two groups encompass second-generation immigrants who were born in the survey country and did not migrate in childhood. They represent 5.5% of the sample, of which most (77%) have only one foreign-born parent. Members of the second-generation who had a childhood migration experience represent only 0.12% of the sample and were excluded from the analyses.

Table 2 breaks the sample by the region of origin of respondents' parents'. Most parents of foreign-born respondents come from Northern and Western Europe. Such partition reflects the socio-historical circumstances of the birth cohorts surveyed in SHARE, which are often members of the second generation whose parents migrated before World War II from neigbouring countries. We return to this historical context and its implications for our findings in the concluding section. Among respondents with two parents born abroad, 87.2% had parents who came from the same country and very few had parents coming from different regions (0.2%).

Table 1 Respondents' migration background

	Family migration history	Lived childhood migration experience	*n* (unweighted)	% (weighted)
Native-born with no childhood migration experience	No	No	17,727	91.35
Native-born with a childhood migration experience	No	Yes	206	1.25
1.5 generation with one parent foreign-born	Yes (lower)	Yes	70	0.34
1.5 generation two parents with two foreign-born parents	Yes (higher)	Yes	290	1.33
2nd generation with one foreign-born parent	Yes (lower)	No	909	4.29
2nd generation with two foreign-born parents	Yes (higher)	No	271	1.42

Notes: Data from waves 3 and 7 of SHARE.

Table 2 Number of foreign-born parents and their region of birth

		n (unweighted)	% (weighted)
Both parents are native-born		17,929	92.60
1 foreign-born parent	Parent born in Northern and Western Europe	642	1.98
	Parent born in Eastern Europe	244	1.99
	Parent born outside of Europe	95	0.66
2 foreign-born parents	Both from Northern or Western Europe	324	1.10
	Both from Eastern Europe	104	0.82
	Both from outside of Europe	103	0.61
	Each from a different region	33	0.23

Notes: Data from waves 3 and 7 of SHARE.

3.3. Analytic approach

Our analytic focus is on the first international migration experienced between the ages of 18 to 50. We begin by describing the average emigration trajectories of individuals with a different family migration history and childhood migration experience through Kaplan-Meier survival functions. These give the 'survival rate'—that is, the proportion of respondents who did not emigrate out of the total pool of respondents 'at risk' of emigrating—at each year of age. If a person eventually emigrates, the individual also leaves the pool of individuals at risk of emigrating and no longer contributes to estimation.

We then estimate multivariable models to adjust for a range of potential confounders. To estimate the duration-specific risk of first adult-life emigration, we use a Cox proportional hazard model where $h_i(t)$ denotes the risk of first emigration for individual i at time t, where time t is measured in years from 0 (for age 18) to 32 (for age 50). The model that we fit can be formally expressed as follows:

$$h_i(t) = h_0(t) \times \exp(\beta_1 M + \beta_2 SD + \beta_3 C + \beta_4 W) \quad (1)$$

The model includes a range of time-constant variables (for descriptive statistics, see Appendix A). The focal variables of interest are family migration histories and childhood migration experiences, captured in vector M. Other control socio-demographic variables are captured in vector SD and include gender, birth cohort, urbanicity of place of residence (at age 17), and parental educational background (highest level of education attained by either parent). Because many respondents emigrated in early adulthood before completion of tertiary education, we use parental education as a proxy for socio-economic status. All models include a country fixed effect, C , and a wave fixed effect, W, to control for structural macro-level conditions that may shape emigration decisions. These sets of controls are introduced in a stepwise fashion. First, we control only for migration histories (Model A) and then progressively add country and wave fixed effects (Model B) and socio-demographic characteristics (Model C). The βs in Equation 1 are vectors of estimated model parameters, which we express as hazard ratios (HRs). HRs give the expected change in the ratio of the odds of experiencing the 'hazard' (i.e., emigrating for the first time in adulthood) associated with a one-unit increase in the explanatory variables, *ceteris paribus*.

4. Empirical evidence

4.1. Risk of first adult emigration

Figure 2 shows the results from the Kaplan-Meier survival functions. These signal a low risk of adult international migration for the native-born population with no childhood migration experience, and a slightly greater risk for second-generation immigrants. In contrast, members of the 1.5 generation and native-born individuals with childhood migration experience display substantially higher risks. For example, by age 30, the share of respondents who had emigrated was 3.26% for the native-born population with no childhood migration experience, 4.97% for second-generation immigrants, 8.03% for the 1.5 generation, and 13.33% for the native-born population with childhood migration experience. This pattern of results is largely consistent with our theoretical expectations. Because members of the 1.5 generation combine family migration history with childhood migration experience, they should display heightened mobility as adults. The high risk of emigrating among the native-born population with a childhood migration experience, particularly around the ages of 22 to 25, is however more surprising. This is unexpected given that their family migration capital should be lower than that of members of the 1.5 generation, whose parents were born abroad. This pattern of results could emerge because of different socio-economic profiles across the groups. Therefore, we progress to regression analyses that control for possible confounds.

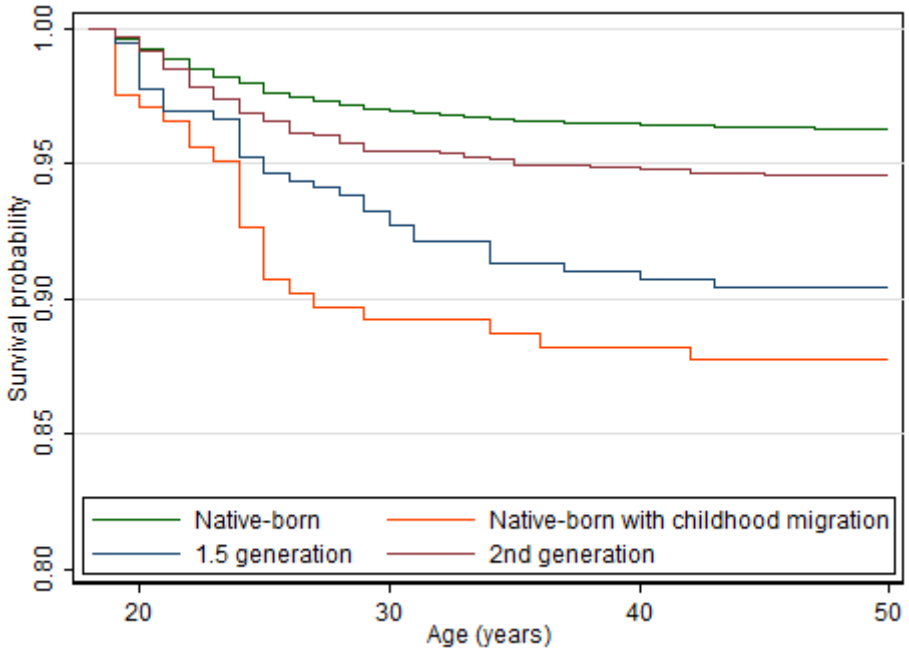


Figure 2 Kaplan-Meier survival estimates of the first international migration in adulthood by family migration history and childhood migration experience
Notes: Data from waves 3 and 7 of SHARE for individuals from after 1945.

The results of a first set of multivariable Cox regression models are presented in Table 3. The model with no control variables (Model A) confirms the descriptive patterns identified in Figure 2: individuals with family migration history or childhood migration experiences are more likely to emigrate in adulthood than native-born individuals with no migration experience. This pattern applies more strongly to individuals who had childhood migration experience—both the native-born (HR=3.49, $p<0.01$) and the foreign-born (HR=2.61, $p<0.001$). The addition of country and wave and fixed effects in Model B renders the estimated effect of membership in the second generation statistically insignificant (HR=1.26, $p>0.05$), a finding that holds when socio-demographic characteristics are added in Model C (HR=1.16 $p>0.05$). The remaining model coefficients remain statistically significant at conventional levels in Model B and C. The overlap in confidence intervals across regression coefficients within Model C suggests that differences between native-born with childhood migration and members of the 1.5 generation are not statistically significant. Collectively, these findings highlight the importance of lived migration experiences during childhood, which compounds with family migration history to enhance the odds of adult international migration. While not focal to the arguments in this paper, the HRs on the control variables are generally consistent with expectations, with the risk of emigrating increasing with parental education, and decreasing with residence in more rural areas. Respondents' sex is not statistically significantly.

Table 3 Hazard ratios and 95% confidence intervals from Cox proportional hazard models of first adult emigration, main models

	Model A	Model B	Model C
Migration history (ref. cat. Native-born with no childhood migration)			
Native-born with childhood migration	3.49**	3.35***	2.51***
	[2.34,5.20]	[2.24,5.01]	[1.67,3.76]
1.5 generation	2.61***	2.13***	1.97***
	[1.85,3.69]	[1.20,3.03]	[1.38,2.80]
2nd generation	1.46**	1.26	1.16
	[1.13,1.88]	[0.97,1.63]	[0.30,1.51]
Demographic characteristics			
Female			1.07
			[0.93,1.23]
Birth cohort (ref. cat. 1946-52)			
1953-59			0.81*
			[0.68,0.95]
1960-67			0.75**
			[0.62,0.91]
Parental education (ref. cat. Primary)			
Second			1.40***
			[1.15,1.69]
Tertiary			2.49***
			[2.03,3.06]
Residence at age 17 (ref. cat. big city)			
Suburb of a bit city			0.70**
			[0.54,0.92]
Large town			0.79*
			[0.61,0.95]
Small town			0.80*
			[0.65,0.99]
Rural area or village			0.54***
			[0.44,0.66]
Country and wave fixed effects	No	Yes	Yes
n	19,403	19,403	19,403
Log likelihood	-7,728	-7,573	-7,498
Akaike Information Criteria (AIC)	15,463	15,182	15,050

Notes: Data from waves 3 and 7 of SHARE. Statistical significance: * $p<0.05$, ** $p<0.01$, *** $p<0.001$.

The lack of statistical significance for members of the second generation constitutes an unexpected result, as it contradicts our first hypothesis as well as findings from recent studies (de Jong and de Valk 2023). As such, it merited further investigation. We know from Table 1 that members of the 1.5 generation are more likely to have two foreign-born parents, whereas members of the second generation are more likely to have only one foreign-born parent. This difference may drive some of the observed disparities in emigration behaviour. To test this proposition, we repeated the analyses using an alternative categorization of the focal explanatory variables (Table 4). Specifically, we include separate variables capturing childhood migration experience (yes/no) and the number of foreign-born parents (0, 1, 2).

The results from the fully specified model (Model C) indicate that respondents with two foreign-born parents are statistically significantly more like to emigrate than native-born respondents (HR=1.84, $p<0.01$), but those with only one parent born abroad are not (HR=1.11, $p>0.05$). This finding lends

support to Hypothesis 1a, which posited that individuals with a greater family migration history should be more likely to emigrate during adulthood. In other words, while family migration history matters, it is the cumulative contribution of having two foreign-born parents that leads to heightened adult-life mobility. This explains why there was no statistically significant association between membership in the second generation and emigration in adulthood in the Table-3 models.

Inspecting the regression coefficients confirms that childhood migration history (HR=1.25, $p<0.01$) and parental background (HR=1.59, $p<0.001$) are both related to subsequent emigration. This lends support to Hypothesis 2, according to which family migration history and childhood migration experience independently contribute to enhancing individuals' emigration prospects. Yet, we have previously theorised that childhood migration is a by-product of parental migration history, as shown in Figure 1. Thus, the childhood migration variable may "absorb" some of the estimated effect of the family migration history variables. As a robustness check, we ran an additional model excluding the childhood migration variable (Model D). The results confirm the importance of having two (compared to one) foreign-born parents. Further, the slight increase in the HRs on the family history variables supports the notion that their impact on the odds of emigration runs partially through childhood migration experiences.

In Appendix A2, we also consider the geographical origin of parents as a robustness check. Results show that, compared to the native-born, individuals with both parents born in another Western or Southern European country are more likely to emigrate. The HR on the geographic origin variable is however not statistically significant for those from Eastern Europe or outside Europe. We interpret this finding as indicating that the heightened mobility of the 1.5 generation is not a sign of a lack of integration in a host society, as it might have been the case if emigration was more likely among those of non-European ancestry.

Table 4 Hazard ratios and 95% confidence intervals from Cox proportional hazard models of first adult emigration, models distinguishing number of foreign-born parents

	Model A	Model B	Model C	Model D
Migration history				
Childhood migration (ref. cat. no migration)	1.32***	1.33***	1.25**	
	[1.17,1.50]	[1.16,1.53]	[1.08,1.45]	
Parental history (ref. cat. both native born)				
1 foreign-born parent	1.47**	1.21	1.08	1.11
	[1.12,1.93]	[0.92,1.30]	[0.82,1.43]	[0.84,1.147]
2 foreign-born parents	1.72***	1.51*	1.59**	1.84***
	[1.26,2.37]	[1.09,2.11]	[1.14,2.21]	[1.34,2.51]
Control variables	No	No	Yes	Yes
Country and wave fixed effects	No	Yes	Yes	Yes
n	19,403	19,403	19,403	19,403
Log likelihood	-7,728	-7,573	-7,498	-7,555
Akaike Information Criteria (AIC)	15,463	15,182	15,050	15,368

Notes: Data from waves 3 and 7 of SHARE. Statistical significance: * $p<0.05$, ** $p<0.01$, *** $p<0.001$.

4.2. Onward versus return migration

We now turn our attention to emigration destinations, as this enables to tease out the relative role of general versus location-specific migration capital. To accomplish this, we consider two separate scenarios: (i) whether individuals emigrate to countries where their parents were born or where these individuals resided during childhood (return migration), and (ii) whether individuals emigrate to third countries with which they have no such ties (onward migration). The cumulative proportion of individuals who engaged in return and onward migration by age 50 is reported in Table 5. This shows that native-born individuals with childhood migration experience are twice as likely to emigrate onward (9.71%) than to engage in return migration (4.85%). For members of the 1.5 generation, however, rates of return migration (5.00%) and onward migration (5.56%) are closer. In contrast, second generation migrants are more likely to engage in onward (5.85%) than return (0.42%) migration.

Results from multivariable Cox regression models in Table 6 compare the determinants of return and onward moves. These models exclude native-born individuals with no childhood migration, as they cannot engage in return migration. The results confirm that native-born individuals with childhood migration experience are statistically significantly more likely to migrate onward than members of the 1.5 generation (HR=2.02, $p<0.05$), whereas members of the second generation are less likely to engage in return migration (HR=0.07, $p<0.001$). This pattern of effects suggests that intergenerational transmission contributes to the formation of both location-specific and general capital, consistent with Hypothesis 3.

Exploring the role of parental education, a proxy for socioeconomic status, can aid to establish which groups most benefit from migration capital accumulation. Parental education enables onward migration (HR=2.13 $p<0.01$), but it does not play a role in return migration (HR=2.09, $p>0.05$). The different panels in Figure 3 expand on this finding. Specifically, they show the predicted survival function by parental education (up to primary, secondary and tertiary) for each sub-population group (native-born with and without childhood migration, 1.5- and second-generation migrants) for both onward and return migration. Migration is well-established to be a selective prospect, particularly with respect to education (Feliciano 2005). Consistent with this claim, the probability of remaining immobile decreases with parental education. This pattern holds for all sub-population groups and it is particularly apparent for onward migration (Panel A).

Among native-born individuals with childhood migration experience, our model suggests that the probability of having migrated onward by age 30 is ∼9% for those with tertiary-educated parents, compared to just ∼4% for those with primary-educated parents. Thus, having migrated during childhood benefits individuals from advantaged backgrounds proportionally more than it benefits individuals from less advantaged backgrounds. From this prism, economic and migration capital may cumulatively benefit the most advantaged groups, consistent with Hypothesis 4. Unsurprisingly, this is particularly pronounced for onward migration, which is a riskier and more costly endeavour than return migration.

Comparing respondents with parents with the same level of education within each graph shows that native-born individuals with childhood migration experience are the only group that is more likely to migrate onward than native-born individuals with no childhood migration experience. This is a seemingly unintuitive result. It suggests that members of the 1.5 generation, who also benefited from a lived migration experience, may face greater barriers to emigrating in adulthood than the native-born population. Such barriers might include difficulties being granted residency visas in third countries, as some of them may not be citizens of the European countries in which they reside. This proposition is supported by the fact both the 1.5 generation and native-born individuals are particularly likely to engage in return migration. These findings also signal that living in a foreign

country during childhood may be sufficient to develop location-specific migration capital—that is, such experience does not need to be coupled with family migration history for individuals to move as adults.

Table 5 Emigration destination by family migration history and childhood migration experience, cumulative proportion by age 50

	Native-born, no childhood migration experience	Native-born, has childhood migration experience	1.5 generation	2nd generation
Return migration	N.A.	4.85	5.00	0.42
Onward migration	4.04	9.71	5.56	5.85

Notes: Data from waves 3 and 7 of SHARE.

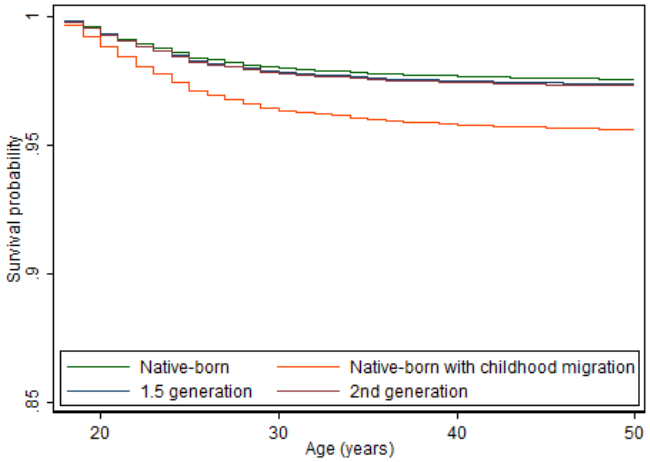
Table 6 Hazard ratios and 95% confidence intervals from Cox proportional hazard models of first adult emigration, models distinguishing onward and return migration

	Onward migration	Return migration
Migration history (ref. cat. 1.5 generation)		
Native-born with childhood migration	2.02*	0.90
	[1.04,3.94]	[0.38,2.12]
2nd generation	1.10	0.07***
	[0.64,1.88]	[0.03,0.21]
Demographic characteristics		
Female	1.52*	1.07
	[1.01,2.30]	[0.54,2.12]
Birth cohort (ref. cat. 1946-52)		
1953-59	0.82	1.51
	[0.52,1.29]	[0.62,3.71]
1960-67	0.51*	1.26
	[0.29,0.89]	[0.43,3.68]
Parental education (ref. cat. Primary)		
Second	1.30	1.43
	[0.75,2.26]	[0.58,3.53]
Tertiary	2.13**	2.09
	[1.23,3.68]	[0.82,5.32]
Residence at age 17 (ref. cat. big city)		
Suburb of a bit city	0.48*	1.13
	[0.24,0.99]	[0.32,3.97]
Large town	0.29**	1.74
	[0.14,0.61]	[0.63,4.80]
Small town	0.67	0.87
	[0.40,1.14]	[0.28,2.68]
Rural area or village	0.43**	1.15
	[0.25,0.75]	[0.40,3.28]
Country and wave fixed effects	Yes	Yes
n	1710	1642
Log likelihood	-714	-219
Akaike Information Criteria (AIC)	1480	490

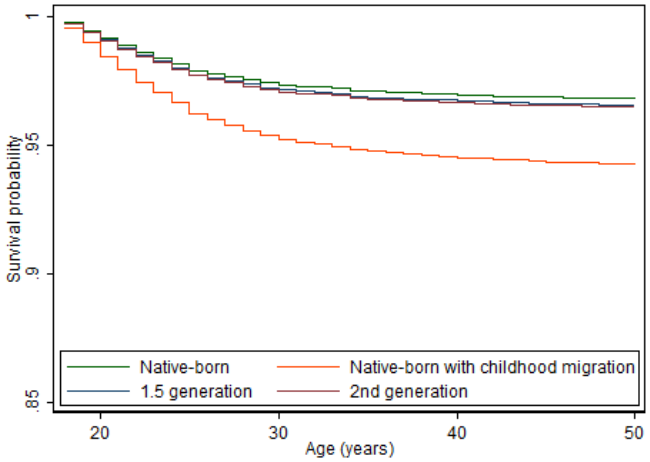
Notes: Data from waves 3 and 7 of SHARE. Statistical significance: * $p<0.05$, ** $p<0.01$, *** $p<0.001$. The analyses exclude native-born individuals with no childhood migration.

Panel 3a. Onward migration

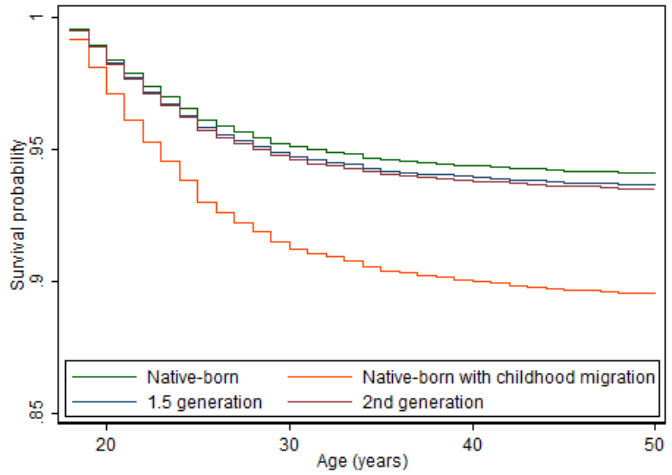
Primary-educated parents



Secondary-educated parents

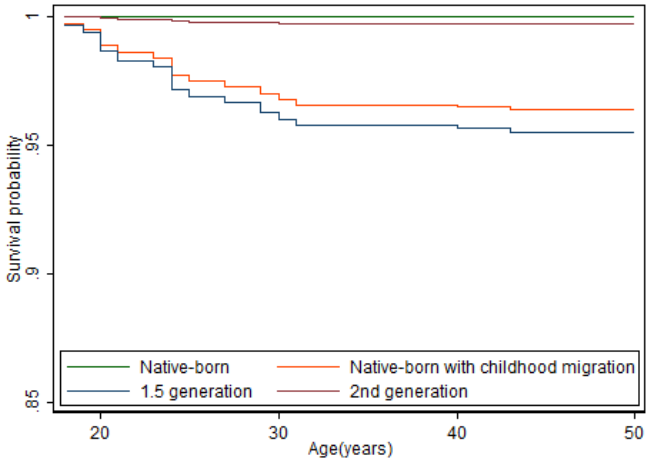


Tertiary-educated parents

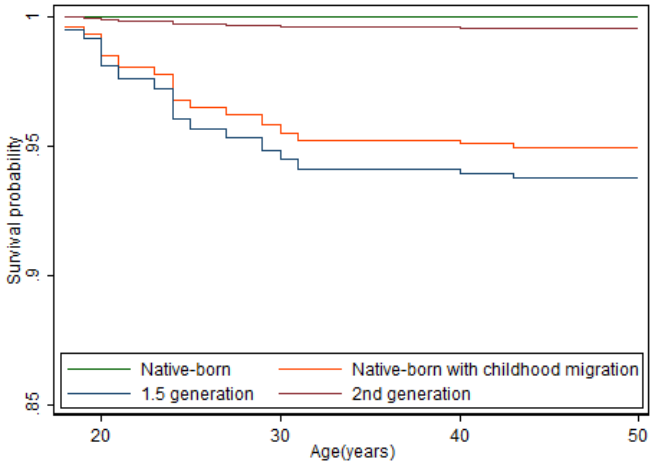


Panel 3b. Return migration

Primary-educated parents



Secondary-educated parents



Tertiary-educated parents

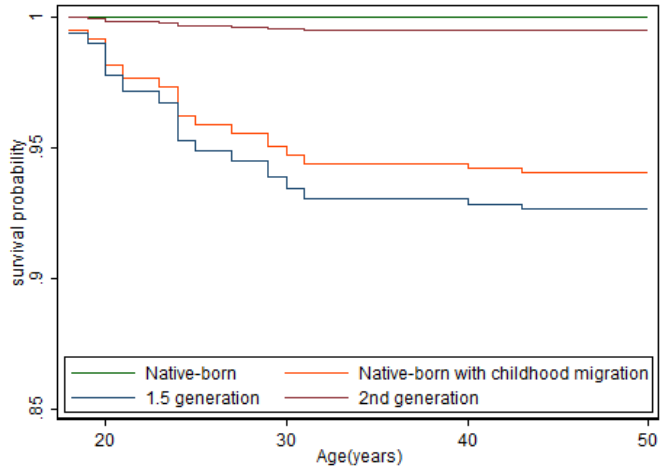


Figure 3 Predicted survival function of first onward migration in adulthood, by migration history and parental education

Notes: Data from waves 3 and 7 of SHARE. Predictions based on regression results reported in Table 6.

5. Discussion and conclusion

Building on a rapidly expanding literature on the intergenerational transmission of demographic behaviours, this study has posited that the international migration of adult individuals is facilitated by the intergenerational transmission of migration capital. Our key results and their alignment with our research hypotheses are summarised in Appendix A3. Consistent with Hypotheses 1a and 1b, we found that family migration history plays a decisive role in facilitating subsequent adult emigration. However, parents seem to serve as a behavioural model only in families with two foreign-born parents, which increases the probability of adulthood emigration by 59% relative to those with no foreign-born parents. In contrast, having only one foreign-born parent is not a sufficient condition to elicit international migration in adult life. For 95% of individuals with two foreign-born parents, both parents were born in the same country. Due to this, we conclude that such family arrangement facilitates the transmission of *location-specific* migration capital. This is visible in the emigration behaviour of members of the 1.5 generation (80% of which have two foreign-born parents), who exhibit a disproportionate likelihood to engage in return but not onward migration. The literature on international migration has long depicted return migration as 'failed migration', caused by a lack of social or economic integration and being the result of low human capital. By comparing immigrants to native-born individuals with childhood migration experience, we have shown that return migration does not necessarily signal unsuccessful moves. Rather, our results support a view of return migration as a deliberate strategy facilitated by the acquisition of migration capital.

We also found that childhood migration experiences play a critical role in setting individuals on a migratory path. Individuals who migrated in childhood are 25% more likely to migrate internationally in adulthood. This is also manifested in the heightened adult-life mobility of (i) members of the 1.5 generation compared with second-generation migrants and (ii) native-born individuals with childhood migration experience compared to those with no such experience. These findings align with experiential learning theory, which emphasises the role of concrete experiences in supporting abstract conceptualisation and the formation of knowledge. In the context of this study, these concrete experiences may include practical knowledge of 'how to' migrate and an understanding the benefits of migration. Therefore, our results lend partial support to Hypothesis 2: while family migration history matters for those with no hands-on migration experience, a lived experience of migration is more conducive to subsequent international migration, including both onward and return migration. In other words, living in a foreign country during childhood seems sufficient for individuals to develop both general and location-specific migration capital, in support of Hypothesis 3. It does not need to be coupled with a history of family migration for individuals to become more mobile as adults. The existing literature has largely portrayed childhood migration negatively, emphasising the loss of social networks to the individual. By taking a life-course approach and following individuals up to age 50, we have shown that—despite any such short-term challenges—childhood migration experiences can be a source of advantage in later life.

Our results also indicate that, consistent with Hypothesis 4, socio-economically disadvantaged individuals are less able to draw on their migration capital to emigrate. Conversely, socio-economically advantaged individuals are better able to translate their migration capital into actual adult migration. This pattern is most visible among native-born individuals with a childhood migration experience: those with tertiary-educated parents are much more likely to migrate onward in adulthood than those with primary- and secondary-educated parents. Taken together, these results suggest that childhood international; migration is an additional source of advantage that contributes to the reproduction of socio-economic inequalities by allowing young adults to capitalise on the migration capital inherited from their parents. This finding resonates strongly with recent findings about the role of internal migration in the transmission of socio-economic inequalities between generations.

In reflecting on the implications of our findings, it is important to acknowledge the limitations of this study. First, it is important to recall that our results may be specific to the circumstances of European baby-boomers, which constitute our analytic sample. These individuals reached young adulthood before the introduction of freedom-of-movement legislation within the Schengen area, at a time where international migration was less common than it is now. Similar research focused on more recent European birth cohorts (de Jong and de Valk 2023) suggests that having one parent may be sufficient to stimulate emigration in young adulthood. This discrepancy highlights the need to extend evidence to more recent birth cohorts and to different institutional contexts. In relation to this, we interpreted the lack of onward migration among members of the 1.5 generation as an indication of the additional barriers they may face compared with native-born individuals, including access to residency visas in third countries, particular among non-citizens. This proposed explanation aligns with bourdieusian interpretations of migration capital (Kim 2018; Moret 2020), which emphasise the role of institutions and regulation in the production, conversion and legitimization of migration capital. Testing this proposition could be the focus of subsequent research.

Second, the small size inherent to survey data on international migration constitutes another study limitation. While most of our results align with theoretical expectations, too large standard errors due to small cell sizes may have prevented regression coefficients from reaching statistically significance (Type-II estimation errors). The present study offers a solid theoretical foundation for future research on the intergenerational transmission of migration behaviour and calls for further testing of our hypotheses using larger datasets. While the risk of emigration can be easily captured in administrative data and population registers (which dwarf survey datasets), such data sources do not capture the direction of emigration and do not enable distinctions between onward and return migration. Recent examples of cross-country linked administrative datasets between Sweden and Finland (Weber and Saarela 2019) offer a possible way forward, although extending this approach to multiple countries would represent a major challenge. A more feasible solution would be the inclusion of retrospective life-history modules, such as done in SHARE, in established longitudinal household surveys such as the *UK Household Longitudinal Study* or the *Household, Income and Labour Dynamics in Australia Survey*. Such modules would provide evidence for more recent birth cohorts across a wider range of countries to better understand the formation and transmission of migration capital and its role in the reproduction of socio-economic inequalities. In the meantime, the present study offers a set of conceptual and analytic tools that we hope contribute to invigorating research on the factors underpinning international migration behaviour.

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Appendix A1 Descriptive statistics

		n (unweighted)	% (weighted)
Childhood and parental migration history			
Native-born, no childhood migration experience		17,727	91.35
Native-born, childhood migration experience		206	1.25
1.5 generation, one foreign-born parent		70	0.34
1.5 generation, two foreign-born parents		290	1.33
2nd generation, one foreign-born parent		909	4.29
2nd generation, two foreign-born parents		271	1.42
1 foreign-born parent	Parent born in Northern and Western Europe	642	1.98
	Parent born in Eastern Europe	244	1.99
	Parent born outside of Europe	95	0.66
2 foreign-born parents	Both from Northern or Western Europe	324	1.10
	Both from Eastern Europe	104	0.82
	Both from outside of Europe	103	0.61
	Each from a different region	33	0.23
1 foreign-born parent	Parent born in Northern and Western Europe	642	1.98
Emigration from 18 to 50 years of age			
Did not emigrate		18,606	96.75
Onward migration		818	3.02
Return migration		36	0.37
Socio-demographic characteristics			
Female		10,764	51.40
Birth cohort 1946-52		6,194	26.35
1953-59		7,049	34.87
1960-67		6,217	38.87
Parental education			
Primary		9,007	48.61
Second		7,576	38.65
Tertiary		2,807	12.74
Residence at age 17			
Big city		3,201	16.14
Suburb of a big city		1,729	7.00
Large town		3,275	17.39
Small town		4,359	23.69
Rural area or village		6,896	32.79
Country			
Austria		1,444	2.57
Belgium		2,693	3.59
Cyprus		137	0.03
Denmark		2,056	2.05
Finland		372	0.4
France		1,739	20.18
Germany		2,102	26.16
Greece		584	2.29
Italy		2,468	21.75
Luxembourg		579	0.09
Malta		275	0.04
Netherlands		632	1.78
Spain		2,064	13.78
Sweden		1,320	2.92
Switzerland		1,069	2.38
Wave			
Wave 3		5,135	29.94
Wave 7		14,393	70.06

Notes: Data from waves 3 and 7 of SHARE.

Appendix A2 Hazard ratios and 95% confidence intervals from Cox proportional hazard models of first adult emigration, models distinguishing parents' geographic origins

	Model 1A	Model 1B	Model 1C
Migration history			
Childhood migration (ref. cat. no migration)	1.31***	1.33***	1.25**
	[1.15,1.49]	[1.16,1.53]	[1.08,1.450]
Parental history (ref. cat. both native born)			
1 parent born in Europe	1.64**	1.20	1.11
	[1.20,2.25]	[0.87,1.66]	[0.81,1.54]
1 parent born in Eastern Europe	0.75	0.93	0.87
	[0.36,1.58]	[0.44,1.98]	[0.41,1.85]
1 parent born outside Europe	2.10*	1.71	1.18
	[1.05,4.22]	[0.85,3.46]	[0.58,2.38]
Both parents born in Europe	1.89**	1.45	1.68*
	[1.27,2.79]	[0.97,2.18]	[1.12,2.53]
Both parents born in Eastern Europe	1.40	1.73	1.61
	[0.62,3.12]	[0.77,3.90]	[0.71,3.61]
Both parents born outside Europe	1.28	1.29	1.2
	[0.57,2.87]	[0.57,2.91]	[0.53,2.72]
Parents born in different regions	2.59	2.398	1.76
	[0.97,6.94]	[0.89,6.46]	[0.65,4.756]
Control variables	No	No	Yes
Country and wave fixed effects	No	Yes	Yes
n	19,403	19,403	19,403
Log likelihood	-7,729	-7,573	-7,498
Akaike Information Criteria (AIC)	15,463	15,182	15,050

Notes: Data from waves 3 and 7 of SHARE. Statistical significance: * $p<0.05$, ** $p<0.01$, *** $p<0.001$.
The analyses exclude native-born individuals with no childhood migration.

Appendix A3 Research hypotheses and summary of findings

Hypothesis	Support	Finding
H1a. Individuals with a family migration history are more likely to emigrate than individuals without it	Mixed	Second-generation immigrants are more likely to emigrate in adulthood than native-born individuals (Figure 1), but this effect dissipates once control variables are introduced (Table 3). Second-generation immigrants have a low propensity to emigrate because three-quarters of them have only one foreign-born parent (Table 1). Once the number of foreign-born parents is controlled for, family migration history becomes significant (Table 4).
H1b. The impact of family migration history increases with the number of foreign-born parents	Yes	Individuals with two foreign-born parents are 59% more likely to emigrate during adult life than individuals with two native-born parents (Table 4). Having one foreign-born parent does not make a statistically significant difference.
H2. Family migration history and lived experience synergise to cumulatively enhance the likelihood of adult emigration	Mixed	Members of the 1.5 generation, who combine both family migration history and lived migration experience, exhibit a greater propensity to emigrate than second-generation immigrants with no first-hand childhood migration experiences (Figure 1 & Table 3). However, they are equally likely to emigrate as native-born individuals with childhood migration experience (Table 3). This suggests that lived migration experience is more facilitative of subsequent emigration than family migration history.
H3. Individuals with high levels of location-specific capital are more likely to engage in return migration, while individuals possessing general migration capital are likely to migrate onward to a country where they or their family have never resided before	Yes	Native-born individuals with childhood migration experience are the most likely to migrate onward or to return to previous country of residence (Table 6). Thus, living in a foreign country in childhood seems sufficient to develop both general- and location-specific migration capital. It does not need to be coupled with family migration history for individuals to be mobile in adulthood. Members of the 1.5 generation tend to engage in return but not onward migration (Figure 3 & Table 6), suggesting the transmission of location-specific capital.
H4. Economically disadvantaged individuals are less able to draw on their migration capital to emigrate, particularly for migration to third countries for which migration costs are greater	Yes	Parental education is a strong determinant of onward migration, but not of return migration (Table 6). Individuals with tertiary-educated parents are more likely to draw on their migration capital to emigrate in adulthood than those with primary and secondary-educated parents (Figure 3). This is particularly true for native-born individuals with childhood migration experience.