

Immigrants' Occupational Segregation in France: "Brown Collar" Jobs or a Sub-Saharan African Disadvantage?

WORK IN PROGRESS – PLEASE DO NOT CITE

Rebecca Tesfai
Temple University

Large-scale labor migration is considered a relatively recent phenomenon in most European countries; however, immigrants have been an integral part of the French labor force nearly as long as in the United States. Due to demographic deficits, France has consistently relied on foreign labor largely originating from nearby European countries since the mid-19th century (Morokvasic-Muller et al. 2008). On account of increased competition for unskilled labor post-WWII, France was unable to recruit European laborers and turned to their African colonies to supply their ongoing need for migrant workers (Hansen 2003). Though the (primarily North) African population was substantial (McDonald 1969), their presence in France was not initially contentious because authorities assumed that Africans were temporary rather than permanent migrants (Verdugo 2011). However, even after the end of labor migration programs in the 1970s the North and Sub-Saharan African populations continued to grow due to family reunification (Heering, van der Erf and van Wissen 2004) and it became clear that Africans were in France to stay (Hansen 2003). The African immigrant population is now long-standing and comprises 43% of France's immigrant population (INSEE 2017). While time in the host country and a large population lead to knowledge and social networks that may be beneficial in the labor market, numerous studies document North and Sub-Saharan African immigrants' employment (Aeberhardt et al. 2010, Chaib 2003, Meurs, Pailhé and Simon 2006) and wage (Aeberhardt and Pouget 2007, Algan et al. 2010) disadvantages in France. Despite significant growth in the Sub-

Saharan African immigrant population in particular (Borrel 2006, Mayer 2007), very few studies investigate an important aspect of their labor market integration – occupational segregation.

Occupational segregation – the systematic sorting of workers into particular jobs with disadvantaged groups concentrated in low-skilled, lower paying jobs (Gauchat, Kelly and Wallace 2012) – reflects ethnic hierarchies in the host country. Jobs that are labelled as “immigrant” or “minority” jobs (like those that are labelled “women’s work”) are socially devalued and therefore pay less (Alonso-Villar, del Río and Gradin 2012). Individuals with more than one minority status (immigrants and visible minorities for example), will be clustered in the lowest status/lowest paying jobs. During France’s post-war period, North and Sub-Saharan African immigrants were largely concentrated in agricultural and factory work due to low-skilled labor recruitment, and Sub-Saharan African immigrants remained highly segregated from the native-born in 1999 (Meurs, Pailhé and Simon 2006). Immigration policy passed since then focuses on recruiting *skilled* workers (Murphy 2006), therefore occupational segregation patterns may now be different with Sub-Saharan African immigrants working in jobs not historically held by the foreign-born.

Skills-based immigration policies are implemented under the assumption that highly-skilled immigrants are better able to contribute to the host-country labor market. However, there are still structural barriers to occupational attainment that will vary by region of origin. The overwhelming majority of public service jobs are restricted to French/EU citizens, leaving approximately 20% of jobs inaccessible to non-EU immigrants who are not yet French citizens (Fougère and Safi 2009). Furthermore, many professions in the private sector are difficult for foreigners to access because only French diplomas are recognized and the process for

recognizing foreign diplomas is long, if not impossible, depending on their profession (Observatoire des Inégalités 2017).

In addition to structural barriers, Sub-Saharan African immigrants likely experience discrimination in the labor market. It is common knowledge in France that all immigrants suffer from less access to employment than the native-born (Joseph and Lemièrre 2005), with the disadvantage largest for those of non-European origin (Heath, Cheung and Smith 2007). African immigrants exhibit particularly low employment rates (Aeberhardt et al. 2010, Algan et al. 2010) and studies attribute African immigrants' employment disadvantage to hiring discrimination (e.g. Edo, Jacquemet and Yannelis (2017), Pierné (2013)). Due to negative attitudes toward immigrants – in 2013, 70% of French citizens agreed that there were too many foreigners living in France (Taras 2015) – Sub-Saharan African immigrants' occupational segregation may still be quite high.

Research in new immigrant receiving countries such as Spain and Sweden shows that visible minority immigrants experience occupational segregation in the labor market (Alonso-Villar and del Río 2013, Åslund and Skans 2010). However, due to the recency of those immigration flows, their modes of migration (primarily as refugees/asylees), and the small size of their immigrant populations, it is unclear if these patterns are also true in more established immigrant receiving countries in Europe. France has the third largest immigrant population and the oldest immigrant population in Europe (Safi 2014). It is also home to the largest Muslim community in Europe (Hamilton, Simon and Veniard 2004). Consequently, the occupational segregation patterns in France may be considered a prototype of what will be observed in other European countries in the future.

Given the growing Sub-Saharan African immigrant population, determining their occupational segregation patterns is a necessary step for formulating policy to facilitate the successful incorporation of even the most marginalized immigrants in the French labor market. This study uses population data from the most recent French census to investigate the race/nativity occupational segregation of first-generation immigrants in France. Specifically, I use 2011 French census data to answer the following questions: (1) Are there “brown-collar” jobs in France? In the United States, Catanzarite (2000) coined the term “brown-collar occupations” to describe low-skilled jobs in which recent immigrant Latinos are overrepresented. I amend this term here to refer to visible minority immigrants’ over-representation in low-skilled jobs. And (2) Is Sub-Saharan African occupational segregation significantly higher than that of all other immigrant groups? That is, is the occupational segregation of Sub-Saharan African immigrants unique?

Background

Nativity-based occupational segregation has long been a feature of labor markets in long-standing immigrant receiving countries (Alonso-Villar, del Río and Gradin 2012, Elliott and Lindley 2008, Hellerstein 2008). Proponents of human capital theory postulate that – because education, work experience, and skills are crucial predictors of matching workers to jobs (Kaufman 2002) – labor market inequalities like occupational segregation are a result of human capital differences across groups. As in other major immigrant receiving countries, it is commonly assumed in France that immigrant “quality” has declined over time (Block 2015) and their low human capital explains their low labor market outcomes. These expectations are largely unfounded: the proportion of immigrants in France with less than a secondary education has

consistently declined since 1962 and university completion rates of the native- and foreign-born were nearly identical by 2011¹.

Despite higher levels of educational attainment compared to previous decades, immigrants in France may still be occupationally segregated. Multiple studies show that employers largely ignore pre-migration labor market skills/experience (Adamuti-Trache 2014, Eckstein and Weiss 2004, Lewin-Epstein et al. 2003) and non-EU migrants face greater difficulties getting their qualifications recognized in the French labor market (Simon and Steichen 2014). This is especially true for immigrants from African countries because employers assume they have poorer education systems (Buzdugan and Halli 2009, Friedberg 2000, Grant and Nadin 2007). Even in Canada (which has a skills-based immigrant selection policy) the vast majority of Sub-Saharan Africans are relegated to low-wage/low-skilled work that is well below their qualifications (Creese and Wiebe 2009). Consequently, high levels of human capital may not shield Sub-Saharan African immigrants (and visible minority immigrants in general) from occupational segregation in low-skilled/low-paid work in France.

Search and match theory suggests that immigrant labor market disadvantages that remain after controlling for human capital characteristics are a result of living in the host-country for a relatively short time. That is, immigrants take jobs for which they are overqualified because they have limited knowledge of the local labor market (Chiswick 1978, Kogan 2007). With time in the host country, this theory predicts that labor market disadvantages like occupational segregation will decline as familiarity with the local labor market increases.

Labor market knowledge is frequently described as an understanding of the formal job market, but often requires more than understanding how to utilize employment agencies and

¹ Author's calculations, 2011 French census. Minnesota Population Center. 2018. "Integrated Public Use Microdata Series, International." edited by N. I. o. S. a. E. S.-. France. Minneapolis, MN.

classified ads (Granovetter 1974). Previous research in the U.S. (Granovetter 1974, Marsden and Gorman 2001) and Europe (Granovetter 1995, Olli Segendorf 2005) find that the majority of employed persons find their job through informal methods. In an informal search, individuals learn about job openings through family, friends, or acquaintances. By using their social network, job seekers can gain better/more complete information about job availability and quality (Granovetter 1974).

Like the native-born, immigrants make use of social networks to find jobs. However, these informal job search methods may work differently for the foreign-born. Immigrants have smaller, more homogenous social networks because they have spent less time in the host country and have fewer contacts outside of their co-ethnic community. When immigrants do have a job contact vouching for them, employers are more likely to hire them (Ellis, Wright and Parks 2007). Yet, this employment benefit can lead to an occupational disadvantage. Reliance on social networks can increase immigrants' transitions into low prestige jobs (Sanders, Nee and Sernau 2002) where immigrants (Behtoui 2008) and minorities (Falcon and Melendez 2001) are concentrated. Lack of access to key players in the labor market reduces immigrants' likelihood of being hired in integrated professions. Essentially, use of social networks in the labor market amplifies differences (Portes 1998) and is of general importance for social stratification (Korpi 2001) exemplified through occupational segregation. Among immigrants, Sub-Saharan Africans likely have one of the smallest and least diverse social networks because – despite a long history of migration to France – large scale migration is relatively recent. If social contacts play a large role in occupational segregation, Sub-Saharan Africans' occupational segregation would be higher than that of other immigrants.

Social networks may also play a role in occupational attainment due to discrimination in the labor market. Employers rank order applicants with their position in that rank order dependent on employers' evaluation of the applicants' race/nativity (Liebersohn 1980) based on homophily (preference for those similar to themselves) or stereotypes. There is strong evidence of homophily in the European labor market (Åslund, Hensvik and Skans 2014, Edo, Jacquemet and Yannelis 2017). The negative relationship between minority group and occupational status implies that visible minorities are less likely to be promoted, transferred, and/or recruited into higher level occupations (Carmichael and Woods 2000) leaving them occupationally segregated. While all immigrants would be disadvantaged due to homophily, it may not be consistent across groups because the relative status of different immigrant/minority groups influences employer hiring preferences (Catanzarite 2000). If homophily explains occupational segregation patterns in France, both North and Sub-Saharan Africans will be more segregated than other immigrant groups since North African and black individuals are consistently named as the principal victims of discrimination in France (Bleich 2009).

Nearly 90% of individuals living in France believe that racism is widespread (Comission Nationale Consultative des Droits de l'Homme 2016). Despite evidence indicating that visible minority status plays an important role in immigrants' employment and wages – and that immigrants are highly clustered within the labor market (Simon and Steichen 2014) – very little research investigates the impact of visible minority status on occupational segregation experienced by the foreign-born in France. As a result, it remains unclear whether Sub-Saharan African immigrants' visible minority status leaves them more segregated than all other immigrants. I address this gap in the literature by using French census data to explore whether Sub-Saharan African immigrants' occupational segregation patterns in France are unique or if all

visible minority immigrants have similar experiences of occupational segregation. By including regression analyses measuring occupational segregation, I also determine whether socioeconomic differences across visible minority groups explains any variation in occupational segregation.

Data and Methods

Data

I use data from the 10% sample of the 2011 French census made available through the Integrated Public Use Microdata Series International (Minnesota Population Center 2018) to measure race/nativity-based occupational segregation in France. The data include individuals between the ages of 25 and 65 who live in identifiable departments. I limit the data to individuals living in departments for two reasons. First, the vast majority of visible minority immigrants live in departments: 85% of Sub-Saharan African, and approximately 80% of North Africans and Other non-European immigrants live in departments. Gleave's (2017) examination of black immigrant occupational segregation in the U.S. found that black immigrant segregation patterns in places with extremely small black immigrant populations can skew results due to small group representation in the models. By focusing analyses on departments, I avoid this issue. Furthermore, I limit my sample to identifiable departments because I utilize department-level characteristics in regression analyses. Because unidentifiable departments (i.e. other and unknown departments) are not representative of any specific department, I cannot include them in these analyses.

Methods

To measure occupational segregation in France, I utilize the most commonly used segregation measure (Blau, Brummund and Liu 2013): the Duncan and Duncan (1955) Dissimilarity Index (DI) calculated with person weights using the following equation:

$$DI = \frac{1}{2} \sum_i \left| \frac{d_i}{D} - \frac{m_i}{M} \right|$$

In this general equation, d_i (m_i) represents the number of all employed members of the dominant (minority group) in the i^{th} occupation and D (M) represents the total dominant group labor force (total minority group labor force). The resulting DI coefficient represents the proportion of the minority population that would have to change occupations for the occupational distribution of the dominant and minority groups to be the same. A segregation value of 0 indicates complete integration and a value of 1 indicates complete segregation.

I use the dissimilarity index to measure Sub-Saharan African (SSA), North African (NA), Other Non-European (Other), and EU-European (EU) immigrant segregation from the native-born. I measure segregation from French-born workers because jobs dominated by the native-born majority group have high wages and occupational status (Semyonov and Herring 2007). As a result, calculating segregation from the native-born serves as a proxy for full labor market incorporation. I also include analyses of visible minority immigrant segregation from EU immigrants to determine if visible minorities have different labor market experiences than EU immigrants. I conduct all dissimilarity indices by gender and citizenship.

To determine (1) if Sub-Saharan African immigrants experience significantly higher rates of segregation than other immigrants and (2) the extent to which human capital and social networks play a role in the occupational segregation patterns observed, I also conduct linear regression models (with frequency weights) measuring occupational segregation. The dependent variables are department-level occupational segregation from the French-born and from the EU-born

experienced by immigrant group members. The independent variables are group level indicators in each department. Because immigrants are more likely to be able to make use of social networks in places with large co-ethnic populations, I control for the proportion of the department population that is the same gender/nativity. To address human capital differences between groups, I also control for the median educational attainment of the gender/nativity group. The most detailed educational attainment variable available is categorical; therefore, it is presented as such in the regression analyses. The categories include a number of secondary degrees: CAP (Certificat d'Aptitudes Professionnelles), BEP (Brevet d'Etudes Professionnelles), BAC (Baccalaureat), and BEA, BEC, BEI (Brevet d'Enseignement Agricole, Brevet d'Enseignement Commercial, and Brevet d'Enseignement Industriel respectively). The educational attainment variable also includes two educational attainment levels less than secondary: BECIP (Brevet d'Etudes du Premier Cycle) which is the equivalent of a middle school diploma, and less than secondary. The highest median educational attainment is an undergraduate degree (University diploma 1st cycle). In addition to controlling for human capital and social network characteristics, I also include measures of immigrant characteristics: percent of the nativity/gender group that are new immigrants in each department and the percent French citizen of each group in the department. Finally, I include a measure of self-employment (percent of the same nativity group in the area that is self-employed) and unemployment rate in the department.

Results

Descriptive Statistics

Table one presents descriptive statistics for the native- and foreign-born in French departments. Nearly 90% of the sample is native-born, with North Africans as the next largest

group. As the longest-standing immigrant group in France, they have the highest citizenship rate among the foreign-born – 70% of North Africans are citizens. SSAs and Other immigrants comprise the same proportion of the population (2% each) and have similar citizenship rates (approximately 60%). Due to the importance of citizenship in determining occupation, the remaining descriptive statistics are presented for citizens and non-citizens separately. I find that both gender composition and educational attainment vary by citizenship. Among citizens, approximately half of all immigrant groups (and the native-born) are women, while among non-citizen 44% and 34% of SSAs and NAs respectively are women. The difference in gender composition is not observed among Other immigrants. Citizens – regardless of nativity – are more highly educated than non-citizens for all immigrant groups.

---Table 1 about here---

Table two shows occupations with over-representation of immigrant groups in France. I find that all immigrants are highly concentrated within the French labor market. Although SSA men and women together only comprise 2% of the population in these places, men and women comprise over 10% of their top occupation in France suggesting that these groups experience substantial occupational segregation in France. Among men, Sub-Saharan and North Africans are both concentrated in security and surveillance jobs, however NAs are also concentrated in transportation work (as are Other men). EU European men are also highly concentrated, but in construction related fields. Despite the concentration of each group, there is little overlap between nativity groups. The small amount of overlap among men stands in stark contrast to immigrant women; both SSA and NA women are highly likely to work as maid service employees and multipurpose employees in a hotel, cleaners, home health aides, and domestic workers. While research in the United States shows that immigrant women funnel into

occupations with other immigrant women regardless of nativity (Wright and Ellis 2000), I find very little overlap between North and Sub-Saharan African women's most common occupations and that of other immigrant women.

---Table 2 about here---

Fougère and Safi (2009) and (Observatoire des Inégalités 2017) note that citizenship is an important predictor of immigrants' occupations, therefore I also examine immigrants' occupational segregation disaggregated by citizenship. Table three presents occupational concentration focusing only on citizens and the concentration of non-citizens is presented in Appendix 1. Due to their EU citizenship, any occupation restricted to French citizens are also open to EU immigrants (Fougère and Safi 2009). As a result, there is little difference in EU immigrants' occupational concentration by French citizenship. Among the remaining immigrant groups, however, I find that citizenship plays different roles in immigrants' occupational patterns based on gender. Citizenship plays an important role in men's occupational concentration – citizen and non-citizen NA and Other men do not share a top occupation and SSA men only have one occupation in common (private security and surveillance agents). Women follow a very different pattern in that they largely engage in domestic work regardless of citizenship.

---Table 3 about here---

Occupational Segregation – Dissimilarity Indices

Figures one and two present segregation analyses measuring all immigrants' segregation (by citizenship and gender) from the native-born and EU immigrants respectively. Focusing first on citizens' segregation from the native-born (leftmost bars), I find NA and EU European men and women are least segregated from the native-born. Other immigrant men are most segregated

followed by SSAs. While the same is true among women, the difference between the two groups is much smaller (1%).

As expected, immigrants who are not French citizens (rightmost bars) are more segregated from the native-born than those who are citizens; however, their segregation patterns are quite different. All non-citizen visible minority immigrant men have similar levels of occupational segregation. Among women, SSAs experience the highest level of segregation (DI = 0.43), followed by NAs, Other non-Europeans, and EU immigrants.

To determine whether the different occupational patterns observed in Tables 2 and 3 are large enough to lead to occupational segregation *among* immigrants, Figure 2 focuses on visible minority immigrants' segregation from EU immigrants. SSA and Other non-European men have nearly identical dissimilarity indices, while North Africans have much lower segregation levels (DI=0.24 compared to DIs of approximately 0.30). Among women, by contrast, SSAs experience the most segregation from the EU-born and Other non-Europeans the least. As in analyses measuring segregation from the native-born, segregation rates are higher among non-citizens. This is to be expected given that EU immigrants who are not French citizens have access to the same jobs as French citizens due to their EU citizenship. Among non-citizens, NA immigrants are most segregated and Other non-European immigrants least segregated.

---Figures 1 and 2 about here---

Regression Analyses

The dissimilarity indices presented in Figures 1 and 2 clearly show that immigrants are highly segregated from the native-born and that there is variation by region of origin. However, because each dissimilarity index is a separate analysis, it is unclear whether there is a significant difference in immigrants' occupational segregation. Furthermore, those analyses do not measure

the impact of human capital, social network, and immigration related characteristics. To determine whether Sub-Saharan African immigrants' experience a unique occupational disadvantage in France, Tables 4 and 5 present linear regression models measuring segregation from the native-born and EU immigrants respectively. Each table presents segregation results by citizenship and for men and women separately.

Focusing first on French citizens' segregation from the native-born (left two columns of Table 4), I find that all visible minority immigrants are significantly more segregated from the native-born than EU immigrants after controlling for average group level socioeconomic characteristics in each department. Among men, there is very little difference in visible minority immigrants' coefficients (0.08 and 0.09). These results show that the differences in visible minority occupational segregation observed in Figure 1 are attributable to group-level differences in socioeconomic characteristics. Among women, however, I find that controlling for socioeconomic characteristics does not change the segregation patterns observed in Figure 1: SSA women are most segregated and NA women least segregated from the native-born.

---Table 4 about here---

As expected, citizenship plays a crucial role in immigrants' occupational segregation: I find larger segregation coefficients in analyses focusing on those who are not citizens (right two columns) compared to the analyses focusing on citizens. However, the impact of citizenship varies across groups. The coefficients of non-citizen SSA men are 2.5 times larger than that of SSA men who are citizens while there is only a 0.02 difference between the coefficients of citizen and non-citizen Other non-European men. The impact of citizenship is even larger for women: coefficients for all non-citizen women are at least twice as large as those for citizen women.

Not only does citizenship have an impact on visible minorities' segregation relative to the EU-born, it also changes the occupational segregation patterns observed. While human capital reduced the occupational segregation differences among male visible minority citizens, it actually widens the differences between groups compared to results presented in Figure 1. Before controlling for group-level socioeconomic characteristics, all visible minority non-citizen men had similar levels of segregation from the native-born. After controlling for socioeconomic characteristics, I find that SSA men are most segregated and Other non-Europeans are least segregated relative to EU immigrants. Although citizenship changes the impact of controlling for human capital, social network, and immigration characteristics among men, it does not do so for women. SSA women are most segregated and Other non-Europeans least segregated both before and after controlling for group-level characteristics.

In all analyses presented in Table 4, the directions of independent variables' coefficients are largely in the expected direction. As the proportion of the same nativity/sex group in the department increases, segregation decreases providing some evidence of the importance of social networks in helping immigrant groups find less segregated jobs. Not only is the presence of a same nativity group important, but so are the characteristics of that group. A higher proportion of established immigrants with the same nativity group (measured both by the percent new immigrant and percent that are citizens) is associated with lower occupational segregation rates. In addition, occupational segregation rates decrease with increasing levels of educational attainment. Self-employment is positively associated with occupational segregation for nearly all groups, likely because immigrants' self-employment increases when immigrants feel that there are not sufficient opportunities in the wage labor market (Blume 2009).

Table 5 presents results from linear regression models measuring segregation from the EU-born. SSA and NA immigrant citizens are less segregated from the EU-born than Other non-European in the regression model including men alone. However, among women, SSA and NA are significantly *more* segregated than Other non-Europeans. Controlling for socioeconomic characteristics changes the occupational segregation patterns observed in Figure 2 very little.

Among non-citizens, there is very little difference in visible minority men's segregation from the EU-born. I find the most variation in segregation from EU immigrants among women. NA and SSA women are more segregated from the EU-born than Other non-European immigrants regardless of citizenship, however NA non-citizen women's coefficient (0.11) is over three times that of SSA women. The independent variables in all analyses largely follow the same pattern as in Table 4.

---Table 5 about here---

Discussion

France's current immigration policy focuses on high-skilled immigration (Murphy 2006) with an emphasis on immigrant assimilation (Goodman 2011) as a requirement for entry into France and naturalized citizenship. This policy emphasis indicates that the prevailing assumption regarding immigrants' low labor market outcomes is that they are low-skilled and not well assimilated. These policies are also in line with France's emphasis on the Republican model and its strong assimilationist principles (Alba and Foner 2014, Taras 2015). However, in investigating SSAs' occupational concentration and occupational segregation in France, my results indicate that these policies may not adequately address labor market disparities in France.

First, I find that there are brown collar jobs in France, but given that occupational concentration varies across groups, this is only true for North and Sub-Saharan African men.

Both Other non-European and EU men are over-represented in specific occupations, however these are not consistently low-skilled jobs. SSA and NA men, by contrast, are clustered in low-skilled occupations: SSA men are concentrated in security work and unskilled sanitation and kitchen jobs while NA men are concentrated in transportation, security, and retail work. This pattern of brown collar work is also true among women. Both NA and SSA women are concentrated in domestic and care work, while three of the top five Other non-European and EU women's occupations are skilled work. Although occupational concentration varies by citizenship, these patterns of brown-collar work are persistent for immigrants both for those who are French citizens and those who are not.

SSA and NA immigrants' persistent occupational concentration in brown collar jobs suggest that they experience unique barriers to employment in France. The results of the occupational segregation analyses highlight the unique disadvantage experienced by SSA immigrants. Although visible minority French citizens are similarly occupationally segregated from the native-born relative to EU-immigrants, SSAs are *most* segregated among non-citizens. Gaining French nationality has been shown to significantly offset the extent of labor market discrimination against immigrants (Fougère and Safi 2009). Yet, SSA women are most segregated regardless of citizenship even after controlling for socioeconomic characteristics.

Human capital, social network, and immigration characteristics played an important role in men's occupational segregation patterns, but not women. To determine whether independent variables' impact on immigrants' occupational segregation varied across groups, I also conducted regression analyses for each immigrant group separately (Appendices 2-5). I find that in analyses of segregation from the native-born, independent variables' coefficients were very similar across groups with an important exception – the coefficients for SSA men's educational

attainment (Appendices 2 and 3). Specifically, the negative coefficients were larger at all educational levels for SSA men who were citizens and the coefficient for a university degree was larger than any other group among non-citizens.

In addition to differences in coefficients, there is also important variation in the size of R^2 values. Among visible minorities, Other non-Europeans have the highest R^2 value with the exception of analyses focusing on non-citizen women's segregation from EU women. That is, the independent variables explain a larger proportion of Other non-European immigrants' segregation patterns than any other group. By contrast, among citizens, SSA women's R^2 values for analyses measuring segregation from the native-born are lower than all other women. The same is not true among men who have similar R^2 values as NA men in analyses measuring segregation from the native-born.

Together, these results show that it is not SSA immigrants broadly, but SSA women in particular who experience a unique disadvantage in the French labor market. Not only are SSA women concentrated in brown-collar work, but increased human capital and larger social networks do little to reduce their disadvantage. As a result, immigration policies focusing on skills may not address the wage disparities present in the French labor market. My results suggest that, instead, policy should focus on ameliorating the additive disadvantage associated with being women and racial minorities. France does have anti-discrimination legislation in place (Safi 2014), however these laws seem insufficient for preventing discrimination against visible minority immigrants in the labor market.

In combination with previous research showing that over-qualification is widespread among SSA immigrants (Simon and Steichen 2014), my results suggest that future research should determine the extent to which SSA immigrants occupational segregation explains the wage

disadvantages found in previous work. Finally, because social mobility surveys show that if immigrants experience discrimination in the labor market, their children are excluded from the labor market (Dayan, Echardour and Glaude 1996, Viprey 1998), future research should also investigate the impact of first-generation immigrants' occupational segregation specifically on their children's occupational attainment.

References

- Adamuti-Trache, Maria. 2014. "Pursuing Post-Secondary Education in the Host Country and the Occupational Attainment of Highly Educated Immigrants to Canada." *Journal of Education and Work*:1-24. doi: 10.1080/13639080.2014.918942.
- Aeberhardt, Romain and Julien Pouget. 2007. "National Origin Wage Differentials in France: Evidence from Matched Employer-Employee Data." *IZA Discussion Series*. Institute for the Study of Labor, Bonn, Germany.
- Aeberhardt, Romain, Denis Fougère, Julien Pouget and Roland Rathelot. 2010. "Wages and Employment of French Workers with African Origin." *Journal of Population Economics* 23(3):881-905.
- Alba, Richard and Nancy Foner. 2014. "Comparing Immigrant Integration in North America and Western Europe: How Much Do the Grand Narratives Tell Us?". *International Migration Review* 48(S1):S263-S91.
- Algan, Yann, Christian Dustmann, Albrecht Glitz and Alan Manning. 2010. "The Economic Situation of First and Second-Generation Immigrants in France, Germany and the United Kingdom." *The Economic Journal* 120(542):F4-F30.
- Alonso-Villar, Olga, Coral del Río and Carlos Gradin. 2012. "The Extent of Occupational Segregation in the United States: Differences by Race, Ethnicity, and Gender." *Industrial Relations* 51(2):179-212.
- Alonso-Villar, Olga and Coral del Río. 2013. "Occupational Segregation in a Country of Recent Mass Immigration: Evidence from Spain." *Annals of Regional Science* 50:109-34.
- Åslund, Olof and Oskar Nordström Skans. 2010. "Will I See You at Work? Ethnic Workplace Segregation in Sweden, 1985-2002." *Industrial and Labor Relations Review* 63(3):471-93.
- Åslund, Olof, Lena Hensvik and Oskar Nordström Skans. 2014. "Seeking Similarity: How Immigrants and Natives Manage in the Labor Market." *Journal of Labor Economics* 32(3):405-41.
- Behtoui, Alireza. 2008. "Informal Recruitment Methods and Disadvantages of Immigrants in the Swedish Labour Market." *Journal of Ethnic and Migration Studies* 34(3):411-30.
- Blau, Francine D., Peter Brummund and Albert Yung-Hsu Liu. 2013. "Trends in Occupational Segregation by Gender 1970-2009: Adjusting for the Impact of Changes in the Occupational Coding System." *Demography* 50:471-92.
- Bleich, Erik. 2009. "Where Do Muslims Stand on Ethno-Racial Hierarchies in Britain and France? Evidence from Public Opinion Surveys, 1998-2008." *Patterns of Prejudice* 43(3-4):379-400.
- Block, Laura. 2015. "Regulating Membership: Explaining Restriction and Stratification of Family Migration in Europe." *Journal of Family Issues* 36(11):1433-52.
- Blume, Kræn. 2009. "Labor Market Transitions of Immigrants with Emphasis on Marginalization and Self-Employment." *Journal of Population Economics* 22:881-908.
- Borrel, Catherine. 2006. "Enquêtes Annuelles De Recensement 2004 Et 2005: Près De 5 Millions D'immigrés À La Mi-2004." Vol. *INSEE Première*. Paris: Institut National de la Statistique et des Études Économiques.
- Buzdugan, Raluca and Shiva S. Halli. 2009. "Labor Market Experiences of Canadian Immigrants with Focus on Foreign Education and Experience." *The International Migration Review* 43(2):366-86.

- Carmichael, Fiona and R. Woods. 2000. "Ethnic Penalties in Unemployment and Occupational Attainment: Evidence for Britain." *International Review of Applied Economics* 14(1):71-98.
- Catanzarite, Lisa. 2000. "Brown-Collar Jobs: Occupational Segregation and Earnings of Recent-Immigrant Latinos." *Sociological Perspectives* 43(1):45-75.
- Chaib, Sabah. 2003. "Women, Migration and the Labour Market: The Case of France." in *Gender and Insecurity: Migrant Women in Europe*, edited by J. Freedman. Hants: Ashgate Publishing.
- Chiswick, Barry R. 1978. "The Effect of Americanization on the Earnings of Foreign-Born Men." *Journal of Political Economy* 86(5):897-921.
- Comission Nationale Consultative des Droits de l'Homme. 2016. "La Lutte Contre Le Racisme, L'antisémitisme, Et La Xénophobie: Année 2015." Vol. Paris: La Documentation Française.
- Congregado, Emilio, Antonio Golpe, A. and André van Stel. 2011. "Exploring the Big Jump in the Spanish Unemployment Rate: Evidence on an 'Added-Worker' Effect." *Economic Modelling* 28:1099-105.
- Creese, Gillian and Brandy Wiebe. 2009. "'Survival Employment': Gender and Deskilling among African Immigrants in Canada." *International Migration* 50(5):56-76.
- Dayan, Jean-Louis, Annick Echardour and Michel Glaude. 1996. "Le Parcours Professionnel Des Immigrés En France: Une Analyse Longitudinale." *Economie et Statistique* 299:107-28.
- Duncan, Otis Dudley and Beverly Duncan. 1955. "A Methodological Analysis of Segregation Indexes." *American Sociological Review* 20:210-17.
- Eckstein, Zvi and Yoram Weiss. 2004. "On the Wage Growth of Immigrants: Israel, 1990-2000." *Journal of the European Economic Association* 2(4):665-95.
- Edo, Anthony, Nicolas Jacquemet and Constantine Yannelis. 2017. "Language Skills and Homophilous Hiring Discrimination: Evidence from Gender and Racially Differentiated Applications." *Review of Economics of the Household*.
- Elliott, Robert J.R. and Joanne K. Lindley. 2008. "Immigrant Wage Differentials, Ethnicity and Occupational Segregation." *Journal of the Royal Statistical Society. Series A (Statistics in Society)* (3):645-71.
- Ellis, Mark, Richard Wright and Virginia Parks. 2007. "Geography and the Immigrant Division of Labor." *Economic Geography* 83(3):255-81.
- Falcon, Luis and Edwin Melendez. 2001. "The Social Context of Job Searching for Racial Groups in Urban Centers." in *Urban Inequality: Evidence from Four Cities*, edited by A. O'Connor, T. Chris and L. Bobo. New York: Sage.
- Fougère, Denis and Mirna Safi. 2009. "Naturalization and Employment of Immigrants in France." *International Journal of Manpower* 30(1/2):83-96.
- Friedberg, Rachel M. 2000. "You Can't Take It with You? Immigrant Assimilation and the Portability of Human Capital." *Journal of Labor Economics* 18(2):221-51.
- Gauchat, Gordon, Maura Kelly and Michael Wallace. 2012. "Occupational Gender Segregation, Globalization, and Gender Earnings Inequality in U.S. Metropolitan Areas." *Gender and society* 26(5):718-47.
- Gleave, Sara. 2017. "Started from the Bottom Now We're Where? African-American and Latino Niching in Gulf Coast Metros." *Social Science Quarterly*.
- Goodman, Sara Wallace. 2011. "Controlling Immigration through Language and Country Knowledge Requirements." *West European Politics* 34(2):235-55.

- Granovetter, Mark S. 1974. *Getting a Job: A Study of Contacts and Careers*. Cambridge, MA: Harvard University Press.
- Granovetter, Mark S. 1995. *Getting a Job: A Study of Contacts and Careers*. Chicago and London: University of Chicago Press.
- Grant, Peter R. and Shevaun Nadin. 2007. "The Credentialing Problems of Foreign Trained Personnel from Asia and Africa Intending to Make Their Home in Canada: A Social Psychological Perspective." *International Migration and Integration* 8:141-62.
- Hamilton, Kimberly, Patrick Simon and Clara Veniard. 2004. "The Challenge of French Diversity." Vol. Washington, DC: Migration Policy Institute.
- Hansen, Randall. 2003. "Migration to Europe since 1945: Its History and Its Lessons." *The Political Quarterly* 74(1):25-38.
- Heath, Anthony F., Sin Yi Cheung and Shawna N. Smith. 2007. *Unequal Chances: Ethnic Minorities in Western Labour Markets*, Vol. 137. Oxford: Published for The British Academy by Oxford University Press.
- Heering, Liesbeth, Rob van der Erf and Leo van Wissen. 2004. "The Role of Family Networks and Migration Culture in the Continuation of Moroccan Emigration: A Gender Perspective." *Journal of Ethnic and Migration Studies* 30(2):323-37.
- Hellerstein, Judith. 2008. "Workplace Segregation in the United States: Race, Ethnicity, and Skill." *The Review of Economics and Statistics* 90(3):459-77.
- INSEE. 2017. "Insee in Brief: Understanding . . . The Measurement of Foreign and Immigrant Populations." Vol. Paris: INSEE.
- Joseph, Olivier and Séverine Lemièrè. 2005. "La Discrimination De Genre Et D'origine À L'encontre Des Jenues Sur Le Marché Du Travail: Mesures À Partir De Différents Aspects Des Situations Professionnelles." Vol. *Net.Doc*. CEREQ.
- Kaufman, Robert L. 2002. "Assessing Alternative Perspectives on Race and Sex Employment Segregation." *American Sociological Review* 67(4):547-72.
- Kogan, Irena. 2007. *Working through Barriers: Host Country Institutions and Immigrant Labour Market Performance in Europe*: Springer Netherlands.
- Korpi, Tomas. 2001. "Good Friends in Bad Times? Social Networks and Job Search among the Unemployed in Sweden." *Acta Sociologica* 44(2):157-70.
- Lewin-Epstein, Noah, Moshe Semyonov, Irena Kogan and Richard A. Wanner. 2003. "Institutional Structure and Immigrant Integration: A Comparative Study of Immigrants' Labor Market Attainment in Canada and Israel." *The International Migration Review* 37(2):389-420.
- Lieberson, Stanley. 1980. *A Piece of the Pie*. Berkley: University of California Press.
- Marsden, Peter V. and Elizabeth H. Gorman. 2001. "Social Networks, Job Changes, and Recruitment." Pp. 467-502 in *Sourcebook of Labor Markets: Evolving Structures and Processes*, edited by I. Berg and A. L. Kalleberg. New York: Kluwer Academic.
- Mayer, Nonna. 2007. "Diversité, Ethnocentrisme Et Votes: Baromètre Politique Français, Enjeux Et Analyses." Vol. Paris: Centre de Recherches Politiques de Sciences Po.
- McDonald, James R. 1969. "Labor Immigration in France, 1946-1965." *Annals of the Association of American Geographers* 59(1):116-34.
- Meurs, Dominique, Ariane Pailhé and Patrick Simon. 2006. "The Persistence of Intergenerational Inequalities Linked to Immigration: Labour Market Outcomes for Immigrants and Their Descendants in France." *Population-E* 61(5-6):645-82.

- Minnesota Population Center. 2018. "Integrated Public Use Microdata Series, International." edited by N. I. o. S. a. E. S.-. France. Minneapolis, MN.
- Morokvasic-Muller, Mirjana, Bernard Dinh, Swanie Potot and Monika Salzbrunn. 2008. "Immigrant France: Colonial Heritage, Labour (Im)Migration and Settlement." Vol. *IDEA Working Papers*.
- Murphy, Kara. 2006. "France's New Law: Control Immigration Flows, Court the Highly Skilled." Vol. Washington, D.C.: Migration Policy Institute.
- Observatoire des Inégalités. 2017, "Cinq Millions D'emplois Demeurent Fermés Aux Étrangers Non Européens", Tours, France: Observatoire des Inégalités.
(<https://www.inegalites.fr/Cinq-millions-d-emplois-demeurent-fermes-aux-etrangers-non-europeens>).
- Olli Segendorf, Åsa. 2005. "Job Search Strategies and Wage Effects for Immigrants." Faculty of Social Sciences, The Swedish Institute for Social Research, Stockholm University, Stockholm.
- Pierné, Guillaume. 2013. "Hiring Discrimination Based on National Origin and Religious Closeness: Results from a Field Experiment in the Paris Area." *IZA Journal of Labor Economics* 2(4).
- Portes, Alejandro. 1998. *The Economic Sociology of Immigration: Essays on Networks, Ethnicity, and Entrepreneurship*. New York: Russel Sage Foundation.
- Safi, Mirna and Anna Jacobs. 2008. "The Immigrant Integration Process in France: Inequalities and Segmentation." *Revue Francaise de Sociologie* 49(Supplement: An Annual English Selection):3-44.
- Safi, Mirna. 2014. "Shifting Focus: Policies to Support the Labor Market Integration of New Immigrants in France." Vol. Washington, DC: Migration Policy Institute and International Labour Office.
- Sanders, Jimmy, Victor Nee and Scott Sernau. 2002. "Asian Immigrants' Reliance on Social Ties in a Multiethnic Labor Market." *Social Forces* 81(1):281-314.
- Semyonov, Moshe and Cedric Herring. 2007. "Segregated Jobs or Ethnic Niches? The Impact of Racialized Employment on Earnings Inequality." *Research in Social Stratification and Mobility* 25:245-57.
- Simon, Patrick and Elsa Steichen. 2014. "Slow Motion: The Labor Market Integration of New Immigrants in France." Vol. Washington, DC and Geneva: Migration Policy Institute and International Labour Office.
- Taras, Raymond. 2015. "French Muslims and France's Foreign Policy." in *Fear and the Making of Foreign Policy: Europe and Beyond*: Edinburgh University Press.
- Verdugo, Gregory. 2011. "Public Housing and Residential Segregation of Immigrants in France, 1968-1999." *Population* 66(1):169-93.
- Viprey, Mouna. 1998. "La Non-Neutralité Du Système D'emploi À L'égard Des Enfants De Parents Migrants." *Ville-Ecole-Intégration* 113:98-115.
- Wright, Richard and Mark Ellis. 2000. "The Ethnic and Gender Division of Labor Compared among Immigrants to Los Angeles." *International Journal of Urban and Regional Research* 24(3):583-600.

Figure 1 – Immigrant Occupational Segregation from the Native-born by Citizenship and Gender

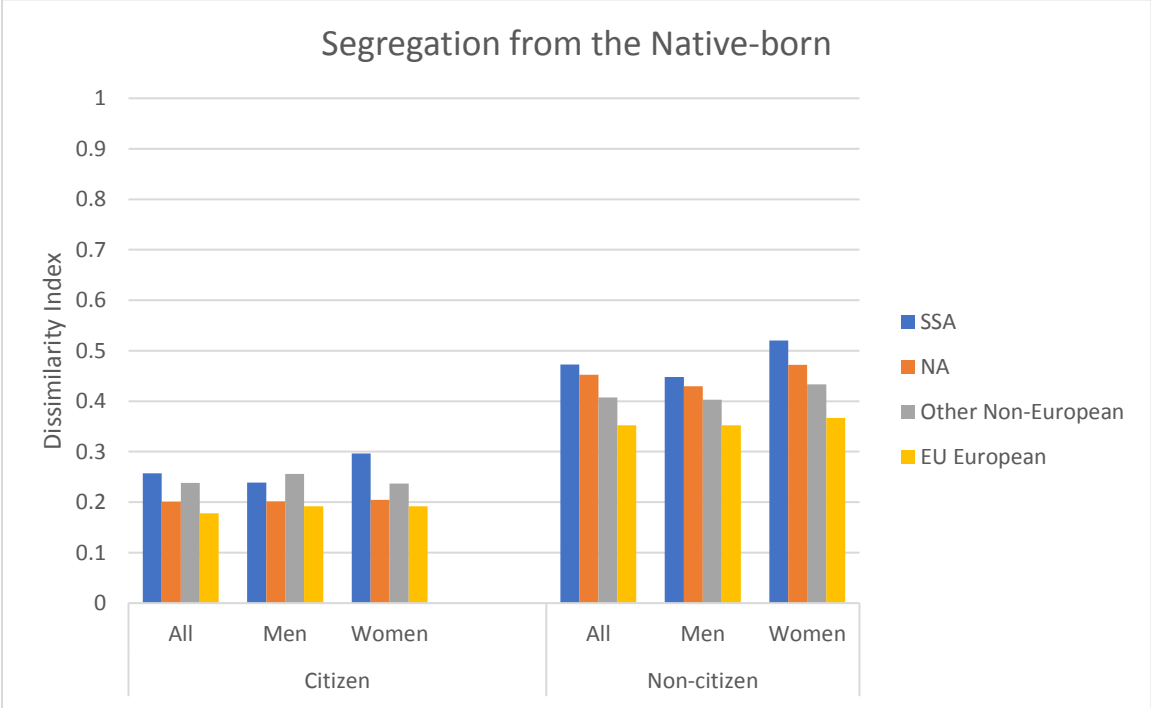


Figure 2 – Non-European Immigrants’ Occupational Segregation from EU Immigrants by Citizenship and Gender

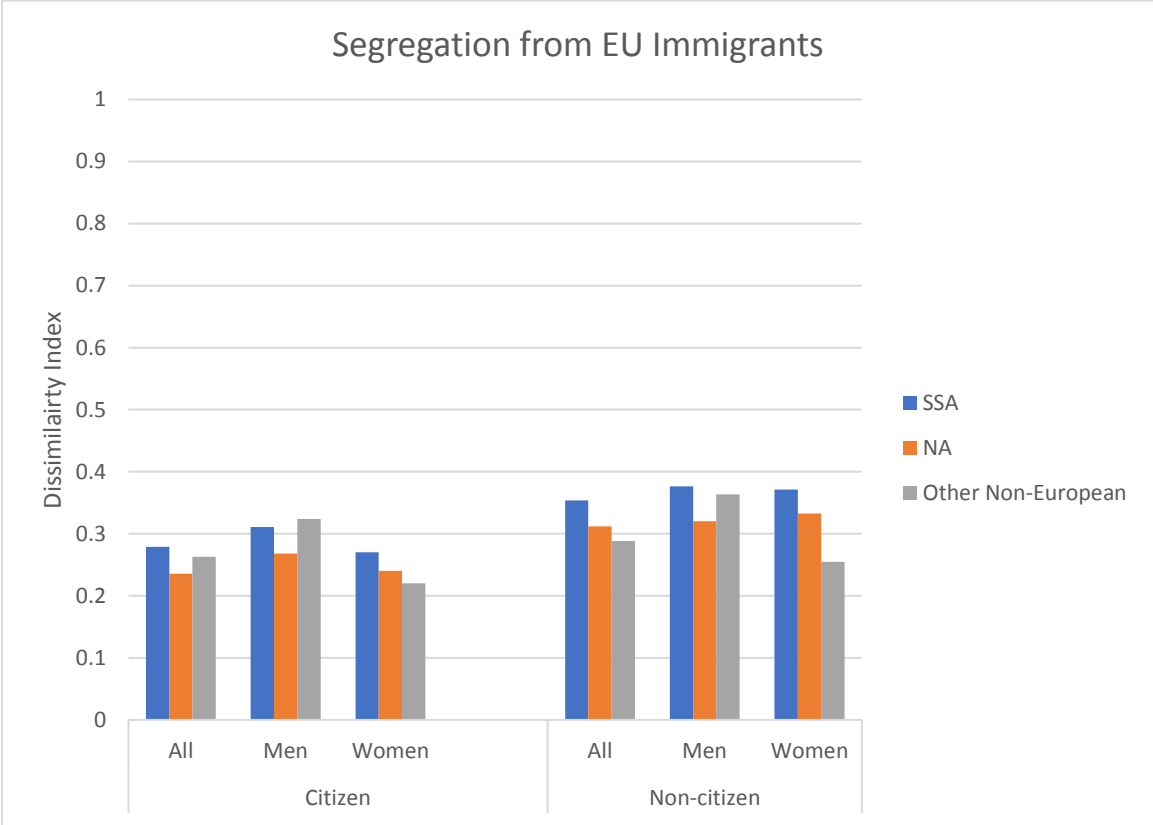


Table 1: Descriptive Characteristics in French Departments (Employed adults age 25-65)					
	Native-born	SSA Immigrant	North African Immigrant	Other Non-European Immigrant	EU European Immigrants
% of Population	87.4	2.3	4.5	2.1	3.7
% Citizen	---	61.8	70.3	60.2	39.3
N	6,447,688	168,068	334,361	157,989	272,224
<i>Citizens</i>					
% Women	48.6	49.7	44.1	47.4	53
Mean age	42	44	47	44	47
Educational Attainment (%)					
Less than Secondary	16.5	26.9	27.0	25.5	27.2
Secondary – Technical	26.1	14.6	20.0	12.5	23.7
Secondary – General	18.9	19.5	17.6	18.1	15.7
University	38.5	39.0	35.6	43.9	33.5
% New Immigrant (Arrived between 1999 and 2011)	---	19.8	13.8	11.3	7.7
<i>Non-citizens</i>					
% Women	---	43.8	31.6	47.3	44.5
Mean age	---	40	41	40	44
Educational Attainment (%)					
Less than Secondary	---	45.4	48.5	42.3	40.1
Secondary – Technical	---	9.7	15.3	6.0	14.4
Secondary – General	---	18.2	14.2	13.8	14.2
University	---	26.8	22.0	37.9	31.3
% New Immigrant (Arrived between 1999 and 2011)	---	56.6	49.4	57.9	41.1

Table 2. Immigrant Workers' Over-Represented Occupations (% of Occupation Comprised of Group Members) in French Departments by Gender			
Occupations with Over-representation of Sub-Saharan Africans			
<i>Occupation</i>	<i>% Sub-Saharan African Men</i>	<i>Occupation</i>	<i>% Sub-Saharan African Women</i>
Private security and surveillance agents	10.56	Maid service employees and multipurpose employees in a hotel	13.09
Secular clergy	8.62	Cleaner	7.08
Security guards, bodyguards, private investigators and similar (fully employed)	6.20	Domestic workers	5.89
Unskilled sanitation and waste treatment workers	5.42	Home health aides, housekeepers, family workers	4.76
Kitchen helpers, apprentices and multipurpose employees in the restaurant industry	5.28	Caregivers (civil service or private sector)	3.89
Occupations with Over-representation of North Africans			
<i>Occupation</i>	<i>% North African Men</i>	<i>Occupation</i>	<i>% North African Women</i>
Small- and medium-sized retailers of general foods, from 0 to 9 employees	14.23	Cleaner	9.67
Taxi drivers, paramedics and other transportation workers, from 0 to 9 employees	12.38	Maid service employees and multipurpose employees in a hotel	9.22
Skilled concrete workers	11.87	Childcare assistant, nannies, host families	7.58
Taxi Drivers (fully employed)	11.80	Domestic workers	6.75
Private security and surveillance agents	11.43	Home health aides, housekeepers, family workers	5.78
Occupations with Over-representation of Other non-Europeans			
<i>Occupation</i>	<i>% Other Non-European Men</i>	<i>Occupation</i>	<i>% Other Non-European Women</i>
Craftspeople of various services, from 0 to 9 employees	10.49	Interpreters, translators (independent or fully employed)	9.86
Taxi drivers, paramedics and other transportation workers, from 0 to 9 employees	9.03	Skilled tailors and seamstresses, workers skilled in fabric work (except clothing manufacturing), artisanal skilled workers in leather work	6.85
Cooks and kitchen assistant	7.18	Servers, restaurant assistants, waiters (bar, pub, cafe or restaurant)	5.33
Various repairers	6.42	Domestic workers	5.26
Secular clergy	5.10	Manicurists, aestheticians (salaries)	5.17
Occupations with Over-representation of EU Europeans			
<i>Occupation</i>	<i>% EU-European Men</i>	<i>Occupation</i>	<i>% EU-European Women</i>
Unskilled structural works construction workers	17.29	Janitors, caretakers	21.96
Skilled concrete workers	16.80	Domestic workers	18.03
Skilled masons	16.29	Interpreters, translators (independent or fully employed)	15.80
Masons	14.00	Rehabilitative masseurs-physiotherapists, fully employed	7.71
Team leaders of structural and public works	12.12	Owner of a small hotel, hotel-restaurant, from 0 to 2 employees	7.11

Occupations with 500+ Employees

Table 3. Immigrant Workers' Over-Represented Occupations (% of Occupation Comprised of Group Members) in French Departments by Gender - Citizens			
Occupations with Over-representation of Sub-Saharan Africans			
<i>Occupation</i>	<i>% Sub-Saharan African Men</i>	<i>Occupation</i>	<i>% Sub-Saharan African Women</i>
Private security and surveillance agents	4.88	Maid service employees and multipurpose employees in a hotel	5.23
Owner and manager of gas stations, from 0 to 9 employees	4.44	Cleaner	2.93
Security guards, bodyguards, private investigators and similar (fully employed)	3.71	Caregivers (civil service or private sector)	2.78
Taxi drivers, paramedics and other transportation workers, from 0 to 9 employees	3.14	Domestic workers	2.66
Unskilled sanitation and waste treatment workers	2.98	Home health aides, housekeepers, family workers	2.44
Occupations with Over-representation of North Africans			
<i>Occupation</i>	<i>% North African Men</i>	<i>Occupation</i>	<i>% North African Women</i>
Taxi drivers, paramedics and other transportation workers, from 0 to 9 employees	9.20	Childcare assistant, nannies, host families	5.29
Small- and medium-sized retailers of general foods, from 0 to 9 employees	7.63	Cleaner	4.89
Taxi Drivers (fully employed)	7.58	Maid service employees and multipurpose employees in a hotel	4.81
Private security and surveillance agents	6.52	Home health aides, housekeepers, family workers	3.89
Drivers of lifting equipment	6.05	Civil service officials (outside of schools, hospitals)	3.76
Occupations with Over-representation of Other non-Europeans			
<i>Occupation</i>	<i>% Other Non-European Men</i>	<i>Occupation</i>	<i>% Other Non-European Women</i>
Taxi drivers, paramedics and other transportation workers, from 0 to 9 employees	7.73	Interpreters, translators (independent or fully employed)	3.88
Various repairers	5.22	Skilled tailors and seamstresses, workers skilled in fabric work (except clothing manufacturing), artisanal skilled workers in leather work	2.89
Owner and manager of gas stations, from 0 to 9 employees	3.80	Drycleaners, laundrymen, from 0 to 9 employees	2.32
Taxi Drivers (fully employed)	3.23	Maid service employees and multipurpose employees in a hotel	2.14
Owner of small restaurant, café, 0 to 2 employees	2.85	Servers, restaurant assistants, waiters (bar, pub, cafe or restaurant)	2.07
Occupations with Over-representation of EU Europeans			
<i>Occupation</i>	<i>% EU-European Men</i>	<i>Occupation</i>	<i>% EU-European Women</i>
Masons	3.29	Janitors, caretakers	5.37
Team leaders of structural and public works	3.25	Interpreters, translators (independent or fully employed)	4.79

Skilled Masons	3.17	Domestic workers	4.34
Field foremen (non-management)	3.06	Clothing, textile and leather craftspeople	2.38
Skilled concrete workers	2.81	Skilled tailors and seamstresses, workers skilled in fabric work (except clothing manufacturing), artisanal skilled workers in leather work	2.27

Occupations with 500+ Employees

Table 4. Coefficients from Linear Regression Models of Metropolitan Area Level Occupational Segregation of Immigrants from the Native-born in French Departments (Employed Adults, age 25-64 and not in school)

	<i>Citizens only</i>		<i>Non-Citizens only</i>	
	Among Men	Among Women	Among Men	Among Women
Nativity (ref. EU European Immigrants)				
SSA	0.08***	0.10***	0.20***	0.28***
NA	0.08***	0.04***	0.15***	0.24***
Other Non-European	0.09***	0.08***	0.11***	0.19***
Proportion of same nativity/sex group in department	-0.01***	-0.01***	-0.01***	-0.01***
Median Educational Attainment of same nativity/sex group	(ref. some secondary)	(ref. BEPC)	(ref. some secondary)	(ref. BEPC)
Some Secondary	---	-0.02***	---	0.07***
CAP	-0.04***	-0.06***	-0.05***	0.03***
BEP	-0.06***	-0.08***	-0.11***	0.01***
BAC	-0.03***	-0.08***	-0.15***	-0.001***
BEA, BEC, BEI	-0.04***	-0.09***	-0.15***	0.03***
University, 1 st cycle	-0.11***	-0.15***	-0.21***	-0.05***
% New immigrant of same nativity/sex group in department	0.002***	0.002***	0.001***	-0.003***
% Citizen of same nativity/sex group in department	-0.001***	-0.002***	0.001***	0.01***
% Self-employed of same nativity/sex group in department	0.01***	0.01***	0.01***	0.01***
Department unemployment rate	0.01***	-0.004***	0.003***	-0.0004***
Number of Observations	62,313,975	57,042,171	49,457,948	36,699,379
Adjusted R ²	0.66	0.6648	0.679	0.7454

* p<0.05; ** p<0.01; *** p<0.001

Table 5. Coefficients from Linear Regression Models of Metropolitan Area Level Occupational Segregation of Visible Minority Immigrants from EU-born Immigrants in French Departments (Employed Adults, age 25-64 and not in school)

	<i>Citizens only</i>		<i>Non-Citizens only</i>	
	Among Men	Among Women	Among Men	Among Women
Nativity (ref. Other Non-European Immigrants)				
SSA	-0.03***	0.06***	-0.01***	0.03***
NA	-0.08***	0.06***	0.01***	0.11***
Proportion of same nativity/sex group in department	-0.003***	-0.004***	-0.01***	-0.01***
Median Educational Attainment of same nativity/sex group	(ref. some secondary)	(ref. BEPC)	(ref. some secondary)	(ref. BEPC)
Some Secondary	---	0.01***	---	-0.0002
CAP	-0.02***	-0.002***	-0.02***	0.02***
BEP	0.002***	0.01***	-0.01***	0.03***
BAC	-0.001***	-0.002***	0.02***	0.02***
BEA, BEC, BEI	-0.04***	-0.01***	-0.01***	-0.03***
University, 1 st cycle	-0.07***	-0.04***	-0.02***	-0.02***
% New immigrant of same nativity/sex group in department	0.003***	0.001***	0.0003***	-0.001***
% Citizen of same nativity/sex group in department	0.004***	0.0004***	0.001***	-0.003***
% Self-employed of same nativity/sex group in department	-0.0001***	0.02***	-0.004***	0.01***
Department unemployment rate	0.01***	0.00002***	0.01***	-0.0002***
Number of Observations	51,655,105	44,739,746	29,726,681	19,885,653
Adjusted R ²	0.4935	0.4693	0.5819	0.5194

* p<0.05; ** p<0.01; *** p<0.001

