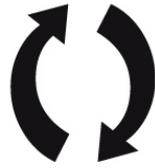


# MAFE



Migrations  
between Africa  
and Europe

## *MAFE Working Paper 38*

# **Becoming a Man: Legal status, Networks and Male Migration between Senegal and Europe**

MAO-MEI Liu<sup>1</sup>

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<sup>1</sup> [mao-mei.liu@brown.edu](mailto:mao-mei.liu@brown.edu)

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**BECOMING A MAN: LEGAL STATUS, NETWORKS  
AND MALE MIGRATION BETWEEN SENEGAL AND EUROPE**

**ABSTRACT** Unauthorized migration to Europe dominates the headlines of its newspapers and – at times – the rhetoric of its politicians. Yet, nearly all migrants enter Europe with authorization, and very little is known about pathways that lead to authorized migration or, alternatively, unauthorized migration. Focusing on Senegalese men – a population which experiences extreme pressure due to strict gendered social norms, shifting and tightening labor markets and the parallel expansion of education –, this study is among the first to examine rigorously the competing risks of authorized and unauthorized international migrations. It applies multinomial logistic event history models to recent longitudinal data. Examining Senegalese male migration to Europe between 1990 and 2008, I find that authorized and unauthorized migrations reflect different logics. Authorized migration appears to be more family or household-driven, while unauthorized migration is a more individual-driven and alternatively networked strategy. Higher relative risks of migrating authorized (relative to staying) are associated with greater family privilege and/or being in a privileged holding pattern. At the same time, men who have more difficulty accessing social adulthood and belong to the transnational religious networks have higher risks of unauthorized migration.

In 2008, an estimated 88% - 92% of the total foreign-born population in the EU-15 was in regular status (Clandestino 2009: 4). Yet, concerns and fears of illegal immigration frequent newspaper headlines and political rhetoric throughout Europe, and, alongside economic policy, the European Union's difficulties in constructing a common immigration framework reflect deep-seated tensions of how to integrate Europe (Lahav 2004). Relatively little is known about how *different* legal statuses may reflect different migration strategies, and the stark differences in migration's risks and benefits by legal status challenge the assumptions that migration is a household strategy, and those about the consequences of migration for origin and destination.

Building on prior work about international migration behavior and masculinity, this article closely examines the ways in which gendered norms and shifting educational and labor market opportunities in Senegal breed diverse migration strategies. I am interested in how men use long-distance international migration to achieve social adulthood, how authorized and unauthorized migrations may reflect different migration logics, and whether authorized migration is a family or household-driven strategy, while unauthorized migration is more individual-driven, alternatively networked. The migration strategies that young men undertake have important implications for their life chances, their social and economic integration, and the well-being of their families in Senegal,

and are also pathways for how citizens of the world can become Europe's "new, disenfranchised underclass" (Gonzales 2011).

## LEGAL STATUS AND MIGRATION

Legal status stratifies migration. Migrations of different legal status – authorized and unauthorized migrations - hold radically different risks and promises for states, individual migrants and their families.<sup>2</sup> The historical gap between destination governments' desire and discourse to control migration and their ability to do so (Schrover *et al* 2008:12-20) is fueled, in part, by influential sectors of the economy (eg. agriculture, domestic work, construction) which prefer unauthorized migrant labor for its flexibility and lower cost (PICUM 2004b). Unauthorized migrants suffer (relative to their authorized migrants) as a result. Indeed, unauthorized migrants have lower wages (Rivera-Batiz 1999), lower occupational status (Obućina 2013) and face higher risks at destination: less job protection and more dangerous jobs (PICUM 2004b); difficulty securing housing (PICUM 2004a); poorer health and less access to health care (PICUM 2007) than their authorized counterparts. At the same time, authorized migrations depend on the approval processes of different decision-makers, acting on behalf of destination countries' governments (Jasso 1998, Hainmueller and Hangartner 2013, Rissing and Castilla 2014). Since migration's benefits vary heavily by legal status, it is important to understand what leads to authorized and unauthorized migrations (Vickstrom 2013, 2014).

Unauthorized migration pathways tend to be more risky and costly, involving particularly large risks of death, apprehension and failure. Hundreds of migrants die in their attempts to reach Europe each year (e.g. Carling 2007, Spijkerboer 2013). Tens of thousands are intercepted in transit in North Africa (e.g. Simon 2006), while others – like would-be migrants stuck in Senegal (Poeze 2010) and those in indefinite transit in Morocco (Collyer 2006) – see their migration projects stall or fail.

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<sup>2</sup> Other terms in the literature include illegal migration and undocumented migration. Here, we use the term unauthorized migration, which is preferred since it seems both accurate (unlike 'undocumented' migration when, in most cases, individuals have a passport or other identification/documentation) and politically neutral (unlike 'illegal' migration). Although 'irregular' migration also avoids these problems, it seems less clear for my purposes. In principal, our focus of study are individuals who, to the best of our knowledge, have always traveled voluntarily and may have sometime hired a *passeur* or human smuggler to help them enter a country without authorization. Human smuggling is distinct from the grave problem of human *trafficking*, which involves: involuntary movement, long(or short)-term exploitation, interdependency with organized crime, and the possibility that the individual will be recruited for criminal work (Bakrektarevic 2000, as quoted by Aronowitz 2001: 165). According to de Haas (2008: 10), human trafficking is rather rare in the West African-Europe context.

Migrants' legal status also influences migrant families and non-migrants at origin. Intensified border enforcement and migrants' lack of status dampen the circularity of international migration flows (e.g. Massey and Espinosa 1997, Vickstrom 2013, 2014). Migrants' unauthorized status (and the accompanying economic and social vulnerability) can lead to gaps or lack of communication with families at origin, as well as the loss of remittances. It may also contribute to couples' and families' transnational living arrangements (Baizán et al 2014, Beauchemin et al 2015, González-Ferrer et al 2012, 2014, Mazzucato et al 2015). As a result, potential migrants greatly prefer legal forms of migration, although significant numbers are willing to assume the high risks of illegal migration (Mbaye 2014). Migrant strategies and routes also adapt to changes in enforcement and elsewhere (Carling 2008) and now include transit migrations (Baldwin-Edwards 2006) and other 'turbulent' trajectories (Schapendonk 2012).

At the same time, academic inquiry into the determinants of migration is very limited in its legal status and geographical scope: nearly all focuses on unauthorized migration from Mexico or Albania (e.g. Espinosa and Massey 1999, McKenzie and Rapoport 2010, Ryo 2013, Stecklov *et al* 2010); *quasi*-legal migration where migration law is not routinely enforced (Parrado and Cerrutti 2003 for Paraguay-Argentina migration); and migration with no special documentation requirement, as for Thai internal migration (e.g. Curran *et al* 2005, Garip 2008); or has failed to distinguish among different legal statuses. One notable exception is the recent scholarship of Vickstrom (2013) who explores individuals' varied paths into irregular status, as well as gendered labor market access and transnational activities of Senegalese migrants in Europe, as related to legal status. However, only one study (Massey and Espinosa's 1997 study of Mexican-U.S. migration) appears to have explicitly examined the determinants of first-time authorized and unauthorized migration. It includes a model that also estimates the competing risks of individuals migrating with or without authorization. Given its broader aims, the study's findings were limited regarding social capital: household social capital raised the likelihoods of both kinds of migration.

### *Migration between Senegal and Europe*

This study takes the case of Senegalese male migration to Europe from 1990 to 2008, during which there is a strong distinction between authorized and unauthorized migrations. In general, politicians in Europe have usually deepened (and moved) the line defining authorized and unauthorized migrations, making authorized status more difficult to obtain and/or maintain, although migration policy-making continues to be extremely politicized and somewhat volatile (for a review of France, Italy and Spain's migration policies, see Vickstrom 2013). At the same time, there are increased numbers of attempts and consequences for unauthorized forms of migration (Carling 2007).

Throughout this period, the “migration-development nexus” has grown in importance, as governments in North and South negotiate and connect to ‘manage’ migration and development (for review and analysis of the Senegal-Europe case, see Kabbanji 2013).

This study starts in 1990 because Senegalese previously enjoyed visa-free-entry into France (1960-1985) and Italy (1966-1990). Even so, during most of the previous period, special authorization was normally required for longer stays or migration.<sup>3</sup> Governments in both Europe and Africa played active roles. Italy required Senegalese to “regularize” their position if they wanted to settle (Vickstrom 2013), while in France, the 1974 bilateral agreement with Senegal obliged Senegalese in France to have a *titre de sejour* for stays over three months. This permit required either: a housing certificate and health exam for reunified family migrants; or a pre-departure government-approved work contract in France for all others. Given the oil crisis, the latter was effectively out-of-reach for most. On the other side, concerned about visible out-migration to France during France’s booming 1950’s and 1960’s, the Senegalese government required its citizens to possess exit visas to *leave* for France (Vickstrom 2013). Until this policy was revoked in 1981, migrants could be “unauthorized” by Senegal as well, and many circumvented this requirement by taking more complicated itineraries: exiting Africa through Gambia (Gabielli 2010) or entering Europe through Italy (Vickstrom 2013).

This study focuses on Senegalese men, a population which experiences extreme pressure due to strict gendered social norms, shifting and tightening labor markets and the parallel expansion of education. While scholars have begun to investigate the links between gendered role-making and migration for women (see Paul 2015), far less attention has been paid to masculinities and migration. In Senegal, males are expected to be their family’s sole breadwinners (Barou 2001, Bass and Sow 2006), and shifts towards female wage work (Mackintosh 1989) and migration (Babou 2008, Barou 2001) budge only slightly these strong gendered norms. The ‘social moratorium’ on young Senegalese men - their extreme difficulty in achieving social adulthood - has its roots in the droughts and groundnut crisis of the 1970’s, the structural adjustment programs of the 1980’s and the January 1994 currency devaluation. The parallel expansion of education and increasing gender equity of educational opportunities has also contributed to tightening marriage and labor markets for young Senegalese men.

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<sup>3</sup> In order to distinguish migration from business trips and vacations, this study defines migration as stays of at least one year.

## INTERNATIONAL MIGRATION – AN INDIVIDUAL OR HOUSEHOLD-DRIVEN PROPOSIT?

Major migration theories anticipate different motivations for migration.<sup>4</sup> On one hand, the neoclassical economic perspective proposes that migration is primarily an individual decision (*e.g.* Todaro 1969, 1976): where individuals calculate where the expected net returns to migration are largest over a certain period and migrate there (Borjas 1990). Individual human capital characteristics which increase the relative pay or likelihood of employment then raise the likelihood of migration. On the other hand, the new economics of labor migration perspective argues that families and households – rather than individuals – make decisions about migration: not only to maximize expected income, but to distribute risk and access credit and capital (*e.g.* Stark 1984, Stark and Bloom 1985, Stark and Taylor 1991). Meanwhile, the social capital perspective emphasizes the importance of migrant networks that link potential migrants to destination (*e.g.* Boyd 1989, Curran and Rivero-Fuentes 2003). Recent studies have attempted to integrate all three perspectives (Liu 2013, Massey and Espinosa 1997, Munshi 2003, Palloni et al 2001, Stecklov *et al* 2010), but scholars have yet to explore deeply whether some forms of migrations are family or household-driven, while others are more individual-driven. This paper explicitly explores the expectation that authorized migration is a family and household-driven strategy, while unauthorized migration is an alternatively-networked, individual-driven strategy.

At the same time, although legal status brands contemporary migration experience (*e.g.* Castles *et al* 2005, Massey *et al* 1999, Schrover *et al* 2008), it has received scant attention from quantitative scholarship. While scholars of irregular migration find that migrant networks stratify individuals among different pathways of irregularity (Vickstrom 2013 and 2014 for Senegal-Europe) and gendered modes of unauthorized border crossing (Singer and Massey 1998, Donato et al 2008 for Mexico-U.S.), only one study-to-date has contrasted the determinants of authorized and unauthorized migration. In their study of male migration from Mexico to the U.S., Massey and Espinosa (1997) found that authorized and unauthorized migrations had similar social capital requirements: household social capital raised the likelihood of both. Given the different legal status and risk composition of migration between Senegal and Europe, I expect different findings for Senegal: household migrant social capital will increase authorized migration, but play a null or negative role in unauthorized migration.

International migration is very costly, and migrants pursuing distinct migration strategies likely differ in motivations and needs. Given the very different requisites and risks of authorized and

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<sup>4</sup> I refer to voluntary migrations. Therefore, refugee movements and/or human trafficking are outside the scope of my study.

unauthorized Senegalese migrations to Europe, individuals are likely to need family funding and support to access authorized migrations. Visas can be purchased, but are prohibitively expensive for most individuals. Poeze (2010: 2) estimated that a visa to Portugal cost about 5000€ on the streets of Dakar, while her interview respondents earned an average of 80€ per month. Indeed, the requirements of a successful tourist, family or professional visa application – we take France as an example – are out-of-reach of most Senegalese: official employment at origin or scholarship, proof of financial resources and housing at destination (Consulat Général de France à Dakar 2013).<sup>5</sup> In Senegal, where only 6.2% of the labor force is in the formal sector (World Bank 2007: 26), all other individuals cannot authentically prove official employment. Second, the financial resources requirements (personal bank account with at least 65€/day - or 32.50€/day for those with a host - for the trip duration) are extremely high given the realities of unemployment and wages in Senegal. Finally, to acquire an official ability-to-host certificate, the individual's host in France must fulfill multiple employment and housing requisites. At the same time, unauthorized migration involves great risks of death (e.g. Carling 2007) and apprehension (e.g. Simon 2006). In addition, many other individuals see their migration projects stall or fail, these include: would-be migrants stuck in Senegal (Poeze 2010) and sub-Saharan Africans indefinitely *en-route* in Morocco (Collyer 2006) and elsewhere in North Africa.

Here, given the distinct costs, risks and resource requirements of authorized and unauthorized migrations<sup>6</sup>, I expect that the role of families to vary as well. The new economics of labor migration theoretical model was originally formulated to explain rural-urban migration in 1960's and 1970's sub-Saharan Africa, and scholars have been slow to recognize the limits of the unitary household decision-making model and update its theoretical expectations (see Boyd 1989, Paul 2015 for skillful critiques). Here, I recognize that the views and interests of household members can conflict and have consequences for individual migration behavior. First, authorized migrations (legal family reunification or temporary – work, tourist – visas<sup>7</sup>) generally require *much larger initial financial investments* than unauthorized migration (Alpes 2011, Gaibazzi 2014, Hernández-Carretero 2008). The corresponding expenses (paperwork, travel, migration brokers, other intermediaries) are usually cost-prohibitive for individuals, so costs are usually paid for by pooling money from close kin. In

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<sup>5</sup> We do not include temporary work visa programs here since the number of visas available is minimal (Poeze 2010: 38).

<sup>6</sup> Although legal status trajectories are dynamic, diverse and complex (Vickstrom 2013) and “authorized entry” covers a multitude of experiences (entry on a student visa, entry on a temporary work visa, entry on a family reunification visa) especially in terms of subsequent life at destination, in this paper, I focus on migration strategies (rather than outcomes at destination) and make a simple theoretical and empirical distinction between first-time authorized and unauthorized migration.

<sup>7</sup> In the case of contemporary Senegalese migration to Europe, a small minority access “elite” pathways of authorized migration (business or study visas), given their extremely high level of economic capital (facilitating access to a business visa) or human capital (facilitating access to a student visa), but the overwhelming majority does not (Baizán et al 2013). To most, authorized migration is only accessible through legal family reunification or temporary (work, tourist) visas.

addition, legal family reunification requires having a close family sponsor at destination. In these ways, authorized migration is more likely to involve the family, household and strong migrant networks. Second, unauthorized migrations have *higher requirements for discretion* (Hernández-Carretero and Carling 2012, Poeze 2010). The level of discretion needed is related to: the high likelihood of failure, possible stigma; the surveillance and official efforts to prevent boat migration in Senegal and en route; avoiding malicious spells cast or ordered by jealous peers. Third, a key difference is the *likelihood of familial opposition*. Since unauthorized migration involves dangerous uncertain journeys and high risks of physical harm (death) and failure, elders and households are more likely to oppose, despite promises of remittances (like Pakistani migrants to Europe, as documented by Ahmad 2008). Together, this likely makes unauthorized migration a more individualistic endeavor. Given the differences in initial investment, discretion, and possible family opposition, I anticipate that *authorized migrations are more likely to reflect family or household strategies, while unauthorized migrations are more likely to reflect individual strategies*.

### **BECOMING A MAN: RISK, CONTROL & SOCIAL TIES**

Social capital theorists anticipate that levels of social capital depend on the nature of the relationship that gives access to the resources, the amount and quality of the resources (Bourdieu 1987, Loury 1977), and the specific nature of the activity at-hand (Coleman 1988, Massey et al 1987). In the case of migration, the migrant network hypothesis proposes that an individual's migration influences the migration likelihoods of those in their social network. Indeed, migrant networks *do* appear to be central to the international migration decision-making process (*e.g.* Boyd 1989, Massey and Garcia España 1987, Massey et al 1993). Although network influence does vary with its tie strength (Liu 2013), quality (Espinosa and Massey 1997), and gendered nature (Creighton and Riosmena 2013, Curran and Rivero-Fuentes 2003, Kanaiupuni 2000, Toma and Vause 2014), scholars generally find that network connections increase an individual's likelihood to migrate internationally in a variety of contexts: from Mexico to the U.S. (Curran and Rivero-Fuentes 2003, Massey 1990, Palloni *et al* 2001); between sub-Saharan Africa and Europe (Liu 2013, 2015, Toma and Vause 2013, 2014); within South America (Parrado and Cerrutti 2003); and from Albania (Stecklov *et al* 2010).

When exploring the strength of tie hypothesis and expectation that weaker ties can facilitate more innovative and useful information (Granovetter 1973, Burt 1995), previous scholarship of Senegalese migration to Europe (Liu 2013) finds a particularly important role for weak ties. Since

definitions of social capital are gendered and culturally-dependent (Curran and Saguy 2013), I piggyback off Liu's theoretically and empirically-motivated definitions of strong ties (parents and siblings), weak ties (extended family and friends) and tie strength.

Families, friendship and religious networks particularly influence life chances at key junctures and moments, for example as young men seek to become adults. Like in first-world contexts where the transition to adulthood is stratified by race and education and is closely related to changes in labor force, education and other institutions (e.g. Fussell and Furstenberg 2005, Oppenheimer et al 1997, Pettit and Western 2004), becoming a man in many contemporary developing nations is a stratified and complex process. The intrinsically gendered nature of household negotiation about migration has been skillfully captured in recent work on female Filipina migrants (Paul 2015). There is far less scholarship about migration and masculinity. Contemporary ethnographic studies of Senegal capture stories of a generation of young men 'stuck' in Senegal: cordoned by tight labor markets, strict gender and generational social hierarchies and expectations, and increasing exposure to other (more affluent) worlds through technologies and transnational migrant cultures (e.g. Hernández-Carretero 2008, Hernández-Carretero and Carling 2012, Poeze 2010).

Previous scholarship (Hernández-Carretero and Carling 2012) identifies the particular difficulties that contemporary Senegalese young men face in achieving social adulthood given the socioeconomic context, a phenomenon that anthropologist Henrik Vigh has named the "social moratorium on youth" (2006: 37). We expand on Hernández-Carretero and Carling's ideas in order to integrate: a deeper conception of gendered social expectations; a longer time frame (1990-2008) and broader contexts; and an exploration of alternative networks, like the Mouride Muslim brotherhood. First, rigid social expectations that men be breadwinner of their families persist. These expectations survive despite major macro shifts to wage labor, increased female labor force participation, expanding educational opportunities, growing international migration experience. From Mackintosh's 1989 study of gender and class in rural Senegal to Babou's 2008 study of Senegalese female hair braiders in the U.S., *women* broadly and distinctly *reject* the idea that their wages contribute to the household economy, even when they may do so, in reality. Likewise, given the overwhelmingly male composition of Senegalese migration flows to Italy, men must renegotiate gendered roles to incorporate 'women's work': cooking, cleaning, household upkeep (Sinatti 2014). The male sole-breadwinner model creates extreme and particular pressure on young men in Senegal, many who struggle to find and keep a steady job. Second, the 'social moratorium' on young Senegalese men has been developing for much of the past quarter century. The 1970's ground nut crisis, the 1980's structural adjustment programs, and the de-evaluation of the currency in 1984 laid

the groundwork for more difficult transitions to adulthood. Seasonal and circular labor migrations have been a traditional option for young Senegalese: since independence, Senegalese out-migration flowed primarily to Gabon, the Ivory Coast and other West African countries, and later to Central Africa (Gerdes 2007). However, migration within Africa became much less attractive in the context of crisis and xenophobia in Gabon and the Ivory Coast in the late 1990's. Since the 1970's, the expanding and more gender-equitable educational opportunities have also helped create a severely competitive marriage market for Senegalese men, and, ironically, new kinds of social exclusion. Third, left out of the Hernández-Carretero and Carling (2012) account was the role of the religious commercial networks of the Mouride Muslim brotherhood, noted for its significant role in long-distance international migration. The Mourides have developed extensive and efficient predominantly-male religious commercial trading networks throughout Europe, the U.S. and beyond (e.g. Diouf and Rendall 2000, Evers Rosander 2001, Riccio 2001) and appear to play a key role in migration between Senegal and Europe (e.g. Liu 2013).<sup>8</sup>

Extended family hierarchies also play an important traditional role in Senegal, so Senegal is a rich environment in which to explore how household structures and migrant social capital influence authorized and unauthorized migrations. The traditional family structure is patrilineal and involves the co-residence of several brothers, their wives and children (Gabrielli 2010). Generational hierarchies are important in families (Bass and Sow 2006: 92-93) and villages (Gabrielli 2010), but have been altered by both urbanization (Gabrielli 2010) and migration (Barou 2001). Previous work (Liu 2013) identifies that household migration strategies and migrant networks are important, but did not find a significant role for extended family networks in Senegalese migration to Europe. However, that study does not explore how legal status may be a defining issue. Some qualitative studies have paid attention to familial hierarchies and legal status. Poeze (2010) describes two different models for unauthorized boat migration between Senegal and Spain: individuals searching for independence from familial hierarchies and those obeying such hierarchies. It is not yet clear which model dominates in the Senegal-Europe context, and this paper aims to clarify this. *I expect that traditionally-defined strong-tied (parent and sibling) migrant networks dissuade unauthorized migration, while encouraging authorized migration. At the same time, I expect that 'stronger'*

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<sup>8</sup> About 94% of Senegal's population identifies as Muslim (CIA 2014), and its citizens are greatly influenced by four dominant Sufi brotherhoods (Khadre, Layene, Tidiane, Mouride). The Mourides are an autochthonous brotherhood and have come to play a particularly important role in international migration (for review in English, see Diouf and Rendall 2000). From its rural roots and strengths in the groundnut industry, the Mourides responded to the 1970's droughts and groundnut crisis by exploiting their connections to the colonial ports of call in Senegal (including those in the "four communes" of Saint-Louis, Dakar, Rufisque and Gorée) and through rural-urban migration (Diouf and Rendall 2000). Later, aided by the Senegalese government's 1986 decision to open up Senegal to imports (abandoning special protection for Senegalese products), the Mourides established themselves in the import-export and service sectors and developed religious commercial trading networks throughout Europe, the U.S. and beyond (e.g. Diouf and Rendall 2000, Evers Rosander 2002, Riccio 2001).

*extended family ties (uncle/aunt) will encourage authorized migrations and discourage unauthorized migrations.*

Peer pressure works the other way: unauthorized migration, despite its risks, appears to promise young men freedom from strict family expectations and limited social and economic options and thus becomes attractive to young people, especially young men (Ahmad 2008, Poeze 2010). Potential unauthorized migrants may be more likely to anticipate support of their co-nationals at destination. Poeze (2010) found that most Senegalese would-be boat migrants made no pre-migration preparations for destination due to: the belief that the Senegalese community would show solidarity with new migrants; and the uncertain, secretive nature of boat migration plans. Other ethnographies document the important role of Mouride transnational networks in migrations (e.g. Babou 2002, Riccio 2001), sometimes highlighting the irregular nature of this migration. In these ways, weak ties (e.g. friendship) to destination may be particularly important for unauthorized migration and help compensate for lack of other support. Indeed, *I expect that weak friendship ties and Mouride transnational networks will be particularly important for unauthorized migration.*

## **DATA AND METHODS**

### *Migration between Africa and Europe project data*

This article uses the recent longitudinal biographical survey data from the Migration between Africa and Europe (MAFE) Project (2012), specifically that of the Senegal migratory system. The multi-site survey methodology is discussed in Beauchemin (2012). MAFE-Senegal interviewed non-migrants and return migrants (mostly from Africa) in Senegal and current migrants in France, Italy and Spain. These three destination countries account for about 45% of all Senegalese outside Africa (Beauchemin and González-Ferrer 2011). Probabilistic sampling frames were available and employed in Senegal and Spain, while non-probabilistic quota sampling methods were used in France and Italy (for discussion of latter, see Beauchemin and González-Ferrer 2011). The individual retrospective questionnaire collected biographical life histories and detailed information about individual's housing, unions, children, work, migrations, migrant networks, legal status, remittances, and properties. Migrants were defined as individuals born as Senegalese nationals, had migrated to Europe as adults and had lived there at least one year. In total, approximately 600 current Senegalese migrants in France, Italy, and Spain and nearly 1,100 residents of the Dakar region were interviewed in 2008. This study follows 923 men, 219 of whom migrated from Senegal to Europe between 1990 and 2008.

For example, the MAFE household membership roster includes information about the respondent's ties to the individuals who lived in the household (parent, sibling, other relative, friend) at the beginning of each housing spell. Information about migrant networks, legal status (residence and work permits), remittances and property ownership are also available. The MAFE migrant network module includes retrospective migration histories of the migrant network (individuals who had lived a year or more outside Senegal) of two groups: all close family migrants (parents, siblings, spouses and children); and the extended kin and friend migrants who the respondent report being able to count on (or could have counted on) to receive or help them migrate. Information about countries lived, type of link, gender, year of meeting (friendships), year of death (if applicable) are also included. The retrospective nature of the data has limitations, namely potential recall bias (Smith and Thomas 2003). However, my focus on the first year of migration to Europe from Senegal – an extremely prominent life event – helps protect the analysis of the main outcome from recall bias. Nor is a migrant likely to remember poorly their legal status in the year of entry.

I analyze the competing risks of first migration from Senegal to France, Italy or Spain, by distinguishing *legal status at entry*: 'authorized' first-time entry if the individual reports having either a residence or work permit, and 'unauthorized' first-time entry if not.<sup>9</sup> We focus on first-time migration, since it has higher costs (Deléchat 2001) and apparently different mechanisms than subsequent migration (*e.g.* Donato *et al* 2008, Massey and Espinosa 1997, Parrado and Cerrutti 2001). Moves from Senegal to other destinations (including those to Europe but not France, Italy or Spain) are censored at the year of migration.

The time-varying *household migration strategies* and *migrant networks* measures are estimated utilizing the migrant network module and the household membership roster. Figure 1 summarizes the measures. For precision's sake, I restrict migrant network indicators to years lived in Europe and to parents, siblings, uncles/aunts, nieces/nephews, cousins, and friends.<sup>10</sup> All migrant network indicators are lagged one year to avoid simultaneous migration among respondent and network members.

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<sup>9</sup> First migration to Europe was chosen rather than the first international migration since the costs and barriers to migration are quite different across the Africa-Europe border, in comparison to borders between African countries, or those between Africa and North America for example.

<sup>10</sup> Friendship networks are potential sources of endogeneity in the study of network and migration behavior (individuals may form friendships in order to aid their own migration project), and so their analysis ought to be highly restricted (Liu 2013). I include only friendships which: 1. began when neither individual had migration experience; 2. lasted at least three years before either migrated out of Senegal; and 3. have passed the three-year threshold.

*Household migration strategies* are measured in two ways (summarized in Figure 1): *household migration network* and *migrant spouse*. The binary indicator *household migration network* is coded 1 for all years when a household member was reported to be a migrant in Europe and 0 if not. Following Liu (2013): whenever a household included *any* sister, *all* sisters in the migrant networks were then considered household *during the entire housing spell*. This was repeated for migrant brothers, mother, father and friends. In addition, when the household included “other relative”, all cousins, aunts/uncles, and nieces/nephews were categorized as household during the entire housing spell.<sup>11</sup> Complementary analysis explores whether household effects vary with *household economic situation* (1 ‘more than enough money to cover basic needs’ – 4 ‘not enough money to cover basic needs’).

I follow previous convention in considering *migrant spouse* to be a proxy for (legal) family reunification (Liu 2013, Toma and Vause 2014). It is coded 1 when the respondent reports a spouse living in Europe and 0 when not. The entire European Union (and most developed countries) has special provisions to facilitate the legal reunification of close family (e.g. Gil Araujo 2010, Bonizzoni et al 2009, Kofman et al 2010).

*Migrant network* is coded 1 for all years the respondent reported having a non-household migrant network member and 0 otherwise. I also distinguish for strength of tie. I piggyback on Liu’s theoretically and empirically-motivated definitions of tie strength (2013): *strong ties* (parents and siblings); *weak ties* (extended family and friends); and tie strength of weak ties from strong to weak (uncles/nephews, cousins and friends).<sup>12</sup>

I include a multitude of time-varying control variables, summarized in Figure 2. These include respondent’s age, ln(age), marital status; being polygynous; number of children; occupational status (working, unemployed, studying, at home, retired/inactive); and whether the respondent owned land, housing or a business in each person year. All time-varying covariates are lagged one year, so I analyze the influence of the previous year’s status on the current year’s risk of migration. The remaining covariates are time invariant. Origin indicators include: urban origin, whether the respondent’s father was deceased or unknown at respondent’s age 15; his father’s education (no

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<sup>11</sup> While the household measure is updated at the beginning of each of the respondent’s housing spells, it does not account for other changes (births, deaths) during the housing spell and only includes migration when Ego or the entire household moves.

<sup>12</sup> As Liu (2013), I have been careful to protect the friendship variable from possible endogeneity or the idea that individuals may seek friendships that will facilitate their own migration project. Migrant friendships met several requirements: the year of meeting was reported; individuals met at least three years *before* either person migrated out of Senegal.

formal schooling, primary schooling, secondary and above); the respondent's own religious affiliation (Muslim brotherhoods of Khadre, Layène, Mouride, Tidiane; "other Muslim"; Catholic and other Christian); whether he was firstborn; his number of siblings; his highest level of education (less than primary, primary, lower secondary, upper secondary or higher). Finally, to control for origin and destination contextual effects, period effects (before 1990, 1990-1999, 2000-2008)<sup>13</sup> and two time-varying contextual factors are included: urban population growth in Senegal (%) and GDP per growth per capita in Senegal (%). This latter data was provided by the World Bank's World Development Indicators.

### *Analytical strategies*

My empirical strategy is based on hazards analysis, which measures the risk of experiencing migration in a given year. I am interested in first-migration since the requirements of first migration are especially high, and studies have found that subsequent migration has distinct social capital costs and determinants (Massey and Espinosa 1997, Parrado and Cerrutti 2003). With my focus on adult male migration, I restrict the sample to males: who were born in Senegal; had Senegalese citizenship in the year of their birth; and who had always lived in Senegal until at least age 17. First possible migration to Europe is at age 18.

To explore the dynamics of first migration between Senegal and Europe, I employ a competing risks (multinomial logit) event history model to predict legal status at migration. Since individuals are "at-risk" for both authorized and unauthorized migrations, this modeling is appropriate for understanding the determinants of each, relative to staying in Senegal. Once an individual has migrated, they leave the analysis. The unit of interest is person year, so I can consider the wealth of time-varying independent variables and covariates. An event history competing risks design helps clarify and compare different outcomes. It has been used to analyze labor market (e.g. D'Addio and Rosholm 2005) and public health (e.g. Steele and Curtis 2003) outcomes, but is less common in migration studies (for exceptions, see: Davis, Steklov and Winters 2002's study of domestic and international migration; Massey and Espinosa 1997's model of authorized and unauthorized migration). The Kaplan-Meier failure estimates of male migration to Europe from 1960-2008 are illustrated in Figure 3. Authorized entries (Figure 3.A) are much more numerous than unauthorized entries (Figure 3.B): both kinds of entries have increased significantly from 1990 to 2008, the period of this study.

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<sup>13</sup> The period effects are related to pertinent changes in immigration policies. Entry visas for Senegalese nationals were made compulsory by 1990 in France, Italy and Spain. Nearly all the legalizations and regularization campaigns in all three countries took place before 2000.

## RESULTS

While Table 1 shows descriptive statistics for non-migrants, authorized migrants and unauthorized first-time migrants, Tables 2 and 3 present multinomial models predicting how migrants enter Europe: with or without authorized status. Each model contains the effects of independent variables on the relative risks of migrating to Europe with authorized status, and migrating without authorized status, both compared to the reference category of staying in Senegal. Coefficients are reported in relative risks: values greater than 1 signal determinants that increase the likelihood of migration type, relative to staying; values less than 1 signal determinants that dampen likelihood of migration relative to staying. We focus exclusively on the determinants of first-time migration from Senegal to Europe (France, Italy and Spain), all other migrations are censored in the year of migration.

These models appear to support the idea of authorized migration as a traditionally-networked, family-driven strategy. Relative to staying in Senegal, men with migrant networks are much more likely to migrate with authorization. The same is true for men living in households with household migration strategies.

In contrast, unauthorized migration is an alternatively-networked and perhaps more individualistic strategy. Traditional network measures don't appear to raise the risk of unauthorized migration: individuals with personal migrant networks, household migrant networks or migrant spouses are *as* likely to migrate unauthorized *as stay* in Senegal. At the same time, alternative transnational religious commercial networks play a key role: Mourides are far more likely to migrate unauthorized than stay in Senegal. There are signs that unauthorized migration is a last resort: men who are more disadvantaged or who are in vulnerable situations are more likely to migrate unauthorized.

### *Household-driven authorized migration*

I use a multi-step strategy to explore whether that authorized migrations are family-driven. First, I expect that authorized migrations will reflect household migration strategies: that household migration networks increase the risks of authorized migration and have little or negative effects on unauthorized migration. The results confirm this: household migration networks significantly

increase the relative risk of authorized entry (Table 2, Model 2,  $p < .05$ ), and have a null effect on unauthorized entry.

Second, given the importance of extensive family and friendship networks (and obligations), I expect that family and friendship outside the household also play an important role in authorized male migration. Results do show that having non-household migrant networks greatly and significantly increases a man's chances to migrate with authorization to Europe (Table 2, Model 2,  $p < .001$ ).

Third, I expect that authorized migration's family-driven nature is likely to require household (family) resources. This is confirmed: men whose fathers attended primary school are much more likely to migrate to Europe (Table 2, Model 2,  $p < .01$ ). Interestingly, men from very privileged families (fathers who had secondary schooling) are as likely to migrate as to stay in Senegal. This supports previous findings that international migration draws from the middle of the socioeconomic spectrum. At the same time, young men in a privileged holding pattern – those who were 'at home', traditionally associated with female homemakers, are much more likely to migrate with authorization (Table 2, Model 2,  $p < .01$ ). These results support previous qualitative research of the importance of pooled resources, especially for authorized migrations (Alpes 2011, Gaibazzi 2014, Poeze 2010).

Fourth, if authorized migration is family-driven, I expect that authorized migration cannot happen in the absence of plentiful family resources. This indeed appears to be the case. A man's chances to embark on authorized migration decreases significantly when he has more siblings (Table 2, Model 2,  $p < .01$ ) or in cases where his father was unable to fulfill the important traditional breadwinner role due to absence or death when the respondent was aged 15 (Table 2, Model 2,  $p < .10$ ).

Overall, for the case of Senegalese male migration to Europe, results support the idea that authorized migration is a household-driven strategy.

### *Individual-driven unauthorized migration*

The models also explore the competing risk of unauthorized migration to Europe, relative to staying in Senegal. Of particular interest is understanding whether unauthorized migrations are more individual-driven and less family-driven. With the exception of the age variables, compared to the

models of authorized male migration, different determinants appear to drive unauthorized male migration. First and importantly, results show overall null influences of household migration strategies and migrant networks (Table 2, Model 2). These results differ from previous findings of the importance of household migration strategies and migrant networks for migration between Senegal and Europe (e.g. Liu 2013) and other contexts (Palloni et al 2001, Stecklov et al 2010). Unauthorized migration appears to have a different logic from the common expectation that migration is a strategy of the household.

Second, models show that belonging to the Mouride Muslim brotherhood starkly raises a man's likelihood to migrate unauthorized to Europe (Table 2, Model 2,  $p < .01$ ). While previous ethnographic work has emphasized the importance of the Mouride religious commercial networks (e.g. Diouf and Rendall 2000, Evers Rosander 2001, Riccio 2001), this is the first paper to confirm the tight link between Mouride networks and *unauthorized* migration using quantitative methods.

Third, findings support the idea that unauthorized migration is an exit strategy for less-advantaged men who strive to enter 'social adulthood' from more vulnerable situations. Men who are unemployed (Table 2, Model 2,  $p < .01$ ) and those lacking formal schooling ( $p < .10$ ) have higher relative risks of unauthorized migration, than staying in Senegal. Importantly, men who characterize their own occupational state as 'unemployed' neither associate their status with study, nor being 'at home.' Instead, they identify with the 'lack' of employment. At the same time, consistent with previous findings, migrants are not the most disenfranchised. Certain financial and family resources aide plans for long-distance international migration, even for strategies that involve unauthorized entry: men who own a dwelling are also more likely to migrate unauthorized than stay (Table 2, Model 2,  $p < .05$ ).

### *Role of strong & weak ties*

Traditionally-defined strong-tied migrant networks are expected to dissuade unauthorized migration, while encouraging authorized migration. Results lack statistical significance, although they point to a possible dampening effect of strong ties for unauthorized entry (Table 3, Models 1-3). Here, household migration network indicators may have captured much of the expected effect. Also, results likely are the product of several factors, documented in the qualitative literature: in Senegal's patriarchal family culture, the child or brother of a migrant may not be free to embark on unauthorized migration due to a tight "collective fatherhood" that emerges especially when the

biological father is absent due to migration (Barou 2001: 20); a brother may wait for his brother to formally sponsor family migration to Europe (Poeze 2010: 50); a father in Europe may send remittances for study or starting a business at origin, making unauthorized migration less attractive; and finally, information about destination may be bleak and unattractive. Finally, these results may reflect the heterogeneity of “strong-tied” networks: including diverse opinions for and against specific migration projects (Poeze 2010); stratified by different factors, including polygyny (Gaibazzi 2014); different capacities to help family members at home (Alpes 2011).

However, I expect that weak ties would be particularly important for unauthorized migrations. The expected weak tied effect for unauthorized migration is largely assumed by Mouride transnational networks (Table 2, Model 2,  $p < .01$ ). Migrants do not necessarily know specific individuals in the Mouride network prior to migration, but they do appear to draw on this resource as part of their decision-making process. Surprisingly, analysis of strong (parent and sibling) ties and weak (extended family and friendship) ties show that weak ties have no significant overall influence on unauthorized entry, but raise the relative risks of authorized entry (Table 3, Model 1,  $p < .001$ ). Instead, in the Senegalese context where family structures usually include extended kin, it is important to distinguish among different ties to extended family. Once tie strength is accounted for, it is clear that ties to cousins (Table 3, Model 2,  $p < .10$ ) and friendships ( $p < .001$ ) power the positive weak tie effect in authorized migration, while unauthorized migration’s “weak tie” effect appears to bundle several opposing influences. Friendships raise the relative risks of unauthorized entry (Table 3, Model 2,  $p < .10$ ), while ties to cousins may lower risks, although these latter effects lack statistical significance. All in all, these results support the idea that friendships are a key network influence (Liu 2013) and that unauthorized migration is better characterized as a culturally and peer-driven individual strategy rather than a family strategy (Ahmad 2008, Poeze 2010).

### *Robustness checks*

As a corollary of the main hypothesis, the previously theorized effects (the influence of household migration networks) could depend, largely or in part, on a difference in the wealth of the households. Robustness checks can help to dispel this concern. Analyzing time-varying information of whether households had sufficient money to cover basic needs (reference: not having sufficient resources), I find evidence that belonging to a household with sufficient resources to cover basic needs increases both the relative risks of authorized (Table 3, Model 2,  $p < .05$ ) and unauthorized (Table 3, Model 2,  $p < .05$ ) migrations, relative to staying in Senegal. At the same time, the influence of household migration strategies on migrations does not appear to vary with household

wealth for either authorized or unauthorized migration: interactions are not significant (Table 3, Model 3).

## DISCUSSION

Migration between Senegal and Europe offers an advantageous viewpoint from which to analyze authorized and unauthorized migrations. Senegal and Europe are separated by great geographical and social distances, and migration requires great economic and social capital, and unauthorized entry is extremely risky. Unlike other migration systems where unauthorized migration dominates (e.g. Mexico-USA as studied by Massey and Espinosa 1997 or Albania as studied by Stecklov et al 2010) or authorized (or *quasi*-authorized) migration (e.g. Paraguay-Argentina as studied by Parrado and Cerrutti 2003; or Thai internal migration, see Entwisle et al 2007 and Curran et al 2005) dominates, Senegalese migrants pursue various routes and legal paths to Europe.

The limitations to this study pave the way to future work. First, it focuses on migrant networks at destination and is unable to comment on origin-based networks. Origin-based kin, friendship and religious networks in Senegalese migration to Europe are important and well-documented (e.g. Evers Rosander 2002, Lacomba and Moncusi 2009, Poeze 2010). Also, origin and destination-based networks likely interact in a variety of ways, jointly influence migration behavior (Liu 2015), and this process may depend on legal status, gender and other factors. This is a promising avenue for future research. Second, given its interest in masculinity and male's transition to adulthood, the study was limited to male migrants and its results may be biased against migration as a household strategy, since women experience greater barriers to independent migration. Future study should include female migration and analyze how gendered family norms (e.g. Barou 2001, Bass and Sow 2006, Evers Rosander 2002), gendered migrant networks (e.g. Cerrutti and Massey 2001, Creighton and Riosmena 2013, Liu 2013, Toma and Vause 2014), and gendered migration patterns (Baizán et al 2013, Schoorl et al 2000) are related to migrations of different legal statuses. Third, despite much attention to designing period effects and selecting contextual variables, this study has not explicitly accounted for changes in migration policies, although many are designed to affect migration behavior. Our concerns are partially off-set by prior research of Mexico-U.S. migration: as border enforcement changes, migration decisions remain stable (Orrenius 2004) although modes of unauthorized crossing change (Singer and Massey 1998, Donato et al 2008). These are dynamic processes – migration policies change, as do migrants' economic outlook at destination. Future work ought to capture and examine this. Finally, this study has utilized a residence-based measure

of household, but alternative measures and strategies (Paul 2015) exist. Given the tradition of multi-residence family or household structures in Senegal (Bass and Sow 2006) and between Senegal and Europe (Beauchemin et al 2013), a systematic exploration of other measures and development of new measures of household structures is important for the future.

Despite its limitations, this study finds that migrations of different legal statuses have different resource requirements and intends to make several contributions. First, the descriptive analysis shows that Senegalese migration to Europe is rare, and authorized migration is much more common than unauthorized migration, despite press coverage to the contrary. Since the late 1990's, authorized entries and unauthorized entries have multiplied. While this paper does not confirm previous empirical findings that relate macro-economic growth with increasing risks of unauthorized migration (Massey and Espinosa 1997), it does clarify and support previous ethnographic study of Senegal: men who belong to the Mouride Muslim brotherhood networks have higher relative risks of unauthorized migration, while there is no Mouride influence on authorized migration. It also develops new findings: men who have particular difficulties in accessing 'social adulthood' are more likely to embark on unauthorized migration. This paper also extends current knowledge and finds that for Senegalese male migration to Europe, authorized migration is a strategy of individuals who hail from greater privilege or stability: more privileged men (in terms of own or father higher human capital) are more likely to embark on authorized migration, while those from more vulnerable situations (including larger families) are less likely to do so.

Second, I build a theoretical framework for understanding the intersection of long-distance international migration and young Senegalese men's attempts to attain social adulthood. To do so, I distinguish the risks and costs of different migration strategies and relate these to the role of households in migration decision-making and the use of migrant networks. While previous studies discuss different pathways to migration (e.g. Carling 2002) and social adulthood and unauthorized migration (e.g. Ahmad 2008, Hernández-Carretero and Carling 2012), this is the first effort (to the best of my knowledge) to explicitly link migration behavior along the legal status spectrum to household migration strategies, migrant network resources and the life course.

Third, I find that, in the case of Senegal-Europe migration, migrations of different legal statuses employ network resources and ties in distinct ways. In general, authorized migrants are more likely to have migrant social capital than unauthorized migrants. While migrant social capital consistently raises the risks of authorized migration, it has varying effects on unauthorized migration. Regarding the debate of whether unauthorized migration is expression of individual autonomy or of household

strategy, this study finds that authorized migration reflects a household migration strategy, but that unauthorized migration may be an expression of autonomy *in the face of* the opposition of the household and strongly-tied migrant networks. At the same time, friends and religious commercial transnational networks abroad significantly support individuals' unauthorized migration projects.

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## FIGURES

**Figure 1** Household migration strategies and Migrant network measures<sup>a</sup>

Measure	Definition <sup>b</sup>	Details
<i>Household migration strategies</i>		
Household migration network	Any member of current household who is currently in Europe	Spouses and children excluded
Migrant Spouse	Spouse in Europe	
<i>Migrant Network (non-household)<sup>c</sup></i>		
Strong Tie	Parents and siblings in Europe	
Weak Tie	Extended family members and friends <sup>d</sup> in Europe	Some analysis further distinguishes among uncles/nephews, cousins, and friendship ties.

a – All measures vary year by year and, in analysis, are lagged by one year.

b – All networks defined for network members living in Europe (France, Italy or Spain) in given year.

c – Current household members excluded.

d – Included only friendships (1) formed before either individual migrated from Senegal; (2) lasted at least three years before either migrated out of Senegal; and (3) have passed the three-year threshold.

**Figure 2** Control variables

	Measures	Values
Origin indicators <sup>a</sup>	Urban origin	0/1
	Firstborn	0/1
	Number of siblings	#
	Father unknown or deceased when respondent was aged 15	0/1
	Father's education	No formal; primary; secondary and above
	Religious affiliation	Muslim – Layene; Khadre; Mouride, Tidiane; Other Muslim; Christian -Catholic
Individual status <sup>b</sup>	Age, ln(age)	#
	Own education	No formal; primary; lower secondary, baccalaureate and above
	Marital Status	0/1
	Polygynous	0/1
	Has children	0/1
	Number of children	#
	Current occupational status	Working; studying; unemployed; retired or inactive
	Current property ownership status –	
Own land	0/1	
Own a house	0/1	
Own a business	0/1	
Contextual & period effects <sup>c</sup>	GDP per capita growth in Senegal	%
	Urban population growth in Senegal	%
	Periods	Before 1990; 1990.1999; 2000-2008

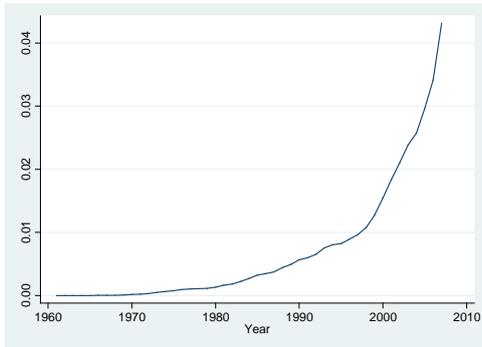
a – All origin measures are time invariant.

b – Except for own education (measured at time of survey), all individual status measures are time-varying and, in analysis, lagged by a year.

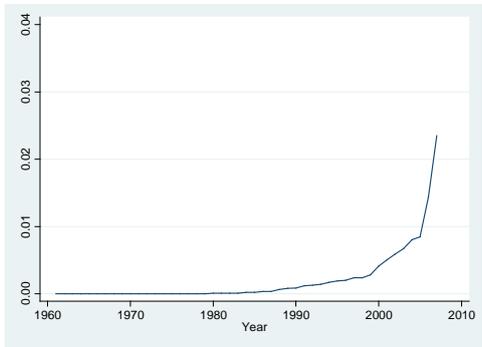
c – Except for period dummies, all contextual measures are time-varying and, in analysis, lagged by a year.

FIGURE 3: KAPLAN-MEIER FAILURE ESTIMATES OF MIGRATION TO EUROPE, BY LEGAL STATUS AT ENTRY

A. AUTHORIZED ENTRY



B. UNAUTHORIZED ENTRY



**Table 1** Descriptive information of male sample: migrants, by authorized and unauthorized status at 1<sup>st</sup> migration to Europe and non-migrants at time of survey (2008)

Controls	Non-migrants		Authorized 1 <sup>st</sup> time migrants		Unauthorized 1 <sup>st</sup> time migrants		
	Mean	SE	Mean	SE	Mean	SE	
<b>Migrant Network</b>							
Having a nonhousehold migration network	0.407	(0.027)	0.387	(0.042)	0.412	(0.109)	
No ties	0.602	(0.027)	0.556	(0.043)	0.768	(0.064)	**
Only strong tie	0.100	(0.016)	0.102	(0.025)	0.079	(0.038)	
Only weak tie	0.254	(0.024)	0.318	(0.040)	0.153	(0.049)	**
Both ties	0.044	(0.011)	0.024	(0.012)	(omitted)		*
Weak tie: stronger	0.071	(0.014)	0.069	(0.020)	0.025	(0.018)	
Weak tie: medium	0.100	(0.016)	0.105	(0.026)	0.037	(0.029)	†
Weak tie: weaker	0.183	(0.021)	0.222	(0.035)	0.108	(0.037)	*
Having a household migration network	0.233	(0.023)	0.414	(0.043)	0.335	(0.078)	
Having a migrant spouse	0.009	(0.005)	0.014	(0.010)	(omitted)		
<b>Age</b>	38.35	(0.69)	27.80	(0.51)	27.79	(0.74)	
<b>Family of origin</b>							
Urban origin	0.687	(0.025)	0.807	(0.039)	0.798	(0.058)	
Firstborn	0.232	(0.023)	0.288	(0.040)	0.298	(0.067)	
Number of siblings	8.235	(0.290)	6.783	(0.315)	6.463	(0.757)	
Father unknown or deceased at respondent's age 15	0.096	(0.016)	0.049	(0.022)	0.112	(0.044)	
<b>Father's education</b>							
No formal schooling	0.370	(0.220)	0.385	(0.044)	0.614	(0.070)	**
Primary school	0.101	(0.014)	0.274	(0.038)	0.124	(0.040)	**
Secondary and above	0.167	(0.017)	0.280	(0.038)	0.129	(0.046)	*
<b>Religious affiliation</b>							
<b>Muslim</b>							
Layene	0.021	(0.006)	0.012	(0.009)	0.010	(0.010)	
Khadre	0.025	(0.007)	0.032	(0.017)	0.067	(0.038)	
Mouride	0.213	(0.019)	0.348	(0.041)	0.575	(0.073)	**
Tidiane	0.298	(0.021)	0.298	(0.042)	0.178	(0.059)	†
Other Muslim	0.074	(0.012)	0.175	(0.033)	0.144	(0.057)	
Christian Catholic	0.066	(0.011)	0.077	(0.023)	0.026	(0.018)	†
<b>Individual Status</b>							
<b>Current household structure</b>							
Married	0.614	(0.026)	0.318	(0.041)	0.418	(0.070)	
Has children	0.605	(0.027)	0.336	(0.041)	0.371	(0.067)	
Number of children	2.602	(0.187)	0.657	(0.092)	0.797	(0.163)	
<b>Own education</b>							
No formal schooling	0.130	(0.015)	0.084	(0.025)	0.320	(0.070)	**
Primary school	0.227	(0.019)	0.215	(0.036)	0.308	(0.068)	†
Lower secondary	0.143	(0.016)	0.185	(0.033)	0.204	(0.051)	
Baccalaureate and above	0.200	(0.018)	0.517	(0.044)	0.168	(0.059)	***
<b>Current property ownership status</b>							
Own land	0.174	(0.021)	0.055	(0.018)	0.036	(0.020)	
Own a house	0.136	(0.018)	0.058	(0.027)	0.159	(0.050)	†
Own a business	0.121	(0.018)	0.080	(0.023)	0.042	(0.033)	
<b>Current occupational status</b>							
Working	0.579	(0.022)	0.712	(0.038)	0.944	(0.028)	***
Studying	0.025	(0.007)	0.142	(0.027)	(omitted)		***
Unemployed	0.043	(0.009)	0.118	(0.030)	0.056	(0.028)	
At Home	0.004	(0.003)	0.005	(0.005)	(omitted)		
Retired or Inactive	0.050	(0.010)	0.023	(0.012)	(omitted)		*
<b>Individuals</b>	<b>704</b>		<b>159</b>		<b>60</b>		

Note: Data are weighted. Differences between authorized and unauthorized migrants are significant at †  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$   
Source: MAFE-Senegal 2008.

**Table 2** Logistic estimation of the relative risk of being a first-time male migrant in a year: by legal status at entry

	Model 1				Model 2			
	Authorized Entry		Unauthorized entry		Authorized Entry		Unauthorized entry	
	B	SE	B	SE	B	SE	B	SE
Migrant Network					2.12***	0.39	1.13	0.36
Household Migration Strategies								
Household migration network (spouse excluded)	1.50*	0.30	1.07	0.35	1.53*	0.30	1.09	0.36
Migrant Spouse	0.37	0.38	0.00	0.00	0.33	0.33	0.00	0.00
Controls								
Age	0.55***	0.07	0.58**	0.11	0.56***	0.07	0.58**	0.11
ln(age)	2.4e7***	8.7e7	1.0e6*	5.5e6	1.28e7***	4.6e7	9.2e5*	5.0e6
Family of Origin								
Urban origin	1.38	0.33	1.85	0.73	1.35	0.33	1.86	0.73
Firstborn	1.32	0.26	1.09	0.37	1.35	0.27	1.10	0.37
Number of siblings	0.94**	0.02	0.96	0.04	0.93**	0.02	0.96	0.04
Father unknown or deceased	0.42 <sup>†</sup>	0.19	1.20	0.54	0.45 <sup>†</sup>	0.21	1.21	0.55
Father's education (ref. = no formal schooling)								
Primary school	1.99**	0.46	0.86	0.36	1.84**	0.43	0.85	0.36
Secondary and above	1.27	0.30	0.63	0.27	1.25	0.30	0.63	0.27
Religious affiliation (ref. = Tidiane)								
Muslim								
Layene	1.10	0.54	2.80	1.81	1.16	0.58	2.81	1.81
Khadre	0.59	0.44	1.55	1.73	0.59	0.44	1.57	1.75
Mouride	1.20	0.26	3.33**	1.32	1.20	0.136	3.31**	1.32
Other Muslim	1.41	0.37	1.78	1.02	0.53	0.22	1.76	1.01
Christian Catholic	0.58	0.24	1.00	0.83	1.13e-6	0.00	0.99	0.82
Individual Status								
Current household structure								
Married	0.99	0.26	0.91	0.38	1.03	0.27	0.91	0.38
Polygynous	1.47	0.79	0.39	0.43	1.41	0.75	0.40	0.43
Number of children	1.07	0.11	1.23	0.21	1.05	0.11	1.22	0.21
Education (ref. = primary school)								
No formal schooling	1.15	0.41	2.09 <sup>†</sup>	0.86	1.10	0.39	2.10 <sup>†</sup>	0.87
Lower secondary	1.23	0.34	1.21	0.50	1.18	0.33	1.21	0.51
Baccalaureate and above	1.88*	0.48	0.58	0.28	1.75*	0.46	0.57	0.28
Property								
Land	0.94	0.36	1.95	1.11	0.99	0.38	1.96	1.12
House	0.52	0.23	2.74*	1.20	0.51	0.22	2.72*	1.19
Business	1.56	0.55	0.27	0.27	1.46	0.53	0.26	0.27
Current occupational status (ref. = working)								
Studying	0.94	0.26	0.49	0.39	0.98	0.27	0.49	0.39
Unemployed	1.32	0.48	3.37**	1.39	1.36	0.50	3.37**	1.39
At home	9.55**	6.59	0.00	0.00	8.35**	5.75	0.00	0.00
Inactive	1.2e-6	0.00	1.88	1.47	2.6e-6	0.00	1.89	1.47
Macro Factors								
Periods (ref: 1990-1994)								
1995-1999	1.05	0.36	0.90	0.56	0.98	0.34	0.89	0.55
2000-2003	1.52	0.50	2.35	1.31	1.36	0.45	2.31	1.29
2004 and after	0.75	0.27	2.53	1.43	0.64	0.23	2.46	1.40
Urban population growth (%)	2.28	2.11	1.79	2.79	2.51	2.32	1.79	2.79
GDP growth per capita (%)	0.99	0.05	0.99	0.09	1.00	0.05	0.99	0.09
N (person-years)	7,611		7,611		7,611		7,611	

Notes: Results are presented in relative risk. Age, ln(age), marital status, polygynous, number of children, occupational status, landownership, homeownership, business ownership, period effects, % urban population growth, and % GDP per capita growth are time-varying indicators, and vary year by year.

Source: MAFE-Senegal 2008.

<sup>†</sup>p < .10; \*p < .05; \*\*p < .01; \*\*\*p < .001

**Table 3** Logistic estimation of the relative risk of being a first-time migrant in a year, by legal status at entry: Migrant networks and tie strength

	Model 1				Model 2				Model 3			
	Authorized Entry		Unauthorized Entry		Authorized Entry		Unauthorized Entry		Authorized Entry		Unauthorized Entry	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
Migrant network (non-household)												
Strong tie	1.07	0.29	0.55	0.27	1.17	0.3	0.79	0.39	1.16	0.35	0.76	0.38
Weak tie	2.43***	0.46	1.48	0.47								
Weak tie: uncle/nephew					1.09	0.39	1.17	0.89	1.09	0.40	1.17	0.89
Weak tie: cousin					1.70 <sup>†</sup>	0.51	0.66	0.42	1.70 <sup>†</sup>	0.52	0.67	0.43
Weak tie: friend					2.95***	0.65	1.93 <sup>†</sup>	0.88	2.93***	0.65	1.88	0.77
Household migration network	1.67***	0.33	1.47	0.44	1.66*	0.33	1.11	0.37	1.10	0.65	0.28	0.30
Migrant Spouse	0.38	0.39	0.00	0.00	0.36	0.37	0.00	0.00	0.36	0.37	0.00	0.00
Household Economic Situation (sufficient)	0.56	0.21	1.19	0.70	1.48*	0.28	2.00*	0.61	1.36	0.31	1.54	0.55
HH Econ*HH migrant network									1.34	0.54	2.51	1.64
<i>N</i> (person-years)	7,557		7,557		7,557		7,557		7,557		7,557	