Migrant Network and Immigrants’ Occupational Mismatch

ISABELLE CHORT
Université Paris-Dauphine, PSL Research University, IRD, LEDa, DIAL, 75016 Paris, France

Online Appendix
A.1. The MIDDAS migrant surveys

The MIDDAS migrant surveys took place in four waves between 2009 and 2010, successively in France, Italy, Mauritania and Côte d’Ivoire and using common sampling design, fieldwork procedures and questionnaire. Any attempt to carry out a representative survey focused on international migrants faces the issue that they usually represent a very small proportion of the population in a given country and that no survey frame is available. A detailed discussion on issues raised by migrant surveys and a comparison of the performance of alternative survey methods is provided by McKenzie and Mistiaen (2009). To mitigate these two problems, first, the most recent population censuses were used in each country to identify regions, and within them cities and districts, hosting significant populations of Senegalese migrants. When the number of potential districts to be surveyed within a region or city was important, three strata were constructed according to the density of the Senegalese population in each district. Districts to be surveyed were then randomly drawn within each stratum with probabilities proportional to the number of Senegalese in those districts. The number of migrants to be interviewed was finally determined using the relative weight of the relevant district in the total Senegalese population. This sampling method aimed at achieving representativeness especially at the geographic level.

To get as various a sample as possible, surveyors were then sent to the selected cities/districts and tasked with randomly getting in contact with Senegalese migrants in public spaces (streets, markets or shopping centres, public transport stations, and so forth). To be eligible, interviewees had to meet three compulsory criteria: (i) being aged 18 and over; (ii) residing in the relevant city/district; and (iii) either being a Senegalese national or a former Senegalese national. To further ensure representativeness, surveyors were also asked to keep diversity according to gender, age, education, and migration history. Contacting groups and snowballing were prohibited. For comparative purposes, the same full questionnaire was administered in each country, with nonetheless marginal adaptations depending on the context. The MIDDAS survey was designed to cover a wide range of quantitative and qualitative aspects of the migrant experience, including socio-demographic characteristics, housing and living conditions, employment and earnings, migration history, links to the origin household, remittance behaviour, return and investment projects in Senegal, insertion and social networks in the host country.
Table A1. Mapping of ISCO-08 major groups to skill levels

| ISCO-08 major groups                             | Skill level |
|-------------------------------------------------|-------------|
| 1 Managers                                      | 3+4         |
| 2 Professionals                                 | 4           |
| 3 Technicians and Associate Professionals        | 3           |
| 4 Clerical Support Workers                       | 2           |
| 5 Services and Sales Workers                     | 2           |
| 6 Skilled Agricultural, Forestry and Fishery Workers | 2           |
| 7 Craft and Related Trades Workers               | 2           |
| 8 Plant and Machine Operators, and Assemblers    | 2           |
| 9 Elementary Occupations                        | 1           |
| 0 Armed Forces Occupations                      | 1 + 2 + 4   |

Source: ILO

Figure A1. Distribution of skill levels (ISCO-08 definition) of self-declared comparative advantage and actual job.
**Table A2(a).** Actual job – 15 most frequent occupations (ISCO code)

| ISCO 08 code | Title                                                                 | %      | cum. %   |
|--------------|----------------------------------------------------------------------|--------|----------|
| 52           | Sales workers                                                        | 17.04  | 17.04    |
| 7531         | Tailors, dressmakers, furriers and hatters                          | 9.20   | 26.24    |
| 93           | Labourers in mining, construction, manufacturing and transport       | 6.84   | 33.08    |
| 5120         | Cooks                                                                | 6.34   | 39.43    |
| 91           | Cleaners and helpers                                                 | 3.73   | 43.16    |
| 95           | Street and related sales and service workers                         | 3.36   | 46.52    |
| 7112         | Bricklayers and related workers                                      | 2.99   | 49.50    |
| 8322         | Car, taxi and van drivers                                           | 2.74   | 52.24    |
| 723          | Machinery mechanics and repairers                                    | 2.36   | 54.60    |
| 6222         | Inland and coastal waters fishery workers                            | 2.24   | 56.84    |
| 7212         | Welders and flamecutters                                             | 1.99   | 58.83    |
| 5141         | Hairdressers                                                         | 1.49   | 60.32    |
| 7313         | Jewellery and precious-metal workers                                 | 1.49   | 61.82    |
| 9313         | Building construction labourers                                      | 1.49   | 63.31    |
| 5222         | Shop supervisors                                                     | 1.37   | 64.68    |

**Table A2(b).** Self-declared comparative advantage – 15 most frequent occupations (ISCO code).

| ISCO 08 code | Title                                                                 | %      | cum %    |
|--------------|----------------------------------------------------------------------|--------|----------|
| 7531         | Tailors, dressmakers, furriers and hatters                          | 12.42  | 12.42    |
| 723          | Machinery mechanics and repairers                                    | 6.01   | 18.44    |
| 5120         | Cooks                                                                | 5.01   | 23.45    |
| 52           | Sales workers                                                        | 4.01   | 27.45    |
| 7112         | Bricklayers and related workers                                      | 4.01   | 31.46    |
| 7411         | Building and related electricians                                    | 4.01   | 35.47    |
| 7212         | Welders and flamecutters                                             | 3.61   | 39.08    |
| 5141         | Hairdressers                                                         | 3.21   | 42.28    |
| 6222         | Inland and coastal waters fishery workers                            | 2.40   | 44.69    |
| 7522         | Cabinet-makers and related workers                                   | 2.40   | 47.09    |
| 3513         | Computer network and systems technicians                             | 2.20   | 49.30    |
| 7131         | Painters and related workers                                         | 2.00   | 51.30    |
| 7313         | Jewellery and precious-metal workers                                 | 2.00   | 53.31    |
| 91           | Cleaners and helpers                                                 | 1.60   | 54.91    |
| 23           | Teaching professionals                                               | 1.20   | 56.11    |

*Source: MIDDAS survey, 2009–2010*
Table A3. Probit estimates for horizontal and negative mismatch: Europe and Africa (restricted sample)

|                          | Europe          |            | Africa          |            |
|--------------------------|-----------------|------------|-----------------|------------|
|                          | (1)            | (2)        | (3)             |            |
|                          | Horizontal      | Negative   | Horizontal      |            |
|                          | mismatch (d)   | mismatch   | mismatch (d)   |            |
| Network help             | 0.215          | −0.486**   | 0.405***        |            |
|                          | (0.208)        | (0.200)    | (0.154)         |            |
| Time since arrival       | 0.027***       | −0.016**   | −0.004          |            |
|                          | (0.009)        | (0.008)    | (0.010)         |            |
| Male (d)                 | 0.323†         | −0.206     | 0.129           |            |
|                          | (0.204)        | (0.147)    | (0.204)         |            |
| Age at arrival           | 0.026†         | −0.003     | 0.009           |            |
|                          | (0.016)        | (0.010)    | (0.010)         |            |
| Intermediate or vocational secondary degree (d) | −0.141    | −0.058 | 0.273 |            |
|                          | (0.355)        | (0.246)    | (0.223)         |            |
| Secondary degree (baccalauréat) (d) | −0.143    | −0.334 | 0.138 |            |
|                          | (0.226)        | (0.417)    | (0.504)         |            |
| University degree (d)    | −0.193         | 0.134      | −0.296          |            |
|                          | (0.241)        | (0.264)    | (0.419)         |            |
| Italy (d)                | 0.823***       | 0.702***   |                 | 0.706**    |
|                          | (0.153)        | (0.189)    |                 | (0.321)    |
| Côte d'Ivoire (d)        |                 |            |                 | 0.706**    |
| Constant                 | −2.239***      | −0.473     | −1.487***       |            |
|                          | (0.520)        | (0.438)    | (0.349)         |            |
| Observations             | 230            | 230        | 254             |            |
| Pseudo $R^2$             | 0.098          | 0.082      | 0.055           |            |

Notes: Standard errors clustered at the region (Italy, Mauritania and Côte d’Ivoire) or employment area level (France) in parentheses. The alternative in each column is respectively the absence of horizontal and negative mismatch. $^+ p < 0.15$, $^* p < 0.10$, $^{**} p < 0.05$, $^{***} p < 0.01$. (d) for dummy variables. The reference category for education is no or primary education.

Reference

McKenzie, D. J., & Mistiaen, J. (2009). Surveying migrant households: A comparison of census-based, snowball and intercept point surveys. *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, 172(2), 339–360. doi:10.1111/rssa.2009.172.issue-2