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**Determinants of Migration between Senegal  
and France, Italy and Spain**

Pau Baizán, Cris Beauchemin, and Amparo González-Ferrer

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# DETERMINANTS OF MIGRATION BETWEEN SENEGAL AND FRANCE, ITALY AND SPAIN

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Pau Baizán, Cris Beauchemin, and Amparo González-Ferrer

## Introduction

In the European opinion (media and policy makers), contradictory common wisdoms are associated to Sub-Saharan migrants, among which Senegalese migrants form one of the larger groups. On one hand, they are often associated to a flow of poor or destitute people, fleeing misery. On the other hand, policy makers -in Senegal as well as in Europe- are also concerned by a potential “brain drain”, suggesting that out-migrants are the most educated, who should be encouraged to return. Another policy concern is related to family reunification that has become the main channel for legal entry into Europe, Sub-Saharan migrants being often accused of overusing their right for family reunion (European Migration Network 2012). In line with this view, they are usually perceived by policy makers as permanent rather than temporary migrants. To go beyond these various contradictory preconceptions, the objective of this paper is to provide some analyses of the MAFE data<sup>1</sup> to understand better the logics of Senegalese migration. More specifically, it aims at helping us to identify the main factors underlying different propensities to migrate from Senegal to France, Italy and Spain, and from these European countries back to Africa, across individuals over time. Among these factors, we aim at clearly distinguishing the role played by individual, household and contextual factors. The paper is divided into four sections. First, we review some of the socio-economic and policy transformations that have taken place in the last five decades in Senegal, and relate them to the patterns and trends observed in migration to Europe. Second, we sketch a “profile” of Senegalese migrants to Europe, and of returnees, by providing some basic descriptive information about their characteristics. This is followed, in the third section, by a presentation of the main results of in-depth statistical analyses of the determinants of migration from Senegal to Europe and of return to Senegal. Finally, in the conclusion, we analyse the extent to which the main factors explaining both decisions (departure and return) are linked before emphasizing some policy implications of the results.

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<sup>1</sup> For more details on the MAFE project methodology, see Beauchemin (2012).

## **1. Background and previous evidence on international migration**

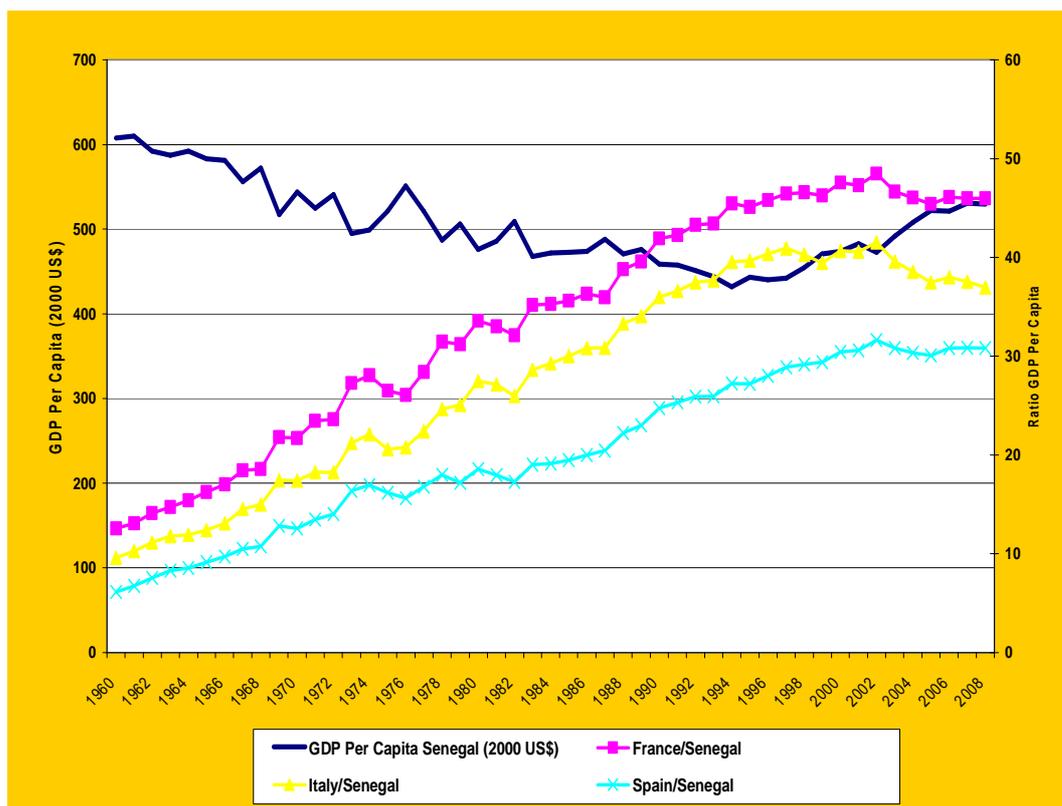
### **1.1. Recent socio-economic and political transformation in Senegal**

As most of Sub-Saharan Africa countries, Senegal has remained well behind other regions of the World in terms of economic and human development. It ranked 166 out of 182 countries, with a Human Development Index value of 0,464 in 2007 (United Nations Development Programme, 2009). Furthermore, progress from the independence in 1960 in social and economic indicators has been relatively modest. Senegal has experienced long periods of economic recessions and crises, including most of the 1980s and 1990s, that have hindered development. Although the role of poverty in determining migration seems to be context specific (de Haas, 2009), income levels have remained well below to what is generally believed to lead to mass migration (Faini and Venturini, 2010). International historic experience shows that migration accelerates in early phases of development, combined with parallel demographic transition (Taylor, 1986). However, migration out of Senegal has substantially increased in parallel with a mostly stagnant but changing economic context and a demographic transition in an early stage (Sakho, 2013). In that respect, life expectancy at birth still remains among the lowest in the World, with only 59.8 years, and the infant mortality rate was 50 per 1000 live births. The total fertility rate has experienced relatively modest declines, as it attained an average of 4.6 children per woman (all demographic figures are estimates from the United Nations for 2010). In terms of the expansion of education and health services, progress made has been substantial but slow. For instance, Berthélemy et al. (1996) note that the enrollment rate has increased massively. According to these authors, between 1960 and 1990, it went from 22 to 57 per cent in primary education is concerned, and from 2 to 16 per cent in secondary education. However, they estimated that the quality of education is poor and deteriorating, and not fitted for sustaining economic development. The Unesco estimated that in 2007 the combined gross enrolment ratio was 41 per cent, and the adult literacy rate of only 42 per cent. It should be noted that the gender differential has been reduced notably in the last few decades, as the combined gross enrolment ratio in education of men was 43.3 for men and 39.0 for women, and the adult literacy rate was respectively 52.3 and 33.0 in 2007 (United Nations, 2009).

Economic policy has been marked by two main periods. The post-independence period (1960-1980) was characterized by an import-substitution policy and by intensive government regulation. The economic development was based on the peasant production of groundnut for export, with French capital and state enterprises dominating formal-sector industry, commerce, and banking. This model came to an end in the late 1970s, when the country suffered a deep economic crisis that was aggravated by severe droughts between 1978 and 1981 and from a drastic fall in world groundnut prices. As a response to the bad economic performance, several structural adjustment plans, supported by the International Monetary Fund and World Bank, were implemented by the government, culminating in the devaluation of the currency in 1994 (e.g. Collier and Gunnig, 1999; Azam, 2004; Thioub, Diop and Boone 1998). This economic policy period, from the early 1980s to the present, was characterized by a drastic liberalization of the economy, involving the privatization and downsizing of state enterprises, deregulation of markets and reduction of trade barriers. It should be emphasized that these policies did not produce the expected results in terms of economic growth and

stabilization, at least until the second half of the 1990s. As for most other sub-Saharan countries, economic growth has lagged well behind of World average. Income differentials with European countries have sharply widened since the early sixties, despite of the moderate increase in GDP per capita occurred in Senegal after the devaluation of 1994, as can be seen in Figure 1.

**Figure 1. GDP per capita in Senegal and Ratio of GDP per capita between Senegal and each destination country in Europe (1960-2008)**



Source: World Bank, World Development Indicators, 2009.

The long period of economic recession involved a general decrease in real income, a surge of economic insecurity and the widening of inequalities, with a larger proportion of people affected by poverty (Duruflé 1988; Weissman 1990). Recurrent agricultural crises, amplified by ecological conditions and by policy decisions, lead to a deterioration of living conditions in rural areas and migration to cities. In urban areas, the decline of state sector and of industry, motivated a significant cut in the real wage rates and the spread of the informal sector (Azam, 2004). Various analyses estimate the informal sector to represent anywhere from 80% to 90% of Senegal's total active population. For instance, in 1991 the Government estimated that the informal economy accounted for 58.7 of the active urban population, compared to 17.8 per cent for the modern sector, while 23.5 per cent was unemployed (Gaufrey and Maldonado, 1998; International Labor Office, 2002). In particular, the capital city, Dakar, experienced profound transformations in its local labor market, including a severe reduction of highly qualified jobs and substantial job creation from the mid-nineties in the informal sector,

although returns to schooling remain generally low in this sector (Bocquier 1996). Urban population accounted for 58 per cent of the total population in 2005, with Dakar concentrating a large fraction of the rural-urban migration flows. This fast growing city has become a large metropolis of more than 2 million inhabitants, out of a total population of about 12.5 million in 2010. Finally, it should be emphasized that the country has enjoyed a remarkable level of political stability and democracy since its independence, in comparison with other Sub-Saharan Africa countries. Senegal has not been involved in armed conflicts with its neighbors. It has only been affected by an internal but long-lasting conflict in the region of Casamance that did not generate large flows of refugees across borders.

## **1.2. International Migration Dynamics**

Senegalese international migration has traditionally gone to either other African countries like Ivory Coast, Mauritania, Gabon or Gambia, or to France, the past colonial power. However, the increasing presence of Senegalese migrants in countries like Italy or Spain, but also the US, Portugal or Saudi Arabia, clearly illustrates the diversification that Senegalese international flows have experienced in recent times (Sahko, 2013). In fact, according to the Senegalese Census of 2002, the five most important destinations of individuals who left Senegal between 1997 and 2002 were, in decreasing order: Italy, France, Gambia, Mauritania and Spain (Flahaux et al. 2010). These five countries concentrated more than 2/3 of total Senegalese international migration between those years. Accordingly, in order to investigate the determinants of Senegalese migration to Europe it seems justified enough to focus our analysis on migrations to France, Italy and Spain. In the rest of this paper, we will refer to these three countries as Europe.

Senegalese migration to France started to be numerically visible in the mid-sixties, as a result of the active recruitment of workers initiated by the automobile industry in the metropolis (Pison et al. 1997, Robin, 1996). By that time and the following decade, the Senegalese flow to France mostly came from the northern region of the Senegal River Valley, and was mainly made of Soninke and Pulaar males of rural origin. The oil crisis in 1974 brought new restrictions on workers immigration in European receiving countries and, at the same time, opened the floor for family reunification schemes. However, most Senegalese migrants waited until the 1980s to call their wives and children in Europe (Barou 1993).

In the eighties, increasing economic difficulties in Senegal are commonly mentioned as the main reason underlying large increase in the figure of people leaving the country (Tall, 2002, Bruzzone et al. 2006), which came along with the progressive replacement of migration to Africa by migration to Europe and the diversification of destinations there (Ma-Mung, 1996). Indeed, migration rates out of Senegal to Europe experienced a substantial increase in the 1980s and the following decades, while migration rates to other African countries stagnated or declined (Sakho, 2013). Not only had the main destination countries (partially) changed over this period, but also the main sending areas in the origin country. The capital city, Dakar, became the main provider of Senegalese international migrants, especially to Europe: according to the 2002 Census, 26% of all migrants who left Senegal between 1997 and 2002 originated from Dakar (Lessault and Mezger 2010), a proportion similar to what was previously registered between 1988 and 1993 (Robin, Lalou et al. 1999). This explains why the region of

Dakar was chosen to collect the MAFE data in Senegal. However, it means that the results presented in this paper are not necessarily valid for the whole country. It is thus important to keep in mind some specificities of the migrant population from Dakar. According to the 2002 Census data, females and students are over-represented among international migrants from the capital region, when compared with all Senegalese international migrants (Table 1). However these figures do not say anything on the propensity to migrate of various groups from Dakar. In particular, the overrepresentation of students may simply be due to the fact that Dakar concentrates a large number of the Senegalese teaching institutions. In the rest of this section, we explore what are, according to the literature, the factors that may explain that some people migrate to Europe while others do not.

**Table 1. Specificities of the International Migrants from Dakar**

	Whole Senegal	Region of Dakar
<b>Demographic characteristics</b>		
Proportion of women	18%	25%
Mean age at departure	28	29
<b>Motives for migration</b>		
Work	76 %	68 %
Studies	10 %	19 %
Family	10 %	10 %
Other motives	4 %	3 %
Total	100 %	100 %
Source : République du Sénégal (2008). 2002 Census, our own computation. Definition: in the Census, international migrants are people who have left a Senegalese household for at least 6 months between 1997 and 2002.		

After 2005 and the new concern of European policy makers for African migration, several official reports have been produced by international organizations with the specific aim of reviewing studies on the drivers of Senegalese migration (European Commission 2007; OIM 2009). More often than not, these reports have a very general content and underline the lack of data to study the determinants of migration. Curiously, these reports do not cite the results of the Push-Pull project that produced and analyzed data on the factors of both intended and actual migration. However, this project until recently constituted a unique source of empirical results on the determinants of migration out of Senegal (Robin, Lalou et al. 1999; Lalou and Ndione 2005; Van Dalen, Groenewold et al. 2005).

The literature on Senegalese migration is in line with most theories and acknowledges the fact that the socio-economic environment plays a major role to explain international migration. As summarized above, policies of structural adjustment have not prevented the deterioration of living conditions for large fractions of the population and the increase of economic insecurity and social inequalities. In this context, international migration in the last decades is interpreted both as an individual and household survival economic strategy. A process of individualization of the migration decision would be at play in Dakar, in relation to higher levels of education (Lalou and Ndione 2005). In the rest of the country, international migration would be more often conceived as a family contract, in which the family assumes the costs of migration in advance of remittances that will be sent in the future by the migrant, as it was

also the case in the Senegal River (Guilmoto 1998). This logic of migration seems to fit to the NELM (New economics of Labor Migration) model of risk and income diversification that households practice to face uncertainty and lack of resources (Stark 1991). Interestingly, according to the results of the Push-Pull project, the level of education itself has a non-significant effect on international migration from Dakar and a negative effect on migration from Touba (a Muslim religious city center, capital of the Murid brotherhood), where those who did not receive a formal education are more likely to leave the country (Lalou and Ndione 2005). These results qualify the fears of a potential brain drain. However, international migration in these results is not limited to Europe and is actually dominantly made of migration towards neighboring countries. Education may have a different (and positive) effect when considering only developed countries, that are especially attractive for young educated people who have had very little employment opportunities in Senegal lately (Diagne and Lessault 2007).

The range of destination countries considered in the analyses of the Push-Pull project data may also influence the results regarding gender. According to Lalou and Ndione (2005), there would be no significant difference between males and females in the propensity to out-migrate from Dakar. This could be explained by the fact that women who migrate within West Africa, especially to the neighbouring countries, remain under a strong social control. In any case, it does probably not reflect liberal social norms regarding female migration in Senegal since 44% of the surveyed population disapproved the migration of unmarried women (Van Dalen, Groenewold et al. 2005). Results of the Push-Pull project regarding age, matrimonial status or network effects are more conform to usual expectations. Single people are more likely to migrate, as are young adults when compared to elders. Those with relatives living abroad are twice likely to migrate by comparison with those who have no family connections out of Senegal. Network effects are also visible in Lalou and Ndione's (2005) results in the effect of the ethnic group on the propensity to migrate, with Wolof people having much higher odds of out-migrating than people from other groups. This does not really reflect the qualitative literature on migrant networks in Senegal that rather emphasizes the influence of religious belonging on migration behaviours. Murids especially, i.e. members of a large Senegalese Muslim brotherhood, have indeed been largely described as major actors of international migration in the last decades. Traditionally employed as peanut producers in Eastern Senegal, they have progressively consolidated their community in Dakar and conquered the principal open-air market, Sandaga, a major point for informal activities of import-export and of departure to Europe and the US. According to Riccio (2001), the internationalization of the trading activities of the Murids is one factor leading to their increased out-migration. Their religious networks would have played an increasing role in the new migration dynamics among Senegalese people, explaining to a certain extent the diversification of destinations of Senegalese migration (Bava, 2000). Despite this large consensus on the role of Murid networks, the assumption that Murids have a larger propensity to migrate out of Senegal was not confirmed by Lalou and Ndione's results (2005). It might be explained by the correlation between Murid and Wolof belongings.

While the Push-Pull project provided the first multivariate analyses on the individual socio-economic factors of migration, it provided very few information on the impact of the context. Actually, while the theoretical literature recognizes the potential impact of macro-contextual

variables in various domains (economic situation, environmental context, national policies), almost no empirical results are available on Senegal. According to our knowledge, the direct effect of the economic context, at origin and in destination countries, has never been tested. From an environmental point of view, the severe droughts that Senegal experienced since the 1970s is commonly believed to encourage a large and permanent flow of out-migration, especially from Northern and Eastern parts of the country. However, the influence of hydraulic deficit on migration is not that straightforward in the Sahelian context (Henry, Schoumaker et al. 2004) and has never been seriously studied in Senegal (European Commission 2007). Finally, the role of national policies, especially in the migration domain, is more subject to common wisdoms than to empirical evidence. For instance, policy makers in Europe seem to believe that regularization programs encourage out-migration from Africa and especially Senegal (European Commission 2007), even though it has never been demonstrated regarding immigration in Europe and is subject to controversial results in the North American context.

In the end, what we actually know, beyond received ideas, about the determinants of Senegalese migration is quite limited. The influence of the environmental, economic or policy contexts on out-migration is not completely clear. And no quantitative studies are so far available on the determinants of return migration to Senegal. However, it has been established that return to Senegal is a significant phenomenon. According to the Push-Pull data (1997-1998), more than a quarter of the surveyed households in the capital city (27.5%) contained at least one returnee. It is also important to keep in mind that these returnees may be involved in circular migration: barely 50% of them declared they have accomplished a permanent return, and returnees are more numerous to declare their intention to move abroad than non-migrants (Robin, Lalou et al. 1999). Furthermore, 30% of the migrants living abroad would have had the intention to return, with higher imputed intentions<sup>2</sup> to return among the more recent migrants and among those currently in Italy (compared to those in France or in the neighboring countries of Senegal, no results being available for Spain). In addition, 16% would have been indecisive regarding the perspective of coming back or staying abroad. These figures are not representative of the region of Dakar<sup>3</sup>, but they illustrate quite well that return migration was a significant phenomenon at the end of the 1990s in the capital city. Return migration was also described as a common phenomenon until the mid-1970s in the Senegal River Valley, where international migration was conceived as a temporary movement of young males organized by the community (Barou 1993).

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<sup>2</sup> The data were collected in Senegal, so that the answers were not given by the migrants themselves but by proxy respondents, usually the household heads who declared the migrants.

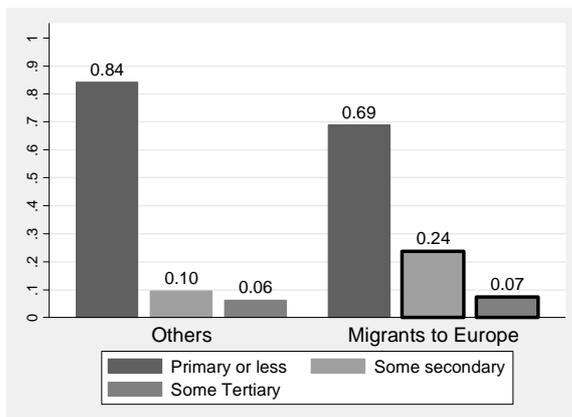
<sup>3</sup> The sample of the Push-Pull survey was restricted to areas with international migrants in the agglomeration of Dakar-Pikine, excluding other parts of the region of Dakar.

## 2. The migrants' profile

The MAFE surveys allow to go beyond the limitations of the previous studies on the determinants of Senegalese migration. On the one hand, thanks to its retrospective nature, the MAFE data allows to test the effect of the changing economic context<sup>4</sup>. On the other hand, thanks to its transnational nature, it allows to compare current migrants and returnees and thus to analyze the determinants of return. Before presenting the results of multivariate analyses (section 3), we present in this section some descriptive results that give a sense of who the Senegalese migrants in Europe are (compared to the non-migrants), as well as a profile of the return migrants (compared to migrants in Europe)<sup>5</sup>.

Senegalese migrants are predominantly young and male individuals (Sakho, 2013). They are also relatively well educated with respect to Senegalese non-migrants, as Figure 2 shows. In particular, individuals with secondary and tertiary level of education represent 24 per cent and 7 per cent of migrant individuals respectively, as compared to 10 and 6 per cent of non-migrant individuals. Nonetheless, a clear majority of Senegalese migrants (69 per cent), are relatively poorly educated, as they reach primary or lower level of education only. This fact clearly puts them in a disadvantaged position in the highly competitive and skill biased European labor markets. When we complement this positive educational selection with respect to the place of origin with the proportion of individuals who own assets in Senegal before migration, it becomes clear that migrants are not drawn among the most deprived individuals in society. As many as 17 per cent of migrants do own an asset (dwelling, land, or business) before migration as compared to 7 per cent on non-migrants. The fact of owning an asset can enhance the capability to face the costs of migration and is positively related to social class.

**Figure 2. Educational level by group (migrants to Europe vs. others)**



Source: MAFE-Senegal biographic survey in Senegal, France, Italy and Spain. Weighted data.

Population: The category "Migrants to Europe" includes migrants surveyed in France, Italy and Spain in addition of the return migrants surveyed in Senegal who used to live in one of these three countries. Migrants are observed the

<sup>4</sup> At this stage, we do not study the effect of migration policies on the propensity to migrate for at least two reasons. First, time varying variables on the policy context are barely available. Second, taking into account the context of various destination countries requires complex statistical analyses that are beyond the scope of this preliminary chapter.

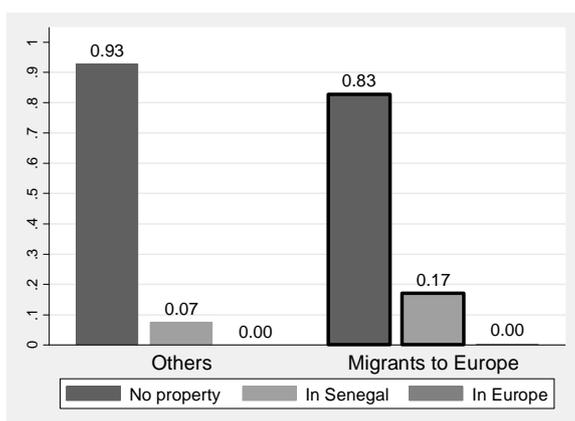
<sup>5</sup> We present in the text a selection of the descriptive results. More results are available in appendix.

year before their first migration. Only migrants who first migrated after 18 are taken into account (N=597). The category “Others” (N=1,073) regroup the rest of the population surveyed in Senegal and who had not migrated to Europe by the time of the survey (2008). They are observed at age 26 (the mean age at first migration minus 1) or their age at the time of the survey if they were less than 26 at this time. All individuals are aged 18-65 at the time of the survey (2008),

*Note:* A thick black frame indicates that the difference between migrants to Europe and the others is statistically significant at 5% (if it is a thick dotted frame, the difference is significant only at 10%).

*Interpretation:* 69% of the migrants to Europe attended primary school. Note that not all of them completed it.

**Figure 3. Assets in origin country by group (migrants to Europe vs. others)**



*Source:* MAFE-Senegal biographic survey in Senegal, France, Italy and Spain. Weighted data.

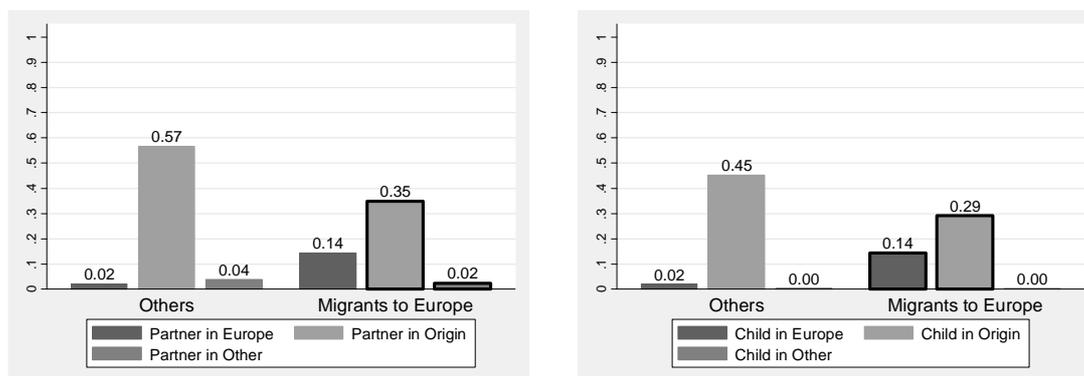
*Population:* As in Figure 2.

*Note:* A thick black frame indicates that the difference between migrants to Europe and the others is statistically significant at 5% (if it is a thick dotted frame, the difference is significant only at 10%).

*Interpretation:* 83% of the migrants to Europe had no property the year before their first migration to France, Spain and Italy. 17% of them had at least one asset among the following before departure: a house, a land, or a business.

One of the most powerful facilitator of migration is related to the personal links that potential migrants have with previous migrants. These social networks located at destination countries can be composed of close family members, such as partners and children (Figures 4 and 5) or other relatives, friends or acquaintances. According to our data, as many as 14 per cent of migrants have a partner in one of the European countries studied, compared to only 2 per cent of non-migrants. Family reunification motives are also related to the presence of children in Europe, that involves 14 per cent of migrants. The importance of networks in sustaining and amplifying migration to particular destinations can be illustrated by the fact that 62 per cent of migrants already had other family members (neither partner nor child) or friends in their destination countries before migration, while only 30 per cent of non-migrants were in that situation.

**Figures 4 and 5. Location of the relatives (partners and children), by group (migrants to Europe vs. rest)**



Source: MAFE-Senegal biographic survey in Senegal, France, Italy and Spain. Weighted data.

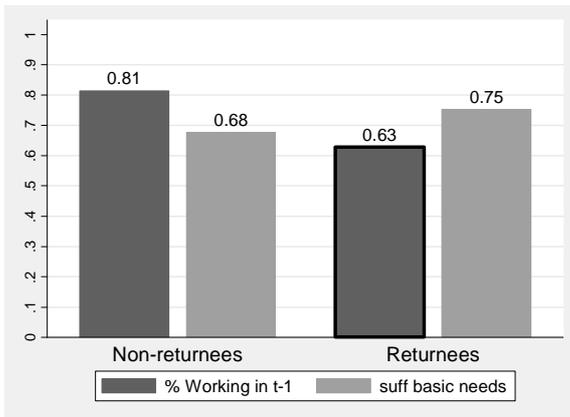
Population: As in Figure 2.

Note: A thick black frame indicates that the difference between migrants to Europe and the others is statistically significant at 5% (if it is a thick dotted frame, the difference is significant only at 10%).

Interpretation: 35% of migrants to Europe had at least one partner (married or not) in Senegal the year before migrating, 14% had (at least) a partner in Europe and only 2% had (at least) a partner living in a country different from Senegal and our selected destinations in Europe. Some of them had simultaneously different partners living in different locations (27 individuals had a partner simultaneously in more than one of these 3 locations the year before migrating). As a result, the percentage of migrants who had no partner at all the year before migrating is a bit larger than 49% [100- (14+35+2)=49], since some individuals are included both in the bar of partner in Europe and in the bar of partner in Origin, for example.

To a large extent, returnees are very similar to current migrants in Europe: they departed at similar ages, they have almost the same sex ratio, they are not significantly more or less educated... In an effort to explore the potential factors explaining return, we focus here on the variables that make the returnees “special” when compared to those who have not (yet) come back to their origin country. First specificity: returnees were less likely to be employed before their return than the other migrants (63 per cent against 81 per cent for non-returnees, Figure 6). However it does not necessarily reflect a situation of economic uncertainty among returnees. Indeed, returnees are not especially deprived when compared to the others. Albeit the difference is not statistically significant, they are more numerous to declare that their household (in Europe) had enough to cover basic needs (one year before return) than the other migrants (Figure 6). This is consistent with the fact that returnees have more often properties (at least a house, or a land or a business) than those who have not yet returned (40% against 28%, Figure 7). Actually, the over-representation of non-working people among returnees might be due to the fact that this category includes, as usual, unemployed workers, but also housewives and students. This last category is indeed over-represented among returnees (Figure 8): those who left their origin country for studying are clearly more numerous to go back to Senegal than the others, which –at first sight– suggests that brain drain is not a big deal in Senegal.

**Figure 6. Employment status and household economic resources, by group (returnees vs. non-returnees)**



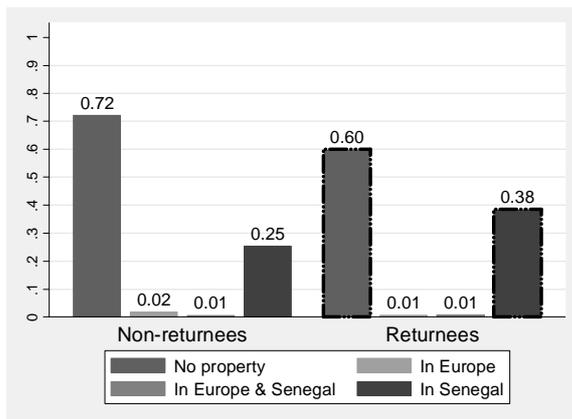
*Source:* MAFE-Senegal biographic survey in Senegal, France, Italy and Spain. Weighted data.

*Population:* The category “Returnees” includes Senegalese migrants who went to live in France, Italy or Spain for at least one year after they were aged over 18 and who returned to Senegal at some point before the time of the survey (2008), either for at least one year or for less than a year when the migrant had the intention to resettle in Senegal but finally did not (N=97 events of return that correspond to 84 Egos, reminding that 10 individuals had repeated returns). They are observed one year before their return to Senegal. The category “Non returnees” (N=578) regroup the rest of the migrants who had migrated to the selected European migration countries and who did not return at the time of the survey. They are observed at time ‘date of arrival plus 6’ (6 being the mean duration of stay in the selected European countries), or less if they had not yet stayed for 6 years at the time of the survey. All individuals are aged 18-65 at the time of the survey (2008).

*Note:* A thick black frame indicates that the difference between migrants to Europe and the others is statistically significant at 5% (if it is a thick dotted frame, the difference is significant only at 10%).

*Interpretation:* 63% of the return migrants who used to live in France, Italy or Spain were not working the year before return to Senegal. 75% of them declared their household (in Europe) had enough resources to cover basic needs.

**Figure 7. Ownership of property, by group (returnees vs. non-returnees)**



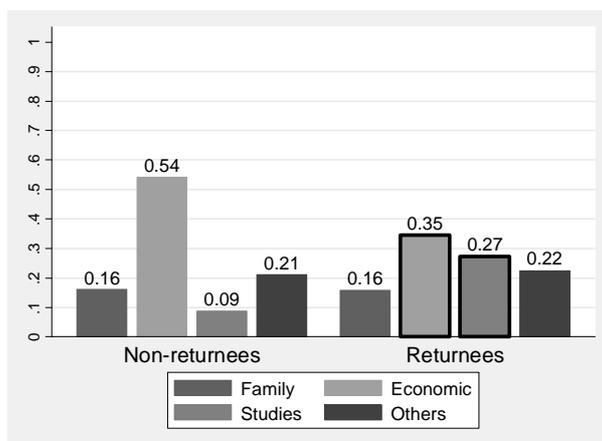
Source: MAFE-Senegal biographic survey in Senegal, France, Italy and Spain. Weighted data.

Population: As in Figure 6.

Note: A thick black frame indicates that the difference between migrants to Europe and the others is statistically significant at 5% (if it is a thick dotted frame, the difference is significant only at 10%).

Interpretation: 60% of the return migrants to Europe had no property the year before return to Senegal. The same year, 38% of them had at least one asset in Senegal (house, land or business).

**Figure 8. Reasons for migration to Europe, by group (returnees vs. non-returnees)**



Source: MAFE-Senegal biographic survey in Senegal, France, Italy and Spain. Weighted data.

Population: As in Figure 6.

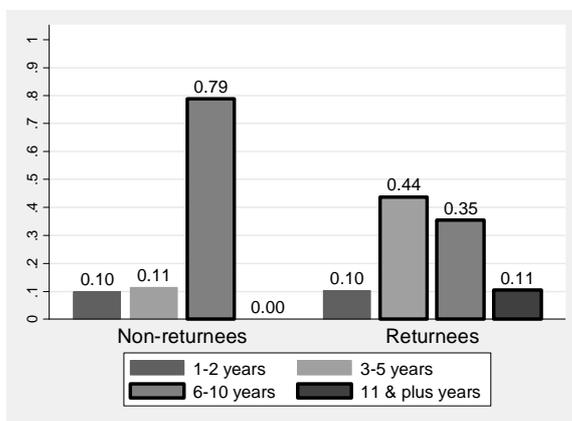
Note: A thick black frame indicates that the difference between migrants to Europe and the others is statistically significant at 5% (if it is a thick dotted frame, the difference is significant only at 10%).

Interpretation: 27% of the return migrants to Europe left Senegal for a motive associated to their studies.

As figure 9 shows, most returnees come back to Senegal after spending a few years in destination countries: 44 per cent after a stay of 3-5 years and 35 per cent after a stay of 6-10 years, while only 11 per cent after stays of more than 10 years. These results are consistent with migration projects of relatively short duration, in order to accumulate an amount of resources (money, formal education, professional know-how, networks...) that allow to improve the economic position once back in Senegal. The results showing that returnees are less numerous to remit or to pay a visit in Senegal are in line with this idea of accumulation

during their stay abroad in order to prepare an investment at home (Figure 12). It is worthwhile noting nevertheless, that the large majority (79 per cent) of non-returnees have spent between 6 and 10 years at destination, possibly indicating a more permanent migration. Returning to Senegal is often planned well ahead by migrants, who invest in their country of origin, especially in dwellings, for themselves or their family members. Therefore it is not surprising that 38 per cent of returnees own a property in Senegal before coming back while a significantly lower proportion, 25 per cent, of current migrants own a property in Senegal (figure 7). Also the location of close family members is related to the return project: 92 per cent of returnees have their partner in Senegal and 52 of them their children, compared to respectively 71 and 29 per cent for current migrants in Europe (figures 10 and 11).

**Figure 9. Length of residence of Senegalese migrants in our European destinations, by group (returnees vs. non-returnees)**



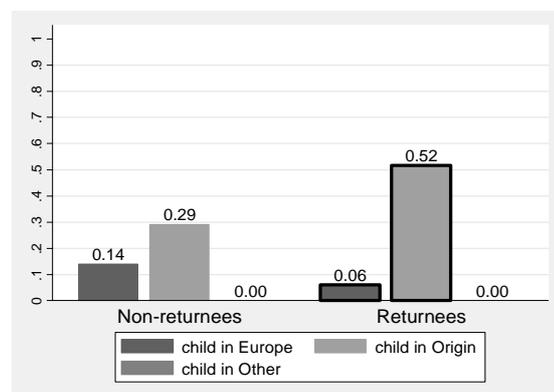
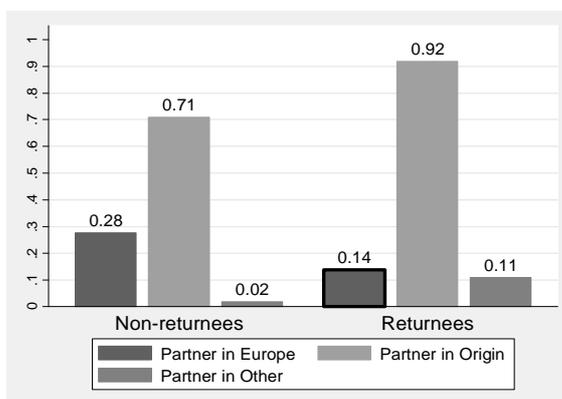
Source: MAFE-Senegal biographic survey in Senegal, France, Italy and Spain. Weighted data.

Population: As in Figure 6.

Note: A thick black frame indicates that the difference between migrants to Europe and the others is statistically significant at 5% (if it is a thick dotted frame, the difference is significant only at 10%).

Interpretation: 44% of the return migrants remained 3 to 5 years in Europe (France, Italy, Spain).

**Figures 10 and 11. Location of the relatives (partners, children) by group (returnees vs. non-returnees)**



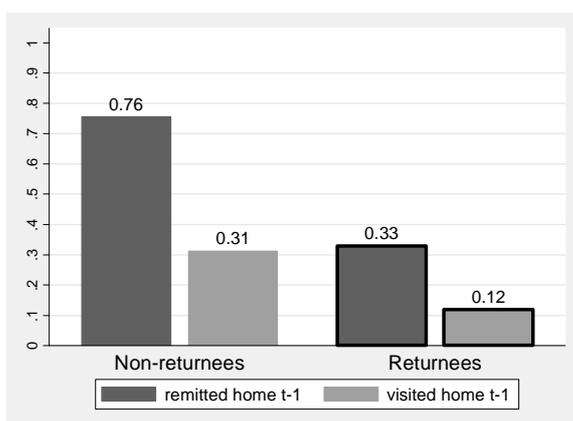
Source: MAFE-Senegal biographic survey in Senegal, France, Italy and Spain. Weighted data.

Population: As in Figure 6.

Note: A thick black frame indicates that the difference between migrants to Europe and the others is statistically significant at 5% (if it is a thick dotted frame, the difference is significant only at 10%).

Interpretation: 92% of the returnees had at least one partner (married or not) at origin (i.e. in Senegal) the year before return. Some of them had simultaneously different partners living in different locations.

**Figure 12. Remittances & visits to origin, by group (returnees vs. non-returnees)**



Source: MAFE-Senegal biographic survey in Senegal, France, Italy and Spain. Weighted data.

Population: As in Figure 6.

Note: A thick black frame indicates that the difference between migrants to Europe and the others is statistically significant at 5% (if it is a thick dotted frame, the difference is significant only at 10%).

Interpretation: 33% of the returnees remitted and 12% of them paid a visit in Senegal the year before return.

### 3. Determinants of migration between Senegal and Europe

The above results describing the profiles of the migrants to Europe and of the returnees are not sufficient to identify the factors of migration. First, they do not take sufficiently into account the changing situation over time of the interviewees, be they migrants or not. Second, they only give indication on gross effects of potential factors of migration at the individual level. To go further, in this section, we provide results on net effects of individual and contextual variables that are usually believed to influence the propensity, first, to out-migrate and, second, to return. A full description of the models is given in Gonzalez-Ferrer, Kraus *et al.*, 2013.

#### 3.1. Determinants of Departure

**Demographic factors** (age and gender) play in Senegalese migration quite expected roles, net of the effects of the other variables, including factors related to the life cycle. Older people are significantly less likely to migrate to Europe, as indicated by the odds ratio, which is about 75 per cent lower for individuals aged 35 and more than for younger individuals (18-34, Table 2). The young profile of migrants is practically a universal phenomenon, that can be related to their higher lifetime returns from migration and lower costs, including psychic costs, as

younger workers have more of their human capital in education than in job specific skills, and they have longer working lives (McKenzie, 2008).

Worldwide, female rates of international migration are converging with those of men, although predominantly Muslim populations and migration flows in their early stages tend to show large gender differentials (McKenzie, 2008). In the case of Senegalese migration to Europe especially<sup>6</sup>, women show an odds of migration more than 60% lower than men (1-0.388=61 in Model 7). It can be noted that the lower probability of migrating to Europe among women is not a consequence of their lower educational status (on average), or the fact they are more frequently married than men, since the effect of the variable 'Female' estimated in the regression model is net of the effect of the other variables included in the model, such as educational level and marital status. Actually, the lower engagement of women in migration is probably related to their traditional role as wives and care takers at home, and more generally to the large differential in social status with respect to men (Barou 1991).

Senegalese migration is highly determined by **individuals' resources** (education, social networks or economic resources). While Senegalese migrants are often seen in Europe as deprived people fleeing desperately the African continent, our results show that those with a higher human capital and better economic resources are much more likely than the others to move to Europe. With regard to **educational selectivity**, our multivariate results clearly show that the less educated (primary level or less) have a lower propensity to out-migrate (descriptive results were not significant). Individuals with secondary education are nearly twice (odds of 1.9 in Model 7) as likely to migrate than those with primary or less, and the coefficient is nearly as strong for individuals with tertiary education (1.8 in Model 7). With regard to the individuals' educational level, the people most likely to migrate from Senegal to Europe are apparently not the ones that can expect lower wages in Senegal. This result is totally in line with descriptive results showing that 18,6% of Senegalese citizens with university education live in an OECD country, while the proportion is only 2.3% when the whole Senegalese population is considered (OECD 2008). A positive migration selectivity with respect to education seems to be the rule rather than the exception in migration from developing countries (especially the least developed) to developed countries (Hanson, 2010). In such contexts, education has a fundamental role in increasing aspirations, in overcoming social and economic barriers to migration, and enhancing employment prospects at destination (de Haas, 2010). Major exceptions in that respect concern countries with a higher level of development than Senegal and with well advanced migration transitions, such as the Mexico-US migration flow, that is documented to have an intermediate selection with respect to education (Chiquiar and Hanson, 2005).

In line with the literature on international migration and the above presented descriptive results, **social networks** are a crucial factor determining migration decisions. When interpreting the results, it should be taken into account that personal networks and family members residing in European countries have greatly increased since the early 1980s, when

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<sup>6</sup> Migration to African countries is not considered in these results, which explains the difference with the above mentioned results of the Push-Pull project.

sharp increases in Senegalese migration have been recorded, leading to a multiplier effect in migration rates. The results reported here indicate that Senegalese who have friends or relatives (not including partners or children) in Europe are more than 3.5 times more likely to migrate than individuals without them, even statistically controlling for numerous other confounding factors (odds of 3.57 in Model 7). Notably and in addition, those individuals whose partners are already in Europe are about 11 times more likely to leave Senegal and join their partners in France, Spain or Italy than those whose partners did not migrate. However, it does not mean that all partners left behind in Senegal ultimately join their partner in Europe (see Beauchemin, Caarls *et al.*, 2013 and Baizán *et al.* 2011). Having a partner living in Senegal does hinder migration, as it reduces the odds of migration by about one third. By contrast, the presence of children in Europe or in Senegal does not seem to have any effect, once we adjust by the partner's location. The direct effect of migrants' networks (i.e. of the presence abroad of partners, friends and other relatives) probably absorbs the effect of belonging to the Murid brotherhood, known to be especially involved in international migration (a positive gross effect of 1.34 is replaced by a 0.9 non-significant odd ratio in Model 7), although this effect may also be offset by the positive effect of being Wolof, an ethnic group in which Muridism is frequent.

Net of the effect of education or social networks, the indicators of **economic resources** also show that Senegalese migrants are clearly not the more deprived. The results concerning the variables employment and sufficiency of basic needs at the household level also provide positive and significant results, when measured as gross effects (respectively 1.2 and 1.4). In the models, the possession of assets in Senegal offsets their significance. The fact of owning at least one asset (a house, a land or a business) in Senegal has a strong significant positive effect, as it increases the odds of migration by nearly 70 per cent with respect to individuals without properties (1.68 in Model 7). In other words, Senegalese migrants to Europe are definitely not selected among the poorest individuals in Senegal.

To some extent, the variables related to the individuals' socio-economic level seem to absorb the effect of the **economic context**. Indeed, without controlling for individual variables, the gross domestic product (GDP) change has a positive effect (gross effect of 1.09), that indicates that periods of crises seem to have a negative effect on departure, possibly by limiting the resources available to migrate. However this variable becomes insignificant once a number of individual variables are included in the model, suggesting that the effect of economic trends act through such individual variables as employment or the perception of having enough resources to meet basic needs. In contrast, the effect of the variable "devaluation year" has a negative net effect on migration (0.55 in Model 7), most likely by rising very significantly the cost of migration for all people, whatever their socio-economic level. Indeed, the 1994 devaluation halved the franc CFA value when compared with the French franc, and consequently with other currencies. In other words, it means that the price of every European good (including flying tickets or visa taxes, for instance) doubled for Senegalese people.

**Table 2. Determinants of departure from Senegal to selected destinations in Europe (France/Italy/Spain). Discrete-time logit regressions (Odds ratios)**

	Gross Effects	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Ref. Younger 25								
25-34	1.06	1.021	0.984	1.099	1.145	0.976	0.947	0.931
35 & plus	0.28***	0.313***	0.264***	0.370***	0.411***	0.370***	0.355***	0.342***
Female (ref. male)	0.34***	0.418***	0.439***	0.344***	0.357***	0.370***	0.367***	0.388***
Ref. Primary & less								
Some secondary	3.78***	2.901***	2.809***	2.509***	2.463***	1.887***	1.892***	1.938***
Some tertiary	2.80***	2.243***	2.146***	2.040**	2.031**	1.782**	1.786**	1.773**
Employed (ref. no)	1.23*		0.985	1.032	1.017	0.951	0.943	0.959
Suf. for basic needs (ref. no)	1.36**		1.198	1.097	1.094	1.046	1.045	1.038
Some asset in Senegal (ref. no)	1.30		1.603**	1.689**	1.725**	1.582**	1.575**	1.679**
Ego has a partner in Europe (ref. no)	10.10***			12.14***	12.43***	10.17***	10.27***	10.77***
Ego has a partner in Origin (ref. no)	0.40***			0.601***	0.636**	0.648**	0.651**	0.637**
Ego has a partner in Other country (ref. no)	1.46			1.757	1.854	1.953	1.957	2.113
Ego has a child in Europe (ref. no)	0.88				1.192	1.307	1.330	1.300
Ego has a child in Origin (ref. no)	0.44***				0.877	0.943	0.958	0.957
Ego has a child in Other country (ref. no)	0.10**				0.201*	0.221	0.222	0.244
Ego has other relatives/friends in Europe (ref.no)	5.24***					3.788***	3.686***	3.567***
Average GDP growth rate in 2 previous years in Senegal	1.09***						1.046	1.049
Devaluation year	0.48**						0.564	0.553*
Ref. Other ethnic groups								
Wolof	1.29**							1.777***
Pular	2.29***							1.754**
Ref. Other religion								
Mouride	1.34**							0.922
Tidiane	0.45***							0.605**
<i>Person-year observations</i>	28877	28877	28877	28877	28766	28877	28877	28877
<i>Events</i>	597	597	597	597	597	597	597	597
<i>Egos</i>	1669	1669	1669	1669	1669	1669	1669	1669

Exponentiated coefficients; \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.001$ . See Gonzalez-Ferrer, Kraus et al., 2013 for a full description of the models and the variables. Weighted data.

### 3.2. Determinants of Return

The results of the previous section show quite clearly that individuals with a higher level of resources, be it measured in terms of human, financial or social capital, are more likely to depart from Senegal than more deprived people. These well-endowed persons who migrate are also likely to better integrate economically in Europe than migrants with poor resources (Castagnone, Sakho *et al.*, 2013; Friedberg, 2000; Obucina, 2011). Having this in mind, we now turn our attention to return migration to Senegal, seeking whether it concerns primarily the better off or the others and searching the other factors that may influence return decisions.

The models' results show that return migration is determined by **migrants' personal resources**. However results regarding return are more complex than those related to departure. While all types of resources augment the odds to out-migrate, the effects on return depend on the type of capital (human, economic or social, see table 3). Clearly, our results suggest that the Senegalese migrants with a strong **human capital** have a high propensity to return in their origin country. Tertiary educated individuals have higher probabilities of returning: the odds ratio increases by 80 per cent with respect to individuals with lower education in Model 4. This is in line with the fact that those who departed for study reasons are more likely to return (a significant gross effect of 2.7, even though this effect is no longer significant when other variables, especially the education level, are taken into account). This result is consistent with the predictions of the "neoclassic" economic literature on return migration selectivity (Borjas, 1987) and also with the idea that migrants return when they have achieved a goal fixed in advance of departure, either by finishing their studies or by accumulating a certain amount of savings. At destination, the more educated may accumulate resources faster than the others. And, at origin (i.e. in Senegal), higher education is correlated with better jobs in terms of status and working conditions. In spite that individuals with relatively high status jobs face higher opportunity cost if they return, they also have higher resources that allow them to settle in their home country and possibly to invest in their economic integration. Another explanation for the return of the better educated is that, in spite of their generally better labor market performance, they may find barriers to get jobs that fit their educational credentials in Europe, as most jobs available are found in low skilled occupations (Castagnone, Sakho *et al.*, 2013; Fullin and Reyneri, 2011; Bernardi *et al.* 2011). Immigrant residual disadvantage in the labor market, after controlling for their socio-demographic characteristics, has been termed "ethnic penalty" (Heath and Ridge, 1983). Finally, the higher propensity to return of the most educated migrants could be interpreted as a result of immigration policies that do not always grant working permits to immigrants who entered as students and finished their studies. However, this effect is certainly absorbed by the variable related to employment that shows that those who are not working (unemployed people, but also students or housewives) are twice more likely to go back to Senegal than those who are employed (model 4)<sup>7</sup>.

Interestingly, the effects of the variables related to the migrants' socio-economic status (education and employment) are offset by the effect of **ownership in Senegal**: the possessing

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<sup>7</sup> More basically, non-working migrants, especially the unemployed, may also be more likely to return because they face higher costs of living if they stay in a European country.

at least a house, a land, or a business increases the odds of returning by 2.4 in Model 5. Some of these properties may have been owned before migration, since ownership is a factor of departure, as above established. But some were also acquired during migrants' sojourns in Europe, since it is clear that migration experience significantly augments the odds of investing in Senegal in such assets (Mezger and Beauchemin 2010). Again, this result fits the model of the return migrant as a target earner. In any case, it strongly suggests that keeping attachments to Senegal, through ownership of durable goods, is a more important driver for return migration than the socio-economic status of the migrants. And it's true whatever the economic situation (GDP change and devaluation have apparently no effect on return migration).

This role of **attachment to Senegal** is logically confirmed in the social domain. Indeed, the location of the family is closely related to return migration decisions. Migrants whose partner lives in Senegal are more than twice likely to return (2.4 in model 8). Conversely, family reunification and the presence of other relatives in Europe, in the same country of residence than the migrant, can be taken as sign of a settlement strategy: the fact of living with the partner in France, Italy or Spain, or of having children living in these countries, strongly reduces the probabilities of return (by 60 per cent and by 80 per cent, respectively; Model 8).

The relationships between return migration and the links that migrants have with their origin country are somewhat complex. On one hand, as above mentioned, possessing an asset and having a partner in Senegal incite the migrants to return. On the other hand, individuals who send remittances to Senegal show an odds of returning about 80 per cent lower than individuals that do not remit. Furthermore, individuals who visited Senegal in the previous year also have substantially lowered probabilities of return. Both results suggest that transnational practices are factors of return postponing. On one hand, it might be that people who remit are pressured by their families not to come back, so that they can continue to send money. In addition, for those who are "target earners", sending remittances probably delay the attainment of their saving target<sup>8</sup>. On the other hand, visits to Senegal certainly "help to oil the functioning of splitted families" (Grillo and Mazzucatto, 2008), that are quite numerous (see Beauchemin, Caarls *et al.*, 2013). The negative effect of visits may also be explained by anticipated decisions: those who intend to return may avoid visiting the year before because they know they are going to go back to Senegal for long in the short term.

Whatever the level of economic and social attachment to the country of origin, it is interesting to note that return is highly correlated with duration spent in Europe. The odds of returning to Senegal for individuals living in Europe increases for durations of residence between 3 and 5 years ( 3.4 times higher than individuals with less of 3 years of stay, according to Model 8), and 6-10 years (6.7 times higher), to decline afterwards. These results confirm the pattern of relatively intermediate durations in Europe found above. It is also interesting to note that migrants who already have an experience of long return to Senegal (for at least a year) are also much more likely to return, all other things being equal.

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<sup>8</sup> According to Tall (2002), housing constitutes the main investment target for Senegalese migrants, and is to a large extent financed through savings accumulated abroad.

In any case, it's important to keep in mind that migrants are not isolated in their decision to return. They are enmeshed in a context of **socio-political constraints** that influence highly their propensity to return. In this domain, their legal status is a first significant factor of migration. An important finding of the analyses is indeed that individuals who hold a residence permit that allows them to stay legally in Europe are more than twice more likely to return to Senegal than those undocumented (model 8). Actually, this result is a classical one: it has been repeatedly observed in the case of Latin American migration to the USA. Holding a permit is not only related to the length of time spent in the destination country. It is also closely connected to better economic and social conditions that allow to attaining much faster the particular economic goals of the migrant. However, these variables are controlled for in our analyses, so that we measure the net effect of the legal status in model 8. That undocumented migrants are less likely to return can be interpreted as the paradoxical fact that migrants who have no right to stay are like "trapped" in Europe. Due to their status in Europe, they are likely to fail in their reintegration at origin. And for the same reason, they won't be able to come back to Europe if they cannot reintegrate in a satisfactory manner in Senegal, hence their resistance to return. It is furthermore extremely difficult to socially assume back in Senegal the failure of their migratory project. Social constraints are also visible at the family or community level. Our results suggest that people with lower social status, or in other words with a lower decisional power, are more likely to return than the others. Women (after controlling for the location of their partner) and migrants who did not decide to migrate by themselves are twice likely to return when respectively compared to men and to autonomous migrants (see model 7<sup>9</sup>). These people are engaged in what could be labeled as a "traditional" migration system in which migration is conceived as a temporary move, the return being a way to maintain the classical social order. In particular, the women's higher propensities to return may be linked to their primary role as care givers and household task providers for the extended family, which is often located in Senegal. Furthermore, several authors sustain that wives are sometimes "sent back" to origin because institutions in Europe are too supportive to them, especially in matter of divorce. Sending back women in Senegal would be a way to maintain a strong social control over them (Barou 2001; Azoulay and Quiminal 2002).

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<sup>9</sup> These results are no longer significant in model 8 where religion and ethnic group are controlled for. This is because the women social status and the degree of autonomy in migration decision varies strongly according to the ethnic group.

**Table 3. Determinants of return. Discrete—time logit regressions (Odds ratios)**

	Gross Effects	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Italy (ref. France)	<b>0.43**</b>	0.371**	0.373**	0.403**	0.300***	0.368**	0.379**	0.407**	0.325**
Spain	0.53	0.475	0.491	0.538	0.502	0.592	0.575	0.613	0.584
More than 1 return	<b>11.3**</b> *	8.457***	8.457***	8.131***	10.91***	13.21***	12.75***	12.44***	11.94***
Ref. Length of Stay in Europe < 3 years									
3-5 years	1.35	1.569	1.538	1.773	1.801	3.561**	3.521**	3.564**	3.401**
6-10 years	1.43	1.807	1.716	2.142	2.609*	6.636**	6.944**	6.973**	6.744**
11 & plus	<b>0.20**</b> *	0.253**	0.244**	0.333*	0.496	1.276	1.480	1.542	1.527
Age at migration (Ref. Younger than 25)									
25-35	<b>1.70*</b>	1.403	1.379	1.434	1.095	1.159	1.168	1.170	1.222
35 & plus	<b>2.42**</b>	1.314	1.339	1.495	1.162	1.195	1.067	1.092	1.072
Female (ref. male)	1.20		0.893	0.789	2.189*	2.393*	1.961	2.026*	1.980
Some tertiary (Ref. Less)	1.71		1.416	1.263	1.880**	1.581	1.292	1.330	1.346
Suf income in HH to cover basic needs (ref. No)	1.12			1.051	0.989	1.066	1.038	1.037	0.964
Employed (ref. no)	<b>0.39**</b>			0.573	0.531*	0.871	0.918	0.906	0.970
Legal status (ref. no)	0.80			0.806	1.412	2.171*	2.287*	2.257*	2.385**
Ego has a partner in Europe (ref. no)					0.388**	0.485*	0.410*	0.414*	0.415*
Ego has a partner in Origin (ref. no)					2.072**	2.548**	2.639**	2.594**	2.446**
Ego has a partner in Other country (ref. no)					2.596**	2.499**	2.268*	2.447**	3.237**
Ego has a child in Europe (ref. no)					0.240**	0.213**	0.200**	0.197**	0.210**
Ego has a child in Origin (ref. no)					1.598	1.465	1.553	1.536	1.358
Ego has a child in Other country (ref. no)					0.573	0.717	0.743	0.706	1.180
Ego has other relatives/friends in Europe (ref.no)	1.21				0.745	0.813	0.793	0.811	0.760
Ownership some asset in Senegal(ref. no)	1.45					2.414**	2.329**	2.360**	2.359**
Remitted to Senegal (ref. no)	<b>0.22**</b>					0.148***	0.159***	0.163***	0.167***
Visited Senegal (ref. no)	<b>0.28**</b> *					0.261***	0.254***	0.262***	0.283***
Ref. Migration for Family Reasons									
Economic reasons	0.73						0.477	0.472	0.444
Study reasons	<b>2.70*</b>						0.955	0.949	0.924
Other reasons	1.16						0.791	0.793	0.665
Ego financed migration to Europe on his/her own (ref. no)	0.74						1.634	1.647	1.434
Ego decided migration to Europe on his/her own (ref. no)	<b>0.57*</b>						0.566	0.555*	0.599
Average GDP growth rate in 2 previous years in Senegal	<b>0.87**</b>							0.952	0.967
Devaluation	2.11							1.682	1.821
Wolof (ref. others)	1.17								1.393
Pular	1.08								1.045
Mouride (ref. others)	<b>1.63*</b>								1.780
Tidiane	1.09								1.544
<i>N</i>	7593	7593	7593	7593	7593	7593	7593	7593	7593
<i>Events</i>	97	97	97	97	97	97	97	97	97
<i>Egos</i>	662	662	662	662	662	662	662	662	662

Exponentiated coefficients; \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.001$ . See Gonzalez-Ferre, Kraus et al., 2013 for a full description of the model and the variables. Weighted data.

#### 4. Conclusion

In this concluding section, we will emphasize the more significant results related both to departure and return migration. A first important finding is that the individuals with the higher level of resources in the Senegalese society have a higher propensity to out-migrate. **Migrants to Europe are not the more deprived**, even when considering those who were undocumented at some point in their life. This is particularly clear with respect to the level of **education**, as individuals with secondary and tertiary education degrees are disproportionately represented among migrants. Furthermore, the results also show that the relatively more educated migrants are also more likely to return. As a consequence, “brain drain” appears to be a limited issue in the context of Senegalese migration. The analyses have also demonstrated that the level of economic resources of individuals (or their families) is a powerful determinant of out-migration. This simply reflects the fact that departure is made possible by a minimum of financial capital to pay for the costs of migration, in a context of generalized poverty. Regarding return, the most powerful socio-economic indicator is related to the possession of some sort of asset in Senegal: owning at least a house, a land or a business highly enhances the probability to return, whatever the education level, the employment situation and even the family situation. The location of the family is also closely related to return migration decisions. When the close family members live in Senegal, the odds of returning greatly increase. Reversely, when the partner or the children live in France, Italy or Spain, return probabilities are strongly reduced.

Overall, the results obtained are consistent with two classical types of migrants. On the one hand, some of them, especially those who live in Europe with their close relatives, seem to be engaged in a settlement strategy, even though our data do not allow to say that will never return. On the other hand, others fit in a “target-earnings” interpretation of migration, i.e. individuals aim at obtaining a given goal in terms of savings, and once achieved that level of savings, they return home. For those who are engaged in transnational practices, such as remitting or paying short visits in Senegal, return to Senegal is delayed. In any case, our results emphasize the quantitative reality of return migration, often neglected, and the perspective of the migrant (for whom returning is always kept as a possibility, evaluated against a number of factors, including the possibility to come back to Europe if the return project fails).

The results of the MAFE project have also allowed to precisely quantify the overriding importance of the availability of social capital in destination countries for migration decisions. The role of networks and family members in facilitating migration cannot be underestimated: The results reported above indicate that Senegalese who have friends or relatives (not including nuclear family members) in Europe are more than 3.5 times more likely to migrate than individuals without them. Social capital is therefore a crucial resource to access European labor markets for particular origin countries and groups of the population. The sharp increase in Senegalese migration occurred in the last 15 years in Italy and Spain, connected with labor demand in certain sectors of the economy, has most likely been channeled through migrant networks<sup>10</sup> (here we could attest of the importance of the phenomenon, but clearly this is an

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<sup>10</sup> For more details on the functioning of Senegalese migrants’ networks, see: Liu M.M (2011) and Toma S. and Vause S. (2011).

issue that deserves further investigation). The multiplier effect of personal relationships for migration is also demonstrated by the fact that those individuals whose partners are living in Europe are about 11 times more likely to join their partners than those whose partners did not migrate. It is however essential to emphasize that reunification in Europe is not a universal practice of Senegalese migrants. First, some qualitative studies have shown it is not an aim for all them. Second, other quantitative analyses of the MAFE Senegalese data have shown that nuclear families can live apart across borders for long periods and that they are as likely to reunify in Senegal (when migrants return) than in Europe (Baizán et al. 2011; González-Ferrer et al. 2012).

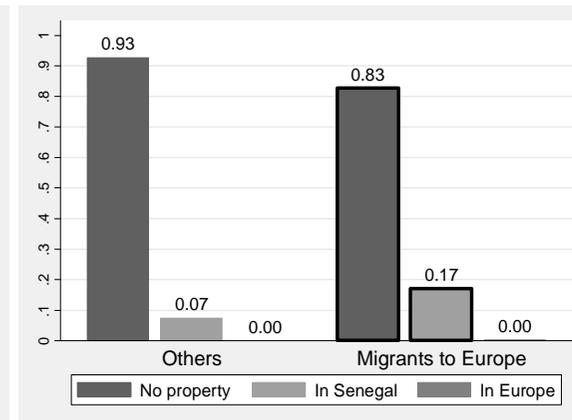
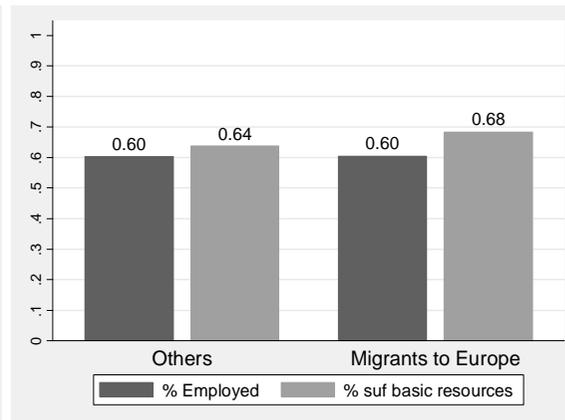
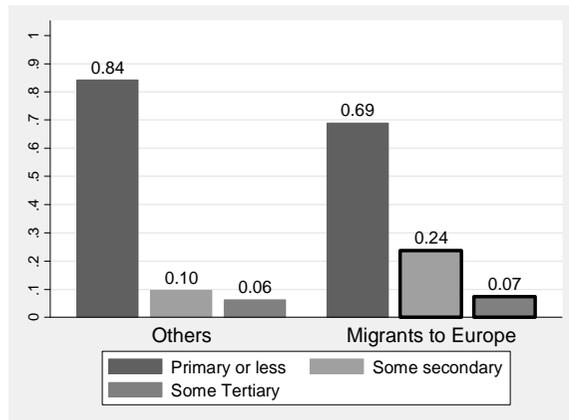
A striking finding of the analyses is that the probabilities of migration to Europe by women are about one third those of men; simultaneously, women's return probabilities are substantially higher. As emphasized above, these results need to be interpreted considering both, the relatively recent development of the migration stream to Europe (especially to Italy and Spain), and the cultural characteristics of Senegalese society, characterized by a low status of women and the importance of transnational family arrangements.

A detailed analysis of the effects of policies in receiving countries is beyond the scope of this paper. Analyses on the potential impact of regularization programs, for instance, are still needed. However, we showed that individuals who hold a permit that allows them to stay legally in Europe are more than twice more likely to return to Senegal than those undocumented. This finding has potentially important policy implications, as it points to an unintended effect (keeping the undocumented migrants in place) of the existing migration policies.

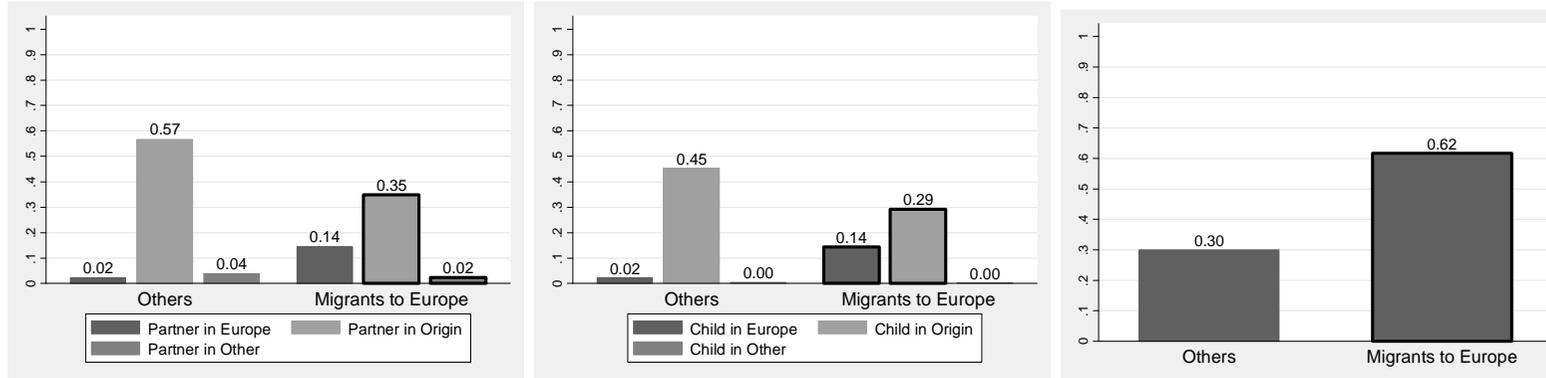
# APPENDIX

## A. DESCRIPTIVE STATISTICS OF VARIABLES CONSTRUCTED TO EXPLORE THE DETERMINANTS OF DEPARTURE TO EUROPE

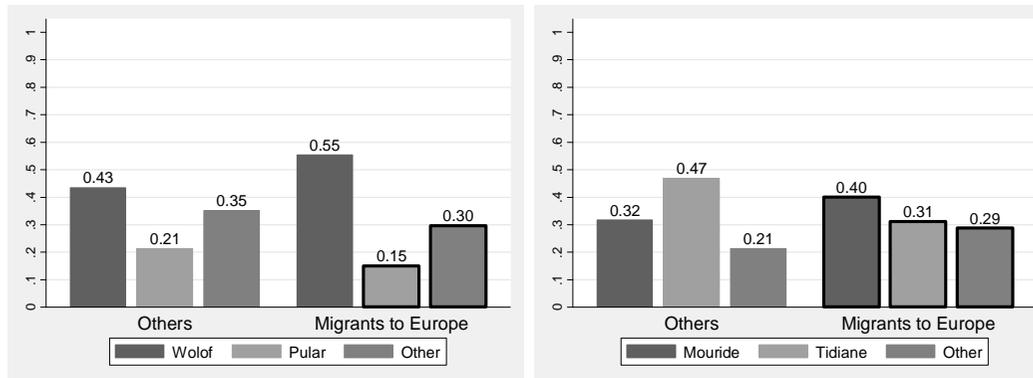
Figures 13, 14 and 15. Educational level, proportion employed and in household with sufficient resources to cover basic needs & assets in origin country by group (migrants to Europe vs. rest)



Figures 16, 17 and 18. Partners, children and other relative/friends and their place of residence, by group (migrants to Europe vs. rest)



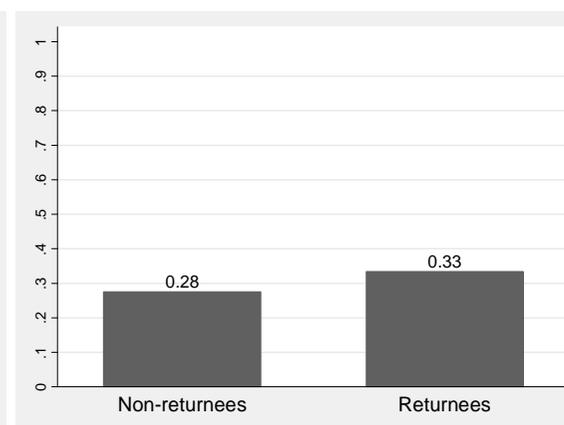
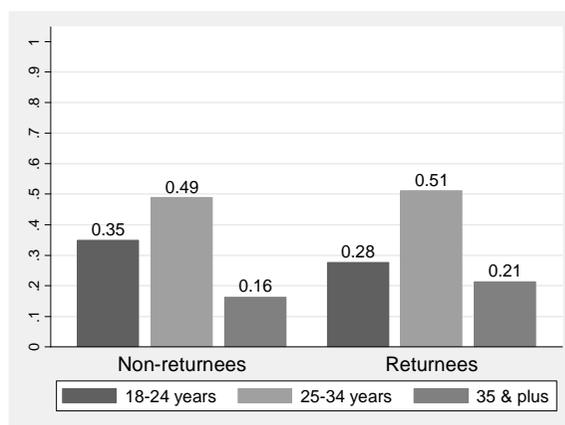
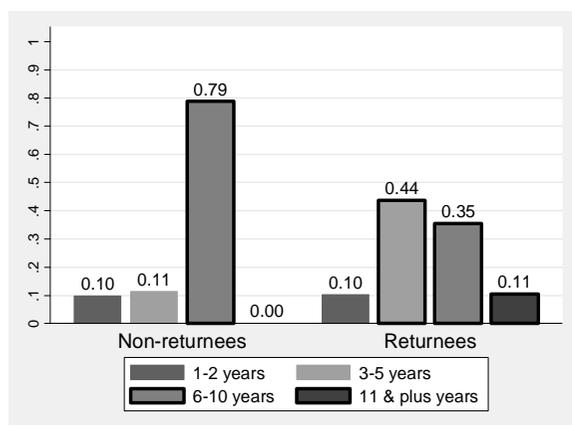
Figures 19 and 20. Ethnic & Religious groups



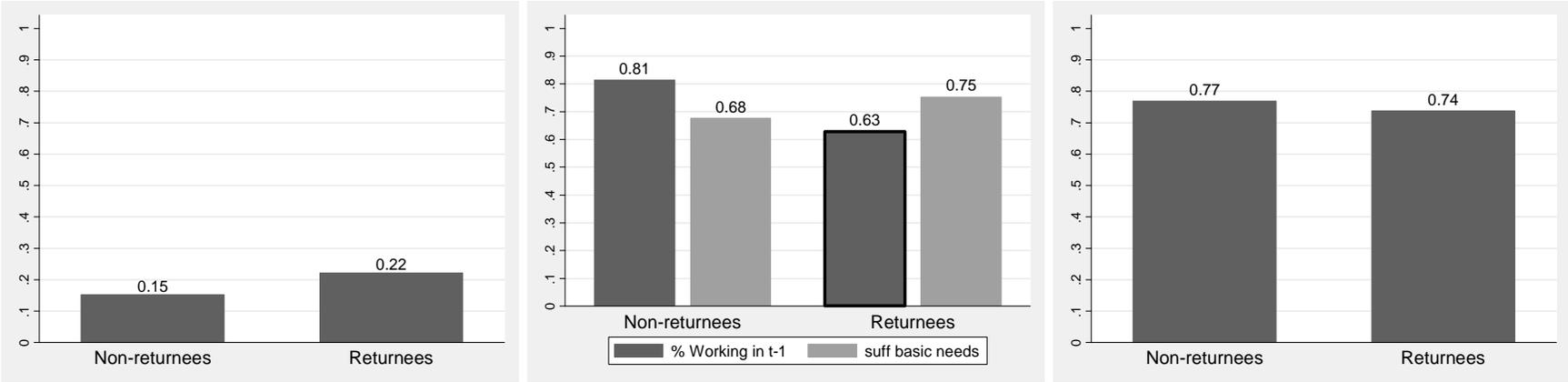
## B. DESCRIPTIVE STATISTICS OF VARIABLES CONSTRUCTED TO EXPLORE THE DETERMINANTS OF RETURN TO ORIGIN IN AFRICA

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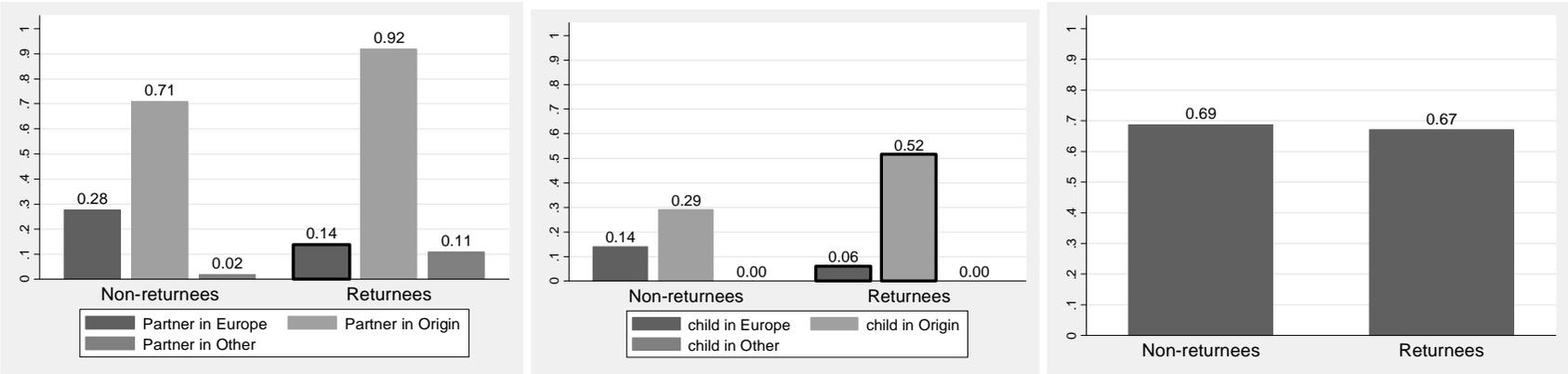
Figures 21, 22 and 23. Length of residence of Senegalese migrants in our three selected European destinations, age at migration to Europe and gender, by group (returnees vs. non-returnees)



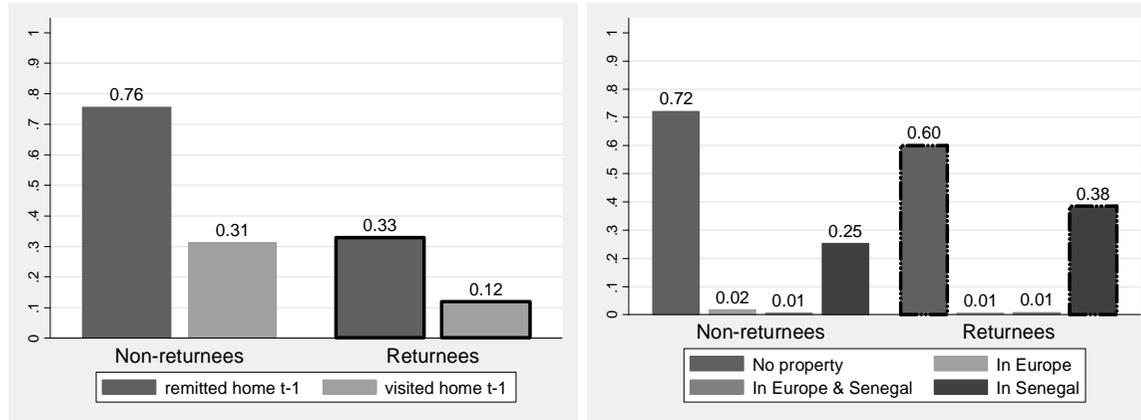
Figures 24, 25 and 26. Educational level (some tertiary), employment status and household economic resources, and legal status at destination, by group (returnees vs. non-returnees)



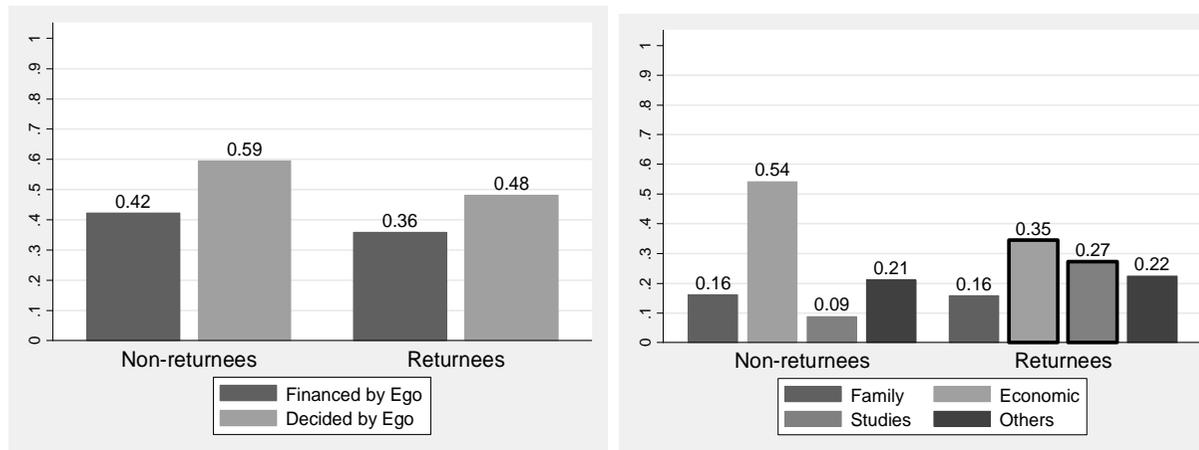
Figures 27, 28 and 29. Partners, children and other relative/friends and their place of residence, by group (returnees vs. non-returnees)



Figures 30 and 31. Remittances & visits to origin and Properties in origin, by group (returnees vs. non-returnees)



Figures 32 and 33. Ego decided & financed migration to Europe on his/her own & reasons for migration to Europe, by group (returnees vs. non-returnees)



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