

Family and personal network: analysis of recent international migration in Turin

Reti familiari e personali: analisi della recente immigrazione internazionale in Torino

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Abstract Questo lavoro presenta i primi risultati di un'analisi dinamica del fenomeno migratorio a Torino. Sono stati utilizzati dati di fonte anagrafica rilevati alla fine del 2004. Gli inserimenti di nuovi componenti nei nuclei familiari sono stati seguiti nel tempo al fine di monitorare l'evoluzione dei nuclei stessi. Si è lavorato sia in ottica descrittiva che inferenziale con l'utilizzo del modello di Cox. In tutto il lavoro sono state tenute presenti le teorie del capitale umano e della Social Network Theory, le quali mirano a spiegare l'ammontare dei flussi migratori in conseguenza della diffusione delle reti familiari.

Keywords: Foreign people in Italy, Social Network Theory, Survival Analysis, Cox Model

1. Introduction

Many studies analyse migration flow, particularly at the macro level. The latest emphasis in demographic and sociological literature however, focused on "social network theory". According to the new hypothesis, migrant networks are sets of interpersonal ties that connect migrants, former migrants and non-migrants in origin and destination countries through ties of kinship, friendship and shared community origin (see Massey 1993). The ties increase the likelihood of international migration for lower costs and risks of movement. Migration flow is not only explained by differentials in wages and employment conditions but by the effects of the network too, where the network connections constitute a form of social capital that people can draw upon to gain access to foreign employment. The aims of this paper are to test the utilization of public data in dynamic way and to summarize the main results of an analysis on the evolution of the foreign families legally living in Turin.

The data source is a public register of Turin with information detected at the end of 2004, (this kind of data were analysed in a previous paper by Barugola 2004). It turned out 70040 foreigners are living in the city, together with 9702 Italian people, forming a total number of 38766 families. The foreigners arrived since 1987 were considered to analyse huge cohorts of immigrant (the cohort consists of families identified by year of enrolment of first component). The family groups with foreign and Italian people, components arrived simultaneously and where information was lacking were removed from the analysis. The final database (without any information about who left the city) counts 28748 records.

The households examined refer to people who haven't change their decision of living in Turin over years; in a certain way they represent the "survivors" in the city.

We examined the database entirely and for each cohorts of immigration. In this paper we illustrate some outcomes regarding the overall database and then we focus on the cohort of 2000. In that year 2359 foreigners turned out to be enrolled as new immigrants. At the end 2004, the 2359 foreigners arrived in 2000, joined by other members family, counted a total of 5253 people.

To study the family changing process we considered the family ties with the first member who emigrated. If the first was joined by a wife/husband the family changed into "couple"; if he/she was joined by a son the family changed into "one parent"; if he/she was joined by wife/husband and child it became "family"; if he/she was joined by other relatives (no wife/husband or child) it became "other member"; if he/she was joined by person without family ties it became "live with", and in addition "extended family1" if there are members with kinship or "extended family2" if the members have both family ties and people living together.

We considered the process of reunion in families composed by up to six members. The two first steps of family transitions of all the cohorts from 1987 are reported in Table 1.

Origin	Household	Destination							
		Couple	Family	One Parent	Other Member	Live With	Ext. Fam.1	Ext. Fam.2	No Event
Alone	28478	4419	1491	1180	2334	1060	72	46	17876
Couple	4419	-	761	-	-	-	481	33	3144
Family	1491	-	717	-	-	-	76	6	692
One parent	1180	-	154	279	-	-	55	20	672
Other memb.	2334	-	-	-	509	45	237	-	1543
Live with	1060	-	-	-	70	82	-	60	848
Ext. fam. 1	72	-	-	-	-	-	10	-	62
Ext. fam. 2	46	-	-	-	-	-	-	3	43

Table 1: First and second family transitions: overall database

It immediately emerges that more than 50% of sole immigrants are still alone, while the most common transitions are reunion of traditional families and of people with ties of kinship.

At this point the analysis does not pay attention to the influence of different cultures and the year of migration. These heterogeneities will emerge in Section 2, where we focus on the dynamic analysis of the family transitions. While we will provide the final remarks in section 3.

2. Dynamic Analysis

The time necessary for the first transition change in function of the arrival year as it is proven in Figure 1 where the Kaplan Meier's curves (see Kaplan and Meier 1958), stratified by first immigrant's arrival year, are presented with a follow up period up to 4 years. The results of the test for the proportionality of the hazards lead to refuse the null hypothesis.

It turns out a faster reunion process for more recent cohorts, due to an evolution of this phenomenon, even for this reason we focused on the year 2000 cohort applying the model defined by Cox 1972.

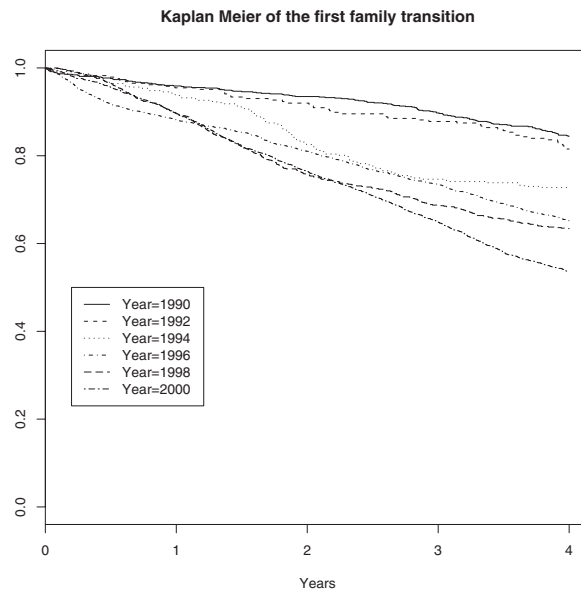


Figure 1: *Kaplan Meier's curves of first transition, stratified for the arrival year*

We considered the following explicative variables (regarding the first immigrant of a cohort): Age at arrival (divided in three classes: 18-30, 31-45 and over 45), Sex, Geographical Area of Provenance (North Africa, Rest of Africa, Asia, Est Europe, Latin America and Developed Countries composed by people from European Union, North America and Japan) and Civil State at the moment of immigration.

Many interactions between the explicative variables were performed, only interaction between Civil State and provenance resulted significant and was used in the final model here commented. The model's baseline hazard profile is a female, 18-30 years old, unmarried from North Africa state. The estimated hazards ratio (HR) and the principal diagnostics statistics are reported in Table 2.

All the variables are significative except the age class of 31-45 and the origin from Asia. The interactions are non significative except between Civil State and the Origin from Developed Countries. Males have an higher tendency of being followed by relatives than female while Over 45s have a reunion hazard of about 50% less than younger people. Married people have more than twice the "risk" of reunion than unmarried.

It's interesting to note the different behavior of immigrants considering the origin areas and the interaction with Civil State. It emerges people from Est Europe have quite 80% more of reunion hazard than people from North Africa while people from Rest of Africa 46% less.

Profiles with the highest reunion hazards are young married males from East Europe on the contrary old unmarried people from Developed Countries have the lowest reunion hazard. The interaction of Civil State and the Origin from Developed Countries is very significant, in fact, considering the interaction, married people have almost 18 times the reunion hazards of unmarried ones.

	coef	HR	se(coef)	lower.95	upper.95	z	p
Age31-45	-0.0193	0.981	0.0685	0.8576	1.122	-0.281	0.780
AgeOver45	-0.7456	0.474	0.1557	0.3497	0.644	-4.789	0.000
Male	0.1783	1.195	0.0684	1.0453	1.367	2.608	0.009
Rest Africa	-0.6171	0.54	0.187	0.374	0.778	-3.301	0.001
Latin America	0.4226	1.526	0.1546	1.1272	2.066	2.735	0.006
Asia	0.2251	1.252	0.1869	0.8682	1.807	1.204	0.230
EST Europe	0.5733	1.774	0.1117	1.4254	2.208	5.134	0.000
Dev. Countr.	-2.6741	0.069	0.7135	0.017	0.279	-3.748	0.000
Married	0.8613	2.366	0.1613	1.7251	3.246	5.341	0.000
Rest Africa:Married	-0.3583	0.699	0.3275	0.3678	1.328	-1.094	0.270
Latin America:Married	-0.2001	0.819	0.2349	0.5166	1.297	-0.852	0.390
Asia:Married	-0.1676	0.846	0.2678	0.5003	1.43	-0.626	0.530
EST Europe:Married	0.0391	1.04	0.1798	0.731	1.479	0.217	0.830
Dev. Countr.:Married	2.0264	7.587	0.8071	1.5598	36.899	2.511	0.012

Table 2: Results of the Cox Model, people immigrated in 2000

3. Final Remarks

In this paper we explored the migrants' tendency of reunion, showing that many reunion models exist according to the Geographical Area of provenance.

We realised that the effects of the network on the migration process is an important factor but it is not the only one. In analysis like this one it is necessary to be cautious because people move for multiple reasons not always available (see Massey 1993 and Palloni and Ceballos 2001). Moreover we have to keep in mind that Government restrictions and/or permissions can have an important role in the process of reunion, indirectly captured by the changes in the family evolution.

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