Social networks and labour market outcomes among Senegalese migrants in Europe and Africa

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Our research questions

- To what extent Senegalese migrants rely on social network for securing employment?
- Which is the impact of network access and network use on the “quality” of their job?
  - What determines the “quality” of their job upon arrival?
  - And what allows them to improve their employment status?
- How does the context of reception shape the role of networks?

Motivation

- Migrant's labour market attainment and trajectories are a major concern in the policy debate
  - They can be a major factor of integration [Fokkema and De Haas, 2011]
  - Migrants' disadvantage in destination countries' labour markets [Chiswick, Lee and Miller (2005) ; Obucina (2011), Brodmann and Polavieja, 2011, Fullin and Reyneri, 2011]
- Social capital is often considered as playing a role in labour market processes
  - Migrants are considered to rely more than natives on social capital since they lack other endowments of capital
- Differences depending from on host economy and society: intra-African migrations are understudied in this respect

A brief literature review

- Wide literature on effect of social capital on labour market outcomes [Granovetter 1973 and 1995, Li 1983 and 1985, ...]
- Case of migrants: old studies on Mexican in the US [Portes and Jensen, 1989], more recent ones on Europe [Kanas et al 2011, Lancee, 2012]
- Different ties may have different impacts: “bridging” vs “bonding” social capital [Putnam, 2000]
  - “bridging” social capital = link with natives → usually considered positive for L mkt [Kanas and Van Tubergen, 2006 on Netherlands]
  - “bonding” social capital = link with co-ethnics → twofold effect: communication and trust vs. “entrapment” [Munshi, 2001 Aguilera and Massey (2003), Kanas and Van Tubergen (2006 and 2011), Amuedo-Durantes et al (2004)]

The data: the “MIDDAS” survey

- Survey conducted in 2009 among Senegalese migrants in France, Italy, Mauritania, Côte d’Ivoire
- We use the dataset on migrants in France, Italy and Mauritania = 893 observations
- Modules on post-migration status and several modules on networks (family, friends, associations, etc.)

Descriptive statistics

	ALL	FRANCE	ITALY	MAURITANIA	Differences MAU/EUR
share of men	71.7	74.8	77.8	63.5	***
age	36.7	38.2	36.2	35.9	**
period of arrival					
before '90s	42	26.3	11.8	85.5	***
90s	21.4	27.9	34.3	4.3	***
2000s	36.6	45.9	53.9	13.2	***
education					
primary	17.8	20	15.8	17.8	
secondary	30.1	26.3	47.1	17.8	***
tertiary	13.3	19.3	21.2	1.2	***
TOT OBS	893	270	297	326	

What do we investigate and how

- Two steps:
  - Who are the people who rely on networks to find a job? Y = job search process
  - How do different networks and job search processes affect job characteristics? Y= labour market outcomes
- For both steps we have measures of both first and current/last jobs
- Main usual problems in analysing the relationship social K – L mkt:
  - Reverse causality: we use the time dimension to identify the direction of the relationship
  - Strong endogeneity issues: unobservables can explain both "being well-connected" and "L mkt outcomes" or "using informal channels" and "L mkt outcomes" [Mouw, 2003]

The dependent variables

	First job	**Current job**
Network use	Did he/she found the first job through … ? Informal (network) channel Family network Friends' network	Did he/she found the current job through … ? Informal (network) channel Family network Friends' network
Labour market outcome	Quality (ISEI score) of the first job	Is he/she is currently employed? Quality (ISEI score) of the current job Quality (4 categories) of the current job: unskilled/skilled/white collar/self-employed

Descriptive statistics of dependent variables

- Occupational score: ISEI: Ganzeboom et al, 1992. International Socio-Economic Index of occupational status
  - Weighted sum of socio-economic characteristics of incumbent of each occupation (education, income and occasionally some others). Combines data on men on 16 countries.
  - Ganzeboom and Treiman, 1996, associate the three classifications to ISCO 88 (ILO classifications), 4 digits.

	ALL	FRANCE	ITALY	MAURITANIA	Differences MAU/EUR
isei first job	29.1	27	29.1	30.8	***
isei last job	31.9	32.1	32.1	31.7	
wage (euros)	769	1260	1123	118	***
unemployed %	15.6	15.2	21.6	10.4	***

Social capital variables

	First job	**Current job**
Access to social capital	Family network at arrival Association membership at arrival Size of the network known before migration Are there some “natives” in the network? (Ethnic origin) (Religion)	Family network before the current job Association membership before the current job Size of the network known before the current job Are there some “natives” in the network? (Ethnic origin) (Religion)
Use of social capital	Did he/she found the first job through informal (network) channel?	Did he/she found the current job through Informal (network) channel?

Descriptive statistics of social capital variables

	ALL	FRANCE	ITALY	MAURITANIA	Differences MAU/EUR
find first job though network %	69.4	55.6	75.9	74.4	**
find last job though network %	51.5	40.5	49.4	72.6	***
size of family network at arrival	1.01 (1.25)	1.25 (1.33)	0.7 (0.9)	1.12 (1.34)	**
size of family network at time of last job	1.13 (1.40)	1.27 (1.37)	0.86 (1.17)	1.27 (1.59)	**
member of association upon arrival %	10.3	6.3	11.8	12.3	*
Network size at survey time	1.21 (1.46)	1.37 (1.71)	1.25 (1.33)	1.05 (1.33)	**

Other explanatory variables

	First job	**Current job**
Human capital	Schooling at arrival Age at arrival Had a job in Senegal	Schooling at survey time Whether graduated in Europe Age at arrival
Background in Senegal	Origin hh lives in Dakar	Origin hh lives in Dakar
Characteristics of migration	Year of arrival undocumented at arrival	Year of arrival undocumented at arrival
Other controls	Sex Destination country	Sex Destination country

Determinants of network use

a) upon arrival

"When you arrived in France/Italy, how did you find your first job?

- Multinomial logit of job search method upon arrival
- ref. category is "Formal channel"
- Marginal effects
- Control for ethnic and religion dummies and for hh origin resident in Dakar

	Network use to find first job	
	Family	Friends
Mauritanian sample (d)	1.315***	0.514*
	(0.386)	(0.312)
Italian sample (d)	1.191***	0.999***
	(0.395)	(0.303)
Primary education (at arrival) (d)	-0.144	0.392
	(0.353)	(0.290)
Secondary education (at arrival) (d)	-0.400	0.223
	(0.300)	(0.237)
Tertiary education (at arrival) (d)	-0.789	-0.111
	(0.509)	(0.375)
Age at arrival	-0.053***	-0.018
	(0.015)	(0.012)
Arrived in the 1990s (d)	-0.480	-0.251
	(0.381)	(0.291)
Arrived in the 2000s (d)	-0.042	-0.536**
	(0.310)	(0.261)
Undocumented migrant (at arrival) (d)	0.316	0.933***
	(0.418)	(0.316)
Male (d)	-0.954***	-0.468**
	(0.261)	(0.234)
Number of relatives in destination country (at arrival)	0.225***	-0.183**
	(0.085)	(0.087)
Size of social network	0.131	-0.034
	(0.095)	(0.086)
Number of “natives” in social network	0.069	0.128
	(0.263)	(0.252)
Was a member of an association before departure (d)	-0.099	0.043

Determinants of network use

a) for the current job

"How did you find your current job?"

- Multinomial logit of job search method for the last employment
- ref. category is "Formal channel"
- Marginal effects
- Control for ethic and religion dummies

	Network use to find first job	
	Family	Friends
Mauritanian sample (d)	1.457***	0.942***
	(0.454)	(0.336)
Italian sample (d)	0.016	0.650**
	(0.493)	(0.309)
Primary education(d)	-0.549	-0.136
	(0.366)	(0.282)
Secondary education (d)	-0.789**	-0.531*
	(0.369)	(0.275)
Tertiary education (d)	-2.031***	-0.878**
	(0.752)	(0.383)
dipl_eur	-0.132	-0.523
	(0.567)	(0.380)
Age at arrival	-0.037**	-0.031**
	(0.016)	(0.013)
Arrived in the 1990s (d)	-0.154	-0.376
	(0.448)	(0.311)
Arrived in the 2000s (d)	-0.076	0.033
	(0.371)	(0.274)
Undocumented migrant (at arrival) (d)	-1.382**	0.375
	(0.666)	(0.307)
Male (d)	-0.557*	-0.028
	(0.294)	(0.238)
Number of relatives in destination country (at)	0.244***	0.065
	(0.093)	(0.080)
Size of social network	0.040	-0.007
	(0.103)	(0.074)
Number of Europeans in social network	0.106	-0.152
	(0.212)	(0.192)

Main findings

- Initially, youths, women and undocumented migrants have higher probability to find job through informal channel
  - This result holds for the current job (not for undocumented on arrival)
- Education lowers the probability of finding a job through informal channels, but not for first employment
- Correlation between family network access and probability of finding job through informal channels → Social ties seem to play a role in job search method
  - "Substitutability" of family and friends network

Occupational status upon arrival

OLS and IV of ISEI firts job

Controls: education, gender, religion, undocumented

Network use instrumented with the predicted probabilities through a multinomial logit model

	(1)	(3)	(4)	(5)	(6)
VARIABLES	OLS	OLS	OLS	OLS	IV
Mauritanian sample (d)	1.247	2.065*	3.799***	1.647	1.907
	(1.102)	(1.113)	(1.340)	(1.200)	(2.492)
Italian sample (d)	-1.374	-0.462	1.251	-0.969	-1.947
	(1.087)	(1.076)	(1.370)	(1.134)	(2.751)
Wolof (d)	1.153	1.000	1.070	1.015	1.746
	(0.949)	(0.949)	(0.948)	(0.949)	(1.289)
Peul (d)	-2.027*	-2.002*	-2.014*	-1.993*	-0.992
	(1.186)	(1.187)	(1.183)	(1.187)	(1.593)
Soninke (d)	-3.538**	-3.633**	-3.798**	-3.686**	-2.582
	(1.587)	(1.598)	(1.595)	(1.600)	(2.379)
N of relatives in destination country (at arrival)	-0.095				
	(0.281)				
Size of social network	-0.632**				
	(0.283)				
member of an asso before departure (d)	-0.691				
	(1.068)				
findjob_family_o		-1.666*	-1.978**	-3.705**	-0.409
		(0.938)	(0.946)	(1.808)	(13.183)
findjob_friends_o		-2.020***	0.667	-1.956**	6.243
		(0.776)	(1.322)	(0.777)	(11.136)
MAUxfindjob_friends_o			-3.970**		
			(1.692)		
ITAxfindjob_friends_o			-3.599**		
			(1.694)		
MAUxfindjob_family_o				2.240	
				(2.085)	
ITAxfindjob_family_o				3.171	

Probability of being employed

Probit and IV Probit of "Being employed at survey time"

Controls: education, gender, religion, undocumented

size of social network at survey time is instrumented using the number of relatives present at arrival and association membership upon arrival

	(1)	(2)	(3)	(4)
VARIABLES	Probit	Probit	IV Probit	Sel eq
Mauritanian sample (d)	0.099**	0.159***	0.399**	-0.498***
	(0.048)	(0.055)	(0.199)	(0.169)
Italian sample (d)	-0.077*	-0.028	-0.298*	-0.073
	(0.041)	(0.049)	(0.159)	(0.156)
Peul (d)	0.038	0.039	0.148	0.048
	(0.047)	(0.047)	(0.183)	(0.176)
Wolof (d)	0.058	0.063*	0.226	-0.000
	(0.037)	(0.037)	(0.146)	(0.140)
Soninke (d)	0.054	0.052	0.210	-0.075
	(0.064)	(0.064)	(0.250)	(0.237)
Size of social network	-0.035***	-0.013	-0.109	
	(0.008)	(0.013)	(0.167)	
MAUxKnetworksize		-0.046**		
		(0.022)		
ITAxKnetworksize		-0.034*		
		(0.020)		
N of relatives in destination country (at arrival)				0.152***
				(0.042)
member of asso before departure (d)				0.799***
				(0.162)

Occupational status at survey time (1)

OLS and IV regression of socio-economic index (ISEI) of occupational status at survey time (last job)

Controls: education, gender, religion, undocumented

network use instrumented with its predicted probability (using a probit model)

	(1)	(2)	(3)	(4)
VARIABLES	OLS	OLS	OLS	IV network use
Mauritanian sample (d)	0.253	-0.952	2.242	2.307
	(1.654)	(2.242)	(1.890)	(2.451)
Italian sample (d)	-0.789	-2.547	-1.720	-1.677
	(1.267)	(1.550)	(1.451)	(1.775)
isei_first	0.565***	0.560***		
	(0.046)	(0.046)		
Peul (d)	1.876	1.860	-0.256	-0.336
	(1.539)	(1.535)	(1.794)	(2.637)
Wolof (d)	0.063	0.125	0.548	0.490
	(1.288)	(1.286)	(1.476)	(2.020)
Soninke (d)	-3.726**	-3.792**	-6.730***	-6.813**
	(1.882)	(1.878)	(2.147)	(2.943)
findjob_network	-0.748	-2.808**	-1.856*	-2.225
	(0.906)	(1.428)	(1.053)	(8.976)
MAUxfindjob_network		2.334		
		(2.403)		
ITAxfindjob_network		3.958*		
		(2.022)		
Constant	9.800	11.507*	28.885***	29.420*
	(6.641)	(6.682)	(7.601)	(15.005)
Observations	409	409	449	449
R-squared	0.452	0.458	0.287	0.286

Occupational status at survey time (2)

Multinomial logit of job categories [ref. is unskilled manual]

Controls: education, gender, religion, undocumented

	(1)	(2)	(3)
	Unskilled non manual	Semi-skilled	Self-employed/other
Mauritanian sample (d)	1.040*	3.004***	1.508*
	(0.573)	(0.619)	(0.777)
Italian sample (d)	-1.529***	0.192	0.616
	(0.462)	(0.416)	(0.495)
Wolof (d)	-0.094	-0.067	0.657
	(0.436)	(0.422)	(0.551)
Peul (d)	-0.591	-0.643	-0.056
	(0.515)	(0.502)	(0.667)
Soninke (d)	-0.693	-1.962**	-0.496
	(0.558)	(0.771)	(0.955)
findjob_network	0.409	-0.479	1.116***
	(0.323)	(0.304)	(0.364)

Main findings

- Social network play different roles in countries: no sharp divide Africa/Europe, but also important differences Italy/France
- Apparent negative effect of both network access and network use, but not robust to instrumentation
- Controls play in the expected way: education and diploma at destination have positive effect on labour market outcome; being undocumented upon arrival has negative and long-lasting effect (not on probability of being employed, but on job quality)
- Ethnicity variables significant: what do they capture? Networks and/or urban vs rural?

Tentative conclusions and way forward

- Networks are highly endogenous: this puts into perspective the pessimistic litterature on networks
  - It is necessary to look at «who uses networks» (in our case, expecially women, youths, undocumented, less educated)

- Relevant role of host contexts: explore more these differences besides the network interaction
- Ivory Coast
- Analysis of wages
- What does effect of ethnicity represents?

The relevant subsamples

- We exclude from the sample those who were born at destination and those who are still at school (N = 888)
- Get the proper subsample for each sub-question:
  - Charact of first job: we exclude those who were students at arrival and those who never got a job (unemployed or inactive) N=777
  - Charact of current job: we just consider those having a (not occasional) job at survey time N=715
  - Probability of having a job today: we exclude those who never looked for a job, retired and non-working because injured N=862