

Internal migration age patterns and the life-course: continuity and change, 1970-2000

Background and research aims

Migration is an activity primarily undertaken by young adults as they move to take up educational, employment and partnering opportunities. After peaking in the mid-twenties, the propensity to move steadily declines with increasing age, in response to mobility-inhibiting factors such as property ownership and career stability, reaching a low typically around retirement age (Rogers and Castro 1981). Underpinning these regularities is a collection of life-course transitions (Mulder 1993; Warnes 1992). Over the course of their lives, individuals go through a series of status changes (Elder 1985) that often trigger a change of residence, such as labour force entry (Venhorst et al. 2011), union formation (Mulder and Wagner 1993) and childbearing (Baccaïni and Courgeau 1996).

Despite the persistent age selectivity of migration across countries (Rogers and Castro 1981) and over time (Rogers and Rajbhandary 1997), there is emerging evidence of a gradual ageing of the migration peak. For example, Brown et al. (2006) identified a continued ageing of the age profile of migration in Australia from 1976 to 2001, characterised by a decrease in moves by young adults, together with higher mobility for ages after the peak. In a similar manner, Ishikawa (2001) observed in Canada, Japan and Sweden, between 1965 and 1990, a dispersion of moves across a wider age range, combined with a shift toward older ages. While this work has delivered valuable insights into the temporal dynamics of internal migration, it has been confined to a few industrialised nations and has not established the underlying drivers of shifts in migration age patterns.

To address this gap, this paper seeks (1) to establish the extent and direction of temporal shifts in the age structure of migration from 1970 to 2000 across a global sample of 12 countries, including developing and industrialised economies, and (2) to explore the extent to which changes in the structure of the life-course have influenced direction and trends in migration age patterns. To that end, we focus on four transitions shown to be key markers in the transition to adulthood (Gauthier 2007) and important triggers of spatial mobility (Mulder 1993): education completion, first employment, union formation and first childbearing. By comparing pathways to adult roles across countries and over time, the research aims to ultimately determine whether countries converge on similar migration age patterns as they experience higher levels of educational attainment and delayed transitions to adult roles, or whether they exhibit specific migration age profiles according their cultural and socio-economic environment.

Methods and data

To capture the association between migration age patterns and life-course transitions, it is imperative to first determine the extent of variations in the age structure of migration across countries and over time. To that end, we employ a suite of comparative metrics which have been shown to summarise the essential age structure of migration and capture cross-national variations. Six principal metrics have been used in prior comparative research to characterise migration age profiles: the age at peak, the intensity at peak, the rate of ascent, the rate of descent, the degree of asymmetry between the rates of ascent and descent and the breadth of the peak. Bernard et al. (forthcoming) demonstrate that this complexity can be adequately summarised by two discrete indicators - the age at which migration peaks and the intensity of migration at the peak – each of which is closely associated with other features of the age profile. As well as providing a standardised measure of the level of migration, intensity at the peak captures the degree of concentration of migration activity around the peak. It shapes the slopes that demarcate the labour force curve: as intensity increases, the upward and downward slopes progressively steepen. At the same time, age at peak migration captures the point in life at which migration occurs and governs the symmetry of the labour force curve, increasing steadily as the age at the peak rises. Computed across a sample of 25 countries, Bernard et al. (forthcoming) show that these two metrics account for two thirds of inter-country variance in the age profiles of migration.

To compute these two metrics, we derive migration age profile indicators from five-year interval data disaggregated by single-year age groups and use migration recorded between minor administrative units. Five years is the most common observation period among countries collecting fixed interval migration data, and thus allows for the best available international coverage and comparability (Bell and Charles-Edwards 2013). With regard to spatial scale, few countries collect data with respect to changes of address (Bell 2005), so comparisons of residential mobility across a large number of countries may be out of reach (Long 1991). Following Rodriguez (2004), we distinguish migration according to two levels of geography, between minor and between major administrative units, and use the former as a systematic measure of short-distance migration.

To measure life course transitions we use three metrics that have been shown to provide an effective framework against which to compare the structure of the life-course across countries and over time: prevalence, timing and spread (Billari and Wilson 2001; Fussell 2005; Hogan 1981; Ravanera et al. 2004; Stevens 1990). Following Modell et al. (1976), we define prevalence as the proportion of a population that has undergone a transition by age 35. As a measure of timing, we use the singulate mean age defined by Hajnal (1953). First proposed to gauge the timing of marriage, this measure has since been applied to other transitions, including departure from the parental home (Guinnane 1992). Finally, we use the interquartile range to gauge the spread of life-course transitions, measured as the

difference between the ages at which 25 and 75 per cent of the population have completed a particular transition (Carter and Glick 1970; Modell et al. 1976). Because not all individuals will experience a transition, we normalise the proportion of a population that has reached a particular status by the age of 35 to 100 per cent. By doing so, we obtain a measure of spread that is independent from the prevalence of a transition. The proposed metrics are computed for ages 15 to 35. This age range corresponds not only to the period of the life-course where key status changes occur (Shanahan 2000), but also to the ages at which the majority of moves take place (Rogers and Castro 1981a) and cross-national differences occur (Bell and Muhidin 2009; Bernard et al. forthcoming).

For the analysis reported here, prevalence, timing and spread are derived from census microdata, which provide the age distribution of statuses occupied by individuals within a population, such as educational, employment, marital and parental statuses. From those data, the ages at which members of a population make a given transition can be inferred assuming that the age distribution of statuses has not been affected by rapid changes (Hajnal 1953). By restricting the analysis to the 15-to-35 age range, we limit the risk of the age distribution of statuses being driven by period- or cohort-changes.

We compute life-course and migration age profile indicators across a sample of 12 countries encompassing five major world regions: Asia (Indonesia and Vietnam), Europe (Greece and Portugal), Latin America (Argentina, Bolivia, Chile, Colombia and Costa Rica) and North America (Canada and United States) and Oceania (Australia). We use microdata from the 1970, 1980, 1990 and 2000 census rounds primarily drawn from the Integrated Public use Microdata Series (IPUMS) database maintained by the Minnesota Population Centre (2011). While the decennial nature of population censuses provides only coarse temporal coverage, with just four observation points between the 1970s and the 2000s, the IPUMS database represents a unique resource for comparative research of mobility.

Findings

Preliminary analysis suggests that, overall, the age profile of migration has either remained fairly stable (Canada, Colombia, Costa Rica and Portugal) or gradually shifted to older ages (Australia, Argentina, Bolivia, Costa Rica, Chile Greece and the United States) over the forty year observation period. In most countries, ageing of the migration peak has been coupled with a dispersion of migration across a broader age range. In Greece, for example, the age at which migration peaks rose from 21 in the 1970s to 24 in the 1980s and 1990s to 28 in the 2000s. Over the same time period, peak migration intensity decreased by 24 per cent, indicating a dispersion of moves across a broader age range. In contrast, Indonesia and Vietnam experienced the opposite trend, with an increasing concentration of migration at young adult ages, coupled with a shift of the migration peak to younger ages. These initial results indicate that not all countries move towards similar migration age patterns

as they experience higher levels of educational attainment and delayed transitions to adult roles, suggesting that the nature of migration/life-course interactions is complex and dependent on the broader socioeconomic context in each country.