

SOCIAL POSITION AND MIGRANT SOCIAL CAPITAL IN INTERNATIONAL MIGRATION FROM AFRICA TO EUROPE

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ABSTRACT

Social capital has been conceptualized as a mechanism through which socioeconomic inequalities are reinforced, and a growing body of labor market, education and health studies support this. In contrast, some migration scholars believe that migrant social capital can potentially broaden access to migration, but few empirical studies exist. We build on prior work by Nan Lin and Sandra Smith to examine how an individual's social position relates to their access, mobilization, and returns to social capital. We use retrospective data from the Migration between Africa and Europe (MAFE) project and study migration to Europe from DR Congo, Ghana and Senegal. Our results suggest that access, mobilization and returns are deeply and differently stratified by social position. While higher-status individuals have greater access to migrant networks, lower-status prospective migrants are more dependent on migrant social capital to migrate and are more likely to mobilize it to help finance the trip.

Keywords: social capital; international migration; migrant networks; social stratification

INTRODUCTION

Sociologists have long argued that individuals can benefit from their social capital - the resources embedded in their social networks - and that these benefits can include access to and improvements in status in the labor market, education, health or migration. Intimately tied to the concept's development is the idea that social capital tends to perpetuate or reinforce socio-economic inequalities; as such, it is a mechanism through which advantaged individuals maintain and increase their economic or otherwise advantaged position (Bourdieu 1986; Lin 2002a; DiMaggio and Garip 2012). Indeed, empirical research which has mostly focused on labor market outcomes generally shows that higher-status individuals have access to higher levels of social capital and derive greater benefits from it in terms of wage or occupational prestige (Granovetter 1974, 1985, 1983; Lin, Vaughn, and Ensel 1981; Ioannides and Loury 2004; Smith 2000; Pichler and Wallace 2009).

Migrant social capital – the social resources embedded in migrant networks – is a key resource for international migration (Massey and España 1987; Massey et al. 1993; Massey and Espinosa 1997; Cerrutti and Massey 2001; Garip 2008, 2016). However, when addressing how networks and inequality are linked, migration scholars have tended to argue that migrant networks expand access to migration across different socioeconomic levels (Massey 1990; McKenzie and Rapoport 2010). Indeed, as migrant networks grow within a given community, the costs and risks of migration are expected to decrease, with newer migrants recruited from a broader set of social milieus. Yet, few empirical studies have examined how social stratification and migrant social capital relate. Mainly carried out by economists, existing studies have been conducted at the community or national levels, rather than the individual level (McKenzie and Rapoport 2007; McKenzie and Rapoport 2010; Bertoli 2010; Beine, Docquier, and Özden 2010; Neubecker, Smolka, and Steinbacher 2015; Massey, Goldring, and Durand 1994; Garip and Curran 2010). Results are mixed: some studies find no support for a relationship, while others find that networks are more valuable for the less-skilled. As awareness of the heterogeneity among migrants (Garip 2016) increases, it is quite important to focus on the individual, particularly in order to understand the mechanisms at work. Indeed, little is known about how migrant social capital is contingent upon an individual's social position.

The lack of attention to the intersection of migrant social capital and social position is surprising, given the advances of the labor market literature and the central role that migrant social capital plays in international mobility. In many cases of labor migration, international migration can be envisaged as a job search process across international borders. The major contribution of this paper is bridging these

two, so far separate, strands of literature and integrating key findings from labor market studies of social capital to migration scholarship.

More specifically, we build on prior work by Lin (1999b, 2000, 2002a) and Smith (2005a) and distinguish three potential sources of inequality in the functioning of social capital by social position: access to, mobilization/use of and returns to social capital. We examine how each of these three dimensions of migrant social capital is conditioned by a prospective migrant's social position. In doing so, we can apply the theoretical framework of social capital to a new context: that of high-cost, long-distance international migration. Do findings, mainly based on labor market studies, hold in this context? By exploring the links between social position and social capital in the context of migration, this paper thus intends to primarily enrich the general social capital literature.

International migration from the Democratic Republic of Congo, Ghana, and Senegal to Europe, the focus of this paper, provides a particularly provocative case study. Overall, young Sub-Saharan Africans are under great pressure to consider intercontinental out-migration due to demographic and environmental pressures, lack of adequate job opportunities and slow wage growth, as well as violent conflict (Hatton and Williamson 2003; Naudé 2010). Across the continent, youth experience increasing difficulties in their efforts to gain employment, status and autonomy and find themselves suspended between childhood and adulthood: scholars have named this a 'social moratorium of youth' (Vigh 2010) or simply 'waithood' (Honwana 2012). In these contexts, international migration has become a key survival strategy. Yet, sub-Saharan African migration to Europe is very costly and may involve migration brokers (Alpes 2011) and complex migration itineraries (Baldwin-Edwards 2006; Schapendonk 2008; Castagnone 2011). As a result of the high costs and risks, migration to Europe is highly selective, both in terms of human and social capital. Migrants tend to be higher-educated and better-off than non-migrants, and family and friendship migrant networks play important roles in the migration process (Liu 2013; Toma and Vause 2013, 2014). These are precisely the conditions under which network effects may exacerbate socio-economic inequalities in access to a social practice: in this case, international migration (DiMaggio and Garip 2012). Thus, migration from DR Congo, Ghana and Senegal to Europe is an intriguing case to study the intersection of human and social capital in achieving desired life outcomes.

In this article, we are interested in understanding whether and how social position stratifies the role of migrant networks in international migration. Do lower-status individuals have less access to and benefit less from migrant networks in terms of their migration chances, compared to higher-status individuals? If so, network effects would compound socio-economic advantage, as generally found in the labor market literature. Or does migrant social capital partly substitute for socio-economic standing, and

lower-status individuals rely and benefit more from their migrant networks than their higher-status compatriots? We use the Migration between Africa and Europe (MAFE) project, a multi-sited retrospective data set, to address these questions. The MAFE survey sampled individuals in the major metropolitan areas of the Democratic Republic of Congo, Ghana and Senegal, as well as migrant populations in Europe. We find that migrant social capital access, mobilization and returns are deeply stratified by social position, albeit in different ways. High-educated individuals have greater access to migrant social capital than low-educated individuals. Once we control for the amount of resources, the returns to social capital are still differentiated by status. Low-educated individuals rely more on their migrant networks for financial assistance with migration and derive larger returns in terms of migration chances. Thus, our conclusions are nuanced: the lower-educated are highly disadvantaged in their access to an extremely influential resource for migration; indeed, this resource is even more important for their chances to migrate than for their high-skilled counterparts. The low-educated appear to profit more from ties to current migrants, which we interpret as evidence for their higher dependence on migrant social capital.

The paper is structured as follows: we start by discussing the social capital literature, developed primarily in the context of labor markets, and how social position conditions the functioning of social capital. Next, we turn to migration scholarship, which has found migrant social capital to be a key resource in international migration but has mostly ignored how it interacts with social position. After presenting the context of study - international migration between Sub-Saharan Africa and Europe – we develop a socially stratified model of migrant social capital and formulate a set of hypotheses. The following section introduces the “Migration between Africa and Europe” data and the methods we employ. We then present our results. Finally, we discuss the implications of our findings as well as their limitations and suggest avenues for future research.

SOCIAL CAPITAL AND SOCIAL STRATIFICATION

Behind the concept of social capital lies the simple and intuitive idea that our lives are influenced not only by how much we know and what we possess, but also by whom we know (Kazemipur 2006). In this paper, we align closely with the social capital definition of Lin (1999b, 2002a) who, alongside Bourdieu (1980, 1986) and Portes (1998), views social capital as investments in social relations with expected returns: “resources embedded in a social structure that are accessed and/or mobilized in purposive actions” (Lin 2002a, 29). Social capital thus “resides in the networks and groups to which people belong” (Mouw 2006, 79). Unlike economic capital possessed by Ego, social resources remain the property of Ego’s

family, friends or acquaintances and can only be “borrowed” temporarily (Lin 1999b; Portes 1998).¹ Lin further distinguishes three dimensions or ‘ingredients’ of social capital:

“the resources embedded in a social structure; the accessibility to such social resources by individuals; and the use or mobilization of such social resources by individuals in purposive actions. Thus conceived, social capital contains three elements intersecting structure and action: the structural (embeddedness), opportunity (accessibility) and action-oriented (use) aspects.” (Lin 1999a, 35)

Extensive research documents the instrumental role of social capital in status attainment processes (Lin 1999b). Social capital resources have been found to lead to better socio-economic outcomes, such as occupational status, prestige, authority position or earnings (Granovetter 1974, 1985; Lin, Ensel, and Vaughn 1981; Lin, Vaughn, and Ensel 1981; Marsden and Hurlbert 1988; Marsden and Gorman 2001; Graaf and Flap 1988; Völker and Flap 1999), although previous claims of causality can be questioned and estimates may be biased due to nonrandom selection into networks (Mouw 2003, 2006).

Beyond its role in helping individuals accrue socio-economic benefit, social capital is thought to be a key resource through which social inequality is perpetuated at the population level. Bourdieu (1980, 1986) envisioned social capital as one type of capital (alongside economic and cultural capitals) that was employed by privileged classes to maintain and reinforce their social positions and domination. In a more formal approach, DiMaggio and Garip (2012) show that, under certain conditions, social networks² serve to exacerbate initial and existing social inequalities.

A growing body of scholarship also shows that the distribution and use of social capital is not uniform across society. Instead, social capital appears to reflect society’s stratified nature: individuals who belong to disadvantaged groups have poorer access to social capital and benefit less from it (Loury 1977; Lin 2000, 2002a). Why do we observe differences in the role of social capital across social class? Lin relates inequality in social capital between groups to two different processes, linked to the ‘ingredients’ of social capital discussed above: 1) a deficit in *access* to social capital (in terms of quantity & quality) and 2) a deficit in *returns* to social capital (assuming similar levels of social capital, groups benefit differentially from social capital).

¹ Like Bourdieu (1980), Lin (2002a), De Graaf and Flap (1988), we consider social capital as an individual attribute, but recognize the diversity of definitions and that it has also been analyzed as a group property (Coleman 1988; Putnam 2001).

² They refer to network effects more generally and do not adopt the social capital perspective (nor terminology), but parallels can easily be drawn.

Differential access to social capital

A first source of inequality may stem from the differential possession of (or access to) social capital, both in terms of quantity and quality. High-status individuals are more likely to be embedded in large, wide-ranging, diverse and influential networks, whereas low-status individuals tend to have smaller, denser and more homogeneous networks (Campbell, Marsden, and Hurlbert 1986; Pichler and Wallace 2009). High-status individuals are also more likely to have weak ties, which are generally associated with better outcomes (Granovetter 1974) or structural opportunities (Burt 2009), whereas low-status individuals appear to have higher proportions of strong ties and disposable ties (Desmond 2012). In addition, high-status individuals have greater access to influential connections and high-status contacts, and thereby more resourceful networks (Lin and Dumin 1986; Erickson 1996; Barbieri 1996; Völker and Flap 1999; Lin, Cook, and Burt 2001; Moerbeek and Flap 2008; Verhaeghe, Li, and Putte 2013; Tubergen and Volker 2015; Desmond 2012)³. Thus, both the structure and composition of personal networks appears contingent on individual social position, and differences appear more pronounced in countries with greater inequality (see Pichler and Wallace (2009) for a comparative study of Europe).

These findings support what Lin (1999a) has called the “strength of position” proposition, which states that an individual’s social resources are affected by their original position. Position of origin refers both to ascribed or inherited position, as well as attained position⁴ (Lin 2002b, 65). Inequalities in access are driven by both a group’s disadvantaged structural position and lower access to opportunities⁵, and by the principle of homophily - the tendency of individuals to associate with like people (for review, see McPherson et al (2001)).

Differential returns to social capital

A second source of inequality between groups is the differential impact or effect of similar (quality and quantity) social capital. Fewer empirical studies have investigated this issue, but findings tend to

³ For example, Barbieri 1996 : Social capital was affected by father’s status; Lin and Dumin 1986: respondents’ original positions- father’s prestige score – positively related to highest status & range of statuses accessed; Volker & Flap 1996: father’s occupational prestige positively related to highest occupation prestige accessed (as reviewed in Lin 1999)

⁴ Measures of social position vary across studies, some focusing on parents’ position, some on individual’s own achieved status, with a few testing both. Verhaeghe et al 2013 find that parents’ educational level is the strongest determinant of access to social capital, whereas Volker and Flap 1999 find that the effect of fathers’ education is mediated through respondents’ own education.

⁵ The finding that more unequal societies also experience larger inequalities in access to social capital (see Pichler and Wallace 2009) may be evidence of this mechanism.

confirm that high-status members of society enjoy greater rewards from similar⁶ social resources (Lin 2000; DiMaggio and Garip 2012). For example, Granovetter (1995) and Smith (2000) find that higher-status job seekers benefit more from (i.e. enjoy a higher return to) their weak ties and from their influential⁷ contacts than lower-status job seekers. Huang and Western (2011) find that the use of social networks for finding a job is associated with poorer occupational outcomes among lower-educated job seekers than among their university-educated peers.

Lin (2000) identifies three different mechanisms that may explain return deficits or that groups obtain different returns to social capital: not using or mobilizing appropriate social capital; ties' reluctance to assist the less advantaged; or differential responses from labor market structures (bias, discrimination). DiMaggio and Garip (2012) further argue, based on prior research (Hoxby 2000; Hoxby and Weingarth 2005), that higher-status individuals may disproportionately benefit from networks because they are more likely to be influenced by their peers and to adopt their beneficial practices.

Differential mobilization of social capital

Whereas Lin only briefly alludes to the unsuccessful activation of social capital as a potential driver of differential returns, Sandra Smith (2005a) places mobilization of social capital at the forefront of the debate. Indeed, her systematic analysis of the multi-level factors that shape this complex process motivate the need to consider the mobilization of social capital as a separate and equally important source of inequality in social capital, next to inequality in access and returns. In a study of low-income African Americans, Smith (2005b) finds that the job seeker's reputation and the socio-economic statuses of the job seeker and the job contact are highly influential in whether contacts decide to help seekers find a job⁸. The strength of the tie, gender, and broader neighborhood and job contexts are also important factors in this process. Her research resonates with earlier findings according to which individuals with lower SES receive support less frequently from their personal networks (Miller-Cribbs and Farber 2008; Desmond 2012).

⁶ Given the imperfect measures of social capital currently used in most studies, no study can definitively argue that two individuals' social resources are perfectly similar. Thus, inequality in access may always partly explain inequality in returns.

⁷ According to Smith (2000), the weak ties of low-status seekers, unlike those of their high-status peers, do not broaden their opportunities and do not connect them to dissimilar actors and thus to novel information and resources. In our view, this explanation relates more to differences in the type of social capital accessed, than to return deficits at similar levels of social capital.

⁸ She focuses in particular on job referrals.

At the same time, quantitative researchers find that higher-status individuals are less likely to use social ties to find jobs (Corcoran, Datcher, and Duncan 1980; Marx and Leicht 1992; Green, Tigges, and Browne 1995; Campbell and Rosenfeld 1986). This is partly related to the job markets of well-educated job seekers, which value certified expertise and credentials over personal contacts (Chua 2011). Even though higher-status individuals appear less likely than their lower-status peers to mobilize their social capital in the job search process, their networks are not necessarily less useful. As Lin (2000) reminds us, the better and more heterogeneous the resources embedded in the network are, the greater the amount of useful information that is *routinely* circulated in the network (McDonald, Lin, and Ao 2009). Only when such useful information is not freely flowing in the network, does the activation of social capital become necessary. This “invisible hand of social capital”, as Lin calls it, may explain why non job-seekers may enjoy higher occupational attainment than active job-seekers.

All in all, higher-status individuals have greater access to better social capital and appear to enjoy higher returns to it in terms of labor market outcomes than lower-status individuals. Higher-status individuals may be less likely to mobilize their networks for finding a job, but when they do so, these networks are more likely to provide the help requested.

SOCIAL STRATIFICATION AND MIGRANT SOCIAL CAPITAL

Migrant social capital – the social capital embodied in migrant networks – consistently influences international migration. Individuals with migrant networks are more likely to migrate abroad from a variety of societies (Boyd 1989; Massey and Espinosa 1997; Kalter 2011; Stecklov et al. 2010) and there is evidence for both contemporary and historical migration flows (Spitzer 2015; Lemerrier and Rosental 2000). Migrant networks appear to be particularly important where migration is costlier, as in international versus internal migration (Davis, Stecklov, and Winters 2002; Taylor 1986). Previous studies have employed the term migrant networks to refer to individual-level personal ties to migrants, as well as macro community-level networks or migration prevalence. In this paper, we follow the tradition of Bourdieu, Portes and Lin and focus on the first: ego-centric ties.

Despite its strengths and breadth, the migration literature has largely neglected how social stratification in origin societies might influence the role and functioning of migrant social capital. Based on the general social capital literature discussed above, we may expect migrant networks to increase social disparities in access to migration. If higher-status individuals and families are better connected to migrant networks and enjoy higher returns from them (in terms of likelihood to migrate), then migrant social capital could widen the gap between social classes. In contrast, migration scholars theorize that as

migrant networks grow, migrant selectivity decreases, and migrants are more representative of and drawn from broader segments of their origin societies (Massey et al. 1993). In other words, migrant networks are argued to contribute to making access to migration more equitable.

This apparent puzzle calls for a systematic analysis of the social stratification of migrant social capital. Does the strength-of-position hypothesis hold true in this case? Furthermore, do higher-status individuals derive more benefit from their migrant networks? The scholarship linking social position and migrant networks is so far scant; below we review the main findings.

Migrant networks and migration selectivity

Most quantitative scholarship of social position and migrant networks examines returns to migrant social capital and most work is at the macro-level; micro studies are rare. Most studies did, however, examine how the role of migrant networks is gendered.⁹ This dearth in the migration scholarship contrasts with labor market scholars' sustained attention to class differences in social capital. Macro-level, mostly economics, studies have used aggregate data on bilateral migration flows thereafter disaggregated by skill level to investigate whether network influence is similar for different skill groups. Some found no differences in the role of networks by skill level (Orrenius and Zavodny 2005) while others found networks to be more valuable for the less-skilled (Beine, Docquier, and Özden 2010; Neubecker, Smolka, and Steinbacher 2015). These macro-level studies, however, cannot comment on the individual-level mechanisms responsible for the observed associations.

Micro-level quantitative studies would be better suited for this purpose. To our knowledge however, very few studies have tested whether social position conditions the influence of migrant networks. In Mexico and Ecuador respectively, McKenzie and Rapoport (2010) and Bertoli (2010) find that in communities with higher migration prevalence (which the authors use as a proxy for migrant networks), the lower-educated are more likely to migrate to the United States. There is no or slightly positive selection in contexts of low migration prevalence. They interpret their findings to be evidence of the cost-reducing function of community-based migration networks: as networks expand, the costs and risks of migration are decreased for all community members, but to a larger extent for the low-skilled.

⁹ In fact, studies of the gendered returns of migrant social capital (for example; Cerrutti and Massey 2001, Curran and Rivero-Fuentes 2003, Kanaiaupuni 2000 for Mexican-U.S. migration; and Liu 2013, Toma and Vause 2013, 2014 for migration between sub-Saharan Africa and Europe) have found differences between men and women in several contexts, while the gendered access and mobilization of migrant social capital has received much less attention. For example, Curran and Rivero-Fuentes (2003) find that female migrant networks are more important for women, and male migrant networks are more important for men. Left unexplored is whether men and women have differential access to female and male migrant networks, and whether mobilization patterns also differ.

The authors argue that networks are therefore likely to benefit the low-skilled more than the high-skilled since the former have less financial capital and since ethnic enclaves at destination provide services mainly to migrants with low skills and low levels of host-language fluency (Mckenzie and Rapoport 2007; Bauer, Epstein, and Gang 2005). According to this perspective, human capital (skills and schooling) and social capital (migrant networks) are partial substitutes in lowering the cost of migration.

However, using migration prevalence to measure migration networks is problematic as it assumes social relationships actually exist among (all) members of the community. In other words, it presumes similar access to the social resources embedded in migration networks. This ignores the fact that internal socio-ethnic differentiation and kinship structures condition access to social capital in most communities (De Haas 2003, 2010b; Garip and Curran 2010). In a community-level analysis, Garip and Curran (2010) find that migration selectivity largely depends on the accessibility of migrant networks. If the total migration experience is concentrated among fewer members of the community, out-migration remains a highly selective process in terms of education and skill.

Differential mobilization of migrant networks

Ethnographic research brings some further evidence that social position conditions the successful mobilization of migrant social capital. In her ethnography of West African migrants, Vilna Bashi (2007) documents migrants' reluctance to help prospective migrants. Indeed, the migrants in Bashi's study openly consider the prospective migrant's social position and whether that prospective migrant can "improve their [the migrant's] lifestyle or enhance their reputation" before they decide whether to provide aid (Bashi 2007, 6). Such strategies echo Smith's idea of functional deficiency (2005b) and Lin's ideas of return deficit (2002b) by social position. Other research suggests that the tightening of immigration restrictions turns migrants from 'bridgeheads' into 'gatekeepers' (Böcker 1994; Engbersen, Snel, and Meeteren 2013; Snel, Engbersen, and Faber 2016). These studies argue that as migration becomes more difficult, established migrants are increasingly unwilling to help prospective migrants, particularly the lower-skilled. Migrants' own social position also plays a role: in her ethnography of Filipino out-migrants, Paul (2013) found that migrants in more secure job positions – and who had better experiences with employers at destination - were more likely to help their contacts migrate.

Finally, some work suggests that social position also shapes which *type* of migrant social capital prospective migrants may draw on. Echoing findings from the general social capital literature (Granovetter 1973), an ethnography of Hong Kong aspiring migrants (Wong and Salaff 1998) found that

higher-skilled prospective migrants, despite having greater access to kin-based migrant networks, employed instead extensive networks of weak ties – classmates, friends and former colleagues - in their migration process. These ties were able to offer relevant information and assistance with finding jobs and setting up businesses at destination. In contrast, working-class prospective migrants depended heavily on their stronger kin networks for assistance getting a visa and finding jobs and accommodation abroad.

To sum up, existing evidence, which is mostly based on aggregate or ethnographic data, suggests that the lower-skilled benefit more from migrant networks than the highly-skilled in terms of migration chances. By decreasing the costs of migration, migrant social capital is argued to make migration more accessible, particularly to those who lack other forms of capital (human, financial). Thus, lower-skilled prospective migrants may need to rely more on migrant networks for assistance with migration. At the same time, established migrants may be more likely to refuse helping the low-skilled migrate, particularly if the economic and political context at destination is restrictive. Finally, existing work offers few clues as to how social position may condition access to migrant social capital.

MIGRATION FROM DRC, GHANA AND SENEGAL TO EUROPE: A HIGHLY SELECTIVE PRACTICE

International migration, and particularly migration to Europe, is a highly desired life prospect for many African young adults. For example, in Senegal, almost three quarters of young adults (between 18 and 39) aspire to move to Europe, according to a recent survey (“EUMAGINE” 2013) compared to about two-thirds young people in Morocco and only 40% in Turkey. Lack of robust economic opportunities, slow wage growth and large wage gaps, alongside economic and political instability in West and Central Africa, contribute to making the prospect of living and working in Europe attractive for many. Moving to Europe however is a highly costly endeavor, particularly in contexts of tightening restrictions on migration. While many *aspire* to migrate to Europe, only the most resourceful – in terms of financial, human and social capital – are likely to be *able* to do so.

Indeed, whereas there is a lively debate about the nature of educational selectivity in the case of Mexican-U.S. migration and many studies have found evidence for negative or intermediate selectivity (Caponi 2010; Orrenius and Zavodny 2005; Rendall and Parker 2014; Ibarra and Lubotsky 2007; Moraga 2010; Ambrosini and Peri 2012), scholars of sub-Saharan African migration to Europe have found consistent evidence for positive educational selectivity (Docquier 2006; Gonzalez-Ferrer et al. 2013; Shaw 2007). African migration to the U.S. also likely reflects positive selection, as suggested by studies of health (Hamilton and Hummer 2011; Read and Emerson 2005). Furthermore, African

migration to Europe, like other migration flows, is highly selective in terms of social capital: those with kin or friends abroad, and particularly with ties based in Europe (Liu 2013; Toma and Vause 2014), are much more likely to migrate than those without such ties.

While sharing many similarities, the three countries are also different in many respects, differences which have shaped the patterns and selectivity of migration flows to Europe. The richest in natural resources of the three, DR Congo currently faces a poorer economic situation, having experienced recent civil war and continued political instability. It is ranked as one of the poorest nations in the world. Despite an extended period of decline, there is evidence that the population's educational attainment increased substantially in recent decades, especially in urban areas, and was accompanied by decreasing gender gaps in education and labor force participation (Shapiro, Gough, and Nyuba 2011). The economic and political crisis drove increasing numbers of Congolese to leave the country: migration rates almost tripled between 1975 and 2008 (Schoumaker and Beauchemin 2015). However, the great majority of moves occur within Africa, and flows towards Europe - mainly Belgium, the former colonial power - have stagnated and even slightly declined between 1990 and 2008. International migration flows remain highly selective in terms of educational attainment and material resources, but not on gender (Gonzalez-Ferrer et al. 2013).

Since its independence in 1960, Senegal has generally followed a trajectory of political stability but also experienced several profound economic crises (Fall et al. 2010). The country is still one of the least educated in Sub-Saharan Africa and stands out in terms of gender inequalities in education and labor market activity, ranking 140th out of 155 countries on gender-related development (UNDP 2009, 183). From the 1980s onwards, Senegalese out-migration has been characterized by two major trends: the diversification of destinations and the intensification of flows, especially towards Europe and North America (Ndione and Broekhuis 2006; Fall 2010). Migration flows remain heavily male-dominated, with women representing only about 20% of recent emigrants in 2002 (Senegalese census 2002), and educational selectivity is lower than in DR Congo (Gonzalez-Ferrer et al. 2013).

Of our three cases, Ghana is the greatest success story in terms of politics and economics. After experiencing a period of internal political turmoil and economic deterioration up to the 1990s, Ghana has since benefitted from high growth rates and moved quickly into the ranks of middle-income countries (ISSER 2011). Migration towards African countries, the main destination up to the 1990s, decreased substantially after this period, whereas migration to Europe and towards other, primarily U.S. and Canadian, destinations increased moderately (Schoumaker et al. 2013). Emigration from Ghana is now oriented mainly to the UK and other English-speaking countries, with newer destinations such as

the Netherlands, Germany and the UK attracting less-skilled compatriots. A recent rise in return migration from European countries has been reported, but the evidence is still anecdotal (IOM 2009).

SOCIALLY STRATIFIED MODEL OF MIGRANT SOCIAL CAPITAL

As discussed above, existing theories of social capital and migrant social capital have some contrasting predictions for the interaction between social position and migrant social capital. This is, in part, due to how local job searches – the focus of most influential studies of social capital – differ from high-cost international migration. International migration requires an alignment of an individual's *aspiration* and *capability* to move abroad (De Haas 2010a; Carling 2002). Like the privileged in most societies, young sub-Saharan Africans with high levels of human, cultural and financial capitals may have less incentive to move abroad and may prefer to compete for the (few) available high-level positions at origin. At the same time, they have the necessary resources to undertake a costly relocation, and to navigate the various risks and uncertainties involved. Migrant networks influence both dimensions by providing the necessary motivation, information and funds for undertaking the trip. They may partly compensate for the lack of human, cultural and financial capitals and thus be particularly helpful for the less-resourced. In contrast, social networks can boost one's cultural and human capital in the job search but can rarely substitute for it.

Integrating findings from both the labor market and the international migration scholarship, we propose a socially stratified model of migrant social capital. We argue that three main factors interact to shape individual experience of migrant social capital: the specific dimension of social capital under study (access, mobilization, returns), the sources of social capital (*e.g.* tie strength), and the prospective migrant's social position. Social position is expected to structure access, mobilization and returns to social capital differently. Given the positive selectivity of African migration to Europe and due to the action of homophily mechanisms, this model predicts that individuals in higher social positions will enjoy greater access to migrant social capital, both to stronger close kin ties and to weaker ties to extended kin and friends. Nevertheless, we expect that at similar levels of access to migrant networks, individuals in lower social positions will benefit more from their migrant social capital in terms of migration chances, as they lack other forms of capital (*e.g.* human, financial). We thus expect those in lower social positions to rely more on their migrant networks for assistance with migration.

For access to migrant social capital, the model predicts that access to strong (close kin) migrant ties as well as access to weak (extended kin and friend) migrant ties will depend on individual's social position in their origin society, beyond other factors. More formally,

$$a_s = \beta_0 + \beta_1 SP + \beta_2 X + \varepsilon \quad (1a)$$

$$a_w = \beta_0 + \beta_1 SP + \beta_2 X + \varepsilon \quad (1b)$$

where a_s is the probability of reporting access to migrant social capital embodied in close kinship ties, a_w the probability of reporting access to migrant social capital embodied in extended kin and friendship ties, SP is the individual's social position in the origin society, X is a list of covariates such as gender, age, past migration, country of origin that may shape access reports, and ε is a disturbance term. This model predicts that access to migrant social capital will increase as individual's social position increases.

The model further predicts that after controlling for access to migrant social capital, the returns to social capital (i.e. in terms of migration likelihood) will depend in part on individuals' social position in their origin society. More formally,

$$r = \beta_0 + \beta_1 SP + \beta_2 MSC - \beta_3 (SP \times MSC) + \beta_4 X + \varepsilon \quad (2)$$

In this model, social position (SP) has a positive sign, which indicates that the probability of migration (r) is expected to increase as individual social position increases. Migrant social capital (MSC) also carries a positive sign, which indicates that the likelihood of migration is expected to increase as migrant social capital increases. The negative interaction term ($SP \times MSC$) indicates that individuals with higher social position will have lower returns to migrant social capital than those with lower social position (human capital).

Finally, for the mobilization of migrant social capital, the model predicts that reports of whether migrants mobilized migrant social capital to decide or pay for migration will depend in part on their social position in the origin society. More formally,

$$m = \beta_0 - \beta_1 SP + \beta_2 X + \varepsilon \quad (3)$$

where m is the probability of reporting mobilization of migrant social capital, SP is the individual's social position in the origin society, X is a list of covariates such as gender, age, and ε is a disturbance term. This model predicts that mobilization of migrant social capital will decrease as individual's social position increases.

DATA & METHODS

We use recent retrospective data from the Migration between Africa and Europe (MAFE) project (2008-2010) (MAFE 2016).¹⁰ MAFE is an example of the multi-sited longitudinal data collection of migration that scholars have called for recently (Beauchemin 2014; Liu et al. 2016; Willekens et al. 2016). MAFE interviewed non-migrants and return migrants at origin (the Democratic Republic of Congo, Ghana, Senegal) and current migrants at destination (Congolese in Belgium and the U.K.; Ghanaians in the Netherlands and the U.K; and Senegalese in France, Italy, and Spain) (see Beauchemin 2012). Nearly 3000 individuals were randomly sampled in selected urban areas of Democratic Republic of Congo (Kinshasa), Ghana (Accra and Kumasi) and Senegal (greater Dakar). With the exception of Spain, for which a random sampling frame (*el Padrón*) was used, MAFE employed quota sampling and a variety of recruitment channels¹¹ to interview 1450 current Congolese, Ghanaian and Senegalese migrants in Europe (Beauchemin and González-Ferrier 2011).

We rely on the individual retrospective survey data. Nearly identical individual questionnaires in each location documented individuals' detailed housing, union, children, work and migration histories. In addition, retrospective histories of migrant networks, documentation status, remittances and property ownership were collected.

Variables

Measuring migrant social capital Despite recent innovations in measuring social capital (*e.g.* naming generators, position generators), the literature still suffers from a lack of longitudinal measures that can account for when the individuals met one another, and their trajectories before and since meeting. Studies of international migration have the additional challenge that networks are transnational and dynamic. It is important to consider migrant social capital dynamically. Previous ethnographic study demonstrates how immigrants' networks change over time at destination, with lasting impacts on the

¹⁰ The MAFE project is coordinated by INED (C. Beauchemin) and is formed, additionally by the Université catholique de Louvain (B. Schoumaker), Maastricht University (V. Mazzucato), the Université Cheikh Anta Diop (P. Sakho), the Université de Kinshasa (J. Mangalu), the University of Ghana (P. Quartey), the Universitat Pompeu Fabra (P. Baizan), the Consejo Superior de Investigaciones Científicas (A. González-Ferrer), the Forum Internazionale ed Europeo di Ricerche sull'Immigrazione (E. Castagnone), and the University of Sussex (R. Black). The MAFE project received funding from the European Community's Seventh Framework Programme under grant agreement 217206. The MAFE-Senegal survey was conducted with the financial support of INED, the Agence Nationale de la Recherche (France), the Région Ile de France and the FSP programme International Migrations, territorial reorganizations and development of the countries of the South. For more details, see <http://mafeproject.site.ined.fr/en/>.

¹¹ Including snowballing, intercept points, contacts from origin households, or through migrant associations and public places

lives and families of immigrants (Hagan 1998). In this study, we exploit dynamic, transnational, Ego-centric measures of social capital.

We derive our measures of migrant social capital from full retrospective (year-by-year) migration histories collected of Ego's parents, siblings, spouses, extended kin and friends. For each network member, years abroad and countries lived are recorded, as are sex, the year they met Ego, year of death (if applicable). Given our interest in migration to Europe and previous studies that emphasize the importance of distinguishing among destination-specific networks (Liu et al 2016b), only the individuals currently living in Europe in a given year then constitute Ego's personal migrant network. The composition and location of migrant networks can thus change over time as family or friends migrate abroad, move onward (Toma and Castagnone 2015), or return to origin. We construct time-varying variables that can capture this yearly variation in our respondents' migrant networks.

We measure *Access* to migrant social capital as having any kin or friends currently living in Europe. Throughout our analysis, we consider migrant spouses separately given their close relationship with legal family reunification. We further distinguish between access to close kin (parent or sibling) and access to extended kin or friends in Europe. For each of these, we construct both a dichotomous variable – whether or not Ego has access to such ties - and a continuous variable, a count of the number of ties. We are interested in pre-migration access to migrant networks and not in the networks developed following migration. As a result, for migrants, we measure access to migrant social capital in the year prior to their first migration to Europe. For respondents who had not migrated by the time of the survey, we measure access to migrant social capital at the average age of migration (29 years in our data), to enhance comparability. For non-migrants younger than 29, we measure access at the time of the survey. Our analyses are thus cross-sectional. We report results from logistic regression models where access is measured dichotomously, but also conduct linear regression models using count variables (number of ties) with similar findings.

The *Mobilization* of social capital focuses on the experiences of migrants. Here, mobilization refers to migrant reports of whether migrant networks contributed to the decision-making or the financing of their first migration trip. For each trip, the respondents are asked: "Who decided about your trip/migration" as well as "Who helped to finance your migration". They have to identify all family members or other persons who participated in each case, and report whether any of these were identified as members of their migrant network. This cross-sectional analysis of migrant social capital mobilization is restricted to migrants with migrant networks, since only they could answer the question of whether their migrant networks were involved. As our outcomes are binary (whether migrant

networks participated in the migration decision-making / to funding the trip), we use logistic regression methods.

Finally, to analyze *Returns* to migrant social capital, we analyze the first international migration to Europe, and whether social position conditions the effect of migrant networks on the likelihood to migrate in an event history framework. We choose to focus only on adult migrations, as migrant social capital may play differently for child migrations, and only consider moves to Europe (since current migrants were not interviewed elsewhere). We employ logistic regression models in a discrete-time event history framework and thus follow individuals from 18 years onwards, up to their first migration to Europe or up to the time of the survey, whichever comes first. Furthermore, we right censor individuals who first migrate elsewhere¹². We use time-varying measures for migrant networks and most other control variables.

Social Position Our primary covariate is social position. We measure both ascribed and attained social position. First, we use father's highest level of education to proxy for respondents' family social background. Since educational distributions vary quite substantially across the three countries (with DRC the most educated and Senegal the least), we construct relative measures of education - low, medium and high educated - which differ between Senegal, on the one hand, and Ghana and DRC, where individuals are more educated, on the other¹³. MAFE also contains some information on father's level of occupation¹⁴, which we use as an alternative for father's level of education in robustness checks, with very similar findings.

Second, we include Ego's own highest level of education as a measure of achieved status. While this should ideally be measured prior to the primary outcome (migration), MAFE does not offer a robust time-varying measure. While MAFE captures individual educational and occupational life trajectories (from respondent aged 6), it did not collect yearly information of specific grade level and thus limits the construction of a true time-varying measure of educational attainment. Our analyses use highest level of education, which is self-reported at the time of survey, and we recognize its potential bias. As a partial

¹² They are no longer in the risk set from the year of their migration onwards.

¹³ The low-educated fathers are those with no formal education in Senegal and fathers with primary education or below in Ghana and the Democratic Republic of Congo; the medium-educated fathers include those attaining primary education in Senegal and secondary or vocational education in RDC and Ghana; the high-educated fathers are those who reach secondary education or above in Senegal, and tertiary (university) education or above in Ghana or DRC.

¹⁴ We distinguish between three categories: 1) fathers not working, deceased or unknown 2) unskilled workers 3) semi-skilled or skilled workers.

remedy, we conduct the same analyses using a time-varying - if imperfect - measure of education that was constructed post-survey: results are very similar (available upon request).

Covariates In nearly all models, in addition to our main variables of interest, we account for several time-invariant covariates – gender, number of siblings, whether respondent is a first-born child, country of origin (DR Congo - reference, Ghana, Senegal) – as well as for a series of time-varying variables: age, partnership status (single - reference, spouse outside Europe, spouse in Europe), asset ownership, number of children, employment status (employed- reference, studying, not working-which includes the inactive and the unemployed); periods (before 1990 - reference, 1990-2002, after 2003).

We have no theoretical reasons to expect different interactions between social position and migrant social capital across the three countries of origin or by gender, nor sufficiently large sample sizes to test such differences. We therefore run pooled models for the main body of our analysis in which we control for gender and for the country of origin effect, while also verifying that similar patterns are found in the three countries and for men and women (results available in Appendix). Table 1 presents descriptive statistics on our independent variables and covariates at the time of the survey, by migration status.

Methods We employ descriptive statistics to show the overall sample characteristics by migrant status (Table 1), as well as the access to migrant social capital by education (Table 2). We use logistic cross-sectional regression models to estimate the relative influence of social status net of other factors on access to migrant social capital (Table 3), while we utilize discrete-time hazard regression models to estimate interaction effects between social position and migrant social capital on the likelihood of migration in a given year (Table 4). Our last analyses restrict the sample to migrants only to describe mobilization of social capital resources (Table 5) and to estimate the likelihood an individual mobilize migrant social capital to help decide or finance migration using logistic cross-sectional regression models (Table 6).

RESULTS

A clear social stratification of access to migrant social capital

We start by descriptively comparing access to migrant social capital by individuals' social position, approached both by father's education and by own education¹⁵. Findings in Table 2 show that access to migrant networks is clearly, and linearly, stratified by social position. Descriptive statistics show a clear gradient by educational level in the percentage of respondents who report knowing at least one person based in Europe: only about 15 percent of individuals with low-educated fathers have any ties in Europe, compared to about 23 percent of those with medium-educated fathers and almost half of those with highest-educated fathers. Access to close kin and access to extended kin and friends based in Europe is similarly stratified. Furthermore, we observe a similar gradient whether we use parental or individual education for capturing social position. We further investigated differences in the number of ties to current migrants, to examine whether the quantity of migrant social capital also varied by social position. Restricting the sample to those who have at least one migrant tie, we find that the average number of connections, while increasing with level of education, does not vary significantly between groups (results available upon request). This is the case for both close kin migrant ties and ties to extended kin or friends.

Logistic regression models allow us to consider further characteristics that may also shape access to migrant social capital (Table 3). Even after controlling for a range of individual and contextual attributes - including age, gender, sibship size, employment, family status, country of origin, period - we find that access to migrant social capital increases sharply with level of education. Furthermore, the two variables - fathers' and individuals' education - have a cumulative effect, each maintaining independent effects net of the other: having attained a higher level of education expands access to migrant social capital beyond having a higher-educated father. Interestingly, the effects appear larger with respect to weaker migrant networks: access to migrant extended kin and friends is more strongly and linearly stratified by education than access to migrant close kin. This echoes findings from the general social capital literature according to which the networks of lower-status individuals are more likely to be composed of strong ties to kin.

Access to close kin networks further depends on the number of siblings and birth order, a finding that echoes Palloni et al. (2001). Given Sub-Saharan African women's lower likelihood to migrate (Vause and Toma 2015) and the high levels of gender-based homophily of social networks (McPherson, Smith-Lovin, and Cook 2001), we would expect women to have lower access to migrant social capital

¹⁵ In most cases, respondents have already attained their highest level of education by the average age of first migration, 29 (since we do not distinguish further within the tertiary level category and consider anyone holding some tertiary education as « high educated »).

than men, particularly to weaker ties. This is indeed what we find with respect to access to extended kin and friendship migrant ties. Having a partner living in Europe is associated to larger access to other close kin migrant ties – parents or siblings – relative to individuals who are currently single and even more so relative to individuals whose partner is living in the country of origin. Finally, two contextual factors strongly condition migrant social capital accessibility and partly reflect spatial and temporal patterns of migration flows to Europe. First, the Senegalese are the most ‘connected’ in terms of both close kin and more extended migrant ties, possibly due to larger rates of Senegalese migration to Europe (Schoumaker and Beauchemin 2015). Ghanaians are least likely to have access to extended ties whereas the Congolese are least connected to close kin ties. Second, levels of accessibility to both type of ties rise over time, in parallel to the growth in Europe-based stocks of migrants from each country.

We also ran separate models by country of origin, and we find the same patterns of social stratification of access to migrant social capital in each country: DR Congo, Ghana and Senegal (results in the Appendix). Furthermore, modeling access as a continuous variable – number of ties - using ordinal least square regression with the same co-variates, leads to very similar results (available upon request).

Differential returns to migrant social capital

We are further interested in examining whether the role of migrant social capital is contingent upon the individual’s social position, or, in other words, whether higher and lower-educated individuals experience differential returns to their migrant networks. We thus estimate, in a discrete-time event history framework, the likelihood of a first migration to Europe in a given year, taking into account social position (measured as both individual education and father’s education), access to networks (close kin, extended kin or friends) and the interaction of the two, as well as a host of control variables shown to influence migration likelihood.

First, findings reported in Table 4 confirm prior research showing that access to migrant networks significantly and substantially increases one’s migration chances. Indeed, network access is one of the factors with the largest effects (OR = 3.6, Model 1). Both stronger ties to close kin in Europe and weaker ties to extended kin, friends or acquaintances increase the likelihood to make a first adult trip to Europe, and their effects are cumulative (i.e. access to weaker ties is significant after accounting for access to strong ties). Second, like previous study (Gonzalez-Ferrer et al. 2013), we find evidence for positive educational selectivity of Sub-Saharan African migration to Europe. The higher an individual’s own level of education, the greater their likelihood to move to Europe. Moreover, having a higher-educated father further increases the migration hazard, over and beyond one’s own attained level of

education. This is a novel finding, suggesting that migration may serve as a strategy of the elites to reproduce their existing social advantage.

Our findings thus confirm the positive effects of (migrant) social capital as well as of human capital and social position in migration from Sub-Saharan Africa to Europe. We now turn to the question of interactions between the two: do returns to migrant networks vary by individual's social position? We interact individual access to migrant social capital with father's level of education (Model 2) and with individual's own level of education (Model 3). Both terms are negative and significant, suggesting that medium- and higher-educated individuals derive lower benefits from this resource compared to the lowest-educated individuals. Access to networks leads to a six-fold increase in migration hazard amongst the lowest-educated, compared to only a three-fold increase for the highest-educated. Thus, the *relative* gain from migrant networks is smaller for higher-educated candidates to migration, who appear to benefit less compared to their lower-educated counterparts. Similarly, individuals with highest-educated fathers profit less from their networks than those with low-educated fathers¹⁶. However, the *absolute* gain derived from accessing Europe-based networks in terms of migration probability appears to be larger for the highest-educated, as illustrated in Figure 1's predicted probabilities of migration, as calculated from Table 4 Model 3.

Models 4 to 6 examine whether migrant social capital plays out differently depending on the strength of the ties between the respondent and the migrants. Access to close kin migrant ties and access to extended kin and friends living in Europe have similar¹⁷ positive and significant impacts on migration hazards. Furthermore, in both cases, the interaction with human capital is significant and negative: medium and higher-educated individuals derive lower benefits from access to strong migrant ties as well as from access to weaker migrant ties compared to their lower-educated peers.

We find similar patterns when conducting the analyses separately by country of origin (results available upon request), except for Congolese migration to Europe. While educational selectivity appears more pronounced in this flow, returns to networks do not significantly vary by individuals' level of education (though coefficients are still negative). At the same time, access to migrant social capital is most strongly stratified in the Congolese context, for both types of ties.

¹⁶ Access to migrant networks leads to a fourfold (OR=3.95) increase in migration hazard for those with low-educated fathers, compared to a significantly lower (OR= 3.95*0.64=2.5) increase among those with high educated fathers.

¹⁷ T-tests show no significant difference between the two coefficients.

Lower-educated individuals, more likely to actively mobilize their migrant networks

A potential explanation for the lower returns derived from migrant social capital by higher-educated migrants may be their lower reliance on migrant networks, particularly with respect to the financing of their migration trip. The MAFE survey also includes some measures of network use, which allow us to examine whether social position also conditions the *mobilization* of migrant networks. Migrants are asked whether they decided their migration trip by themselves or together with others (or whether it was decided only by others), and whether these other individuals were living or had lived abroad. Nearly identical questions were asked about the financing of the trip.

Descriptive results presented in Table 5 show that, among migrants with kin or friends in Europe at the time of their first migration to Europe, the lower-educated are about as likely as medium- and higher-educated to report that these ties contributed towards funding their first trip to Europe. Confidence intervals overlap. In contrast, local networks appear significantly more likely to contribute to financing the migration of the higher-educated. As a result, the higher-educated are less likely to have self-funded their trip. Similar patterns are apparent when considering father's education, though differences are even less pronounced. Furthermore, we find no robust evidence that the role of migrant networks in the migration decision varies with individual's own education or their father's.

Other factors may intervene to confound the relationship between level of education and migrant social capital mobilization – including gender, reason for migration and network composition. Table 6 presents the results of two logistic regression models which estimate the likelihood that an individual reports the migrant network's participation in their decision to migrate (Model 1) or in the financing of their migration (Model 2). As in the descriptive statistics, only the first adult migration to Europe is considered, and only those who had access to a migrant network besides the partner at the time of their migration are included. We control for gender, age, employment status, asset ownership, reason for migration, partnership status, access to close migrant kin, access to migrant extended kin or friends, country of origin and period.

We find that individual's own level of education is negatively correlated with the likelihood of migrant network involvement in trip financing, and, to some extent also in the migration decision. In contrast, father's education does not significantly shape migrant social capital mobilization. Furthermore, migrant networks are more likely to contribute to trip financing or decision-making for certain groups: women (only with respect to decision-making), students (only with respect to trip financing), migrants moving for family reasons, migrants with EU-based kin and recent migrants

(financing only). The involvement of the migrant network is negatively associated with age at migration, moving abroad for study purposes and living in Senegal.

DISCUSSION

Despite growing evidence of migrant social capital's key role in international migration, we still know little about how it relates to social position and social stratification in origin societies. Yet there is a large literature on the social stratification of social capital focusing on labor market outcomes and processes of status attainment from which the migration scholarship could benefit. Applying this literature's insights to the context of migration may also prove profitable to the general social capital research by testing some of its tenets in a new context. Whereas social capital has generally been found to reinforce socio-economic inequalities (Lin 2002b; DiMaggio and Garip 2012), previous evidence suggests that migrant social capital may play a role in making access to international migration more equitable (Massey 1990; McKenzie and Rapoport 2010).

This paper aims to address part of this puzzle, by investigating at an individual level whether and how social position shapes the role of the social capital which is embedded in migrant networks. It borrows the theoretical tools of the general social capital literature and, following Lin (2002) and Smith (2005), distinguishes between access, returns, and mobilization of (migrant) social capital. Whereas much academic attention has been dedicated to the case of Mexican migration to the United States, we shift the focus to a less-studied, but increasingly important migration flow: that of Sub-Saharan African migration to Europe, particularly that from Senegal, the Democratic Republic of Congo and Ghana. While sharing some similarities with Mexican migration, like a culture of migration in origin societies and the important role of migrant networks, African flows to Europe are more positively selected on education. We draw on large-scale, multi-site retrospective data collected between 2009 and 2010 by the Migration between Africa and Europe (MAFE) project.

Overall, our results illustrate important class dynamics in accessing, using and benefiting from migrant networks in international migration from Africa to Europe. Higher-educated individuals and those whose fathers are higher-educated appear to be better connected to Europe-based migrant networks, whether these are composed of stronger ties to close kin or of weaker bonds to extended kin and friends. The strength-of-position proposition (Lin 1999a), stating that the higher the inherited and attained status, the better the access to social capital, is thus validated with respect to migrant social capital. Homophily probably plays a role here, as social networks tend to be homogenous in terms of education, and the more educated are also more likely to be migrants. Thus, higher-status individuals'

better access to migrant networks may partly reflect better access to other educated and higher-status kin and peers.

Both migrant ties to close kin and to more extended kin and friends are crucial factors in migration from Africa to Europe, significantly and substantially increasing migration likelihood. This tends to support the social resources proposition with respect to migrant social capital, in line with increasing evidence in the migration literature (Palloni et al. 2001; Winters, de Janvry, and Sadoulet 2001; Garip 2008, 2016). However, like most prior studies, our analysis is also vulnerable to potential endogeneity biases (Mouw 2003, 2006)—selection into networks, omitted variable bias -, and thus we should interpret these findings with caution. In this paper, we go beyond prior work by examining whether the returns to migrant networks are contingent upon individuals' social position. Our findings reveal that migrant networks appear to influence the migration chances of the higher-educated relatively less than those of the lower-educated. This contrasts with some studies finding that the benefits of accessed social capital in terms of employment or health outcomes are larger for higher-status individuals (Behrman, Kohler, and Watkins 2008).

In line with other work (Marsden and Gorman 2001), we find that the higher-educated are less likely to actively mobilize their migrant networks for migration trip financing than the lower-educated. Indeed, the higher-educated arguably have other types of capital they can draw on, such as their human capital but also their local-based social capital, which high-educated migrants appear more likely to activate. The social capital scholars usually interpret the higher returns to social capital accruing to high-status individuals as greater pay-offs in terms of the desired outcomes, but the same results may also be interpreted as suggesting a heavier dependence on certain (external) resources by some groups. Those lacking human capital rely more on migrant social capital in order to migrate. In this way, human and social capital serve, to some extent, as partial substitutes for one another¹⁸.

Even if migrant social capital increases somewhat less their chances to migrate, higher-status Africans remain more advantaged in their network access than their lower-status counterparts. Access to this valuable social resource is thus unevenly distributed within the society. The effect of migrant networks on society- or community-level inequality in access to migration is beyond the scope of this paper. However, it is reasonable to expect that initial differentials in migrant network access exacerbate inequalities in migration, as DiMaggio and Garip (2012) have formally shown with respect to a wide range of practices. Indeed, the migration context we study here fulfills the three conditions that

¹⁸ At the same time, they are also partly complementary, as the difference in returns does not compensate for the payoff to each form of capital.

DiMaggio and Garip identify for social networks to aggravate inequality: 1) migration from Sub-Saharan Africa to Europe tends to improve adopters' well-being, 2) the likelihood to migrate is a function both of individual endowments such as human capital or father's human capital, and of access to migrant networks 3) High-status individuals are more likely to have access to migrant networks, probably as migrant networks are homophilous with respect to human capital and status, which are themselves associated with migration. Under these conditions, DiMaggio and Garip argue, "advantages individuals obtain from initial endowments (e.g. financial or cultural resources) may be compounded by network influences, exacerbating intergroup inequality in the adoption of rewarding practices relative to what we would expect based on individual differences alone" (2012, 94). The exacerbating effect of networks should be particularly strong in the case of migration, a risky and complex practice requiring what the authors call a "complex contagion", or a sustained input from social networks. Future research should test these predictions with respect to society-level intergroup inequalities in access to migration.

This paper is not able to account for the level of resources embedded in networks, i.e. the status of the contact members. Indeed, the social position of migrant network members is a blind spot in our analysis, a dimension which is nevertheless consequential for the assistance that migrant networks may provide. Unemployed, undocumented migrants may be unable to help their kin or friends wishing to migrate. The MAFE data goes much further than previous migration surveys in collecting information of a large span of respondents' direct ties to migrants, as well as detailed longitudinal information about the ties' migrations. However, like most other surveys, it records neither the occupation nor the educational level of network members: information that would help us to gauge the amount of embedded resources. Had we been able to observe these, we would expect to find even stronger stratification in access to social capital resources, due to social network homophily along the lines of education and occupation. Future surveys should collect more information on the actual resources embedded in migrant networks.

A further limitation of our analysis is that we cannot explore in detail contextual differences in the social stratification of migrant social capital. While confirming the general patterns revealed by a pooled analysis, separate models by country of origin also illustrate some differences between our three countries of origin. Overall, social stratification is more pronounced in the Democratic Republic of Congo, where both access to migrant networks and access to migration are more unequal. Furthermore, lower-educated Congolese do not derive higher returns from their migrant social capital compared to their higher-educated counterparts. As a result, we can expect migrant social capital to play a larger role in migration inequalities in the Congolese context. This may partly be related to the fact that migration

to Europe remains a relatively rare phenomenon in DRC (compared to Senegal and Ghana where migration rates are higher). Consequently, migrant networks are smaller and more concentrated among the highly educated, who are the most likely to move.

Indeed, the uneven accessibility of migrant networks probably constrains the development of migration flows, as Garip (2008) has shown for internal migration in Thailand. Differences in the distribution of migration experience among village members were found to be the biggest source of divergence in community migration outcomes: communities with low levels of equality in access to migrant networks were expected to experience the lowest increases in migration levels. While highly innovative, Garip's analysis takes neither individual social position nor community-level social stratification into account, dimensions which we expect to compound further observed differences.

Our findings may serve to challenge, to some extent, previous studies that link the expansion of migrant networks to negative migration selectivity (McKenzie and Rapoport 2007; McKenzie and Rapoport 2010; Bertoli 2010). While we also find that lower-skilled individuals experience larger returns to migrant networks, our results further point to large differences in access to these migrant networks by skill level, a dimension which these previous studies fail to consider. In measuring community-based migration networks (rather than personal migrant networks), they assume these to be equally accessible to community members, independent of skill level or background. Our findings suggest this is most likely not the case and call for more fine-grained, individual-level measures of migrant social capital in future surveys.

This paper builds off and contributes to both the social capital scholarship focused on status attainment and socioeconomic standing, and to the migration literature examining the role of migrant networks in international mobility. Whereas most theoretical and empirical work on social capital focused on labor market outcomes, we examine how social capital functions in the context of international migration, a much costlier endeavor. Our findings lead us to temper the role of social capital in reinforcing inequality, as access to migrant networks may partly compensate for human capital deficiencies. At the same time, it also challenges migration studies which have emphasized the equalizing influence of migrant networks by underlining the large class-based inequality in access to this precious social resource, inequality so far ignored by prior studies.

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TABLES & FIGURE

TABLE 1: DESCRIPTIVE STATISTICS OF STUDY SAMPLE, BY MIGRANT STATUS

	Non-migrants	Migrants
Father's education		
Low (n=2,143)	44.9%	38.8%
Medium (n=1,878)	39.3%	30.9%
High (n=1,020)	15.9%	30.3%
Individual education		
Low (n=1,345)	30.9%	13.3%
Medium (n=2,513)	49.1%	37.4%
High (n=1,514)	20.0%	49.3%
Gender		
Man (n=2,428)	42.2%	64.3%
Woman (n=2,971)	57.8%	35.7%
Employment status		
Employed (n=3,826)	69.8%	78.5%
Student (n=279)	5.0%	5.9%
Not working (n=1,284)	25.2%	15.6%
Asset ownership		
	36.1%	54.0%
EU-based networks		
	33.0%	67.9%
Partnership status		
Single (n=1,597)	33.3%	23.7%
Partner not in Eur (n=2,927)	64.3%	43.1%
Partner Europe (n=875)	2.4%	33.1%
First born		
	23.9%	25.9%
Age at time survey		
	41.4	43.7
Number of children		
	0.6	0.4
Number of siblings		
	6.9	6.5
Country of Origin		
RDC (n=2,066)	40.2%	14.2%
Ghana (n=1,665)	31.0%	29.4%
Senegal (n=1,668)	28.8%	56.4%
Reason for 1st migration to EU		
Family (n=336)		19.4%
Economic (n=585)		43.7%
Study (n=272)		24.6%
Other (n=272)		12.3%
Weighted percentage	.924	.076
Unweighted frequency	3927	1472

Source: MAFE Individual surveys, 2008-2009.

Notes: Results reported for year of survey

TABLE 2: DESCRIPTIVE STATISTICS OF ACCESS TO MIGRANT SOCIAL CAPITAL, BY LEVEL OF EDUCATION (FATHER, EGO)

	Migrant spouse or children	Migrant close family (parents & sibling)	Migrant extended family or friends
Father's level of education			
Low (n=2,143)	14.7%	7.9%	8.2%
Medium (n=1,878)	22.6%	10.1%	14.6%
High (n=1,020)	46.8%	22.6%	30.7%
Significance level	***	***	***
Own level of education			
Low (n=1,345)	12.2%	6.2%	6.6%
Medium (n=2,513)	23.2%	10.5%	15.3%
High (n=1,514)	38.4%	19.3%	24.3%
Significance level	***	***	***

Source: MAFE Individual surveys, 2008-2009.

Notes: ***p<0.001. Weighted data.

Results reported at time of first Europe migration for migrants and at average age of migration (29 years old) or year of survey (if younger than 29) for non-migrants. 14.7% of respondents with low educated father have access to migrant social capital, compared to 46.8% of those with high educated fathers.

TABLE 3: LOGISTIC ESTIMATION OF ACCESS TO MIGRANT SOCIAL CAPITAL

	Model 1	Model 2	Model 3
	Access to migrant network besides partner or children	Access to close kin (parent, siblings) network	Access to extended kin or friend network
Father education (ref: low)			
Medium	1.40***	1.30**	1.50***
High	2.16***	2.00***	1.90***
Own education (ref: low)			
Medium	1.71***	1.47***	1.87***
High	2.98***	2.34***	3.26***
Female	0.79***	0.93	0.75***
Age	1	0.99	1.01
Number of siblings	1.02*	1.05***	0.98**
Firstborn	0.67***	0.44***	0.95
Has assets	1.09	0.98	1.08
Partnership status t-1 (ref: Single)			
Partner not in Europe	0.74***	0.71***	0.83**
Partner in Europe	1.42**	1.59***	1.28
Employment status t-1 (ref: working)			
Studying	1.11	1.11	1.05
Not working	1.01	1.15	0.93
Country (ref: DR Congo)			
Ghana	0.58***	1.06	0.31***
Senegal	1.81***	1.35	1.52**
Period (ref: before 1990)			
1990s	2.88***	2.45***	3.23***
2000s	5.18***	3.58***	4.98***
Constant	0.04***	0.03***	0.02***
N	4735	4735	4735

Source: MAFE Individual surveys, 2008-2009

Notes: Odds ratios reported. ***p<0.001, **p<0.01, *p<0.05. Analysis at time of first Europe migration for migrants and at average age of migration (29 years old) or year of survey (if younger than 29) for non-migrants

TABLE 4: LOGISTIC ESTIMATION OF MIGRATING TO EUROPE IN A GIVEN YEAR

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Baseline	Interaction Network x Father Ed	Interaction network x Own Ed	Network's Tie Strength	Close ties x Own Ed	Extended ties x Own Ed
Father education (ref: low)						
Medium	1.12	1.02	1.11	1.12	1.11	1.11
High	1.47***	1.94***	1.47***	1.48***	1.48***	1.47***
Own education (ref: low)						
Medium	1.46***	1.44***	1.80***	1.45***	1.64***	1.62***
Higher	3.07***	2.99***	4.42***	3.04***	3.73***	3.54***
Migrant Networks and Interactions						
Migrant network	3.62***	3.95***	6.32***			
Migrant network x Father Education						
Network x Medium-ed Father		1.15				
Network x High-ed Father		0.64***				
Migrant network x Own Education						
Network x Medium educated			0.61***			
Network x Higher educated			0.47***			
Strength of Tie of Networks and Interactions						
Close kin Migrant network				2.78***	5.08***	2.79***
Extended kin and friend Migrant network				2.49***	2.50***	4.93***
Close kin x Own Education						
Close kin x Medium-ed					0.58***	
Close kin x High-ed					0.46***	
Extended kin and friend x Own education						
Extended net x Medium-ed						0.57***
Extended net x High-ed						0.51***
Female	0.59***	0.60***	0.60***	0.59***	0.59***	0.59***
Age	1.18***	1.18***	1.18***	1.18***	1.18***	1.18***
Age squared	1.00***	1.00***	1.00***	1.00***	1.00***	1.00***
Number of Siblings	0.97***	0.97***	0.97***	0.97***	0.97***	0.97***
Firstborn	1.11	1.10	1.10	1.14*	1.12*	1.14*
Occupational status (ref: working)						
Studying	0.61***	0.60***	0.60***	0.61***	0.60***	0.61***
Not working	1.00	1.01	1.01	1.02	1.02	1.02
Partner status (ref: Single)						
Partner outside Europe	0.62***	0.62***	0.62***	0.63***	0.63***	0.63***
Partner in Europe	5.52***	5.37***	5.37***	5.33***	5.21***	5.31***
Country (ref: DR Congo)						
Ghana	1.70***	1.68***	1.68***	1.73***	1.72***	1.73***
Senegal	1.86***	1.83***	1.83***	1.90***	1.88***	1.87***

Period (ref: before 1990s)

1990s	0.91	0.91	0.91	0.93	0.92	0.93
2000s	1.16*	1.14*	1.14*	1.19**	1.17**	1.18**
Constant	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***
N (person years)	88313	88313	88313	88313	88313	88313

Source: MAFE Individual surveys, 2008-2009.

Notes: Odds ratios reported. ***p<0.001, **p<0.01, *p<0.05.

TABLE 5: DESCRIPTIVE STATISTICS OF MOBILIZATION OF MIGRANT SOCIAL CAPITAL, BY FATHER'S AND INDIVIDUAL'S LEVEL OF EDUCATION

	MIGRATION DECISION								
	Alone		With local network only		Migrant spouse		With migrant network		Total
	%	CI	%	CI	%	CI	%	CI	%
Father education									
Low (n=229)	57.4	[47.9,66.4]	8.3	[5.0,13.6]	5.2	[1.9,13.1]	29.1	[21.3,38.3]	100
Medium (n=271)	41.6	[31.6,52.4]	7.4	[4.4,12.1]	1.8	[0.9,3.5]	49.2	[37.9,60.6]	100
High (n=255)	52	[43.7,60.2]	12.7	[7.5,20.8]	6.4	[3.4,12.0]	28.9	[22.2,36.5]	100
	<i>Pr = 0.009</i>								
Own education									
Low (n=94)	52.8	[39.4,65.8]	6.9	[2.9,15.5]	5.2	[1.6,16.0]	35.1	[23.3,49.0]	100
Medium (n=304)	51.8	[42.2,61.2]	6.8	[4.2,10.8]	5.6	[2.5,11.9]	35.9	[26.6,46.4]	100
High (n=403)	51	[43.4,58.5]	13.1	[8.9,18.8]	3.5	[1.7,6.9]	32.5	[25.7,40.2]	100
	<i>Pr = 0.525</i>								
	FINANCING THE TRIP								
	Alone		With local network only		Migrant spouse		With migrant network		Total
	%	CI	%	CI	%	CI	%	CI	%
Father education									
Low (n=213)	33.9	[25.7,43.2]	12.6	[7.7,19.8]	5.9	[2.4,14.1]	47.6	[37.9,57.5]	100
Medium (n=269)	27	[19.3,36.5]	17.4	[11.8,24.8]	11	[3.4,30.3]	44.5	[33.7,55.9]	100
High (n=245)	18.1	[12.6,25.3]	27.6	[20.4,36.1]	6.8	[3.6,12.4]	47.6	[39.2,56.1]	100
	<i>Pr = 0.105</i>								
Own education									
Low (n=92)	32.8	[21.6,46.3]	10.8	[5.2,20.9]	2.9	[0.5,14.9]	53.5	[40.1,66.5]	100
Medium (n=289)	35.8	[27.7,44.8]	8.9	[5.5,14.1]	10.7	[3.8,26.7]	44.5	[35.2,54.2]	100
High (n=390)	18.8	[13.9,25.0]	31.5	[24.7,39.2]	5.9	[3.4,10.0]	43.8	[36.2,51.6]	100
	<i>Pr = 0.000</i>								

Source: MAFE Individual surveys, 2008-2009.

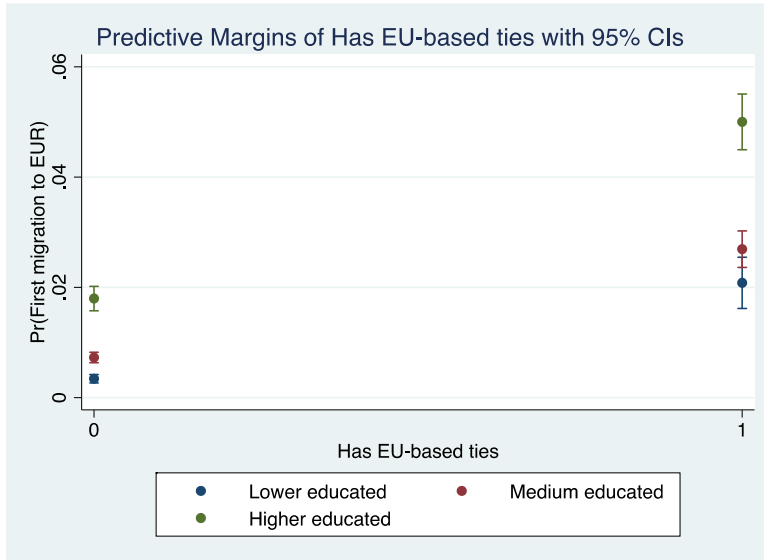
TABLE 6 LOGISTIC ESTIMATION OF MOBILIZING MIGRANT SOCIAL CAPITAL

	Decision	Finance
Father education (ref: low)		
Medium	1.59**	1.09
High	0.78	0.76
Own education (ref: low)		
Medium	0.55**	0.60*
High	0.71	0.54**
Employment status t-1 (ref: Working)		
Studying	1.33	2.52***
Not working	1	1.36
Female	1.37*	1.31
Age	0.96***	0.97**
Has assets	1.01	0.81
Reason for migration (ref: family reasons)		
Economic	0.37***	0.63*
Study	0.15***	0.23***
Other	0.45***	0.49**
Partnership status (ref: Single)		
Partner outside Europe	0.84	1.01
Partner in Europe	1.2	1.56
Migrant Close kin (parent, siblings)		
	2.24***	2.54***
Migrant Extended kin and friend		
	1.24	1.4
Country (ref: DR Congo)		
Ghana	0.83	0.85
Senegal	0.44***	0.55***
Period (ref: before 1990)		
1990s	1.48	1.64*
2000s	1.26	1.59*
_cons	3.81**	1.96
N	741	713

Source: MAFE Individual surveys, 2008-2009.

Notes: Odds ratios reported. ***p<0.001, **p<0.01, *p<0.05. Sample includes all migrants who have migrant networks in the year of first migration.

FIGURE 1 PREDICTED PROBABILITIES OF MIGRATION, BY LEVEL OF EDUCATION AND ACCESS TO MIGRANT NETWORKS.



Notes: Probabilities calculated from Table 4 Model 3 results