Job Networks in Izmir: Why are Migrants Different?

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ECOMOD 2013

Motivation

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- Unemployment is a major concern to majority of the residents in Izmir, the third biggest city in Turkey.
- People use various channels to improve the likelihood of finding a job:
  - formal channels (high educated workers)
  - informal channels (less educated workers)
- Social networks are more important for migrants in general

Table 1 Unemployment rate and rate in total population of migrants and residents in Izmir

	Unemployment Rate	% of total population
Migrant	17.12%	41.35%
Resident	17.12%	58.65%

Outline of today's presentation:

- Outline
- Introduction
- Literature Review
- Methodology
- Results
- Conclusion

Introduction

- Migrants in Izmir have a greater presence in the labor market than their position in the total sample
- Migrants face lower cost when they use networks
- Such networks are more efficient for low qualified jobs, while they are not sufficient for high qulified ones

Literature Review

- Jackson&Calvo-Armengol (2004, 2007): employed workers tend to cluster and create a positive feedback loop among each other in terms of learning job openings and passing that info to the connected agents
- Munshi (2003): social network effects on the Mexican migrants' employment opportunities in the US.
- Wahba&Zenou (2005): the impact of population density on the probability to find a job using social networks in Egypt
- Zenou (2012): asks whether migrants or residents in France and UK use social networks more successfully while searching for employment

Unemployment Rate

NUTS2 Regions	Unemployment rate (%)						
	2005	2006	2007	2008	2009	2010	2011
TR10 (İstanbul)	11.5	11.4	10.4	11.2	16.8	14.3	11.8
TR31 (İzmir)	13.9	12.0	10.5	11.8	16.2	15.1	14.7
Overall unemployment rate (TurkStat)	**10.6**	**10.2**	**10.3**	**11.0**	**14.0**	**11.9**	**9.8**

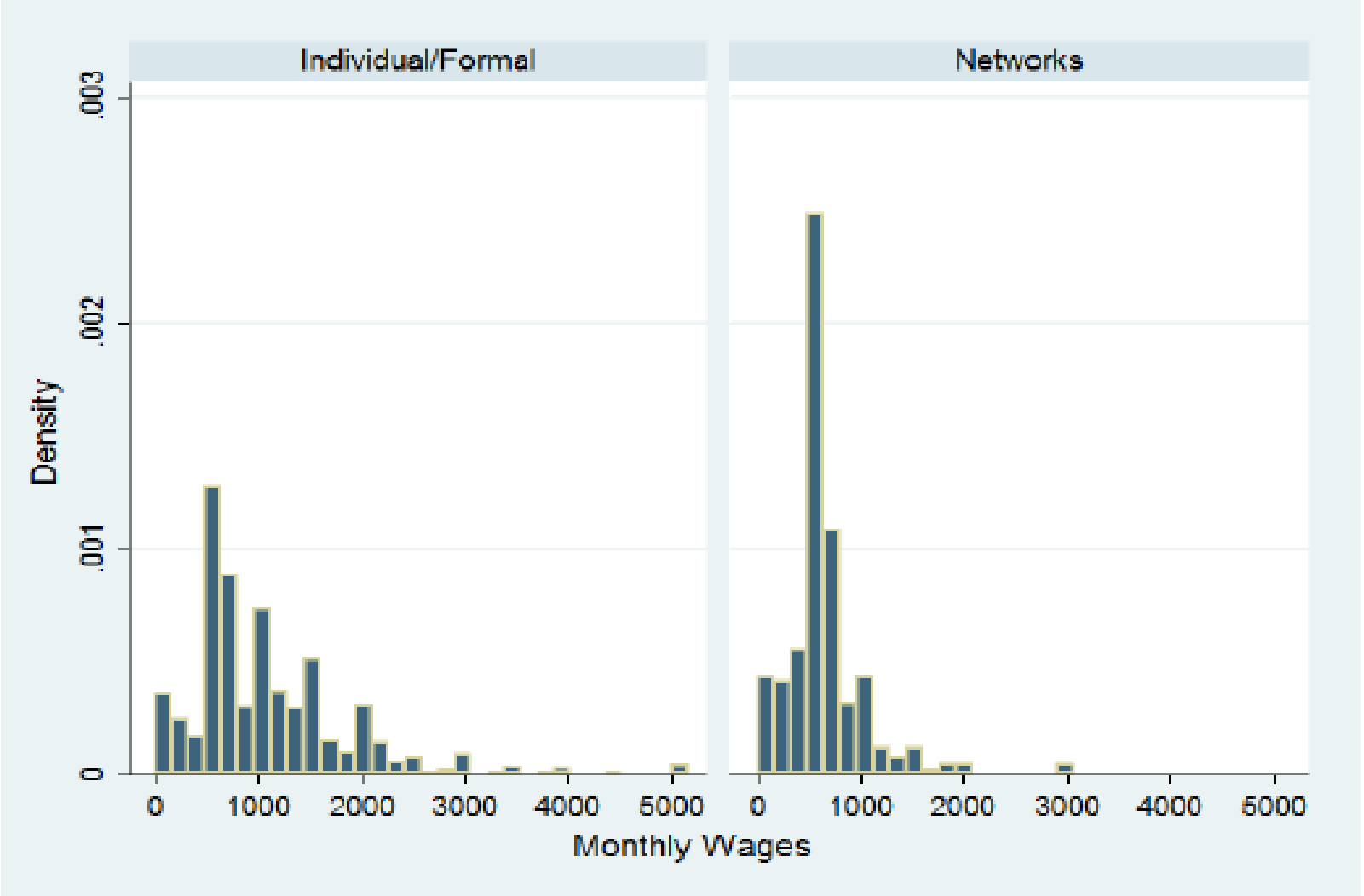
Education distribution of people that use networks

	Migrants		Residents	
	Educated	Less Educated	Educated	Less Educated
Networks	13.58	23.05	16.96	16.46

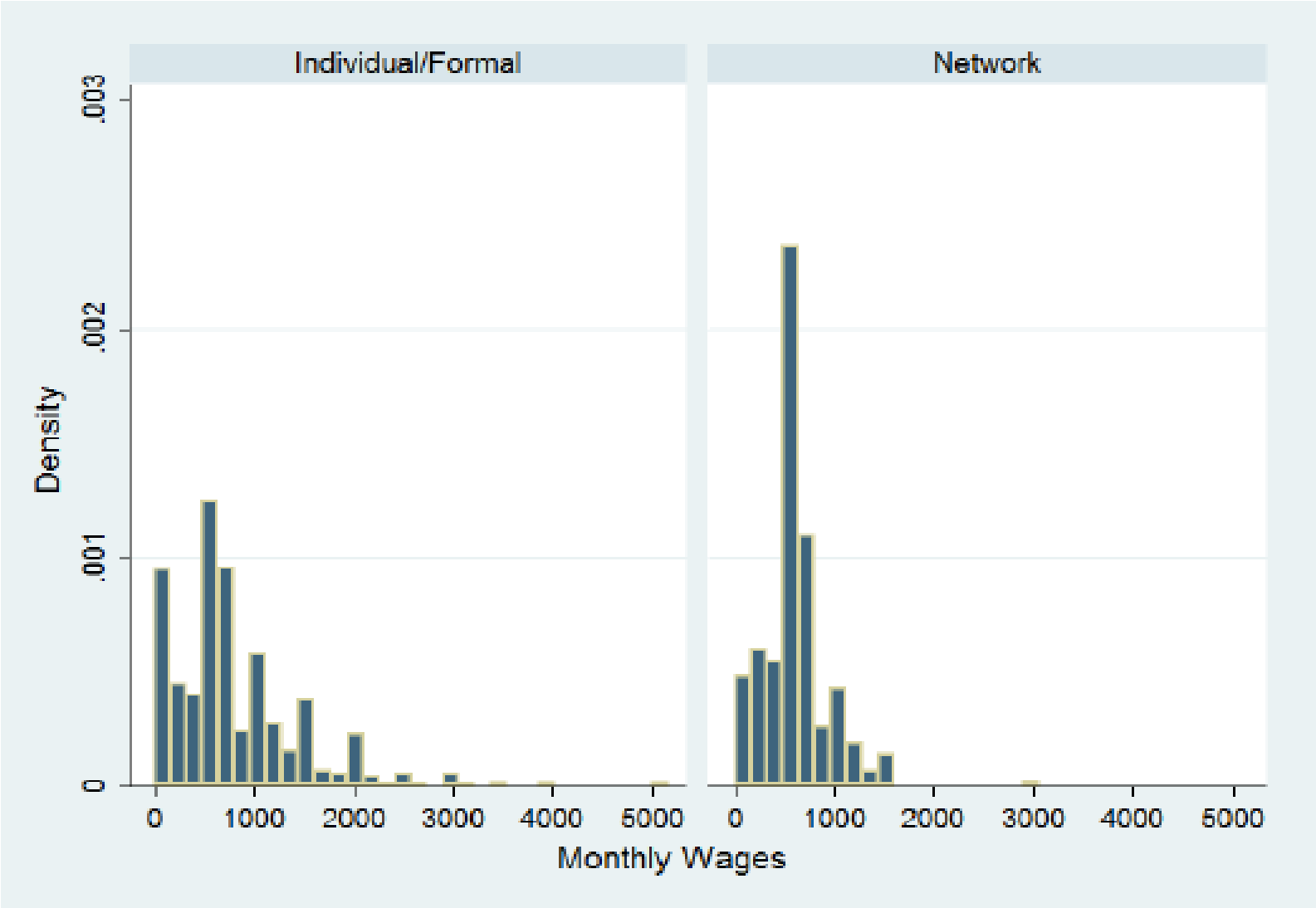
Avarage monthly wages of migrants vs residents

	Migrant		Resident	
	Average	Max	Average	Max
Using Network	659,3152	3000	621,3115	3000
Not Using Network	1100,6030	7500	860,5601	25000

Monthly wages of Migrants



Monthly wages of Residents



Where do migrants come from?

Origin	Total Migrants	# of migrants in Izmir
Turkey	2360079	111255
İstanbul	336932	11177
Manisa	35497	9785
Ankara	13344	7046
Aydın	29923	5926
Balıkesir	35162	4504
Muğla	2885	3643
Konya	56729	3685
Diyarbakır	44858	2982
Bursa	5722	2774
Antalya	61662	2752
Denizli	23468	2495

Data

- Specific data set from the Izmir region, prepared by the Turkish Statistical Institute for a specific survey carried out by Izmir University of Economics in cooperation with the Izmir Commerce Centre, the Izmir branch of the Turkish Statistical Institute and the Turkish Labour Institute. (2011)

Methodology (Probit)

$Netjob_i = \alpha_0 + \alpha_1 X_i + \alpha_2 FE_i + \alpha_3 FO_i + \varepsilon_i$

where X is a vector of individual and household characteristics, FE is father's education, FO is a vector of dummies for father's occupation, and ε is the error term.

Probit Regression Results (Marginal effects)

	I	II
Sex	-0.0233	-0.0246
	(0.0156)	(0.0156)
Age	-0.0181	-0.0184
	(0.0037)***	(0.0037)***
Age^2	0.0001	0.0001
	(0.0000)***	(0.0000)***
Migrant	0.0559	0.0568
	(0.0142)***	(0.0142)***
Single	0.0214	0.0183
	(0.0212)	(0.0211)
Divorced	0.0094	0.0048
	(0.0413)	(0.0407)
Size	0.0019	0.0018
	(0.0050)	(0.0050)
Education	-0.0332	-0.0359
	(0.0067)***	(0.0068)***
Father's Education	-0.0152	-0.0214
	(0.0081)*	(0.0092)**
Qualified Father		0.0596
		(0.0337)*
Self Employed Father		0.0105
		(0.0235)
Qualified Worker Father		0.0400
		(0.0211)**
Unqualified Worker Father		0.0253
		(0.0215)
N	3009	3009
Pseudo R^2	0.0874	0.0897

Probit Results According to Education (Marginal effects)

	Total	Less Educated	Higher Educated
Sex	-0.0246	-0.0526	0.0103
	(0.0156)	(0.0227)**	(0.0207)
Age	-0.0184	-0.0163	-0.0271
	(0.0037)***	(0.0049)***	(0.0064)***
Age^2	0.0001	0.0001	0.0002
	(0.0000)***	(0.0000)*	(0.0001)***
Migrant	0.0568	0.0840	0.0167
	(0.0142)***	(0.0198)***	(0.0201)
Single	0.0183	-0.0156	0.0253
	(0.0211)	(0.0296)	(0.0273)
Divorced	0.0048	-0.0206	0.0552
	(0.0407)	(0.0515)	(0.0681)
Size	0.0018	-0.0012	0.0095
	(0.0050)	(0.0064)	(0.0084)
Education	-0.0359		
	(0.0068)***		
Father's Education	-0.0214	-0.0216	-0.0211
	(0.0092)**	(0.0156)	(0.0104)**
Qualified Father	0.0596	0.1543	-0.0001
	(0.0337)*	(0.0641)***	(0.0386)
Self Employed Father	0.0105	0.0125	-0.0229
	(0.0235)	(0.0325)	(0.0328)
Qualified Worker Father	0.0400	0.0461	0.0067
	(0.0211)**	(0.0282)*	(0.0326)
Unqualified Worker Father	0.0253	0.0244	0.0211
	(0.0215)	(0.0263)	(0.0398)
N	3009	1801	1208
Pseudo R^2	0.0897	0.0785	0.1156

Probit Results according to education controlling for wage (marginal effects)

	Total	Less Educated	Higher Educated
Sex	-0.0331	-0.0876	0.0218
	(0.0176)*	(0.0284)***	(0.0197)
Age	-0.0163	-0.0174	-0.0180
	(0.0041)***	(0.0056)***	(0.0065)***
Age^2	0.0001	0.0001	0.0001
	(0.0000)**	(0.0000)*	(0.0001)*
Migrant	0.0454	0.0629	0.0161
	(0.0148)***	(0.0215)***	(0.0194)
Single	0.0041	-0.0331	0.0178
	(0.0216)	(0.0320)	(0.0258)
Divorced	-0.0096	-0.0434	0.0403
	(0.0395)	(0.0508)	(0.0631)
Size	0.0021	0.0024	0.0002
	(0.0053)	(0.0070)	(0.0083)
Education	-0.0244		
	(0.0076)***		
Father's Education	-0.0149	-0.0135	-0.0136
	(0.0096)	(0.0171)	(0.0101)
Qualified Father	0.0471	0.1283	0.0187
	(0.0340)	(0.0653)**	(0.0332)
Self Employed Father	0.0150	0.0182	-0.0087
	(0.0249)	(0.0358)	(0.0336)
Qualified Worker Father	0.0401	0.0415	0.0187
	(0.0222)*	(0.0303)	(0.0332)
Unqualified Worker Father	0.0162	0.0124	0.0193
	(0.0223)	(0.0284)	(0.0390)
lnWage	-0.0815	-0.0730	-0.1014
	(0.0122)***	(0.0163)***	(0.0177)***
N	2726	1572	1154
Pseudo R^2	0.1151	0.0971	0.1540

Probit Results according to education controlling for wage and work (marginal effects)

	Total		Less Educated		Higher Educated	
	I	II	I	II	I	II
Sex	-0.0322	-0.0248	-0.0822	-0.0620	0.0220	0.0211
	(0.0176)*	(0.0174)	(0.0283)***	(0.0276)**	(0.0196)	(0.0197)
Age	-0.0157	-0.0157	-0.0156	-0.0159	-0.0187	-0.0189
	(0.0042)***	(0.0042)	(0.0057)***	(0.0056)***	(0.0065)***	(0.0065)***
Age^2	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002
	(0.0000)*	(0.0000)**	(0.0001)	(0.0001)	(0.0001)**	(0.0001)**
Migrant	0.0451	0.0406	0.0639	0.0551	0.0177	0.0188
	(0.0148)***	(0.0148)***	(0.0214)***	(0.0213)***	(0.0194)	(0.0195)
Single	0.0038	0.0044	-0.0345	-0.0320	0.0182	0.0187
	(0.0216)	(0.0215)	(0.0318)	(0.0315)	(0.0258)	(0.0259)
Divorced	-0.0106	-0.0093	-0.0465	-0.0411	0.0420	0.0425
	(0.0394)	(0.0392)	(0.0503)	(0.0498)	(0.0635)	(0.0637)
Size	0.0019	0.0023	0.0017	0.0027	0.0005	0.0005
	(0.0053)	(0.0053)	(0.0070)	(0.0070)	(0.0083)	(0.0083)
Education	-0.0233	-0.0250				
	(0.0077)***	(0.0077)***				
Father's Education Qualified Father	-0.0146	-0.0144	-0.0115	-0.0143	-0.0141	-0.0143
	(0.0096)	(0.0095)	(0.0171)	(0.0170)	(0.0101)	(0.0101)
	0.0455	0.0429	0.1260	0.1164	0.0072	0.0075
	(0.0339)	(0.0336)	(0.0652)**	(0.0644)**	(0.0387)	(0.0387)
Self Employed	0.0150	0.0197	0.0203	0.0314	-0.0076	-0.0086
	(0.0249)	(0.0252)	(0.0359)	(0.0368)	(0.0337)	(0.0336)
Father Qualified Worker	0.0405	0.0407	0.0423	0.0418	0.0183	0.0180
	(0.0222)*	(0.0222)*	(0.0304)	(0.0302)	(0.0331)	(0.0331)
Father Unqualified Worker	0.0160	0.0161	0.0109	0.0134	0.0179	0.0181
	(0.0223)	(0.0223)	(0.0283)	(0.0281)	(0.0388)	(0.0388)
Father lnWage	-0.0771	-0.0823	-0.0599	-0.0663	-0.1077	-0.1052
	(0.0129)***	(0.0130)***	(0.0172)***	(0.0173)***	(0.0188)***	(0.0191)***
SGK	-0.0192	-0.0444	-0.0522	-0.1024	0.0276	0.0326
	(0.0182)	(0.0200)**	(0.0234)**	(0.0258)***	(0.0257)	(0.0258)
Firm Size		0.0647		0.1304		-0.0160
		(0.0160)***		(0.0244)***		(0.0219)
N	2726	2726	1572	1572	1154	1154
Pseudo R^2	0.1155	0.1218	0.1003	0.1195	0.1550	0.1556

Conclusion

- The aim of this paper is to investigate the network effect on probability of job finding.
- Migrants have comparative advantage in using social networks to find jobs conditional on that the end result is a success
- The effect of social networks becomes insignificant for the high educated workers.
- Social networks and fathers' job status matter for the less educated workers
- Networks are mainly used for less paid jobs.

Conclusion

- The usage of networks mostly depends on the education level and residency.
- Migrants tend to use social networks more for low paid jobs
- We suggest İŞKUR to revize its job matching policies taking into account these factors