

Migration attempts – who tries, who succeeds, who fails?

Evidence from Senegal

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Introduction and research objectives

The distinction between migration attempts and actual migration is of increasing interest to policy-makers and researchers, as political and financial barriers to international moves are considered to build up “pools of migrant candidates” in the origin countries. To improve migration policy formation, one needs not only a better understanding of the motives and characteristics of migrants at destination, but also of migrant candidates remaining at origin, and the factors determining whether they do or do not carry out the move. However, the existing empirical literature is to a large extent restricted to either realised migrations or stated intentions. This paper aims to investigate those processes jointly, with an application to Senegalese international migration attempts and actual international migration behaviour. More specifically, the research objectives are:

1. To examine whether determinants of migration attempts differ from determinants of actual migration from Senegal, in particular with regard to the role of networks.
2. To explore, for those individuals who attempt migration, the duration of the attempt, as well as the effect of time, individual, household and contextual factors on the likelihood of ending the attempt with a migration or with an abandonment of the attempt.

The economic theoretical literature explains the migration decision of rational subjects in terms of a cost-benefit analysis, whereby discounted expected income in the origin country is compared to discounted expected income in the destination country, adjusted for the financial or psychological costs attached to migration. The variables in question depend on the formation of expectations, on the treatment of the discount factor and the modelling of migration costs, which, if they are sufficiently high, may impede migration (O’Connell, 1997). Most models assume, however, that the migration decision is followed by actual migration (revealed preferences). The migration decision may diverge from actual migration behaviour in case of uncertainty regarding future conditions at home and abroad, as prospective migrants may apply a “wait and see” strategy and delay migration (Burda, 1993; Burda et al., 1998). A second relevant body of literature originating in the field of social psychology is the “theory of planned behaviour” (Ajzen, 1985). It considers intentions as the main determinant of behaviour. Adapted to migration by De Jong (1999, 2000), most studies using stated migration intentions as predictors of actual migration behaviour refer to the theory to justify a modelling approach based on intentions. Manski (1990) argues, however, that intention data performs rather poorly in predicting actual behaviour, as behaviour may be affected by unforeseen events occurring after the survey.

Empirical evidence on migration attempts is scarce. Litchfield and Reilly (2008) analyse the gender differences in migration intentions and migration attempts in Albania. The results indicate that there is no selectivity bias in attempting migration. The data does not, however, allow for investigation of the links between attempts and actual out-migration. A second study considering attempts explores migration of Tongans to New Zealand (McKenzie et al., 2007) and suggests that applicants

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underestimate income and the probability of employment at destination, possibly because they place more weight on negative experiences of migrants they know.

While a considerable amount of empirical literature has used intentions or ‘willingness to move’ data to analyse migration determinants (e.g. Burda et al., 1998; Papapanagos and Sanfey, 2001; De Jong, 2000; Drinkwater, 2003a, 2003b, Van Dalen et al., 2003), intentions have rarely been linked to attempts and actual moves. The only existing study on Senegal (Van Dalen et al., 2003) suggests that there is a large gap between intentions and actual behaviour. While 38 per cent of respondents stated that they intended to migrate, only two per cent had taken concrete steps to realise their intention. However, the authors do not connect intentions/attempts with actual migration behaviour. This has been done in the context of internal migration, when migrants are more easily traced (e.g. De Jong, 2000). Van Dalen and Henkens (2008) examine international migration behaviour using data from a survey on migration intentions in the Netherlands, as well as a tracer survey two years later to ascertain how far migration intentions were realised. The findings suggest that intentions are an important predictor of migration (approx. 25 per cent of those who intended migration moved), that characteristics of the “movers” and “dreamers” do not differ significantly, and that the same factors determine intentions and actual migration. No comparable study exists for a developing country context.

Data and Methods

This paper uses a new set of biographic survey data collected in 2008 in the framework of the MAFE-Senegal project (Migration between Africa and Europe).² In the region of Dakar, approximately 1,200 individuals were sampled. In addition, 600 migrants were interviewed in the main Senegalese destinations in Europe (Spain, Italy, and France).

The survey design rests on two principles:

(1) *Longitudinal data*, obtained through the collection of retrospective life histories covers the life of the respondents from their birth till the time of the survey. Life spheres covered in the questionnaire include, for instance, employment, family formation and housing histories, as well as the migrations of members of the respondent’s social network.

(2) A *transnational sample*, collecting information on non-migrants and return migrants at origin, and on current migrants at destination.

The analysis takes advantage of information capturing not only realised migrations and the preparation period before departure, but also unsuccessful attempts. It is therefore possible to identify individuals who have never attempted migration, individuals who are attempting migration but have not yet migrated, individuals who attempted migration in the past but abandoned the attempt, and individuals who attempted and migrated. Moreover, one can compute the duration of the migration attempt.

The first part of the analysis will explore how determinants of migration attempts differ from determinants of actual migration. The processes of attempt and migration can be described formally as follows (see e.g. Litchfield and Reilly, 2008):

$$y_{i1}^* = x_{i1}'\beta + \varepsilon_1 \quad [1]$$

² The MAFE survey is coordinated by INED (C. Beauchemin, Paris), in cooperation with the “Institut de Population, Développement et Santé de la Reproduction” University Cheikh Anta Diop (IPDSR, Senegal). Other partners: Pompeu Fabra University (P. Baizan), the Centro Nacional de Investigacion Cientifica (A. Gonzalez-Ferrer), and FIERI (Forum Internazionale ed Europeo di Ricerche sull’Immigrazione; E. Castagnone).

$$y_{2i}^* = x_{2i}'\gamma + \varepsilon_2 \quad [2]$$

where y_{1i}^* is the latent propensity to attempt migration, y_{2i}^* is the latent propensity to migrate and the dependent variables are related to observable binary outcomes by the rule:

$y_{ji} = 1$ if $y_{ji}^* > 0$; one observes that the individual attempts migration (j=1)/ migrates (j=2)

$y_{ji} = 0$ if $y_{ji}^* \leq 0$; one observes no migration attempt (j=1)/ no migration (j=2)

This equation structure suggests the use of a bivariate probit model with selection, where the error terms ε_1 and ε_2 are distributed as bivariate normal with means zero, variances one, and correlation ρ .

In a second step, we restrict the analysis to individuals who attempted migration and explore the duration of the attempt episode. We use discrete-time competing risks model (Jenkins, 1995), with the outcomes migration, abandoned attempt, and right-censoring. A multinomial logit model can be used to estimate this competing risks model, in which the event-specific hazard rates take the form:

$$h_{it}^{(j)} = \text{prob}(y_{it} = j) = \frac{\exp[\alpha_j(t) + \beta_j' x_{it}]}{\sum_{j=1}^J \exp[\alpha_j(t) + \beta_j' x_{it}]} \quad [3]$$

The advantages of this approach are that the baseline hazard $\alpha(t)$ can be integrated in a flexible way (e.g. linear, quadratic or as a step function with dummies for each failure time period). Moreover, time-varying covariates X_{it} can be introduced to capture, for instance, effects of changes in marital status, childbirth, employment status or position in the household. The vector of covariates includes individual characteristics (e.g. gender, age, education, marital status, employment status), family and family characteristics (e.g. household composition, type of dwelling, subjective wealth measure, and variables identifying migration experience in the social network), As the attempts of individuals surveyed took place at different points in time, it is important to capture the effect of economic and political conditions at the time of the attempt/migration. Control variables include unemployment rates in the three European destination countries and a weighted average of the GDP differential. Moreover, information on immigration policies (e.g. changes in visa requirements, regularisations, naturalisations, family reunification policies, expulsions) will be used to construct a variable indicating the ease or difficulty of migrating.

To the author's knowledge, existing research does not link the analysis of determinants of attempts to determinants of actual migration behaviour. The duration of migration attempts, and the conditional probabilities of abandoning the migration attempt or moving abroad, have not been modelled either. The findings of this paper should thus provide new insights into selection processes underlying migration decisions and actual migration from a Sub-Saharan African country on the basis of original, retrospective data on migration attempts.

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