The Marriage Market and Homogamy by Age in Italy

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Introduction:
The partner choice implies the selection of the figures acting on the "marriage market", according to several different dimensions (age, education, economic status, race, religion, etc.); more generally, the level of heterogamy with respect to each dimension (i.e. of mixed marriages) represents the degree of broad-mindedness of a society. Scholars have often dwelt upon the importance of mixed marriages between persons of different religions, economic status, education levels in determining a greater social integration among subgroups belonging to different aggregates, and, moreover, in helping social mobility. Traditionally, the prevailing model of assortative mating has been characterized by the tendency towards educational hypogamy for men and educational hypergamy for women (marriages with, respectively, less and more educated partners than themselves), as well as hypogamy and hypergamy by age and social status. Therefore, the traditional couple is typified by rooted gender asymmetries where women are younger, less educated and of a lower status than their partners.
Gender segregated roles play in favour of a high age gap between partners (Becker, 1981; Kalmijn, 1998), while high human capital encourages more balance between the ages. This is why education generates a shift in the attitudes and individuals become more prone to change and less attached to traditional age differences characterising the couple. According to the *by-product hypothesis* of assortative mating, the preference for a partner with the same level of education can also determine an increase in same-age couple (Blossfeld and Timm, 1999; Kalmijn, 1998).
Also *exchange theory* provides an interpretation of the age-difference between partners (Collins and Coltrane, 1991; Kalmijn, 1998). According to this theory, men and women trade characteristics when choosing a partner. The most debated case concerns members of an ethnic group in low prestige position who have better chances of marrying outside their group if this improves their socio-economic status, but there are also many other kinds of exchanges.
The increased contact opportunities between peers can also determine an increase in age homogamy. For instance, increased length of formal education enhances these opportunities (Beekink et al. 1998). Also the workplace is extremely important as a marriage market, even though its effect concerning age differences between partner is less clear. The workplace, on one hand, encourages the meetings between same-age partners, on the other hand it facilitates age gap between couple's partners, because, as it often happens, newcomers women face with already working and probably older, men in an existing organisation (Smeenk 1998). In sum, both school and workplace represent the most relevant marriage markets even though, the former is very efficient in matching same-age couples, while the secnd is especially successful in the case of husband older matches (Bozon and Héran 1987).
Another factor affecting the pattern of homogamy by age may be the attachment of individuals to traditionality: more religious or traditional couples may also be more prone

to husband-older typology of the couple. In this respect, the socialisation process of the children plays a crucial role as it influences children's attitude and orientation towards an ideal and appropriate (normative) age gap with the future partner (Smeenk, 1998; Kalmijn, 1998).
However, it is sometimes very hard to distinguish marriage market effects from purely personal factors in the decision to get married as we can imagine that the existence of a squeeze in the marriage market affects the pool of eligibles and subsequently the selection process.
As far as Italy is concerned, it has been observed that the marriage squeeze has arisen from the significant variations in the number of births (Fraboni, 2000). At aggregate level, many men who were born during the baby boom after World War II had to face, some two decades later, an unfavorable marriage market, since younger female cohorts, born during the War, were less numerous. Similarly, as a consequence of the constant rise in birth rates recorded through the 1950s up to 1964, the female cohorts at marriage age during the 1980s faced with a negative squeeze on the marriage market. Moreover, migratory flows, that concerned especially men at marriage age, further affected the marriage markets of both source and target areas.

Data and research methods:
In Italy, the transition to first marriage has been studied on the basis of the data gathered from the 1998 Multipurpose Households Survey (ISTAT) and by means of biography analysis models. This Survey collects retrospective information regarding marital, fertility and job histories on a sample of 24,000 households, for about 60,000 individuals. Data are representative at regional level of analysis.
Our purpose is to study the changes that have occurred in homogamy patterns at the individual level across cohorts; and the dimension we focus on is homogamy by age.
Previous studies have shown that the structural constraints of the marriage market produce a different effect, for men and women, on the timing of transition to first marriage.
For this purpose, a micro-macro link is made with the marriage market measure obtained for years 1969-95, starting from marriage registers at regional level and then introduced in the model as a time-dependent covariate.
Our analysis is divided into two parts. We first conduct a descriptive analysis by sex and birth cohorts of the homogamy pattern by using the Nelson-Aalen estimator of the integrated hazard function. In the second part we use some models to assess cohort dynamics and then evaluate the impact of the imbalances on the marriage market on the competing risks to marry. We include the condition of being single as an explicit outcome of the marriage process. The covariates taken into account in the analysis are: birth cohort (1955-59, 1960-64 and 1965-69), region of birth, and the time-varying covariate expressing the conditions of the marriage market. In order to study homogamy by age we calculate the age difference (in months) between those who contracted marriage and then distinguish three possible alternative destinations: marrying upward (the partner is older: hypergamy), lateral (the partner has about the same age: homogamy) and downward (the partner is younger: hypogamy). Age homogamous couples are here defined as those where the age difference between partners is such that she is older than him by at most one year or he is older than her by 2 years.

Results:

In Tables 1 e 2 we report the Cox models for multiple destinations, with birth cohort and region of birth as covariates (Model 1) and add the effect of the squeeze in Model 2.

The measure of the marriage market is the Schoen index, which is a continuous variable whose value is 0 when there is equilibrium on the marriage market; higher (or positive) and lower (or negative) than 0 in case of disadvantage for, respectively, women and men on the marriage market.

Men born in 1960-64 have almost the same competing risk to marry upward and lateral as those born a bit earlier (cohort 1955-59): the younger cohort has slightly slower transition to downward marriages (i.e. marriage to a younger woman) than those born in 1955-59 (Table 1).

Table 1: Multiple destinations for homogamy by age; Cox models estimations - MEN

	MODEL 1:						MODEL 2					
	UPWARD		LATERAL		DOWNWARD		UPWARD		LATERAL		DOWNWARD	
Variable	Coeff	p	Coeff	p	Coeff	p	Coeff	p	Coeff	p	Coeff	p
Birth cohort (base=1955-59)												
1960-64	-0.002		0.097		-0.131	**	-0.001		0.083		-0.106	*
1965-69	0.442	**	-0.029		-0.491	***	0.445		-0.095		-0.422	***
Region of birth (base=Piedmont)												
Vaa	0.157		0.099		-0.462	*	0.154		0.168		-0.526	*
Lom	0.129		0.058		-0.074		0.129		0.069		-0.084	
Taa	0.046		0.028		-0.093		0.048		-0.020		-0.054	
Ven	0.189		-0.087		-0.052		0.190		-0.106		-0.036	
Fvg	-0.424		-0.189		-0.059		-0.424		-0.205		-0.050	
Lig	0.380		0.255		-0.212		0.381		0.233		-0.194	
Tos	0.244		0.306	*	-0.020		0.242		0.345	*	-0.055	
Umb	0.486		0.027		-0.184		0.484		0.075		-0.229	
Er	-0.260		-0.166		-0.386	**	-0.261		-0.143		-0.405	***
Mar	-0.457		-0.074		-0.058		-0.458		-0.034		-0.092	
Laz	-0.151		0.058		-0.015		-0.155		0.149		-0.094	
Abr	-0.149		-0.123		0.262		-0.151		-0.070		0.214	
Mol	-0.267		-0.222		0.086		-0.267		-0.234		0.093	
Cam	0.097		0.097		0.294	**	0.096		0.112		0.280	**
Pug	0.270		-0.102		0.371	***	0.268		-0.053		0.329	***
Bas	-0.360		-0.076		0.065		-0.360		-0.081		0.069	
Cal	-0.202		-0.058		0.219		-0.201		-0.080		0.234	
Sic	-0.071		0.219		0.333	***	-0.074		0.279		0.281	**
Sar	-0.390		0.184		-0.011		-0.390		0.180		-0.006	
SQUEEZE												
S							0.126		-2.628		2.251	
n.param.	63						66					
n.events	4539						4539					
Log-like.	-35726.1						-35723.73					

*** p<0.001; ** p<0.005; * p<0.010

With respect to the reference cohort (1955-59), men born in 1965-69 experience a higher transition rate (coefficient positive and significant) to marriages to an older woman and a reduction in marriage transition to a younger woman (the coefficient is negative and is significant). This means that a less traditional model regarding the age difference between partners emerges across cohorts, especially from that born in 1965-69. The relative decrease of the transition rate for the traditional downward age destination, together with the slight rise in upward movements, has also emerged in the descriptive analysis based on the cumulative hazard functions. Across cohorts, men experience a change in the model characterising the age difference in the couple. Traditionally

husband-older couples have prevailed. The decrease in the downward rate, together with the increase in the upward one indicates the existence of a dynamics across cohorts which, with respect to men, moves towards less traditional age-gap between partners. As concerns the region of birth, there is a clear distinction between central and northern regions (except for Piedmont) on the one hand and southern regions on the other hand: the transition rate is especially low for some northern regions (such as, for example, Valle d'Aosta, Liguria, Umbria, Emilia Romagna), while it is rather high for southern regions (Abruzzo, Campania, Apulia, Calabria and Sicily) (Table 1). In the same way, upward marriages for men characterise northern regions, confirming that the traditional custom of older-husband couple is preferred by men born in the South.

The introduction of the marriage squeeze as a time-varying covariate confirms the male advantage in all directions: both downward and upward marriages increase (even though in the second case the coefficient is not significant). In particular, the male advantage in the marriage market accelerates downward transitions more than upward marriages, that is there is a major acceleration of traditional marriages.

Table 2: Multiple destinations for homogamy by age; Cox models estimations - WOMEN

	MODEL 1:						MODEL 2					
	UPWARD		LATERAL		DOWNWARD		UPWARD		LATERAL		DOWNWARD	
Variable	Coeff	p	Coeff	p	Coeff	p	Coeff	p	Coeff	p	Coeff	p
Birth cohort (base=1955-59)												
1960-64	-0.158	***	-0.067		-0.341		-0.121	**	-0.076		-0.365	
1965-69	-0.426	***	-0.570	***	-0.679	**	-0.443	***	-0.609	***	-0.733	**
Region of birth (base=Piedmont)												
Vaa	-0.075		0.142		0.775		-0.002		0.183		0.823	
Lom	-0.127		-0.194		0.701		-0.103		-0.186		0.708	
Taa	-0.184		-0.100		1.017		-0.267	*	-0.126		0.989	
Ven	-0.080		-0.022		0.292		-0.109		-0.033		0.276	
Fvg	0.019		-0.555		0.531		-0.044		-0.565		0.527	
Lig	-0.449		-0.506		0.801		-0.488	***	-0.520		0.786	
Tos	-0.150		0.023		0.408		-0.097		0.044		0.432	
Umb	-0.171		-0.243		0.386		-0.121		-0.215		0.426	
Er	-0.277	**	-0.399		-0.111		-0.236		-0.390		-0.106	
Mar	-0.098		-0.054		0.193		-0.040		-0.033		0.218	
Laz	-0.047		-0.185		-0.046		0.089		-0.135		0.012	
Abr	0.142		0.071		0.071		0.203		0.100		0.110	
Mol	0.175		-0.216		0.712		0.145		-0.222		0.711	
Cam	0.131		-0.080		0.006		0.151		-0.071		0.021	
Pug	0.121		-0.225		0.297		0.202		-0.198		0.327	
Bas	0.095		-0.304		0.227		0.090		-0.307		0.227	
Cal	0.253	**	-0.375		0.355		0.200		-0.386		0.350	
Sic	0.144		0.077		0.080		0.237	**	0.110		0.120	
Sar	-0.158		0.077		0.418		-0.158		0.072		0.413	
SQUEEZE												
S							-8.064	***	-2.920		-3.351	
n.param.	63						66					
n.events	5459						5459					
Log-like.	-43288.5702						-43279.0748					

*** p<0.001; ** p<0.005; * p<0.010

As concerns women (Table 2), the decline in the transition rate to first marriage towards all directions is very strong across cohorts. This reduction is particularly evident in downward marriages, while upward and especially lateral marriages have declined a little less for women born in 1960-64 compared to those born 5 years earlier. Also the following birth cohort accentuated the same declining pattern in transition rates: the lowest rate for the birth cohort 1965-69 refers to downward marriages, then to lateral and lastly to upward marriages. However, the biggest relative reduction occurs between the

second and the third birth cohorts in lateral marriages (to a man of about the same age): the rate here decreases from -0.0672 for the 1960-64 birth cohort to -0.5704 for the 1965-69 birth cohort. In the analysis of the cumulative hazard function we already stressed the deep decline in the transition rates of the women for every destination, especially for lateral movements.
Almost all regions of birth have homogamous (lateral) rate lower than Piedmont's, while upward and downward movements highlight both the prevailing role of traditional husband-older couple in the South and the rise in atypical mating in the North (especially in Trentino Alto Adige, Lombardy, Liguria and Valle d'Aosta, Table 2). An increase in the index of the imbalance reduces the transition rate to first marriage for women, towards all directions. In particular the rate of experiencing an upward marriage (with an older husband) has lowered more than that for homogamous or downward marriages. This means that favourable conditions of the marriage market to men may cause a postponement effect for women, especially to marry to an older husband.

Conclusions:
Another crucial aspect in the research about the dynamics connected with marriage is the study of partners' features. The study of who marries whom or homogamy requires a change of perspective from the analysis of quantitative characteristics of marriages to their qualitative aspects.
In general, traditional marriages prevail in the Italian sample. Despite the persistence of this traditional pattern of homogamy, some new characteristics in the process of partner choice are emerging in Italy. Couples where the age difference between the spouses is low show that the gender division of roles in the couple is progressively shrinking. Men experience both a relatively high reduction in the transition rate to marriages characterized by a great age difference between spouses and a slight increase in more atypical age combinations (referring to couples where woman is older than man). On the contrary, women continue to prefer the traditional model, although in younger cohorts the transition process towards this direction, that in the next few years might increase the number of marriages characterized by greater age balance, is slowing down. Northern men and women seem more prone to this new typology of couple with similar age between partners; this results from a higher gender leveling, while in southern regions the age difference between partners is still high. Moreover, when men are in an advantageous position in the marriage market they also acclerates their transition, especially marrying a younger woman. Women facing disadvantagoues conditions are squeezed comparatively more in marrying an older men, than a same age or a younger partner.