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Legal Status and Transnationalism among Senegalese Migrants in Europe

Erik Vickstrom
Department of Sociology
Princeton University

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ABSTRACT

This paper seeks to examine the relationship between legal status and transnational activities among Senegalese migrants in Europe. Does legal status promote or constrain ties to the sending country? Does lack of legal status spur transnationalism as a reaction, or is transnationalism the product of a more secure integration into the host society? Results from a longitudinal study of Senegalese migrants in France, Italy, and Spain show that legal status, along with other personal and contextual factors, shapes these migrants' remitting, circulating, participation in associations, and host-country investing. Lack of legal status is negatively associated with circulation, participation in associations, and investment, reinforcing the notion that transnational engagement and assimilation are parallel processes. Undocumented status is associated with increased remitting, lending support to the idea that some forms of transnationalism are a response to lack of integration.

Immigration and its economic, political, cultural, and social consequences have recently emerged as increasingly contentious issues in Europe. Although some European societies have long histories of welcoming immigrants, the relative cultural and ethnic homogeneity of many others has thrown recent increases in foreign-born populations into sharp relief. Debates rage in legislatures and the popular media around immigrant integration, with even mainstream politicians and their parties taking aim at immigrants' supposed lack of assimilation to European norms. These debates often center not on the difficulties faced by migrants in adapting to a new home, but on their insistence on retaining links with their homelands seemingly at the expense of integration. Recent legislative attempts to ban Muslim women from wearing traditional Islamic clothing in France symbolize not only European anxiety about the potential incompatibility of Islam and secular European values, but also a suspicion that immigrant integration may be a zero-sum game: practices that link immigrants with their sending countries may prevent them from strongly identifying with the receiving society. Indeed, the French national soccer team's first-round exit from the 2010 World Cup provoked criticism that its mainly immigrant-origin players were more loyal to their home countries than to the one represented by their jerseys (Erlanger 2010). As Portes (1999) points out, the transnational activities of immigrants may give rise to suspicions that these activities could block immigrants' integration and menace the integrity of the host society.

European anxiety over immigrant integration has also increased with the recognition that unauthorized immigration has been a persistent and intractable challenge for the continent's immigration policies. Although toleration of unauthorized residence and subsequent regularization of status has been a de facto migration management policy of both post-war labor importers (such as France) and more recent countries of immigration in Southern Europe (such as Italy and Spain), efforts to tighten immigration controls have brought the issue of illegal immigration to the fore. While high-profile cases of exploitation of illegal immigrants have caught public attention, support for regularization has also waned in the face of the contention that immigrants, whether with or without legal status, are unable to integrate into European society. The conflict that erupted between local youths and African workers in southern Italy in 2010 was

illustrative in this regard, with many arguing that the migrants were responsible for their own plight, which the Italian government eventually solved through deportation instead of adjustment of status (BBC 2010). Thus, despite increasing scholarly recognition of importance of lack of legal status as a determining factor in the context of reception that shapes the opportunities of both the immigrant generation and their children, European governments and societies are becoming increasingly wary of regularization.

This paper seeks to connect these two sources of European skepticism regarding immigrant integration by examining the relationship between legal status and transnational activities in Europe. Does legal status—an indicator of fuller legal inclusion in the host society—promote or constrain ties to the sending country? Do lack of legal status and the legal, social, economic, and cultural exclusion it fosters spur transnationalism as a reaction? Or is transnationalism the product of a more secure integration into the host society? Using a quantitative study of Senegalese migrants in France, Italy, and Spain, I will argue that personal characteristics and contexts of exit and reception shape these migrants' transnational engagements. Chief among the contextual factors of the three destinations is access to legal status, but the impact of this variable differs depending on whether the transnational activity under examination is the product of accumulation of resources (and thus a product of integration) or is the result of exclusion and discrimination. In the former case, lack of legal status is negatively associated with transnationalism, reinforcing the notion that transnational engagement and assimilation are parallel processes. In the latter case, lack of legal status is associated with increased transnational engagement, lending support to the idea that some forms of transnationalism are a response to lack of assimilation. Public perception of Senegalese as vanguard of a massive illegal flow of migrants from sub-Saharan Africa (Lessault and Beauchemin 2009), coupled with recognition of the transnational mode of migration that many of them practice (Riccio 2008), makes Senegalese migrants in Europe an ideal population for studying the relationship between legal status and transnational activities.

Literature Review

Senegal, a former French colony on the Atlantic coast of West Africa, is increasingly cited as a country of emigrants. Zoomers et al. (2008) call Senegal a “diasporic state.” Adepoju (2004) estimates that in 2004 there were 2.5 million Senegalese in overseas locations; that is, 18 percent of the domestic population of approximately 14 million. Between 2000 and 2005, the number of Senegalese emigrants increased by 1.8 percent per year (Daffé 2008). Emigration has emerged as a survival strategy, aspiration, and status symbol for many Senegalese, and transnational activities play a large role in structuring and sustaining this flow.

Types of Transnational Activities

Since the early 1990s, the concept of transnationalism has ridden a theoretical and empirical rollercoaster. Researchers initially hailed the concept as a novel lens for understanding the lived bifocal realities of migrants in advanced postindustrial economies, with advances in transportation and communications technologies making it possible for them to live their lives simultaneously in destination and sending countries. Subsequent research sought to distinguish immigrant from other types of transnationalism and also questioned the novelty, normativity, scope, and liberatory potential of the phenomenon. The current consensus is that, while transnational activities are neither novel nor practiced by all immigrants everywhere, the concept still serves as an important conceptual lens for understanding a distinct path of immigrant incorporation (Portes 2010); immigrants are no longer limited by the social, cultural, economic, and political opportunities offered to them by their new host societies but can draw on cross-border ties to conduct their lives transnationally.

With the recognition that transnational engagement is neither widespread nor normative came an insistence on the heterogeneity of transnational practices. Migrants’ activities linking receiving and sending areas can take on a variety of forms, and researchers have commonly arranged them according to the typology of economic, political, and sociocultural transnational activities (Portes, Guarnizo, and Landolt 1999; Itzigsohn and Saucedo 2002). In addition to mapping diversity in types of transnational linkages, researchers have also noted heterogeneity in the intensity of participation in these various

activities and have distinguished between “narrow” and “broad” transnationalism—denoting activities that are institutionalized and continuous or occasional, respectively (Itzigsohn and Saucedo 2002). The issue intensity of participation has led to debate about what is significant about transnational activities. Some researchers advocate a stricter view of transnationalism by insisting on the regularity of cross-border engagement as a defining criterion, arguing that less-regular cross-border engagement is insufficient to justify a new concept (Guarnizo, Portes, and Haller 2003). Occasional monetary transfers to families in the homeland, for example, should not be considered transnational practices, since immigrants have always engaged in them; entrepreneurial activities that rely on linkages between receiving and sending areas, however, are properly transnational as their success depends on the simultaneity of immigrants’ involvement in multiple social and economic contexts.

It is nonetheless evident that even a phenomenon limited to a small minority of immigrants or practiced only occasionally by a larger community can have important cumulative macro-social consequences for both sending and receiving countries (Portes 2003). Remittances, although not a novel form of cross-border engagement, have acquired an unprecedented economic significance in the global economy. As most studies of transnationalism note, remittances constitute a large share of GDP for many less developed countries (LDCs), which also rely on transfers from their expatriates as a source of foreign exchange (Sana 2005; Guarnizo et al. 2003). Indeed, it is the very *regularity* of these transfers that have allowed LDC governments to rely on them as collateral in the international financial market (Guarnizo 2003). Similarly, migrants have always made return trips to their home countries, but the technological advances that have made other transnational activities possible have also made circulation a viable strategy for economic, political, and sociocultural involvement. Multiple studies highlight the importance of being able to return to the home community to oversee projects funded by hometown associations (Portes 1999; Smith 2006). Thus, in addition to such novel forms of immigrant transnationalism as investing and political participation, less novel forms such as remittances and circulation take on new importance in a transnational social field.

While research has generally found transnational activities to be limited to a minority of immigrants, studies of Senegalese migrants have argued that the dominant mode of organization the migration experience is transnational and that the goal of migrants is to create economic, social, and spiritual lives in Senegal to which they hope to return (Riccio 2008). Examining a selection of transnational practices gives some credence to this statement. Official remittances to Senegal totaled \$633 million in 2004, or about 15% of GDP, and increased by 82% between 2000 and 2004. In terms of the absolute value of remittance flows, Senegal ranks third in sub-Saharan Africa, behind only demographic giants Nigeria and Kenya (Daffé 2008). Short returns to Senegal are an integral part of what Kaag (2008) calls a “circular transnational livelihood,” facilitating trade and other economic transactions (Riccio 2008). Tall (2008) argues that urban migrants have invested a large proportion of their foreign earnings in real estate, and that these visible (and occasionally ostentatious) signs of success have played a large role in creating a “culture of migration” that increase the viability of a transnational social field. Senegalese migrants also participate in a variety of transnational associations, which collect funds from migrants to promote construction of schools, health centers, roads, irrigation systems, and places of worship in their villages or hometowns in addition to providing moral and financial support to migrants at destination (Grillo and Riccio 2004; Kothari 2008).

Determinants of Transnational Activities: Individual Characteristics

In addition to the heterogeneity of types of transnational activities, research has shown that the participants in these activities are also diverse. As Portes(2003:876) notes, “not all immigrants are transnationals,” and thus various studies have identified the factors that make some immigrants more likely to participate in transnational activities than others. Although such a complex phenomenon has many causes, the literature points to three main sets of determinants: individual characteristics, contexts of reception, and contexts of exit. These determinants encapsulate debates over the relationship between assimilation and transnational activities and also point to the potential role of legal status in promoting or constraining these activities.

Individual characteristics traditionally associated with the assimilation of immigrants into host societies also, somewhat paradoxically, appear to be related to the propensity to engage in transnational activities. Many studies have shown that individual characteristics such as age, education, occupation, and length of residence in the host community have a positive relationship with a variety of transnational activities. In their study of Dominican, Salvadoran, and Colombian immigrants in the United States, Guarnizo et al. (2003) find that the propensity for political transnationalism increases with age, education, occupational status, length of US residence, and acquisition of American citizenship. Itzigsohn and Saucedo (2002) similarly find that time in the US is associated with increased transnational participation, and that US. As Guarnizo et al. (2003) note, these individual factors also figure heavily in classical assimilation theory's prediction of immigrants' "progressive disengagement" from the sending country. Contrary to expectations that assimilation and home-country linkages are incompatible, this research supports the view that, at the individual level, the factors that promote immigrant integration are also positively associated with transnational engagement.

Determinants of Transnational Activities: Contexts of Reception

While traditional assimilation and transnationalism have similar determinants at the individual level, the social, economic, political, and cultural context that receives immigrants may cause these two phenomena to diverge. According to the literature on immigrant adaptation, "making it" in a destination country depends heavily on what Portes and Rumbaut (2006) call the "context of reception." They define the most important aspects of context as the policies of the receiving government, the conditions of the host labor market, and the characteristics of the immigrant's ethnic community. Negative features of these facets of the context of reception can block immigrant mobility and imperil the second generation (Portes and Rumbaut 2006, 2001). An exclusionary stance from the government's policies can result in lack of legal status for immigrants and their children, which "forces immigrants into a wholly underground existence" (Portes and Rumbaut 2006:93). Indeed, a voluminous research literature has found that undocumented migrants are economically disadvantaged are at a disadvantage when it comes to assimilation.

In addition to having an effect on assimilation, research has also identified the context of reception as a primary determinant of immigrant transnational activities. Unlike contextual impacts on assimilation, however, a negative context of reception has been found to facilitate transnational activities. Itzigsohn and Saucedo (2002) find evidence of “reactive sociocultural transnationalism” among Salvadoran immigrants in the US, a result of their vulnerable legal position and experiences of discrimination. In his study of Mexican migrants, Sana (2005) reports that remitting is associated with status loss and discrimination, especially among those without legal status. Remitting is also associated with lack of legal status and attendant exclusion from the labor market among Zimbabweans in the UK (Bloch 2008). Citing a number of other studies, Portes(2003) argues that transnational activities can provide a refuge against a hostile context of reception. Thus, at the level of the context of reception, the same factors that hinder assimilation seem to promote certain kinds of transnational activities as a response to exclusion and discrimination.

Unlike many migrant groups, Senegalese migrants do not face a unitary context of reception. While Senegalese are renowned for migrating to all corners of the globe, there are high concentrations of Senegalese migrants in France, Italy, and Spain. These three countries account for 45% of the international Senegalese community¹ and about three quarters of the Senegalese spread across Western countries².

Senegalese emigration to France began during the colonial period as a result of military conscription and intensified as demand for unskilled foreign labor increased during the French economic boom of the 1950s and 1960s. Senegalese workers in French industry suffered during the restructuring of these enterprises in the 1980s, however, and Senegalese migrants started to seek out new destinations in Southern Europe (Riccio 2008), responding to demand for inexpensive and flexible workers in the secondary and informal labor markets of Spain and Italy (Pascual de Sans, Cardelús, and Solana Solana 2000). Senegalese, like other African migrants, are concentrated in unskilled jobs in agriculture,

¹ Personal computation based on the last Senegalese census (2002).

² Personal computation based on the Database on Immigrants in OECD countries (DIOC).

construction, and services in Spain (Pascual de Sans et al. 2000), while they tend to work as street hawkers or in informal industry in Italy (Riccio 2001; Kaag 2008). Even though this work is relatively easy to come by, partly as a result of the rejection of manual labor among native-born workers, the wages are low and the working conditions poor (Pascual de Sans et al. 2000). There has thus been a progressive shift towards informality in the labor markets of the main Senegalese contexts of reception, resulting in more precarious incorporation among Senegalese migrants.

Governmental policies in main contexts of reception of Senegalese migrants have varied over time. All three countries have histories of tolerating or even encouraging illegal immigration and subsequent regularization. From the end of World War II to the 1970s, illegal immigration was the *de facto* migration policy advocated by the French government. Laubenthal (2007) estimates that, at the end of the 1960s, 80% of foreign workers were directly recruited by companies and entered France without a residence permit, to be regularized later by the government. While the French government subsequently cracked down on illegal immigration and generally tightened its immigration policy, there have been six regularizations of those in undocumented status since 1973 (Kraler 2009). The 1997-1998 legalization program that followed on the heels of protests and church occupations by undocumented migrants regularized almost 90,000 people, a large share of whom were sub-Saharan Africans from former French colonies (Miller 2002).

Migration flows to Italy and Spain were rare prior to the 1970s, and neither country had effective immigration policies before the mid-1980s (Laubenthal 2007; Pascual de Sans et al. 2000). The accumulation of a large stock of illegal immigrants prior to these policies also necessitated a series of legalization programs; each country has embarked on six regularization efforts since 1985 (Kraler 2009). These programs have undoubtedly had an impact on Senegalese migrants and migration patterns: a full 55% of all foreigners legalized in Spain's 1991-1992 program were from Africa (Pascual de Sans et al. 2000), and Kaag (2008) argues that Italy's program in the mid-1980s actually attracted the first Senegalese migrants to that country. Despite granting legal status, many of these regularization programs

required renewal every few years; thus, Senegalese migrants' legal status has often been precarious and temporary.

Research has shown Senegalese transnational activities to be associated with marginality and exclusion stemming from negative labor market and governmental contexts of reception. Kaag (2008) describes how Senegalese migrants living at the Residence Prealpino in Brescia, Italy—many of them illegal—fall back on transnational ties and livelihoods to combat their rejection by Italian society. Riccio (2008) suggests that Senegalese migrants are better able to remit by living on the margins of society and drawing on transnational networks to spend less and save more, while those with a “successful entry” into the receiving society-- including stable employment and family obligations at destination—are less likely to remit. Thus the Senegalese transnational mode of migration may actually depend on a degree of marginality in the host society, making migrants more focused on obligations to family at origin and more likely to return. Indeed, the Senegalese context of exit exerts a strong pull on the allegiances of Senegalese migrants, and thus structures their transnational activities.

Determinants of Transnational Activities: Contexts of Exit

The conditions under which migrants leave their home countries have an impact on both assimilation and transnational activities. As Portes and Rumbaut (2006) note, contemporary immigrant flows are socioeconomically diverse, and the financial, human, social, and cultural capital that immigrants bring with them can play an important role in their incorporation at destination (in interaction, however, with the context of reception, which may not give the same return to these forms of capital or may not recognize them because of lack of legal status). Thus, the class and geographic (urban/rural) origins of migration flows in the home country is an important determinant of assimilation. Research also points to the impact of the political context of exit, with refugees and asylees often experiencing negative mental health consequences of their traumatic moves with subsequent fallout for their integration; on the other hand, refugees often benefit from a positive context of reception in the host country, so the effect political context of exit once again interacts with the context of reception.

Contexts of exit also structure transnational activities. Portes (2003) reports that rural Salvadoran migrants, from a peaceful context of exit, are more likely to engage in transnational activities than urban Colombian migrants fleeing from a violent context of exit. In addition to geographic and political factors, scholars have argued that affective links to home communities play a role in promoting transnationalism. Landolt et al. (1999:312) argue that Salvadoran household-level transnational activities are motivated by “a deep sense of obligation” on the part of the immigrant. Guarnizo et al. (2003) find that the expectation that migrants return to their home communities is a strong predictor of transnational political engagement. Sana’s (2005) findings that remittances are motivated by status loss and discrimination at destination also indicate that migrants continue to see the home community as their valid reference group and draw their self worth from home-community value systems. Ongoing social ties are also important for the maintenance of transnational engagement: Bloch’s study of Zimbabweans in the UK shows that kinship ties and staying in touch with family in the origin community are important determinants of remitting. The common finding that married males have a high propensity for transnational activities (Itzigsohn and Saucedo 2002; Guarnizo et al. 2003) also reflects contexts of exit from which men migrate more often than women and in which migration may be a family survival strategy. Strong affective links with the home community are thus indicative of an integrative and interdependent context of exit, and transnational activities depend partially on the strength of these links.

In its fifty years of independence, Senegal has experienced major shifts that have affected its migration patterns. Traditional rural livelihoods eroded, leading to increased urbanization: 42% of the Senegalese population now live in urban areas (CIA 2009), with Dakar alone containing 21% of the national population (Ndione and Broekhuis 2006). Senegalese intercontinental emigration, while traditionally a rural phenomenon (Findley et al. 1995), has also urbanized: Daffé (2008) reports the recent emergence of a significant flow from Senegal’s cities and estimates that 59% of international migrants now come from urban zones. In contrast to the national average of 11% of households with migrants, a recent survey found that almost 20% of households in the urban zones of Dakar and Touba had a member abroad and that 82% of these households receive remittances (Daffé 2008). The shift from rural to urban

origins of Senegalese migrants has been accompanied by an ethnic and religious shift: rural migrants were ethnically Pulaar, Serer, and Soninke, while urban migrants tend to be Wolof and members of the Mouride Sufi Islamic brotherhood (Riccio 2008). The Mouride brotherhood itself plays an important role in structuring migration opportunities for its followers, as its tight networks provide informal assistance both prior to and after arrival (Kaag 2008).

Affective ties to family also play a large role in structuring the context of exit for Senegalese migrants. Riccio (2008) argues that the family is the mainstay of social organization for Senegalese both at home and abroad. Organized around communalism and a hierarchical structured solidarity, the family remains a durable social institution in Senegal despite increases in divorce and breakdowns in intergenerational communication. Furthermore, Riccio (2008) cites research that has shown emigration to be a family strategy: migration is pursued by individual men with assistance from kin, and a desire to return home leads to a temporary socially expected duration of migration on the part of both the migrant and the family. The family is the main source of status for Senegalese migrants, and this connection precludes many migrants from pursuing family reunification at destination (Riccio 2008).

Hypotheses

The literature on transnationalism is clear in assigning importance to both individual characteristics and the context of exit. While evidence on the relationship between individual characteristics of Senegalese migrants and their transnational activities is slim, there is no a priori reason to expect Senegalese migrants to differ from others. Indeed, their “transnational mode of migration” would most likely enable migrants with greater integration in the host society to be more likely to engage in transnational activities. Regarding ties to origin, studies have shown the strength of the Senegalese context of exit in structuring both migration and incorporation at destination. Thus, the stronger the migrants’ ties to place of origin as measured by ethnic, religious, affective family, and instrumental connections, the more the migrant will participate in transnational activities.

In addition to individual factors and those associated with links to migrants’ origins, contexts of reception can structure transnational activities by controlling access to labor markets and governmental

policies. The predictions stemming from this relationship, however, are mixed. On the one hand, lack of legal status and consequent marginal labor market opportunities negatively impact the individual occupational characteristics that are positively associated with transnational activities. On the other hand, legal and economic marginality has also been shown to increase transnational activities as a response to exclusion and discrimination. Research on Senegalese migrants has shown that they often occupy unskilled and precarious positions in informal labor markets, and access legal status through infrequent regularizations. Thus, a more negative context of reception for Senegalese, including lack of legal status, may be associated with greater or lesser propensity to engage in transnational activities, depending on whether the activity under examination is more sensitive to upward economic and occupational factors or downward reactive and discriminatory factors.

Research also indicates that the determinants of transnational activities may vary depending on the type of activity being practiced. Political activities, such as participation in HTAs or in more traditional electoral politics, typically require a degree of formal education and socioeconomic status. Entrepreneurship and investment require business savvy access to various forms of capital. These types of transnational activities would seem to be more dependent on individual resources and a positive context of reception, while the context of exit may be affectively positive but politically negative. Remittances, on the other hand, require only a slight surplus of funds, which migrants can increase by living in austere conditions at their destinations. Circulation similarly requires fewer individual resources, but differs from the other activities in being almost completely dependent on legal status. Thus, it is reasonable to expect the individual and contextual factors structuring transnationalism to vary by type of activity.

Data and Methods

Data Source

The analyses performed in this paper will rely on a data from the Migration between Africa and Europe (MAFE-Senegal) project³. The MAFE project collected retrospective data on more than 1,700 individuals interviewed in 2008. Life histories were collected on various core aspects of the interviewees' life such as family formation, education and employment, housing, and migration. In addition, one module is specifically dedicated to the legal status of the individuals while they were living outside of their country; other modules focus on transnational practices, such as remittances, visits, investments at origin, and participation in associations. The individual life-history interviews permitted the creation of a person-year database with records from an individual's year of birth up to the year of study (2008).

Sample

The MAFE project was conducted both at origin (1,150 individuals in Dakar, Senegal) and in the selected destination countries of Spain, Italy and France (200 migrants per country). The transnational character of the MAFE database allows inclusion in the analyses of individuals who have returned in Senegal after a stay in Europe and thus avoids potential biases in the retrospective measurement of transnational activities. Furthermore the inclusion of three different countries allows study of the extent to which transnational practices vary according to the context of reception, especially in relation to varying policy contexts regarding regularisation.

In Dakar, households were selected randomly (using systematic random sampling) from an updated list of households in the selected census tracts (the primary sampling unit). Two strata were distinguished: households with migrants and those without migrants. A maximum of 50% of households with migrants were drawn in each district. Selected households that could not be reached because of

³ The Migration between Africa and Europe (MAFE-Senegal) survey is a project coordinated by INED (France), in association with the Institut de Population, Développement et Santé de la Reproduction of the University of Dakar (IPDSR, Senegal). It also involves the Pompeu Fabra University (UPF, Spain) and the Forum Internazionale ed Europeo di Ricerche sull'immigrazione (FIERI, Italy). The survey was conducted with the support of the Agence nationale de la recherche (ANR, France), the Ile de France Region, the Institut de recherche pour le développement (IRD, France), the Centre population et développement (CEPED, France) and the FSP programme entitled "International Migrations, territorial reorganizations and development of the countries of the South." The MAFE-Senegal project is now being enlarged to Ghanaian and Congolese Migrations thanks to European funding. For more information, see: <http://www.mafeproject.com/>.

absence or refusals were not replaced during the fieldwork⁴. To take account of refusals and absences of households, 22 households were selected to reach an effective sample size of 20 households per census tract on average. Individuals were then selected within households for the life history survey. In each household, a simple random sample was done to select up to two return migrants, up to two spouses/partners of migrants, and another individual. In France, Italy, and Spain, the objective of the survey was to obtain a sample as representative as possible of the Senegalese population in the destination countries. The way the sample was constituted varied across countries, but some common principles were respected:

- The composition of the sample is as close as possible to the population of Senegalese migrants in the country in terms of gender, geographic distribution, age, socio-economic category or occupation. One exception is that the sample is gender balanced; males and females should be equally represented in order to allow gender analyses.
- Samples in origin and destination were linked, but migrants with weak or no relationships at origin were not excluded from the sample,
- Both documented and undocumented migrants were represented in the sample.

Due to lack of availability of appropriate sampling frames and to fulfill the above requirements, the study employed the quota method in France and Italy to collect information on Senegalese migrants.

In Spain, a sample of Senegalese migrants was drawn from the *Padron*. This source was a unique sampling opportunity in Europe since it is annually updated and includes all migrants, even the undocumented. The Senegalese sample in Europe comprised two types of samples: a linked sample of respondents, whose contacts were obtained in Senegal through the household survey and an additional sample in each country to reach the expected sample size. A module in the Dakar household questionnaire was designed to help collect contacts with migrants in European countries. For Senegalese in France, 156 contacts were collected but only 54% of them were actually usable. In Italy, almost no contact could be

⁴ Replacement would distort the computation of sampling weights, and could also lead to bias the sample.

used. The method of selection of the additional sample varied across countries, but included selection from municipal registers, contacts through migrant associations, street recruitment, and snowball methods. Regions were selected to cover the largest possible population of Senegalese in each country. For example, in France, 64% of the people born in Senegal are concentrated in only three regions (Ile de France, Rhône-Alpes and Provence-Alpes-Côte d'Azur), so participant recruitment was focused there.

For the purposes of my study, I selected all person-years during which an individual was a migrant in France, Italy, or Spain. The sample thus includes person-years contributed by return migrants in Senegal who spent time in one or more of the three European countries. Migrants interviewed in any of the European countries may also contribute person-years to the analysis of other countries if they previously spent time in those countries. The total analytic sample comprises 660 individuals contributing 8,154 person years. The French subsample contained 281 individuals and 3,699 person-years. 224 individuals contributing 2,368 person-years made up the Italian subsample. The Spanish study comprised 216 individuals and 2,087 person years⁵.

Outcome variables

In this study I will investigate four types of transnational activities among Senegalese migrants in France, Italy, and Spain: remittances, circulation (short returns to Senegal), participation in hometown associations, and investing in assets in Senegal. The life-history interview asked respondents to indicate whether they had engaged in these activities in each year in which they were a migrant. I created a dichotomous indicator of participation in each activity in each year of migration, with “1” indicating participation and “0” indicating non-participation.

Explanatory variables

I created independent variables following the theoretical literature on determinants of transnational activities.

⁵ The sample size of the national subsamples of individuals does not add up to the total sample size of individuals because some individuals appear in multiple national subsamples. Only their person-years in a particular destination were counted for analysis of that particular subsample.

Individual characteristics

I include variables measuring years in destination, years of education, and age, all factors expected to increase the propensity to engage in transnational activities. Years in destination is measured as completed years since arrival at a particular year's destination, and this metric is "reset" for each subsequent stay in a different destination. I include a quadratic term on years in destination to account for potential non-linearities in its effect. Years of education is measured as an interval variable. In order to avoid age-period-cohort collinearities with other variables, I used age at migration, which remains fixed over a given migration spell for an individual but then changes if the same individual migrates to another destination. I include a variable measuring number of previous migrations to capture migration-specific human and social capital accumulated by an individual.

Context of exit

Given the gender imbalance of migration from Senegal to Europe, I include a dummy for male. Research on Senegalese migration and transnationalism shows evidence of differential effects by ethnicity, so I include a set of dummies for Senegalese ethnic group: Mandingue, Pular, Soninke, and other ethnic group, with Wolof (the demographic and linguistic majority group) as the reference category. Research has also shown that religion, especially membership in Islamic Sufi brotherhoods, plays an important role in structuring Senegalese transnationalism. I hope to capture this effect via another set of dummies that reflect religious affiliation: Mouride, other Muslim, and not Muslim, with Tidiane as the reference group⁶. I measure affective links to the home community with a set of time-varying indicators of the migrant's marital status with a spouse at origin, whether or not the migrant has children at origin, and whether or not the migrant has at least one parent alive at origin; a time-invariant dummy indicates if the migrant is the eldest of the children in her/his family. To capture instrumental or contractual relationships with the family that might be expected to structure some kinds of transnational activities, I

⁶ Even though Mourides may be numerically superior to Tidianes both in Senegal and abroad, I chose Tidiane as the reference group to highlight the effect of belonging to the Mouride brotherhood, which research has shown to be an important determinant of transnational activities (Riccio 2001, 2004, 2008)

include a dummy variable indicating if family members contributed to the financing of the migrant's trip (which varies for each discrete migration spell). I capture geographic origins of migration with a dummy variable indicating the migrant's identification of Dakar—far and away the country's most important urban area—as place of origin. I hope to measure the socioeconomic status of the sending family context with a set of indicators of the father's schooling (a dummy for “less than secondary school”), employment status (a dummy for “unemployed”), and occupation (a dummy for “worker,” equivalent to “not professional/executive”) when the migrant was 15 years old.

Context of reception

The main explanatory variable of interest in the contexts of reception faced by Senegalese migrants is their potential exclusion as a result of government policies. I created a dummy variable for “undocumented status,” which equals “1” if the migrant did not have a residence permit, work permit, or citizenship in the country of destination. This indicator is time-varying. To capture potential effects of regularizations, I include a dummy for years in which regularizations were carried out in each of the three countries under study.

I created a set of variables reflecting Senegalese migrants' economic incorporation into host country labor markets. A time-varying dummy variable indicated the migrant's employment status (“1” for unemployed). A set of time-varying dummy variables indicated the migrant's occupation, with indicators for manual (including agricultural occupations as well as both unskilled and skilled manual labor) and white-collar occupations; service occupations serve as the reference category. While the dataset does not include information on migrants' income, I include two time-varying dummy variables that measure both absolute and relative economic status: a dummy variable that indicates whether or not the migrant's financial ability to cover basic needs was “more than sufficient” and a second dummy variable that indicates whether or not the migrant's financial situation was better than that of others in the same location.

As some of the literature of African transnationalism indicates that affective ties at destination may weaken transnational activities, I include time-varying indicators of the migrant being married to a

spouse or having children born in or with citizenship in the host country. While these variables do not preclude the possibility that the spouses or children residing in Senegal, they are reasonable proxies for the presence of affective ties to the destination country. I also include a time-varying dummy variable that indicates if the current migration was paid for by a spouse, which would indicate family reunification at destination. To capture potential effects of social networks, I include a count of family members or friends residing in the destination country.

In addition to the above variables measuring the context of reception, I also include dummy variables for residence in Italy and Spain in a given year (with France as the reference category) to account for other aspects of these contexts of reception not already accounted for.

Period effects

To account for potential period effects on the propensity to engage in transnational activities, I include a time-varying dummy indicating in which decade the current year falls.

Models

Exploiting the longitudinal and time-varying nature of both outcome and explanatory variables requires methods that account for clustering. Regular generalized linear models make the important assumption of conditional independence between observations. Such models, however, are unsuitable for data featuring repeated observations on the same individual, which are likely to violate the assumption of independence. Including a person-specific random intercept allows the dependence to be captured by the model (Rabe-Hesketh and Skrondal 2008). This model can be written as

$$\text{logit}\{\text{Pr}(y_{ij} = 1 \mid \mathbf{x}_{ij}, \zeta_j)\} = \beta_1 + \mathbf{x}'_i \beta_2 + \mathbf{x}'_{ij} \beta_3 + \zeta_j$$

where y_{ij} is the dichotomous outcome indicator of participation in a given transnational activity for person i during year j , β_1 is a constant, \mathbf{x}'_i is a vector of time-constant explanatory variables, \mathbf{x}'_{ij} is a vector of time-varying explanatory variables, β_2 and β_3 are regression coefficients, and ζ_j is the person-specific random intercept. The random intercept is assumed to be independent across respondents j and conditionally normally distributed with mean zero and variance ψ :

$$\zeta_j | \mathbf{x}_{ij} \sim N(0, \psi).$$

The person-specific random intercept is what induces the dependence between repeated observations, and can also be thought of as capturing unobserved heterogeneity in the propensity to engage in the outcome (Rabe-Hesketh and Skrondal 2008). Assuming that responses are independent conditional on both the covariates and the person-specific random intercept leads to a binomial distribution of the outcome with binomial denominator of 1 and probability π_{ij} :

$$y_{ij} | \pi_{ij} \sim \text{binomial}(1, \pi_{ij}).$$

I estimate a random intercept model for each of my four outcome variables on the full three-country sample. In addition to the variables described above, I include interactions of the country-specific dummy variables and the variables indicating the context of reception to allow for differential effects by country of residence. I also estimate separate random intercept models for each outcome-country pair, which allow all variables, not only those relating to context of reception, to vary by country of residence. I estimated these models using Stata version 11's xtlogit command, which uses adaptive Gauss-Hermite quadrature to approximate the likelihood function (Rabe-Hesketh and Skrondal 2008). Sensitivity tests indicated forty-eight quadrature points were appropriate for fitting the remitting and circulation models accurately, while models for HTA participation and investing required ninety-six quadrature points.

Dependence among the dichotomous responses for the same person can be summarized by the residual intraclass correlation of the underlying latent outcome variable given the explanatory variables:

$$\rho = \frac{\psi}{\psi + \pi^2/3}$$

Intraclass correlation for dichotomous outcomes is expressed in terms of the latent responses because intraclass correlation for observed outcomes varies according to the values of the explanatory variables. This measure of unobserved heterogeneity will help quantify the extent to which individuals are prone to engage in transnational activities even after accounting for observed covariates.

In the case of high intraclass correlation, it is possible that individuals have intrinsically high or low probabilities of engaging in certain transnational activities. In this case, estimating models that

capture year-to-year changes in outcome and explanatory variables might not illuminate the determinants of these high or low probabilities. As a result, I also estimate a cross-sectional logistic regression model for each outcome where the outcome variable is the proportion p_i of years during which the migrant engaged in a given transnational activity

$$p_i = \frac{y_i}{n_i}$$

where y_i is a count of the years in which person i engaged in a given transnational activity and n_i is a count of number of the number of years in destination. Although researchers frequently use ordinary least squares (OLS) regression to model such proportions, this approach is not suitable because: 1. the outcome proportion is bounded by 0 and 1; and 2. the variance of the proportion is not homoskedastic but depends on the underlying probability. The linear predictor in an OLS model would generate prediction that fall outside of this range and would not be able to accommodate the heteroskedastic variance (Kieschnick and McCullough 2003). Instead, it is reasonable to assume that the appropriate distribution of y_i is binomial

$$y_i \sim \text{binomial}(n_i, \pi_i)$$

where y_i is the sum of n_i Bernoulli random variables (y_{ij} , or success or failure in a given year), n_i is the binomial denominator (count of trials), and π_i is the underlying probability giving rise to the successes and failures. With grouped data of this sort, it is appropriate to use a logistic regression model for binary outcomes with the binomial denominator specified; estimation, testing, and interpretation of the resulting coefficients are equivalent to logistic regression (Rabe-Hesketh and Skrondal 2008).

Using such proportions as outcomes, I estimate a logistic regression model for each outcome on the full three-country sample. I transform time-varying explanatory variables into proportions calculated in the same way as the outcome variables. I include interactions between the proportion of years in each country and the other context-of-reception variables to allow for differential effects of the different contexts of reception. I also estimate separate logistic regression models for the proportion of years in

which migrants engaged in each transnational activity in each country to allow all variables to vary by context of reception.

Results

General Characteristics of the Sample

Table 1 presents descriptive characteristics of the sample under analysis. It shows that migration from Senegal to the three destination countries is a relatively recent phenomenon. While some migrants surveyed were in Europe as early as the 1950s, more than half of the person-years of sample are concentrated in the 2000s. This is reflected by the average length of residence at destination, which is less than eight for the overall sample. Age at migration, barely above 27 years for the sample, also reflects the recency of these migration flows. There are, however, statistically significant differences between destinations in these measures, indicating that the flows to Italy and Spain are much more recent than those to France. Senegalese migrants are also, on average, overwhelmingly male and have less than ten years of formal education⁷. Again, significant differences exist by destination, with Spain in particular being more female, older at migration, and less educated.

[Table 1 about here]

With regard to indicators of the context of exit, almost half of the sample belongs to the Wolof ethnic group, with a substantial minority from the Pulaar ethnic group. Wolofs appear to be overrepresented in Italy and Spain, while Peuhls have spent comparatively more person-years in France. Adherents of the Mouride Islamic brotherhood account for almost 36% of the person-years in the sample, but almost 67% of those in Italy. Tidianes make up almost a third of the sample, but are overrepresented in France. Senegalese migrants have, on average, taken about .4 previous trips to the destination countries. The vast majority still have at least one parent alive in any given year, and almost a quarter are the eldest child in their families. More than a third identify their place of origin as Dakar, with migrants to

⁷ While this may seem low compared to the populations of destination country, it is substantially higher than the average educational attainment for Senegal as a whole, which was 2.23 in 2000 according to a World Bank study (see <http://go.worldbank.org/8BQASOPK40>).

Italy being more likely to indicate the capital city as their origin. Variables indicating the family's socioeconomic status (SES) show that the vast majority of migrants' fathers had less than secondary schooling and worked manual jobs, while only 14% of fathers were unemployed when the migrant was 15 years old. There is again variation of family SES by destination, with migrants in Italy and Spain more likely to have a father with less than secondary education and a manual occupation, while migrants in France are more likely to have a father who was unemployed. Family members contributed to almost a quarter of migrant trips, with migrants in Spain being markedly less likely to have financial support from kin. Migrants spent 75% of their time married, and had children in 67% of person-years, with migrants in Spain having higher percentages on both variables.

Variable indicating context of reception also demonstrate persistent differences by destination. Labor-market variables show that migrants spent almost 20% of their person-years unemployed, with *chomage* being much more likely in France. Migrants are concentrated in the manual (agricultural, unskilled, and skilled occupations) and service sectors; employment was more likely in these sectors in Italy and Spain, while white-collar employment was more common in France (but still relatively unlikely). Twenty percent of trips were paid for by a spouse, with family reunification apparently more common among Senegalese migrants in Spain. While only 11% of migrants had a spouse with citizenship in the host country, almost 30% had children with host-country citizenship; both were more likely in France. Indicators of absolute and relative economic status were low, with only 8% indicating that their financial means were more than sufficient to purchase basic necessities, and only 17% indicating that they felt better off than other people in their town; migrants in Italy seemed more likely to agree with these statements.

Legal status is the facet of the context of reception of primary theoretical interest for this study, but being undocumented was a relatively rare phenomenon for migrants in these destinations: only 10% of person-years were undocumented, with higher proportions in Italy and Spain. Nonetheless, almost 28% of all migrants and fully 40% of those in Spain spent some time in undocumented status, indicating that it

may well be a state that is of quantitative and qualitative importance for the transnational practices of migrants.

Table 2 presents frequency distributions of the four transnational activities under study. Remitting occurred in more than 70% of person-years and 79% of migrants remitted at least once, indicating that it is an activity that is both regular and widespread among Senegalese in Europe. Circulation was also widespread, with 60% of migrants making a short return to Senegal during their time abroad, but this transnational activity was less regular than remitting, as it only occurred in 15.4% of person-years. Participating in an HTA was neither regular nor widespread, with participation occurring in only 15% of person-years and only 19% of migrants ever participating. Investing in Senegal was more regular than either short returns or HTA participation, with migrants reporting assets in Senegal in 29% of person-years in destination. It is also fairly widespread, with almost half of migrants reporting ever having an investment at origin. The descriptive picture that emerges, then, is of a stable but heterogeneous transnational field. Some activities more common and widespread than others, but the vast majority—almost 9 in 10—have participated in at least one of these four forms of transnational engagement.

[Table 2 about here]

Table 2 also presents evidence of differences in the propensity to engage in transnational activities by legal status and destination. For the sample as a whole and in each country, undocumented status is associated with a lower propensity to engage in circulation, HTA participation, and investing (all differences significant at $p < .01$). This supports the hypothesis that exclusion from legal status and the social and economic rights that accompany it reduces the ability of migrants to remain connected to their origins in these ways. The negative relationship between undocumented status and circulation is non-remarkable, as traveling internationally without documentation would preclude re-entry into the destination country. Short returns only occurred in 17% of years in which migrants were documented, however, and migrants with undocumented status in Italy made trips back to Senegal in almost 7% of person-years; it could be that return to Senegal is too costly in financial or opportunity-cost terms for migrants to participate in regularly, regardless of legal status. The negative relationships between both

HTA participation and investing and legal status may be due to exclusion from labor-market opportunities that would enhance these activities.

In addition to these negative relationships, Table 2 shows a positive relationship between undocumented status and propensity to remit. This relationship seems to be driven by migrants in France, where remitting occurs in a higher percentage of undocumented person-years than in documented person-years. This supports the hypothesis that particular kinds of transnational activities may have different determinants. It also lends credence to the idea that some forms of transnational activities are responses to exclusion and discriminations. It is particularly telling that legal exclusion seems to be associated with increased propensity to remit, as research has consistently shown that remitting is partly an attempt to gain status in the home community as a result of exclusion at destination (Sana 2005; Bloch 2008).

Regression Models

Table 3 presents results from the random-intercept logistic regression models in four columns, one for each transnational activity outcome variable. Coefficients indicate the change in log-odds of engaging in a particular transnational activity associated with the explanatory variable net of other variables, and the accompanying t statistic is in parentheses. It is important to note that random-intercept logistic regression models must be interpreted as fitting *subject-specific* probabilities for individual respondents as opposed to population-averaged probabilities because of the non-linear nature of the regression; the average of a nonlinear function is not the same as the nonlinear function of the average (Rabe-Hesketh and Skrondal 2008:254-55). Thus, interpretations of the coefficients are for subject-specific change in the log-odds associated with an individual having the attribute indicated by the explanatory variable.

[Table 3 about here]

The first set of explanatory variables supports the hypothesis that certain personal characteristics associated with integration in the receiving society also have a positive association with transnational activities. Each additional year at destination has a positive and statistically significant association with the log-odds of engaging in each transnational activity. The significant negative quadratic term indicates

that there is a turning point in this general upward trajectory, but this takes place after a substantial number of years in destination (approximately 21 years for remitting, 13 years for circulation, 33 years for HTA participation, and 51 years for investing). Age at migration has a significant positive association with remitting, HTA participation, and investing and a non-significant relationship with circulation, suggesting that migrants who are older upon arrival at destination are more likely to engage in transnational activities in any given year. The log-odds of remitting and investing increase with each additional prior trip, demonstrating the importance of migration-specific human capital. Only two of the four transnational activities showed gender differences in participation, with men being significantly more likely to engage in HTA participation and investing. These models showed no significant association between education and transnational participation.

The results show little support for the hypothesis that the context of exit plays a strong role in structuring transnational activities while controlling for personal characteristics and the context of reception. There are few significant differences between Wolofs and members of other ethnic groups in any of the transnational activities. The exception seems to be members of the Soninké ethnic group, whose log-odds of circulating between destination and Senegal are significantly lower than those of the Wolof, while Soninké log-odds of participating in HTAs are significantly higher than those of the Wolof. These differences might be due, in part, to the overwhelmingly rural, agricultural, and poor origin of Soninké migrants, who have traditionally used migration to Europe as a household survival strategy in the face of drought in the Senegal River valley (Findley et al. 1995; Manchuelle 1997). This context of exit might make the Soninké more likely to pool their incomes in associations that help their sending villages; the difficulty and expense of traveling home might also prevent them from circulating. The lack of differences between adherents of different religions is notable given the common contention that adherents of the Mouride brotherhood are particularly prone to transnational engagement. Indeed, Mourides are actually *less* likely than Tidianes to participate in HTAs and show no significant differences in participation in the remaining three activities.

Affective links with the sending community do not have uniform associations with transnational activities. Having at least one parent alive at origin is associated with increased log-odds of remitting in a given year, but decreased log-odds of circulation. Being the eldest child in a family is negatively associated with HTA participation in a given year, as is having Dakar as a place of origin. Being married to a spouse without the citizenship of the host country is positively associated with remitting, but shows no significant association with other transnational activities and does not vary by destination. The effect of having children without the citizenship of the host country varies by destination: the log-odds of remitting are higher for those migrants in France and Italy with children with non-host-country citizenship, while similar migrants in Spain are less likely to remit. Having children with non-host country citizenship is associated with lower propensity to participate in HTAs and higher propensity to invest among migrants in France; migrants in Spain exhibit the opposite pattern for these two transnational activities, while those in Italy show a significant positive association only with HTA participation. Family socioeconomic status, as measured by occupational and educational attainment of the migrant's father, shows no association with any of the transnational activities. Finally, instrumental links to the family are linked only to investing, increased log-odds of which are associated with family financing of the migrant's trip. Given the predictions of NELM theory concerning instrumental motivations of migrants to remit, the lack of association between this variable and remitting is somewhat surprising.

Contexts of reception also have variable associations with transnational activities. Destination country itself is related to three of the four outcomes: migrants in Spain are less likely than those in France and Italy to remit, while those in Italy are less likely to circulate and invest than those in France and Spain; HTA participation did not vary by country of destination while controlling for other aspects of the contexts of reception and exit and personal characteristics. Affective links at destination have limited associations with transnational activities. Spouse-financed migration is associated with a decreased propensity to remit in all countries, while having a spouse with host-country citizenship has no effect except for a negative relationship with investing among migrants in Spain compared to those in France

and Italy. Having children with host-country citizenship is associated with an increase in the log-odds of remitting and investing in France and Italy, while the same variable decreases the log odds for these outcomes among migrants in Spain. HTA participation decreases with the presence of children with host-country citizenship in France, but increases in Italy and Spain. The odds of remitting decrease by 25 with each additional contact at destination in all countries, while % and the odds of investing increase by 22% with each contact. Number of contacts is also associated with an increase in the log-odds of circulation in Italy compared to France and Spain.

Labor market incorporation plays a role in all of the outcomes, but again varies by destination and transnational activity. Unemployment is associated with 98% lower odds of remitting in all destinations and also lowers the log-odds of circulation in Italy and Spain, but has no significant associations with other outcomes. Occupation also demonstrates a significant association with remitting: in all destinations, the odds of remitting among migrants with manual jobs are 263% higher than among migrants with service jobs, while white-collar workers have 80% lower odds of remitting than those with service jobs. In France, being employed in manual labor compared to working in service is also associated with increased likelihood of circulation and participating in HTAs and decreased likelihood of investing. Having a manual occupation in Italy or Spain, however, is not associated with either circulation or investing (the coefficients on these interaction terms cancel out the coefficients on the main effects, and even reverse the effects slightly). White-collar migrants in Italy, however, have a higher log-likelihood of investing than those in France or Spain. Neither absolute nor relative economic status has significant associations with any of the transnational activities in any of the countries, which probably indicates that economic marginality is captured by the labor-market variables.

Over and above other facets of the context of reception, undocumented legal status has significant associations with transnational activities in multiple destinations. Being undocumented is associated with a 228% increase in the odds of remitting in all destinations. Along with evidence that migrants in manual and service occupations have higher log-odds of remitting, these findings lend some support to the hypothesis that remitting, in particular, is a response to discrimination and exclusion. Undocumented

status is associated with decreased log-odds of circulating in France and Spain; the coefficient on the interaction between presence in Italy and undocumented status is positive, but the magnitude is not great enough to counteract the negative main effect. Undocumented migrants in both Italy and Spain are less likely than those in France to participate in HTAs. Spanish migrants with undocumented status are less likely to invest than those in France and Italy. Being in France during a regularization year is associated with increased log-odds of investing, but regularization is otherwise unassociated with transnational activities.

Since the interactions in these models show persistent differences in the variables associated with the context of reception in each destination, I also estimated separate models for each outcome in each destination. These models are presented in Appendix table 1. Although results are broadly similar to those presented above, estimation problems due to relatively small sample sizes and lack of sufficient degrees of freedom render these models less reliable than those in Table 3.

Table 3 also indicates that the residual intraclass correlation for these models is very high for remitting, HTA participation, and investing. Even after controlling for the explanatory variables in the models, the correlation between latent outcomes in adjacent years is .89 for remitting, .97 for HTA participation, and .95 for investing, while circulation shows much lower within-person dependence with a residual intraclass correlation of only .21. These high correlations indicate that there is substantial unobserved heterogeneity, perhaps due to omitted variables. Alternatively, it could be the case that the high intraclass correlation is due to an individual's underlying probability of engaging in a particular transnational activity: those who are likely to remit do so often, while those who are not likely to remit do so infrequently.

Table 4 presents results from logistic regression models for the proportion of years at destination that migrants engage in transnational activities. While results agree in most respects with the random-coefficient models, there are some important differences. Education is positively associated with circulation, HTA participation, and investing and negatively associated with remitting. Ethnic and religious differences in the context of exit are more pronounced: Soninké are, as before, more likely to

participate in HTAs but are also significantly less likely to participate in the remaining transnational activities, and Mourides are less likely to remit, circulate, and participate in HTAs than Tidianes. Family SES shows some significant associations with transnational activities, with migrants from low-SES families more likely to remit and those from higher SES families more likely to invest.

[Table 4 about here]

The context of reception variables also differed slightly in the grouped data models. The relationship between unemployed status and all transnational activities is strongly and consistently negative across countries, while the relationship between occupation and remittances is attenuated. While economic status variables were insignificant in the longitudinal models, there are some significant relationships in these models. Higher absolute economic status is associated with higher propensity to participate in HTAs and invest among migrants in Italy, but better relative economic status is associated with lower log-odds of participating in these same activities in Italy. Undocumented status shows no association with remittances and is negatively associated with the remaining transnational activities.

The grouped data models, which look at the underlying probability of individuals to engage in these activities, thus assign more importance to education, religion, ethnicity, family SES, employment, and long-term economic status. Proportion of time spent in undocumented status had a negative relationship with circulating, participating in HTAs, and investing, suggesting that these activities are particularly susceptible to the legal, economic, and social exclusion implied by undocumented status. The lack of significant association between undocumented status and remittances challenges the findings of a positive relationship between these two variables in the longitudinal models. This is not necessarily contradictory, however, as the longitudinal models examine outcomes for a specific year and migrant, while the grouped data logistic regression models present population averages. Undocumented status might have an impact on the likelihood of remitting in a given year for a particular migrant, while its long-term effect might average out to zero across the population of migrants.

Discussion and Conclusion

This paper has sought to explore the links between the legal, social, and economic aspects of integration embodied in legal status and the transnational activities of Senegalese migrants in France, Italy, and Spain. Descriptive and predictive models indicated that legal status has important impacts on all transnational activities over and above explanatory variables at the level of personal characteristics, context of exit, and other facets of the context of reception, but these other determinants also show significant associations with transnational activities.

Variables indicating migrants' links to their home communities had some explanatory power. While some limited ethnic and religious differentials were apparent, affective links to family at origin played little role in explaining transnational activities when personal characteristics and the context of reception were taken into account. Having at least one parent alive had a positive association with remittances, as did having a spouse at origin, while having children had variable impacts depending on the destination. Most remarkably, family-financed migration was not a factor in explaining remittances. Instead, migrants "repaid" their families by investing in assets at origin.

Personal characteristics and contexts of reception, including legal status, had varying associations with transnational activities, indicating that these diverse activities have heterogeneous determinants. Personal characteristics, especially time in destination, age, gender, and education seem to be the predominant determinants of HTA participation and investing. These activities seem to be dependent on time and resources accumulated in destination, and thus fall into what has been called "resource-dependent" transnationalism (Itzigsohn and Saucedo 2002). These activities also differ in the labor-market incorporation of their participants in different countries: participants in HTAs across destinations are more likely to be manual than service workers, who seem to seek to pool potentially limited funds in order to have a greater collective impact through projects benefiting both their origin communities and their ability to help each other at destination. Investing had more heterogeneous labor-market determinants: those investing from France are service or white collar workers, while migrants in Italy and Spain are more likely to invest as manual workers than service workers, and white collar workers in Italy have a high propensity to invest. It could be that the informal sectors in which the vast majority of

Senegalese migrants in the southern European countries work offer enough economic opportunity despite the manual nature of the work that these migrants are able to generate a surplus for investing, while the more formal labor market in France is less likely to offer such opportunities to manual workers. Despite some differences in determinants, then, it seems that integration with the host society clearly goes along with HTA participation and investing, as has been found by previous research.

Remittances, on the other hand, seem to be strongly associated with some forms of exclusion. This is evident in labor-market variables: manual and service workers are much more likely to engage in remitting. Most importantly, lack of legal status is strongly associated with remitting, indicating that being undocumented may provoke migrants to seek status in their home communities. This is in keeping with the hypothesis of “reactive transnationalism” (Itzigsohn and Saucedo 2002) and complements findings from other studies of African migrants in Europe that show remitting to be linked to discrimination and exclusion (Bloch 2008). Nevertheless, remitting also increases with time in destination, age at migration, and number of previous trips and decreases sharply when the migrant is unemployed. These additional findings indicate that remitting is also dependent on the accumulation of financial resources that comes with time in destination even when migrants are incorporated in an exclusionary fashion.

Lack of legal status had negative associations with circulation, HTA participation, and investing. It is perhaps not surprising that those without a secure legal status would be less likely to circulate since they would have more difficulty returning to their European destinations; it is nonetheless surprising that lack of legal status has almost zero association with circulation among migrants in Italy, indicating that lack of legal status is perhaps not an impediment to entry into or residence in that destination. The negative association between lack of legal status and HTA participation and investing again lends support to the notion that these activities are particularly sensitive to integration into the destination’s economic, social, and legal structure.

It is evident, then, that the various transnational activities of Senegalese migrants in Europe have heterogeneous sets of determinants, and that these determinants can also vary by destination. Regardless

of this heterogeneity, lack of legal status had consistent and strong associations with transnational activities, indicating that legal integration at destination plays a role in the connections that Senegalese migrants are able to maintain with their sending communities. Lack of legal status seems to attenuate the propensity of Senegalese migrants to engage in circulation, HTA participation, and investing, but also seems to increase their propensity to remit as a possible status palliative for legal, social, and economic exclusion at destination. From a policy perspective, regularization programs would thus not only encourage further integration into the host society, but would also encourage stronger links with the sending community. With many European governments emphasizing “co-development” schemes with migrants resident in their countries, enabling these forms of transnational engagement via adjustment of status would create a productive synergy.

While this paper has taken tentative steps toward clarifying the links between legal status and the transnational engagement of Senegalese migrants, additional research is needed. The models in this paper treated the four transnational activities as separate and discrete outcomes. In reality, migrants have limited funds, time, and energy to devote to these activities on top of meeting their own needs at destination, and it is thus possible that these activities compete for these scarce resources. Future modeling efforts should attempt to model the simultaneity of these outcomes.

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Table 1. Characteristics of the MAFE-Senegal sample by destination

Variable	France	Italy	Spain	All	P value
Personal Characteristics					
Years in destination	9.78	6.74	6.24	7.98	***
Decade: 1950s	0.4%	0.0%	0.0%	0.2%	***
Decade: 1960s	1.3%	0.0%	0.0%	0.5%	***
Decade: 1970s	6.1%	0.2%	0.5%	2.9%	***
Decade: 1980s	16.6%	5.2%	4.5%	10.2%	***
Decade: 1990s	30.2%	28.5%	26.6%	28.8%	**
Decade: 2000s	45.5%	66.1%	68.3%	57.4%	***
Age at migration	26.19	26.79	29.40	27.19	***
Age in 2008	41.65	38.31	39.64	39.85	***
Male	59.3%	66.8%	47.7%	58.6%	***
Education (years)	10.05	9.83	6.70	9.13	***
Context of Exit					
Ethnicity					
Mandingue	6.0%	8.9%	7.9%	7.3%	***
Wolof	29.9%	77.4%	52.0%	49.6%	***
Pulaar	22.4%	6.2%	16.1%	16.0%	***
Serer	6.1%	5.4%	6.4%	6.0%	
Diola	5.5%	0.0%	2.3%	3.1%	***
Soninke	4.2%	1.1%	2.9%	2.9%	***
Other ethnicity	7.8%	0.6%	7.0%	5.4%	***
No ethnicity	2.3%	0.0%	3.7%	2.0%	***
Religion					
Muslim, Tidiane	34.8%	22.4%	31.7%	30.4%	***
Muslim, Khadre	1.1%	0.0%	4.9%	1.7%	***
Muslim, Layene	0.3%	1.2%	1.3%	0.8%	***
Muslim, Mouride	17.5%	67.4%	32.8%	36.1%	***
Other Muslim	20.7%	3.8%	19.0%	15.3%	***
Christian	7.9%	4.7%	9.7%	7.4%	***
Other/No religion	0.5%	0.0%	0.0%	0.2%	***
Number of previous migrations					
Total number of migrations	0.45	0.40	0.40	0.42	
At least one parent alive	81.3%	80.1%	81.5%	81.0%	
Eldest	28.6%	21.3%	19.0%	24.0%	***

Place of origin is Dakar	25.8%	45.7%	36.7%	34.5%	***
Family SES					
Father's education (less than secondary school)	65.1%	79.5%	88.5%	75.3%	***
Father unemployed	18.1%	9.8%	12.4%	14.2%	***
Father's occupation (agricultural or manual worker)	56.0%	80.5%	72.6%	67.5%	***
Migration paid for by family	29.4%	26.5%	13.3%	24.4%	***
Married	70.9%	77.8%	79.0%	75.0%	***
Has children	67.2%	62.9%	74.0%	67.6%	***
Context of Reception					
Unemployed	25.9%	12.1%	17.8%	19.8%	***
Occupation, manual	28.0%	39.8%	34.0%	33.0%	***
Occupation, service	30.6%	38.5%	46.4%	37.0%	***
Occupation, white collar	15.1%	8.2%	1.3%	9.6%	***
Number of contacts at destination	2.89	1.61	2.03	2.29	***
Migration paid for by spouse	19.0%	16.2%	31.8%	21.4%	***
Spouse(s) with host nationality	18.7%	6.1%	4.2%	11.3%	***
Child(ren) with host nationality	40.1%	10.8%	32.8%	29.6%	***
Absolute economic status - "more than sufficient"	5.8%	15.3%	2.7%	7.8%	***
Relative economic status - "better than others around"	12.6%	23.0%	17.3%	16.9%	***
Undocumented status	7.6%	11.2%	12.9%	10.0%	***
Ever undocumented	18.3%	30.8%	40.3%	27.6%	***
N (person-years)	3,699	2,427	2,096	8,222	
N (respondents)	239	209	216	664	

Note: Unweighted sample. Percentages calculated from person-years.

P-values are from F-test of significance of between-group differences.

*** p < .001, ** p < .01, * p < .05

Table 2. Transnational Activities by Destination and Legal Status

Country		Transnational Activity			
		Remitting	Circulation	HTA	Investing
France	Documented	71.5%	18.9%	23.4%	31.3%
	Undocumented	79.6%	1.4%	16.1%	18.9%
	t-test	**	***	***	***
	Total	72.2%	17.6%	22.9%	30.3%
Italy	Documented	68.6%	11.6%	7.7%	26.9%
	Undocumented	70.6%	6.6%	4.0%	16.9%
	t-test		***	**	***
	Total	68.9%	11.1%	7.3%	25.8%
Spain	Documented	72.0%	18.5%	15.2%	30.6%
	Undocumented	72.3%	2.2%	5.5%	16.6%
	t-test		**	**	***
	Total	72.0%	16.4%	14.0%	28.8%
All	Documented	70.8%	16.7%	16.8%	29.8%
	Undocumented	74.2%	3.4%	8.6%	17.5%
	t-test	*	***	***	***
	Total	71.2%	15.4%	16.0%	28.6%
	F-test	*	***	***	***
	Ever participated	79.1%	60.1%	19.6%	47.1%
Ever participated in ≥ 1 activity			88.1%		

Note: Unweighted data from MAFE-Senegal life-history database.

Percentages are based on person-years.

T-tests are for documented/undocumented difference in transnational activity by country.

F-test if for significance of between-group differences for a particular transnational activity.

*** p < .001, ** p < .01, * p < .05

Table 3. *Random-intercept logistic regression of transnational activities, full sample*

	Remitting	Circulation	HTA participation	Investing
Personal Characteristics				
Years in destination	0.51 ^{***} (14.79)	0.07 ^{***} (4.45)	0.42 ^{***} (7.17)	0.43 ^{***} (11.54)
Years in destination squared	-0.01 ^{***} (-12.75)	-0.00 ^{***} (-5.08)	-0.01 ^{***} (-4.02)	-0.00 ^{***} (-4.62)
Decade (ref: prior to 1980s)				
1980s	0.44 (0.81)	0.44 (1.57)	0.56 (0.56)	-0.49 (-0.81)
1990s	0.03 (0.05)	0.71 [*] (2.49)	1.96 (1.72)	-1.54 [*] (-2.24)
2000s	0.47 (0.68)	0.88 ^{**} (2.94)	2.44 (1.94)	-1.75 [*] (-2.22)
Age at migration	0.10 ^{**} (3.09)	0.01 (0.70)	0.30 ^{***} (4.29)	0.38 ^{***} (7.37)
Male	-0.30 (-0.50)	0.01 (0.06)	3.85 [*] (2.41)	2.99 ^{**} (2.81)
Education	-0.08 (-1.72)	0.02 (1.40)	0.07 (0.67)	0.05 (0.64)
Number of previous trips	0.75 ^{**} (3.26)	-0.07 (-1.23)	0.85 (1.67)	1.43 ^{***} (4.29)
Context of Exit				
Ethnicity (ref: Wolof)				
Mandingue	-0.79 (-0.89)	-0.12 (-0.52)	2.10 (0.94)	-2.77 (-1.69)
Pulaar	1.43 (1.92)	0.05 (0.29)	1.54 (0.92)	2.15 (1.80)
Soninke	-1.52 (-1.11)	-1.36 ^{***} (-3.43)	5.91 [*] (2.18)	-4.17 (-1.67)
Other ethnicity	-1.58 [*] (-1.97)	-0.28 (-1.38)	0.45 (0.24)	-0.52 (-0.38)
Religion (ref: Tidiane)				
Mouride	-0.93 (-1.54)	-0.17 (-1.16)	-4.27 ^{**} (-2.80)	-1.06 (-1.08)
Other Muslim	-0.86 (-1.27)	0.21 (1.32)	-2.63 (-1.62)	0.13 (0.11)
Not Muslim	-0.38 (-0.34)	-0.56 (-1.92)	0.68 (0.28)	-2.54 (-1.32)
At least one parent alive	1.49 ^{***} (5.06)	-0.28 [*] (-2.27)	0.13 (0.29)	-0.12 (-0.41)
Eldest child	-0.88 (-1.56)	-0.26 (-1.85)	-3.15 [*] (-2.27)	0.78 (0.82)
Place of origin is Dakar	-0.30 (-0.59)	0.09 (0.75)	-3.12 [*] (-2.34)	-0.78 (-0.89)
Family SES				
Father's education (less than secondary school)	-0.63 (-0.95)	-0.08 (-0.51)	-0.00 (-0.00)	0.13 (0.12)
Father unemployed	-0.43 (-0.46)	0.01 (0.06)	0.80 (0.40)	-1.23 (-0.80)
Father's occupation (ag. or manual work)	-0.11 (-0.14)	-0.02 (-0.12)	-0.90 (-0.53)	0.10 (0.08)
Migration paid for by family	-0.71 (-1.35)	0.14 (1.01)	1.50 (1.14)	1.43 [*] (2.17)
Context of reception				

	Remitting	Circulation	HTA participation	Investing
Destination (ref: France)				
Italy	0.14 (0.18)	-0.91** (-2.77)	-2.70 (-1.19)	-2.51** (-2.94)
Spain	1.80* (2.55)	0.34 (1.06)	-3.38 (-1.80)	-0.02 (-0.02)
Migration paid for by spouse	-1.87** (-2.65)	0.01 (0.06)	2.62 (1.49)	0.54 (0.44)
Unemployed (France)	-3.81*** (-9.82)	0.13 (0.69)	0.12 (0.21)	-0.12 (-0.32)
Unemployed X Italy	0.33 (0.48)	-1.02** (-2.74)	-5.97 (-1.41)	-0.83 (-0.90)
Unemployed X Spain	-0.60 (-0.99)	-0.95** (-2.97)	0.17 (0.15)	-0.27 (-0.36)
Occupation (ref: service)				
Manual (France)	1.29*** (3.33)	0.49** (2.58)	1.98** (2.89)	-1.58*** (-3.57)
Manual X Italy	0.36 (0.63)	-0.62* (-2.27)	-0.58 (-0.48)	1.96** (3.15)
Manual X Spain	0.20 (0.34)	-0.78** (-2.86)	-0.07 (-0.07)	1.93** (2.87)
White collar (France)	-1.61** (-3.17)	-0.16 (-0.69)	0.64 (0.90)	-0.26 (-0.51)
White collar X Italy	1.50 (1.26)	-0.38 (-0.84)	1.12 (0.44)	3.52** (2.80)
White collar X Spain	1.73 (1.09)	-1.19 (-1.33)	2.19 (0.71)	3.31 (1.51)
Undocumented (France)	1.19* (2.34)	-2.70*** (-5.03)	1.07 (1.36)	0.18 (0.36)
Undocumented X Italy	-0.94 (-1.38)	2.19*** (3.56)	-2.41* (-2.25)	-1.43 (-1.84)
Undocumented X Spain	-0.34 (-0.52)	0.32 (0.47)	-2.69* (-2.21)	-2.02* (-2.50)
Regularization year (France)	-0.16 (-0.65)	0.24 (1.67)	0.09 (0.30)	0.50* (2.15)
Regularization year (Italy)	-0.28 (-1.30)	-0.02 (-0.15)	-0.24 (-0.56)	0.00 (0.02)
Regularization year (Spain)	0.15 (0.62)	-0.16 (-1.07)	0.47 (1.19)	0.18 (0.66)
Number of contacts at destination (France)	-0.29*** (-4.32)	-0.02 (-0.83)	0.18 (1.85)	0.20** (2.66)
Number of contacts X Italy	0.12 (0.70)	0.17** (2.64)	-0.19 (-0.58)	-0.19 (-1.04)
Number of contacts X Spain	0.19 (1.27)	-0.09 (-1.27)	0.56 (1.71)	0.31 (1.63)
Married (France)	0.94** (2.96)	0.20 (1.20)	0.83 (1.72)	0.56 (1.62)
Married X Italy	0.12 (0.19)	0.58 (1.89)	-0.17 (-0.17)	-0.20 (-0.35)
Married X Spain	-0.72 (-1.35)	-0.02 (-0.06)	0.34 (0.35)	1.00 (1.63)
Spouse(s) with host citizenship (France)	0.16 (0.34)	-0.01 (-0.04)	-0.65 (-1.03)	0.27 (0.59)
Spouse citizenship X Italy	1.55 (1.65)	-0.33 (-0.76)	-1.95 (-0.54)	-1.82 (-1.36)
Spouse citizenship X Spain	-1.38	-0.49	-51.45	-4.54***

	Remitting	Circulation	HTA participation	Investing
Has children (France)	(-1.41) 1.04*	(-0.89) -0.25	(-0.00) -2.42***	(-4.82) 1.99***
Children X Italy	(1.97) -0.27	(-1.16) -0.31	(-3.31) 4.56*	(3.36) 1.17
Children X Spain	(-0.37) -2.52***	(-1.06) 0.25	(2.07) 4.32**	(1.39) -2.98***
Child(ren) with host citizenship (France)	(-3.41) 0.16	(0.81) 0.20	(2.98) 1.26	(-3.36) -2.46**
Child citizenship X Italy	(0.31) -2.07*	(0.97) -0.30	(1.58) 1.03	(-3.99) 3.16**
Child citizenship X Spain	(-2.48) 0.87	(-0.79) 0.09	(0.49) -2.51	(2.63) 2.83**
Absolute economic status - "more than sufficient" (France)	(1.11) 0.49	(0.27) -0.33	(-1.88) -0.84	(2.58) 1.31
Absolute status X Italy	(0.73) -0.47	(-0.96) 0.08	(-0.82) 2.69	(1.83) -1.85
Absolute status X Spain	(-0.51) -1.50	(0.18) 0.43	(0.84) 1.67	(-1.27) -2.18
Relative economic status - "better than others" (France)	(-0.95) -0.51	(0.61) -0.29	(0.39) 0.25	(-1.31) 0.54
Relative status X Italy	(-1.19) 0.49	(-1.15) 0.84*	(0.28) -4.84	(1.00) 1.53
Relative status X Spain	(0.70) 0.45	(2.21) 0.47	(-1.30) 0.08	(1.22) -1.29
Constant	(0.63) -1.39	(1.32) -2.82***	(0.06) -26.26***	(-1.61) -20.81***
	(-0.94)	(-5.96)	(-7.06)	(-8.24)
N (person-years)	8154	8154	8154	8154
AIC	3,944.20	6,334.96	2,063.05	3,648.85
BIC	4,392.60	6,783.36	2,511.45	4,097.25
LL	-1,908.10	-3,103.48	-967.53	-1,760.42
Model chi-squared	644.09	239.55	292.40	545.68
DF	62.00	62.00	62.00	62.00
$\sqrt{\psi}$	5.20***	0.92	9.72***	8.22***
Intraclass correlation (ρ)	0.89	0.21	0.97	0.95

Notes: Unweighted data from MAFE-Senegal life history study.

Coefficients indicate effect on log-odds of the outcome. *t* statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4. Grouped-data logistic regression of proportion of migrant-years participating in transnational activities

	Remitting	Circulation	HTA participation	Investing
Personal Characteristics				
Years in destination	0.07 ^{***} (8.65)	0.10 ^{***} (4.89)	0.11 ^{***} (6.18)	-0.00 (-0.57)
Decade of arrival (ref: prior to 1980)				
1980s	0.08 (0.54)	0.64 ^{***} (3.66)	0.22 (1.17)	0.75 ^{***} (5.56)
1990s	0.20 (0.90)	0.49 (1.82)	-0.41 (-1.35)	0.58 ^{**} (2.88)
2000s	-0.75 [*] (-2.57)	0.19 (0.55)	-0.78 [*] (-2.01)	0.39 (1.49)
Age in 2008	-0.10 ^{***} (-8.35)	-0.12 ^{***} (-4.89)	-0.12 ^{***} (-5.67)	0.03 ^{**} (2.86)
Age at first migration	0.12 ^{***} (9.26)	0.13 ^{***} (5.26)	0.12 ^{***} (5.59)	-0.02 (-1.41)
Male	0.11 (1.31)	-0.05 (-0.47)	0.14 (1.19)	0.36 ^{***} (4.36)
Education	-0.04 ^{***} (-6.18)	0.03 ^{***} (3.73)	0.06 ^{***} (6.76)	0.02 ^{***} (3.39)
Total number of trips	0.13 ^{***} (3.31)	-0.05 (-1.44)	0.13 ^{***} (4.02)	0.09 ^{***} (3.31)
Context of Exit				
Ethnicity (ref: Wolof)				
Mandingue	-0.10 (-0.84)	-0.06 (-0.40)	0.30 (1.74)	-0.14 (-1.12)
Pular	0.12 (1.25)	-0.09 (-0.94)	0.10 (0.93)	0.46 ^{***} (5.54)
Soninke	-1.17 ^{***} (-6.53)	-1.35 ^{***} (-5.09)	1.16 ^{***} (5.73)	-0.86 ^{***} (-4.69)
Other ethnicity	-0.55 ^{***} (-5.33)	-0.41 ^{**} (-3.14)	-0.20 (-1.26)	-0.34 ^{**} (-3.25)
Religion (ref: Tidiane)				
Mouride	-0.43 ^{***} (-5.32)	-0.19 [*] (-2.10)	-0.85 ^{***} (-8.30)	0.12 (1.69)
Other Muslim	-0.42 ^{***} (-4.80)	0.07 (0.70)	-1.07 ^{***} (-8.57)	-0.12 (-1.46)
Not Muslim	-0.63 ^{***} (-4.45)	-0.51 ^{**} (-2.78)	-0.08 (-0.45)	-0.19 (-1.33)
At least one parent alive, proportion	-0.40 ^{***} (-3.88)	-0.11 (-0.95)	-0.34 ^{**} (-2.80)	-0.35 ^{***} (-3.90)
Family SES				
Father's education (less than secondary school)	-0.02 (-0.29)	-0.12 (-1.20)	0.27 [*] (2.33)	0.11 (1.30)
Father unemployed	-0.16 (-1.42)	-0.10 (-0.78)	-0.11 (-0.74)	-0.47 ^{**} (-4.24)
Father's occupation (ag. or manual work)	0.34 ^{***} (3.51)	-0.17 (-1.65)	-0.23 (-1.83)	-0.19 [*] (-2.06)
Eldest	-0.22 ^{**} (-3.09)	-0.30 ^{***} (-3.51)	-1.29 ^{***} (-11.67)	0.43 ^{***} (6.75)
Place of origin is Dakar	0.14 [*] (2.10)	0.04 (0.52)	-0.90 ^{***} (-8.83)	-0.14 [*] (-2.11)
Migration paid for by family, proportion of trips	-0.53 ^{***} (-6.62)	0.19 [*] (2.12)	0.12 (1.11)	-0.29 ^{***} (-3.76)
Context of reception				

	Remitting	Circulation	HTA participation	Investing
Italy, proportion	-0.78** (-3.05)	-0.92** (-2.88)	-3.05*** (-6.56)	-0.50 (-1.92)
Spain, proportion	-1.23*** (-4.62)	-0.22 (-0.76)	-2.12*** (-5.37)	0.27 (1.10)
Migration paid for by spouse, proportion of trips	-1.01*** (-9.44)	-0.17 (-1.37)	0.28 (1.79)	0.18 (1.67)
Undocumented, proportion (France)	-0.41 (-1.62)	-3.72*** (-7.86)	-0.98*** (-3.46)	-0.47* (-2.07)
Undocumented X Italy	0.49 (1.43)	2.88** (4.68)	1.77*** (3.32)	-0.28 (-0.80)
Undocumented X Spain	0.43 (1.15)	2.40*** (3.95)	0.63 (1.26)	-0.95** (-2.70)
Unemployed, proportion (France)	-2.10*** (-10.81)	-0.67** (-3.04)	-1.16*** (-4.91)	-1.97*** (-10.20)
Unemployed X Italy	0.17 (0.55)	0.00 (0.01)	-0.93 (-1.59)	-0.12 (-0.30)
Unemployed X Spain	0.32 (1.08)	-0.44 (-1.21)	0.01 (0.02)	1.95*** (6.83)
Occupation (ref: service)				
Manual, proportion (France)	-0.08 (-0.47)	0.59*** (3.93)	0.68*** (4.55)	-0.62*** (-4.75)
Manual X Italy	0.46* (2.00)	-0.46 (-1.87)	-0.09 (-0.30)	0.81*** (4.03)
Manual X Spain	0.10 (0.41)	-0.70** (-3.03)	0.58* (2.25)	0.70*** (3.69)
White collar, proportion (France)	-0.42* (-2.26)	-0.44* (-2.06)	0.01 (0.07)	-0.73*** (-4.18)
White collar X Italy	0.75* (2.51)	-0.76 (-1.73)	2.37*** (5.68)	1.11*** (3.83)
White collar X Spain	0.57 (0.65)	-2.89 (-1.72)	2.47* (2.30)	1.43 (1.82)
Married, proportion (France)	1.31*** (7.95)	0.26 (1.33)	0.88*** (4.25)	1.14*** (6.87)
Married X Italy	-2.24*** (-8.22)	-0.07 (-0.20)	-0.38 (-0.79)	-1.04*** (-3.60)
Married X Spain	-0.49 (-1.65)	-0.03 (-0.10)	0.68 (1.31)	-0.07 (-0.25)
Spouse(s) with host citizenship, proportion (France)	-0.19 (-1.23)	-0.37* (-2.25)	-0.91*** (-5.13)	0.14 (0.96)
Spouse citizenship X Italy	0.43 (1.25)	1.27** (2.82)	-0.51 (-0.86)	0.04 (0.11)
Spouse citizenship X Spain	-0.51 (-1.35)	-0.72 (-1.36)	-10.58 (-1.74)	0.65 (1.94)
Has children, proportion (France)	-1.00*** (-5.60)	0.07 (0.33)	-0.10 (-0.45)	0.61*** (3.48)
Children X Italy	1.96*** (7.85)	0.07 (0.21)	1.57*** (3.60)	0.34 (1.33)
Children X Italy	1.44*** (5.22)	0.06 (0.20)	-0.48 (-1.21)	-0.92*** (-3.59)
Child(ren) with host citizenship, proportion (France)	0.92*** (5.71)	0.19 (1.14)	-0.77*** (-4.42)	-1.14*** (-8.07)
Child citizenship X Italy	-0.78* (-2.57)	-0.56 (-1.29)	2.91*** (6.75)	0.40 (1.22)
Child citizenship X Spain	-1.32*** (-5.68)	0.34 (1.42)	0.98*** (3.30)	0.45* (2.20)

	Remitting	Circulation	HTA participation	Investing
Absolute economic status - "more than sufficient", proportion (France)	-0.15 (-0.53)	-0.33 (-0.83)	-0.18 (-0.49)	-0.63* (-2.27)
Absolute status X Italy	0.07 (0.19)	0.35 (0.68)	3.07*** (4.15)	3.19*** (7.90)
Absolute status X Spain	-0.76 (-1.60)	-0.07 (-0.09)	0.49 (0.78)	-1.88** (-2.69)
Relative economic status - "better than others", proportion (France)	0.06 (0.32)	-0.37 (-1.79)	-0.50* (-2.35)	0.42* (2.42)
Relative status X Italy	-0.13 (-0.47)	0.39 (1.16)	-2.89*** (-4.21)	-2.54*** (-8.00)
Relative status X Spain	0.35 (1.26)	0.01 (0.03)	2.56*** (8.74)	-0.02 (-0.08)
Number of contacts in destination	-0.04*** (-4.21)	-0.01 (-0.46)	0.00 (0.25)	0.08*** (8.04)
Constant	2.89*** (6.01)	-1.56** (-2.82)	-0.82 (-1.29)	-2.76*** (-6.32)
Observations	660	660	660	660
Pseudo R^2	0.203	0.075	0.261	0.153
<i>AIC</i>	7,861.49	6,617.72	5,447.51	9,047.70
<i>BIC</i>	8,267.86	7,024.09	5,853.87	9,454.06
LL	-3,872.75	-3,250.86	-2,665.75	-4,465.85
LR Chi Squared	1,969.15	528.72	1,879.48	1,610.80
DF	57.00	57.00	57.00	57.00

Notes: Unweighted data from MAFE-Senegal life history study.

Coefficients indicate effect on log-odds of the outcome. *t* statistics in parentheses.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix 1. Random-intercept logistic regression of transnational activities by country

	Remitting			Circulation			HTA participation			Investing		
	France	Italy	Spain	France	Italy	Spain	France	Italy	Spain	France	Italy	Spain
Personal Characteristics												
Years in destination	0.45 ^{***} (9.11)	1.05 ^{***} (9.16)	0.94 ^{***} (8.93)	0.07 ^{**} (3.04)	0.09 [*] (2.11)	0.18 ^{***} (4.51)	0.40 ^{***} (5.67)	0.45 (1.86)	0.62 ^{***} (3.90)	0.62 ^{***} (10.34)	0.53 ^{***} (4.44)	0.40 ^{***} (3.73)
Years in destination squared	-0.01 ^{***} (-7.74)	-0.04 ^{***} (-7.38)	-0.03 ^{***} (-8.02)	-0.00 ^{***} (-3.62)	-0.01 ^{**} (-2.70)	-0.01 ^{***} (-4.35)	-0.01 ^{**} (-2.99)	-0.00 (-0.15)	-0.03 ^{***} (-3.60)	-0.01 ^{***} (-5.49)	-0.01 (-1.71)	-0.02 ^{**} (-3.13)
Decade (ref: prior to 1980s)												
1980s	1.10 (1.70)	-10.04 ^{***} (-5.36)	8.45 [*] (2.22)	0.28 (0.97)	13.58 (0.01)	16.27 (0.01)	0.29 (0.30)	-1.88 (-0.00)	6.03 (0.60)	-0.82 (-1.28)	6.44 (0.65)	5.97 (1.07)
1990s	0.95 (1.28)	-10.72 ^{***} (-5.29)	8.00 [*] (2.09)	0.55 (1.77)	13.60 (0.01)	16.53 (0.01)	1.36 (1.21)	4.20 (0.00)	6.97 (0.69)	-2.62 ^{***} (-3.33)	9.15 (0.95)	4.37 (0.79)
2000s	1.45 (1.65)	-11.04 ^{***} (-5.03)	8.79 [*] (2.27)	0.83 [*] (2.40)	13.93 (0.01)	16.43 (0.01)	1.59 (1.23)	4.45 (0.00)	9.22 (0.91)	-3.14 ^{***} (-3.29)	9.45 (0.97)	4.35 (0.78)
Age at migration	0.07 (1.48)	0.09 (0.95)	0.04 (0.51)	0.01 (0.70)	-0.01 (-0.38)	0.02 (1.05)	0.24 ^{**} (2.99)	0.79 ^{**} (2.63)	0.37 [*] (2.11)	0.56 ^{***} (7.28)	0.05 (0.29)	0.06 (0.47)
Male	-0.51 (-0.54)	1.11 (0.88)	1.29 (0.93)	-0.02 (-0.09)	0.19 (0.57)	0.15 (0.53)	1.92 (1.05)	17.37 (1.81)	7.65 [*] (2.01)	1.18 (0.88)	12.81 ^{**} (3.08)	1.85 (0.72)
Education	-0.12 (-1.57)	0.02 (0.16)	-0.15 (-1.45)	0.01 (0.31)	-0.01 (-0.41)	0.08 ^{***} (3.91)	0.20 (1.51)	0.53 (1.38)	-0.09 (-0.34)	-0.07 (-0.73)	0.29 (1.05)	-0.02 (-0.09)
Context of Exit												
Ethnicity (ref: Wolof) ^a												
Mandingue	2.73 (1.56)	1.01 (0.63)	-5.50 ^{**} (-2.96)	-0.34 (-0.79)	-0.38 (-1.01)	0.49 (1.41)	1.06 (0.35)	-2.91 (-0.44)	5.15 (1.06)	0.35 (0.15)	-14.83 (-1.70)	-1.17 (-0.34)
Wolof ^e												
Pulaar	0.39 (0.34)	-0.36 (-0.21)	3.29 [*] (2.07)	-0.01 (-0.03)	0.37 (0.98)	-0.02 (-0.08)	0.55 (0.28)	1.62 (0.33)	4.96 (1.15)	1.58 (1.02)	-1.89 (-0.24)	3.74 (1.31)
Soninke ^a	-3.83 (-1.95)	-6.37 (-1.40)	5.68 (1.95)	-1.01 (-1.90)	-1.10 (-0.86)	-2.96 [*] (-2.53)	7.89 [*] (2.41)	3.90 (0.39)	-6.59 (-0.94)	-6.91 [*] (-2.21)		-1.07 (-0.21)
Other ethnicity	-2.16 (-1.77)	-0.23 (-0.10)	-0.86 (-0.56)	-0.12 (-0.40)	-0.33 (-0.56)	-0.61 (-1.82)	-3.16 (-1.30)	-11.97 (-1.15)	7.83 (1.68)	-0.03 (-0.02)	-17.62 (-1.72)	-2.29 (-0.77)
Religion (ref: Tidiane) ^b												
Mouride	-0.31 (-0.30)	-3.23 ^{**} (-2.72)	1.54 (1.21)	-0.55 [*] (-2.04)	-0.00 (-0.01)	0.16 (0.61)	-1.18 (-0.58)	-17.43 (-1.68)	2.66 (0.67)	2.20 (1.49)	1.82 (0.23)	0.78 (0.32)
Tidiane ^b	-	-	-	-	-	-	-	-5.85 (-0.61)	-	-	7.70 (0.98)	-
Other Muslim	0.07 (0.07)	-3.50 (-1.58)	0.23 (0.19)	0.03 (0.12)	0.62 (1.39)	0.47 (1.94)	-1.07 (-0.52)	-11.92 (-1.03)	-3.03 (-0.83)	4.45 ^{**} (2.79)	-0.30 (-0.03)	-2.86 (-1.19)

	Remitting			Circulation			HTA participation			Investing		
	France	Italy	Spain	France	Italy	Spain	France	Italy	Spain	France	Italy	Spain
Not Muslim ^b	0.84 (0.50)	-12.20*** (-3.38)	2.14 (1.00)	-0.61 (-1.40)	-0.71 (-0.84)	-0.38 (-0.81)	4.30 (1.37)	1.82 (0.75)	-0.23 (-0.04)	1.82 (0.75)	-	-2.54 (-0.62)
Number of previous trips	1.49*** (3.54)	1.17 (1.67)	-2.11*** (-3.47)	-0.05 (-0.58)	-0.23 (-1.45)	-0.18 (-1.30)	0.99 (1.86)	0.80* (2.05)	4.06* (-2.18)	0.80* (2.05)	0.06 (0.06)	4.16*** (3.40)
At least one parent alive	2.37*** (5.58)	-0.88 (-1.06)	2.81*** (3.83)	-0.27 (-1.45)	0.01 (0.03)	-0.61** (-2.79)	-0.04 (-0.08)	1.08** (2.87)	-5.33 (-1.65)	1.08** (2.87)	-5.40*** (-3.93)	-0.76 (-0.81)
Eldest child	-0.14 (-0.16)	-2.00 (-1.69)	-0.44 (-0.37)	-0.27 (-1.21)	-0.25 (-0.94)	-0.20 (-0.87)	-4.16* (-2.32)	1.35 (1.09)	-7.02 (-1.69)	1.35 (1.09)	0.75 (0.28)	-1.80 (-0.81)
Place of origin is Dakar	-0.10 (-0.11)	-0.10 (-0.10)	-0.19 (-0.18)	-0.01 (-0.03)	-0.10 (-0.44)	0.27 (1.30)	-4.98** (-2.71)	-1.51 (-1.17)	-4.16 (-1.21)	-1.51 (-1.17)	0.68 (0.29)	-1.60 (-0.77)
Family SES												
Father's education (less than secondary school)	0.53 (0.53)	-2.93* (-2.14)	0.71 (0.46)	0.03 (0.14)	-0.50 (-1.77)	0.17 (0.49)	2.82 (1.45)	3.94* (2.56)	-9.70* (-2.35)	3.94* (2.56)	0.35 (0.12)	-6.62* (-2.16)
Father unemployed ^c	-0.48 (-0.37)	-0.85 (-0.36)	-0.74 (-0.38)	-0.24 (-0.76)	0.91 (1.86)	0.09 (0.24)	-0.18 (-0.08)	-1.65 (-0.88)	3.83 (0.70)	-1.65 (-0.88)	-6.16 (-1.14)	-2.57 (-0.70)
Father's occupation (ag. or manual work)	0.04 (0.04)	-0.71 (-0.37)	0.78 (0.48)	-0.30 (-1.11)	0.59 (1.52)	0.03 (0.10)	-2.32 (-1.11)	-2.61 (-1.57)	4.31 (0.87)	-2.61 (-1.57)	-1.66 (-0.47)	0.73 (0.24)
Migration paid for by family	0.46 (0.51)	-1.19 (-1.14)	-3.31* (-2.27)	0.29 (1.30)	0.00 (0.01)	0.17 (0.54)	2.04 (1.42)	1.00 (0.78)	-2.18 (-0.54)	1.00 (0.78)	-6.19** (-2.81)	-5.07 (-1.54)
Context of reception												
Migration paid for by spouse	0.30 (0.24)	-4.83*** (-3.42)	-3.41* (-2.34)	0.09 (0.29)	0.31 (0.81)	-0.16 (-0.56)	2.55 (1.16)	1.52 (0.90)	7.10 (0.69)	1.52 (0.90)	-4.08 (-0.71)	-0.07 (-0.03)
Unemployed	-3.96*** (-9.13)	-4.51*** (-6.07)	-4.85*** (-8.07)	0.19 (0.98)	-1.06** (-3.08)	-0.60* (-2.35)	-0.07 (-0.13)	0.25 (0.66)	-2.55 (-0.54)	0.25 (0.66)	-1.19 (-0.94)	-0.06 (-0.08)
Occupation (ref: service)												
Manual	1.48*** (3.46)	0.89 (1.73)	1.38* (2.47)	0.49* (2.41)	-0.15 (-0.71)	-0.32 (-1.54)	1.68* (2.53)	-1.43** (-3.05)	1.55 (1.12)	-1.43** (-3.05)	-0.47 (-0.80)	1.30* (2.35)
White collar	-1.72** (-3.14)	-0.84 (-0.63)	0.85 (0.45)	-0.10 (-0.39)	-0.47 (-1.16)	-1.26 (-1.46)	0.47 (0.68)	-0.02 (-0.03)	1.20 (0.37)	-0.02 (-0.03)	1.00 (0.78)	4.50 (1.88)
Undocumented	1.00 (1.89)	0.73 (1.38)	0.97* (2.07)	-2.67*** (-4.89)	-0.57 (-1.82)	-2.25*** (-5.10)	1.16 (1.45)	0.46 (0.89)	-2.01 (-1.75)	0.46 (0.89)	-1.06 (-1.45)	-4.07*** (-3.34)
Regularization year	-0.19 (-0.78)	-0.25 (-1.00)	0.12 (0.41)	0.24 (1.66)	-0.04 (-0.26)	-0.11 (-0.68)	0.07 (0.23)	0.46 (1.92)	-0.19 (-0.41)	0.46 (1.92)	-0.00 (-0.02)	0.02 (0.05)
Number of contacts at destination	-0.36*** (-4.77)	-0.16 (-0.75)	-0.27 (-1.55)	-0.04 (-1.08)	0.14* (2.49)	-0.08 (-1.33)	0.17 (1.73)	0.20* (2.41)	0.24 (0.49)	0.20* (2.41)	-0.14 (-0.57)	0.81*** (3.71)
Married	0.80* (2.42)	1.22 (1.76)	-0.19 (-0.37)	0.19 (1.11)	0.72 (2.68)	0.19 (0.80)	0.88 (1.86)	0.36 (1.00)	-0.33 (-0.30)	0.36 (1.00)	-0.14 (-0.25)	1.69* (3.15)
Spouse(s) with host	0.23	2.33*	-1.42	0.01	-0.21	-0.57	-0.63	0.30	-2.13	0.30	-0.81	-3.74***

	Remitting			Circulation			HTA participation			Investing		
	France	Italy	Spain	France	Italy	Spain	France	Italy	Spain	France	Italy	Spain
citizenship ^d	(0.49)	(2.40)	(-1.37)	(0.06)	(-0.50)	(-1.18)	(-1.01)	(-0.44)	(0.64)	(-0.42)	(-3.60)	
Has children	0.88	1.00	-0.35	-0.33	-0.34	0.03	-1.95**	0.52	0.79	5.94***	0.50	
Child(ren) with host citizenship	(1.52)	(1.38)	(-0.51)	(-1.39)	(-1.48)	(0.13)	(-2.66)	(0.23)	(1.28)	(4.17)	(0.54)	
Absolute economic status - "more than sufficient"	0.22	-1.87*	0.43	0.22	-0.16	0.31	0.86	4.02	-2.13***	1.62	-0.64	
Relative economic status - "better than others"	(0.39)	(-2.24)	(0.65)	(0.98)	(-0.50)	(1.31)	(1.11)	(1.26)	(-3.31)	(1.14)	(-0.65)	
Constant	0.27	-0.04	-1.97	-0.29	-0.10	0.48	-0.94	3.55	1.05	0.29	-0.89	
	(0.39)	(-0.05)	(-1.22)	(-0.82)	(-0.33)	(0.76)	(-0.95)	(0.77)	(1.44)	(0.15)	(-0.55)	
	-0.45	0.29	-0.08	-0.27	0.50	0.19	0.20	-5.19	0.86	2.69	-1.15	
	(-0.96)	(0.43)	(-0.12)	(-1.05)	(1.68)	(0.79)	(0.23)	(-0.95)	(1.55)	(1.51)	(-1.64)	
	-2.83	13.95***	-9.69*	-2.57***	-16.64	-19.42	-22.55***	-43.59	-25.52***	-29.65	-11.45	
	(-1.34)	(3.32)	(-2.04)	(-3.99)	(-0.01)	(-0.01)	(-5.39)	(-0.00)	(-7.75)	(.)	(-1.47)	
N (person-years)	3699	2368	2087	3699	2368	2087	3699	2368	3699	2368	2087	
AIC	1,752.08	967.11	1,058.35	3,039.91	1,611.91	1,712.45	1,187.12	355.44	1,763.19	799.95	941.60	
BIC	1,988.28	1,186.36	1,272.80	3,276.11	1,831.16	1,926.90	1,423.32	563.15	1,999.39	1,013.44	1,156.06	
LL	-838.04	-445.56	-491.17	-1,481.9	-767.95	-818.22	-555.56	-141.72	-843.60	-362.98	-432.80	
Model chi-squared	320.73	143.74	154.94	90.17	65.76	115.25	192.45	.	288.23	671.71	90.93	
DF	36.00	36.00	36.00	36.00	36.00	36.00	36.00	34.00	36.00	36.00	36.00	
$\sqrt{\psi}$	5.34***	5.60***	5.61***	1.03	0.81	0.62**	7.98***	10.97***	7.09***	10.71***	9.99***	
Intraclass correlation (ρ)	0.90	0.91	0.91	0.24	0.16	0.11	0.95	0.97	0.94	0.97	0.97	

Notes: Unweighted data from MAFE-Senegal life history study.

Coefficients indicate effect on log-odds of the outcome. *t* statistics in parentheses.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

^a Due to model-fitting problems, Soninke served as reference category for model for investing in Italy.

^b Due to model-fitting problems, Tidiane served as reference category for models for HTA participation and investing in Italy.

^c Due to collinearity, father unemployed omitted from model for investing in Italy.

^d Due to collinearity, spouse with host citizenship omitted from model for HTA participation in Spain.

Appendix 2. Grouped-data logistic regression of migrant-years participating in transnational activities

	Remitting			Circulation			HTA participation			Investing		
	France	Italy	Spain	France	Italy	Spain	France	Italy	Spain	France	Italy	Spain
Personal Characteristics												
Decade of arrival (ref: prior to 1980)												
1980s	-0.24 (-1.15)	-7.91*** (-6.62)	-0.75 (-1.47)	0.60* (2.57)	-0.56 (-0.44)	0.25 (0.56)	-0.69** (-2.84)	-4.81*** (-5.14)	-0.38 (-0.65)	0.26 (1.30)	-2.39*** (-5.72)	1.95*** (4.81)
1990s	-0.53 (-1.63)	-7.33*** (-5.83)	-0.45 (-0.75)	0.49 (1.25)	-0.94 (-0.71)	0.20 (0.36)	-2.78*** (-6.16)	-0.01 (-0.03)	-1.75* (-2.19)	0.05 (0.15)	-0.91*** (-3.82)	2.26*** (4.32)
2000s ^a	-1.26** (-3.00)	-9.12*** (-6.60)	-2.01** (-2.62)	0.15 (0.31)	-1.24 (-0.86)	0.14 (0.20)	-3.73*** (-6.53)	-	-1.80 (-1.81)	-0.58 (-1.38)	-	3.20*** (4.68)
Age in 2008	-0.07*** (-5.23)	0.02 (0.77)	-0.12 (-4.38)	-0.02 (-1.31)	-0.04 (-1.33)	0.02 (0.85)	-0.11*** (-5.34)	0.46*** (7.33)	-0.07 (-1.88)	-0.01 (-0.81)	0.21*** (8.11)	0.17*** (6.37)
Age at first migration	0.05** (3.19)	0.09** (2.92)	0.15*** (5.05)	0.02 (1.23)	0.04 (1.19)	-0.01 (-0.19)	0.04* (2.02)	-0.18** (-3.12)	0.11** (2.82)	0.06*** (3.86)	-0.16*** (-5.67)	-0.18*** (-6.79)
Male	0.09 (0.68)	0.59** (3.19)	-0.10 (-0.40)	-0.08 (-0.56)	-0.21 (-0.91)	0.10 (0.43)	-0.05 (-0.29)	2.43*** (3.58)	0.19 (0.59)	-0.11 (-0.86)	2.22*** (8.53)	0.14 (0.60)
Education	-0.06*** (-5.39)	-0.05* (-2.54)	-0.05*** (-3.27)	0.02* (2.01)	-0.01 (-0.40)	0.06*** (4.21)	0.06*** (4.80)	0.03 (0.83)	0.00 (0.26)	-0.00 (-0.49)	0.07*** (3.88)	0.01 (0.87)
Total number of trips	-0.00 (-0.06)	0.08 (0.76)	0.24* (2.36)	-0.06 (-1.31)	-0.21* (-1.99)	-0.17 (-1.66)	0.18*** (4.29)	-0.96*** (-5.21)	0.57 (5.29)	0.00 (0.05)	0.30*** (3.79)	0.08 (0.97)
Context of Exit												
Ethnicity (ref: Wolof)												
Mandingue	0.58** (2.71)	1.30*** (4.74)	-2.36*** (-8.65)	-0.56* (-2.35)	0.17 (0.60)	0.39 (1.41)	-0.49 (-1.96)	-1.05 (-1.26)	0.62 (1.74)	0.39 (1.91)	-0.32 (-1.01)	0.73** (2.89)
Pular	-0.03 (-0.20)	0.68* (2.52)	0.79*** (3.34)	-0.17 (-1.30)	0.45 (1.54)	-0.04 (-0.16)	0.16 (1.08)	1.96** (3.03)	1.33*** (4.41)	0.36** (3.03)	0.44 (1.76)	0.94*** (4.65)
Soninke ^b	-1.71*** (-7.30)	-1.64* (-2.43)	1.19* (2.38)	-1.05*** (-3.41)	-1.69 (-1.50)	-2.41* (-2.30)	2.32*** (7.81)	2.97*** (2.25)	-3.32*** (-4.78)	-2.05*** (-6.73)	-	1.73*** (4.60)
Other ethnicity	-0.60*** (-4.25)	0.55 (1.34)	-0.08 (-0.32)	-0.41* (-2.37)	-0.13 (-0.26)	-0.33 (-1.29)	-0.76*** (-3.30)	-0.52 (-0.65)	0.89* (2.52)	-0.09 (-0.61)	-2.21** (-2.89)	-0.62* (-2.34)
Religion (ref: Tidiane)												
Mouride	-0.45** (-3.19)	-1.19*** (-6.01)	-0.04 (-0.19)	-0.59*** (-3.78)	0.20 (1.02)	0.00 (0.02)	-1.09*** (-6.41)	-2.37*** (-7.16)	0.17 (0.71)	0.42*** (3.30)	-0.37* (-2.31)	-0.25 (-1.45)
Other Muslim	-0.42** (-3.09)	-0.96** (-2.77)	0.13 (0.72)	-0.14 (-0.92)	0.69* (2.18)	0.33 (1.82)	-0.88*** (-4.56)	0.14 (0.25)	-1.45*** (-5.13)	0.45** (3.23)	-0.37 (-1.27)	-0.47** (-2.86)
Not Muslim ^c	-0.35 (-1.71)	-6.95*** (-7.26)	-0.26 (-0.79)	-0.65*** (-2.65)	-0.60 (-0.64)	-0.33 (-0.84)	0.82 (3.07)	-	-1.65*** (-3.88)	-0.07 (-0.35)	-	0.04 (0.12)
At least one parent alive,	-0.65***	-0.37	0.20	-0.11	-0.17	-0.14	-0.39*	1.06	-14.29***	-0.68***	0.07	-0.12

	Remitting			Circulation			HTA participation			Investing		
	France	Italy	Spain	France	Italy	Spain	France	Italy	Spain	France	Italy	Spain
proportion	(-3.58)	(-1.68)	(1.27)	(-0.59)	(-0.73)	(-0.78)	(-2.21)	(1.96)	(-3.66)	(-4.33)	(0.35)	(-1.12)
Family SES												
Father's education (less than secondary school)	0.51*** (4.24)	-1.39*** (-6.03)	-0.05 (-0.17)	0.04 (0.28)	-0.59** (-2.96)	-0.17 (-0.62)	0.64*** (3.79)	-0.23 (-0.60)	0.23 (0.64)	0.42*** (3.30)	-0.15 (-0.78)	-1.28*** (-5.32)
Father unemployed ^d	-0.25 (-1.61)	0.64 (1.76)	-0.46 (-1.55)	-0.47** (-2.84)	0.85* (2.39)	0.41 (1.36)	-0.44* (-2.26)		1.05** (2.92)	-0.56*** (-3.55)	0.33 (1.04)	-0.12 (-0.47)
Father's occupation (ag. or manual work)	0.45*** (3.33)	0.53 (1.80)	0.37 (1.46)	-0.48*** (-3.31)	0.53 (1.78)	0.27 (1.07)	-0.49** (-2.82)	-0.29 (-0.63)	0.36 (1.15)	-0.37** (-2.64)	0.67** (2.77)	0.24 (1.11)
Eldiest child	0.22* (2.01)	-0.31 (-1.83)	-0.51** (-2.99)	-0.32** (-2.70)	-0.10 (-0.52)	-0.17 (-0.99)	-1.98*** (-12.82)	-0.45 (-1.29)	-0.51* (-2.12)	0.72*** (7.32)	0.80*** (5.19)	0.00 (0.02)
Place of origin is Dakar	0.21 (1.88)	0.30* (1.98)	-0.30 (-1.93)	0.05 (0.39)	-0.16 (-0.97)	0.15 (0.92)	-1.57*** (-9.03)	-0.54 (-1.88)	-0.37 (-1.61)	-0.42*** (-3.56)	0.81*** (5.72)	-0.54** (-3.27)
Migration paid for by family, proportion of trips	-0.41*** (-3.32)	0.14 (0.85)	-0.28 (-1.11)	0.60*** (4.52)	0.01 (0.08)	0.07 (0.28)	1.02*** (6.58)	-0.10 (-0.29)	0.42 (1.07)	-0.01 (-0.05)	-0.16 (-1.00)	-2.10*** (-6.26)
Context of Reception												
Migration paid for by spouse, proportion of trips	-0.84*** (-4.94)	-3.44*** (-11.62)	-1.06*** (-4.22)	-0.07 (-0.36)	-0.04 (-0.13)	-0.15 (-0.60)	0.64** (2.92)	-0.86 (-0.88)	0.81* (2.21)	-0.49** (-2.92)	0.13 (0.32)	-0.12 (-0.48)
Ever undocumented	0.00 (0.02)	0.93*** (4.07)	1.57*** (7.46)	0.43 (1.83)	0.44* (1.98)	0.34 (1.71)	-0.18 (-0.79)	-0.74 (-1.77)	-0.11 (-0.39)	-0.91*** (-4.99)	0.18 (0.93)	-0.13 (-0.72)
Undocumented, proportion	-0.54 (-1.43)	-0.78 (-1.90)	-2.24*** (-5.62)	-4.46*** (-5.92)	-1.75** (-3.24)	-2.18*** (-3.80)	-0.45 (-1.00)	0.98 (1.15)	-1.40* (-2.28)	0.25 (0.70)	-1.34*** (-3.31)	-0.43 (-1.10)
Unemployed, proportion	-1.88*** (-9.58)	-1.90*** (-5.53)	-2.15*** (-8.45)	-0.73** (-3.22)	-0.63 (-1.65)	-0.85* (-2.57)	-1.66*** (-6.33)	-5.05*** (-4.04)	-1.72*** (-3.65)	-1.25*** (-6.05)	-0.61 (-1.20)	-1.40*** (-4.36)
Occupation (ref: service)												
Manual, proportion	0.07 (0.42)	-0.43 (-1.92)	0.51* (2.18)	0.82*** (5.10)	0.24 (1.08)	-0.33 (-1.35)	0.84*** (4.88)	-0.74 (-1.91)	1.91*** (6.64)	-0.12 (-0.86)	-0.35 (-1.86)	-0.32 (-1.51)
White collar, proportion	0.12 (0.61)	0.66 (1.84)	-0.29 (-0.30)	-0.28 (-1.18)	-0.93* (-2.17)	-2.66 (-1.59)	0.31 (1.28)	1.15 (1.67)	1.87 (1.32)	-0.85*** (-3.99)	0.41 (1.21)	2.94** (2.89)
Married, proportion	1.38*** (8.07)	0.04 (0.15)	0.59* (2.09)	0.39 (1.88)	0.05 (0.14)	0.35 (1.10)	1.02*** (4.45)	3.20*** (4.30)	1.19* (2.29)	0.94*** (5.14)	0.94*** (3.44)	0.96** (3.13)
Spouse(s) with host citizenship, proportion ^e	0.18 (1.13)	-1.43** (-2.96)	0.30 (0.74)	-0.41* (-2.39)	0.93 (1.85)	-0.73 (-1.42)	-0.58** (-3.00)	-2.52* (-1.99)	-	0.01 (0.08)	-4.79*** (-7.44)	-0.80 (-1.76)
Has children	-0.69*** (-3.73)	0.46 (1.92)	0.30 (1.17)	0.24 (1.02)	0.20 (0.79)	0.11 (0.37)	0.67** (2.83)	-0.14 (-0.30)	-0.21 (-0.55)	0.40* (2.06)	0.33 (1.54)	-0.14 (-0.53)
Child(ren) with host citizenship, proportion	1.10*** (6.03)	1.08** (2.76)	-0.30 (-1.18)	0.41* (2.13)	-0.96* (-2.03)	0.19 (0.74)	-0.71*** (-3.30)	3.26*** (3.45)	-0.24 (-0.69)	-0.49** (-2.97)	-1.27* (-2.52)	-0.85*** (-3.33)
Absolute economic status - "more than sufficient",	-0.64* (-2.29)	-0.64* (-2.27)	-1.75*** (-3.84)	-0.37 (-0.93)	0.04 (0.13)	-0.64 (-1.07)	-0.57 (-1.43)	2.50* (2.52)	-0.70 (-1.04)	0.27 (0.92)	2.10*** (6.51)	-2.08** (-2.96)

	Remitting			Circulation			HTA participation			Investing		
	France	Italy	Spain	France	Italy	Spain	France	Italy	Spain	France	Italy	Spain
proportion												
Relative economic status - "better than others", proportion	0.24 (1.19)	-0.25 (-1.05)	0.30 (1.38)	-0.69** (-3.25)	-0.16 (-0.57)	-0.13 (-0.56)	-0.88*** (-3.76)	-6.72*** (-5.50)	2.14*** (8.55)	-0.06 (-0.33)	-2.03*** (-6.93)	0.34 (1.80)
Number of contacts in destination	-0.08*** (-6.27)	0.15*** (4.24)	-0.01 (-0.44)	-0.02 (-1.16)	0.06 (1.85)	-0.00 (-0.07)	-0.07*** (-4.23)	0.36*** (4.98)	0.24*** (5.42)	0.06*** (4.67)	0.18*** (5.82)	0.08** (2.74)
Constant	4.85*** (7.02)	7.55*** (4.63)	3.04** (2.89)	-1.09 (-1.37)	-0.31 (-0.19)	-3.03** (-2.84)	3.87*** (4.18)	-18.23*** (-8.09)	-5.07*** (-3.48)	-1.97** (-2.88)	-8.75*** (-11.21)	-4.40*** (-4.56)
Observations	281	224	216	281	224	216	281	224	216	281	224	216
Pseudo R ²	0.214	0.380	0.272	0.097	0.051	0.069	0.292	0.453	0.320	0.171	0.271	0.223
AIC	3,510.08	1,852.13	1,868.23	3,178.71	1,662.98	1,811.06	2,888.10	726.27	1,195.12	3,835.15	1,993.75	2,022.57
BIC	3,733.85	2,059.84	2,071.40	3,402.48	1,870.69	2,014.22	3,111.87	911.72	1,390.46	4,058.91	2,182.13	2,225.73
LL	-1,719.04	-890.07	-898.12	-1,553.36	-795.49	-869.53	-1,408.05	-330.13	-562.56	-1,881.57	-963.87	-975.28
LR Chi-squared	937.74	1,089.85	670.47	332.22	85.44	129.20	1,161.90	547.62	528.75	776.68	717.86	560.61
DF	35.00	35.00	35.00	35.00	35.00	35.00	35.00	32.00	34.00	35.00	32.00	35.00

Notes: Unweighted data from MAFE-Senegal life history study.

Coefficients indicate effect on log-odds of the outcome. *t* statistics in parentheses.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

^a Due to collinearity, decade of arrival – 2000s omitted from models for HTA participation and investing in Italy.

^b Due to collinearity, Soninke omitted from model for investing in Italy.

^c Due to collinearity, not Muslim omitted from models for HTA participation and investing in Italy.

^d Due to collinearity, father unemployed omitted from model for HTA participation in Italy.