

Following in the footsteps of others? A life-course perspective on mobility trajectories and migrant networks among Senegalese migrants

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Introduction

International migration is still mainly analysed as a one-time, one-way movement from an origin country A to a permanent destination B. Yet migration trajectories are often more complex, as migrants may travel through and successively settle in several countries, or engage in circular mobility. However, the factors that shape individuals' migration trajectories remain little known. In particular, secondary intra-European migration is still an under-researched area, despite the fact that qualitative studies suggest that secondary movements have become a common mobility strategy (Schapendonk 2010; Paul 2011) increasingly adopted in times of crisis (Sacchetto & Vianello, 2012; Cingolani & Ricucci, 2013).

In the African migration context, for instance, qualitative research suggests there is an increasing complexity and fluidity of migration flows and routes towards Europe, with a subsequent fragmentation of migrants' journeys (Schapendonk 2010; Castagnone, 2011). Partly in response to border controls, *step-by-step* migration (Bredeloup, Pliez, 2005), is progressively developing as an emerging migration strategy with transit migration assuming an increasing role in the trajectories undertaken by migrants. Return and circular migration patterns are also common practices (Flahaux et al 2010; Dia, 2009). Finally, African migrants in Europe have also been argued to engage in further onward re-migration *within* the European space, yet research on this phenomenon remains scarce.

Taking advantage of recently collected longitudinal data on mobility between Africa and Europe, this paper attempts to contribute to this literature in several ways.

1. First, it aims to document the structure of mobility patterns among Senegalese migrants, by adopting a longitudinal view of individual *migration trajectories*.
2. Second, it focuses on the under-researched phenomenon of intra-European stepwise migration, examining its drivers.
3. Furthermore, the paper focuses on the role migrant networks play in the shaping of migration trajectories

The objective of the paper is to contribute to the study of intra-EU mobility patterns and determinants, taking the Senegalese migration as a case study.

Data

This paper uses a new set of biographic survey data collected between 2008 and 2010 in the framework of the MAFE project (Migration between Africa and Europe). The survey design rests on two principles:

- (1) A transnational sample, collecting information on non-migrants and return migrants in the country of origin (1,067 individuals interviewed in the Dakar area in Senegal through a three-stage probabilistic sampling), and on current migrants at destination (600 migrants in the main Senegalese destinations in Europe: France, Italy and Spain, recruited through a mix of non-probability sampling methods).
- (2) Longitudinal data, which is obtained through the collection of retrospective life

histories covering different domains, such as employment, family formation and migration histories. The same questionnaire is applied in all countries surveyed.

Methods

This paper uses sequence analysis and optimal matching in order to construct a typology of migration trajectory, and event-history analysis to examine drivers of remigration and return.

As a first step, sequences displaying all migratory careers, undertaken by individuals, from the time of their first migration until the survey date, were produced. The different chronological sequencing of migration events according to their geographical location (countries where they occurred), and nature (out-migrations; further migrations; returns; re-departures; etc.) shape the mobility trajectories of each interviewee.

The next step consists in comparing trajectories through distance measures obtained via optimal matching analysis (OMA); and, based on the results of the comparison, of grouping similar sequences through cluster analysis (Brzinsky-Fay, Kohler, 2006). The latter technique aims to divide a set of objects (in this case individual migration paths), into a set of clusters or classes. The objective is to identify groups of objects that show similar characteristics, allowing to study the occurrence of patterns in different sequences (Billari, 2001).

Last, event history analysis is used to examine the role of several time-varying factors in influencing the likelihood of remigration and return.

Preliminary findings

A. Three main patterns of mobility among Senegalese migrants

From the first set of analysis, based on the analysis of migration sequences, three main mobility patterns were detected, almost entirely mutually exclusive:

1) “linear migration”

Linear migration entails direct, one-way moves from Senegal to destination countries. Migrants from this group leave the origin country, Senegal, and settle in a foreign destination, for shorter or longer periods, without further re-settlement. This first mobility pattern representing 71.6% of all migratory careers fits within a more conventional understanding of migration as transition from a place A (departure country) to a place B (destination country) and, eventually, a permanent return back to point A (in the case of returnees, represented by sequences ending with yellow spells)¹. Within the linear migration pattern, a further distinction was made between the trajectories towards Europe and those in Africa, as shown in graph 1. The

¹ It should however be noted that we are working with a right censored process, i.e. with observations stopping in 2008, with a limited retrospective observation window, which will be longer for migrants who began their migration career longer ago, either because they were born earlier or migrated at an earlier age. Thus, having undertaken only one migration so far does not necessarily exclude further movements to other countries, such as returns to Senegal for the European sample, or future re-emigrations for returnees in the Senegalese sample. Linear migration may in fact potentially evolve in circular (for the returnees in Senegal, who may decide to leave again in migration) or in step-wise (for actual migrants, who could decide to embark onto secondary migration) patterns. The results presented here are thus dependent on the age composition of the sample and the length of the observation window.

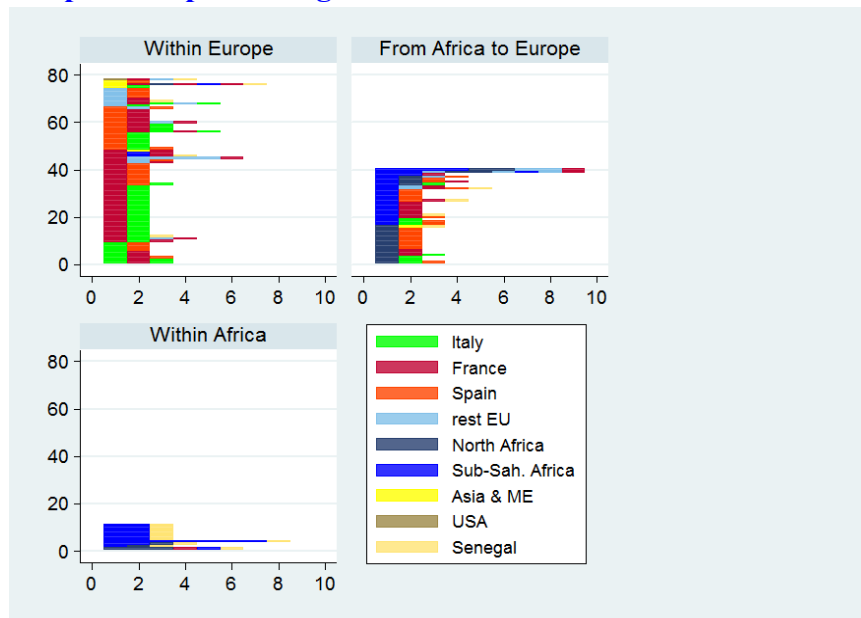
sequences displaying two episodes, with the second episode indicating a return to Senegal, are the ones undertaken by returnees, who were settled back in Senegal at the time of the survey.

- 2) “**step-wise migration**” comprises out-migration and secondary migration episodes with no intermediate returns.

The transition from linear to step-wise migration marks the distinction that Ma Mung (2009: 144) underlined between "international mono-migration", which are built on linear migration patterns between the country of origin and the migratory destination, and "pluri-migration", entailing the crossing of several subsequent countries. Step-wise migration consists in fact of fragmented mobility steps across different countries out of Senegal, both in the African and/or in the European space. These paths are characterized by a more or less high level of “migration turbulence”, in which multiple moves (from 2 to 9 different spells) lead to the composition of step-by-step migration. Step-wise migration accounts for 16,1% of all sequences within the sample. Within the step-wise cluster, three sub-groups of step-wise movement were distinguished through optimal matching and cluster analysis (graph 2).

The first sub-group obtained within the step-wise macro-cluster (cf. graph 2, picture at the top on the left) displays step-wise migration within the European space and is the most prominent within the linear pattern. Once in Europe, first places of arrival may or may not be the ones where migrants settle for good. **The second sub-cluster** in graph 2 (at the top on the right) shows preliminary steps in North African and Sub-Saharan countries leading to Europe. Step-wise migration is strongly associated with transit movements, as an emerging strategy used by migrants in an era of tightening entry procedures in European destination countries (Castagnone, 2011). Such movements mainly - albeit not exclusively - take place in African intermediate countries and in North Africa. Finally, **the third group** (at the bottom on the left) depicts intra-African (mostly within Sub-Saharan and in particular West African countries) step-wise mobility mainly leading back to Senegal as a final outcome.

Graph 2: Step-wise migration



Source: MAFE-Senegal Survey (own calculations)

- 3) “**circular migration**” includes trajectories with one or more return to Senegal and subsequent re-departures.

Circular migration is the third migratory pattern, which entails repeated out-migrations and temporary long-term (longer than a year) returns to the country of origin (the “pendulum migrants” evocated by de Haas, 2010). This pattern develops in three possible forms of mobility: a bi-polar circularity within European Union, involving returns from European destinations and re-departures to Europe; a multi-polar circular migration, from African countries back to Senegal and re-emigration to Europe; and, finally, a repeated mobility between African destinations and the country of origin.

B. Determinants of re-departure and return

Next, our analysis turns to the determinants of the decision to leave the country of destination, either in order to move elsewhere in Europe or in order to return to the origin country. Given that the data is longitudinal, the best way to do this is to employ **discrete-time event history analysis**. Using the respondents’ detailed migration histories, a categorical measure is constructed, indicating whether the individual is still in the country of destination (0), whether he or she has re-migrated to another European country (1) or returned to Senegal (2). The 4 cases of remigration to other destinations are excluded from the analysis. The individuals enter the risk set at the beginning of their European migration spell and are followed until either the time of the survey (if still at destination) or until their departure for another destination (Senegal or another European country).

Our population of study consists of all respondents having carried out at least one migration within Europe and who may or may not be at destination at the time of the survey. The unit of analysis is any European migration spell. Our sample consists

of 670 individuals and 806 migration spells. By the nature of the MAFE survey design, most of these spells are taking place in France, Italy or Spain, the countries where the survey was conducted (besides Senegal). However, since the survey is retrospective, the respondents are also reporting on previous migration spells which may have taken place in other European or African countries. While in a first set of analyses we consider all European migration spells, we also check whether our results are robust when only including the ones located in France, Italy or Spain.

Co-variables. *Access to migrant networks in Europe* is among the main independent variables. One of the innovative features of the MAFE survey is the longitudinal information it collects on the respondents' migrant network. The migration trajectories (year and destination of each move) of the interviewee's relatives, friends and acquaintances having spent at least a year abroad are recorded. Based on this information, four variables are constructed, capturing ties located in the country of settlement (*networks at destination*), in other countries in Europe (*networks same region*), *networks elsewhere* (mostly Africa) and *returnees* (network members who returned to Senegal after at least one year abroad). Furthermore, three aspects of the composition of networks located in other countries in Europe are taken into account: the type of relationships (close family ties vs. extended kin and friends), the gender of the tie and the level of migration experience (recent, experienced and long-term migrants²). The models also *control* for several time-varying contextual and individual characteristics which have been shown to shape mobility, such as period, country of settlement, duration since arrival, educational level, age, legal status, family status. We perform a series of multinomial logistic analyses using the cases of *no migration* as our reference. Coefficients are presented as Odds Ratios. Sampling weights are used in all models.

Preliminary findings suggest that having kin or friends located in other countries in Europe increase the chances of subsequent moves on the continent. Distinguishing the networks by their composition in a series of additional models, we find that it's only the weaker ties – friends or extended kin – that significantly increase the likelihood to re-migrate, while close kin - siblings or parents – have no effect. Gender does not appear to matter, as both male and female network members in Europe encourage re-migration. Lastly, and somewhat surprisingly, it's only network members that have recently migrated – for less than 3 years – that affect chances of intra-European mobility.

On the other hand, having ties in the country of destination (excluding the partner or children) does not significantly discourage one from leaving the country; It is the presence of the spouse in the country of residence that substantially diminishes the likelihood of a remigration within Europe; the effect of having children at destination goes in the same direction but is not significant.

Confirming results from the sequence analysis, we see that both remigrations and returns are more likely to take place from France than from Italy and Spain,

² Recent migrants have migrated for under 3 years, experienced migrants between 4 and 10 years, long term migrants have been abroad for at least 11 years.

reflecting also the older nature of the Senegalese flows to France. Retrospective data is quite limited when assessing historical trends, but findings seem to confirm previous work. Remigrations appear to have increased in the 1990s and to have peaked in the first half of the 2000s, while decreasing afterwards, but these results are not statistically significant. Return migration from Europe illustrates a completely opposite trend as it significantly decreased in recent periods, as also found in other work (Flahaux et al. 2013). This may reflect the paradoxical effect of the increasingly restrictive migration policies adopted by European governments that encourage permanent migration and thus increase overall stocks of immigrants (de Haas and Czaika 2013).

Individual-level variables play a lesser role in explaining the likelihood of moving within Europe, with the exception of migrants' legal status. Those who have a visa (in addition to other documents or not) and those with no legal documents are more likely to move within Europe than those who have a residence permit in the country of settlement. Migrants who do not need a permit, mostly for having the nationality of the country, appear less likely, though not significantly so, to leave the country of settlement than those with a residence permit. Women are initially found to be less likely to engage in remigration within Europe and to return to Senegal than to stay in the country of settlement, but this result is no longer significant once taking into account migrants' educational level and employment status. Interestingly, the level of education does not seem to influence remigration chances, while those with a university-level degree have a higher rate of return, though not significantly so.

Employment status influences secondary mobility, in the expected direction. Those least attached to the (primary) labour market, such as the self-employed or the unemployed, are most likely to re-migrate or return, whereas having a skilled or semi-skilled position or being a student significantly discourages from leaving the country of settlement. Low skilled wage employment is only significant with respect to decreasing the likelihood of *return*, in comparison to self-employment.

Preliminary conclusions

A descriptive view of the MAFE data shows that mobility trajectories are more complex than is implied by the hypothesis still underlining a lot of research that migration is a one-off, permanent phenomenon from country A to country B.

Stepwise and circular patterns of migration are revealed, and while they seem to only represent about a third of the migrants it should be remembered that

- Linear migrations are “**censored** observations” and may evolve into such complex trajectories
- Our data are collected before 2009, but the share of complex trajectories is expected to have risen with the **economic crisis**. Qualitative work documents increasing intra-European circulation of Moroccan migrants that left Italy and Spain for more stable western & northern European destinations.

Looking in an event-history framework at the drivers of re-migration we found that:

- Those who are more likely to move within Europe do not fall in the categories that have the **formal right** to do so according to European legislation – students, highly-skilled workers, long-term residents. It is the low skilled, unemployed and those who hold temporary documents (visa) that are more likely to engage in secondary mobility
- However, this shouldn't lead to the conclusion that only the most precarious and the most deprived of human capital migrants move, since we found all levels of educations to be similarly likely to move. This raises the question of a mismatch between education and employment, which deserves further examination as a potentially crucial driver of remigration and return.
- Finally, networks appear as one of the most important drivers of secondary mobility. Stepwise intra-EU migrants are more likely to have larger and more dispersed European networks, with a higher composition of weak ties and more ties to recent migrants.

Bibliography

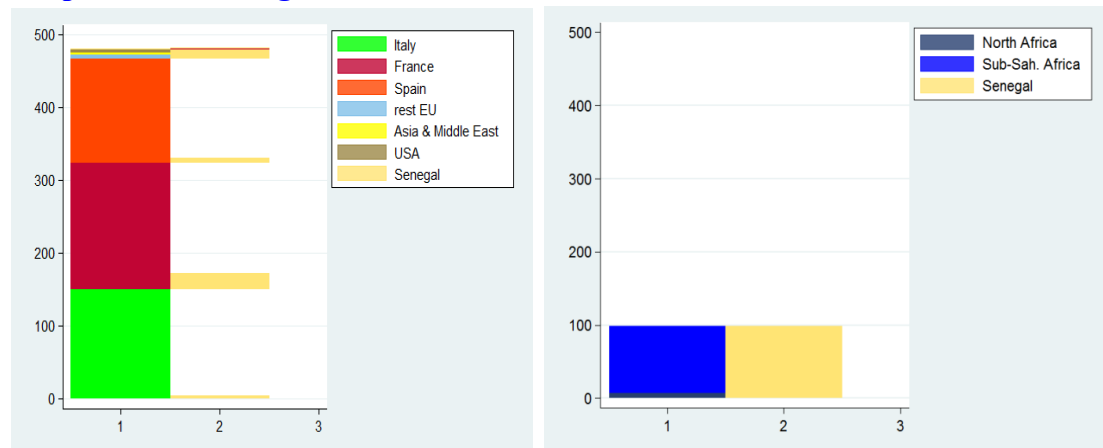
- Billari, F. (2001) "Sequence Analysis in Demographic Research, Special Issue on Longitudinal Methodology", *Canadian Studies in Population*, Vol. 28(2), 2001, pp. 439-458.
- Bredeloup, S., and O. Pliez (ed.) (2005), *Migrations entre les deux rives du Sahara*, Autrepart, n° 36, IRD/ Armand Colin, Paris, 182 p.
- Brzinsky-Fay, C., U. Kohler, and M. Luniak (2006) "Sequence analysis with Stata", *The Stata Journal* (2006), 6, Number 4, pp. 435–460.
- Castagnone, E. (2011). Transit migration : a piece of the complex mobility puzzle. The case of Senegalese migration. *Cahiers de l'URMIS*, 13
- Cingolani, Pietro & Ricucci, Roberta (2013) "Transmediterranei. Le collettività di origine nordafricana in Piemonte, tra continuità e cambiamento", FIERI Rapport
- De Haas, H. (2010) "The internal dynamics of migration processes: A theoretical inquiry." *Journal of Ethnic and Migration Studies*, 36(10).
- Dia, H. (2009). *Espaces domestiques, espaces villageois, espaces urbains multi-situés: Cinquante ans de migrations à partir de la moyenne vallée du fleuve Sénégal (1960-2010)*. Thèse de doctorat en sociologie, Paris:Université Paris Descartes,
- Flahaux M-L., Beauchemin C., et Schoumaker B. (2010) *Partir, revenir : tendances et facteurs des migrations africaines intra et extra-continentales*. MAFE Working Paper n°7, avril 2010.
- Ma, Mung E. (2009) "Introduction", in Cortès G., Faret L. (eds.), *Les circulations transnationales. Lire les turbulences migratoires contemporaines*, Armand Colin,
- Paul, A. M. (2011). Stepwise International Migration: A Multi-Stage Migration Pattern for the Aspiring Migrant. *American Journal of Sociology*, 116(6), 1842-1886
- Schapendonk, J. (2010a) "Staying put in moving sands. The Stepwise Migration Process of sub-Saharan African Migrants Heading North", in ENGEL U., NUGENT P. (eds.), 2010, *Respacing Africa*, Leiden: Brill.
- Schapendonk, J. (2010b) "Stuck between the Desert and the Sea: The Immobility of Sub-Saharan African 'Transit Migrants' in Morocco", in: RITTERSBERGER- TILIÇ H., ERDEMIR A., ERGUN A., KAHVECI, H. *Rethinking Global Migration:*

Practices, Policies and Discourses in the European Neighbourhood, KORA, METU & Zeplin Iletisim Hizm, Ankara.

Sacchetto, Devi and Vianello, Francesca Alice (2012) La diffusione del lavoratore povero. L'impatto della crisi economica sui lavoratori migrant, ESPANET Conference, Roma

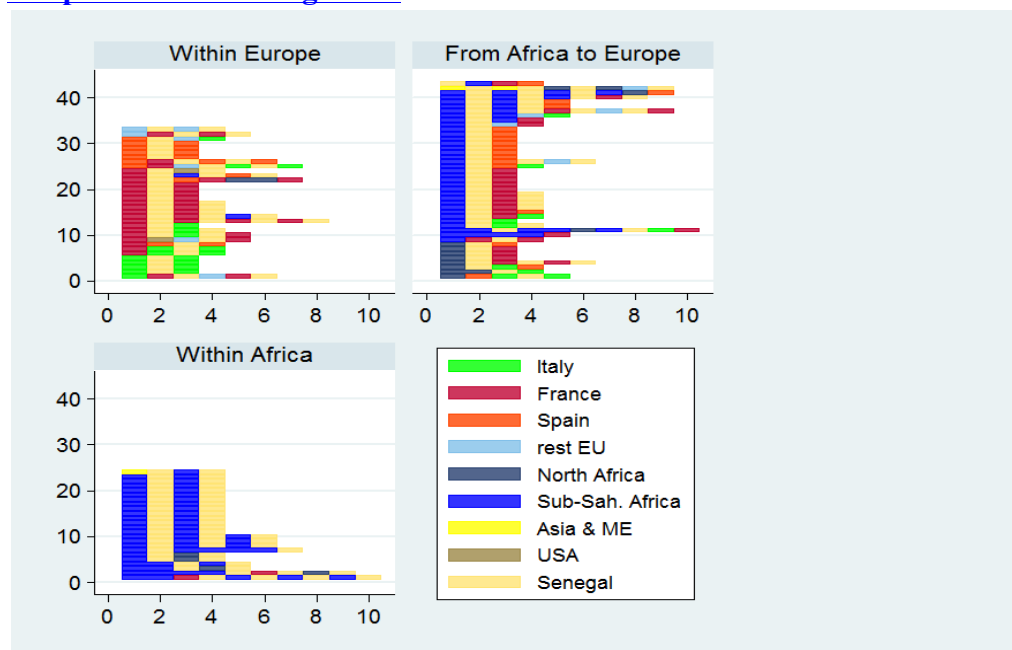
APPENDIX

Graph 1: Linear migration



Source: MAFE-Senegal Survey (own calculations)

Graph 3: Circular migration



Source: MAFE-Senegal Survey (own calculations)

Table 1: Multinomial logistic regression of the likelihood of intra-European remigration and return (ref: remain in country of settlement)

Variables	M1	M2	M1	M2
No migr =	Remigration		Return	

	reference				
Duration since migration	0.71***	0.82**	0.82***	0.95	
Duration squared	1.01***	1	1	1	
Has NTW ^a same country	0.63*	0.83	0.54**	0.87	
Has NTW ^a same region	2.62***	1.86**	1.03	1.06	
Has NTW ^a elsewhere	0.93	0.82	2.06	1.16	
Has Returnees ^a	0.85	1.01	1.22	2.16	
Partner location (ref=Single)					
All partner(s) in Senegal		0.69		0.84	
Partner(s) only same country		0.20***		0.46	
Partner also Europe/Elsewhere		1.35		1.08	
Child(ren) location (ref = No Child)					
All child(ren) in Senegal		0.99		1.73	
Child(ren) only same country		0.28		1.22	
Child also Europe/Elsewhere		2.08		0.00***	
Woman		0.49		0.93	
Period (ref=bef. 1990)					
1990s		1.76		0.92	
2000-2004		2.19		0.49	
2005 or after		0.89		0.15***	
Country of destination (ref=France)					
Italy		0.32***		0.32**	
Spain		0.15***		0.36**	
Other Europe		4.38***		5.96***	
Education level (ref: no degree)					
Primary level		0.9		1.07	
Secondary level		1.04		1.72	
Tertiary level		1.21		2.15	
Employment status (ref: self-employed)					
Not working		0.60		0.80	
Skilled worker		0.31**		0.24***	
Unskilled worker		0.60		0.15***	
Student		0.20**		0.26***	
Legal status (ref: Residence Permit)					
Visa or no docs		2.54**		1.57	
Visa and RP/WP		2.43**		1.69	
Work Permit		1.17		1.31	
Permit not required		0.29		0.39	
Person-years	8238	8238	8053	8238	8053
N events	608	96	96	102	102

p < 0.10, ** p < 0.05, *** p < 0.01 ^aExcluding the partner or children.