

Some Insights about Gender Gaps in Matching Patterns by Age and Educational Attainment: a Case study of Spanish Inter-marriage

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Abstract. Over the last decades the socio-demographic dynamics have experienced dramatic changes in Spain. One of them is linked with the recent arrival of important flows of foreign population and the consequences that such arrival could have in changing those dynamics, particularly in the union formation patterns and the marriage market. So, the aim of this paper is to examine trends in matching patterns by age and educational attainment of Spanish intermarriage, highlighting gender gaps. The data is drawn from the Spanish Marriage Register and the Labor Force Survey. Results show that intermarriage is not gender neutral. There is a peculiar pattern among Spanish men/Foreign women couples: have a higher incidence and are more age and educational heterogamous.

Keywords: *Inter-marriage, gender gaps, matching patterns, Spain*

Introduction

Over the past 40 years, couples in Spain have experienced significant changes: nuptial intensity has decreased considerably and there has been an increase in cohabitation, remarriage and divorce rates (Cortina 2007). There has also been a change to more balanced gender roles arrangements within couples: females have adopted new roles thanks to their increasing levels of schooling and their massive entrance into the labor market (Luxán, Miret & Treviño 1999).

In addition, foreign born population in Spain has grown dramatically in recent decades. The impact of this growth on union formation patterns is yet to be assessed. The entrance of new marriageable partners -via immigration- into the Spanish marriage market pool is reflected in the increase of marriages in which at least one of the spouses has non-Spanish citizenship. Inter-marriage has become an important issue of current nuptiality patterns in Spain. Marriage Records show that in 2006 the percentage of marriages in which at least one of the spouses is foreign-national represented 21.3 % of the total number of marriages registered that year.

The transformation of the women's "traditional" roles into new ones, built on the basis of women's economic emancipation, has resulted in corresponding changes in living arrangements and, specifically, in family and partnership. Less differentiated gender roles will foster a reduction in gender gaps (Becker 1981; Oppenheimer 1988; Solsona 1998; Luxán, Miret & Treviño 1999). The tendency to form heterogamous unions, in which men marry older and form unions with younger and less-educated women, fits into the trading couple's framework that has been traditionally observed in Spain. From an equity perspective, however, males and females mate selection will change in order to search for certain attributes in their potential matches that guarantee a less asymmetrical gender relationship.

Within this framework, the main purpose of this paper is to explore if international migrants are changing the current union formation patterns and dynamics in Spain, with regard to matching patterns by age and educational attainment.

In order to study matching patterns, couples are classified into four groups according country of citizenship or nativity combination of the partners. Firstly, there are couples in which both members are Spanish, being this type of union the one that is taken as the reference. Secondly, there are unions that involved a Spanish men and a foreign woman. Thirdly, those in which she is Spanish and he is a foreigner. And, finally, couples between foreign men and women.

This research is focused on mixed couples, more specifically, in unions between Spanish men and foreign women and between Spanish women and foreign men to search for differences in intermarriage by gender.

The paper covers several time periods according to the possibilities offered by the statistical sources that are used for the analysis. To examine matching patterns by age at marriage and country of citizenship, data are drawn from the Spanish Marriage Records. To explore the educational degree of homogamy, the data used come from the Spanish Labor Force Survey microdata (EPA, II Trimester of 2007).

Background: Contextual factors that shape gender differences in intermarriage in Spain

Along the past 40 years, couples in Spain have experienced significant changes: first, access to marriage institution is now more flexible; second, nuptial

intensity has decreased considerably; third, couples are beyond marriage (there have been an increase in cohabitation rates); and, finally, unions are more liberalized, meaning that are opened to uncountable combinations of partner's attributes like gender and origin (Cortina, 2007). All these transformations have occurred within a broader context of family changes defined as the Second Demographic Transition, like the reduction of fertility, higher divorce rates and remarriage, among others (Van de Kaa 1987; Lesthaeghe 1991).

Until the late twentieth century, Spanish marriages fitted into a complementary model in which each member had a distinct and previously defined action-field to specialize in (the labor market or the household). As reported in Esteve & Cortina (2007) study of homogamy in Spain, there is a trend in which age and educational attainment differentials between partners (in both marriages and cohabitations) have been reduced. The closure of this gap illustrated the lost of significance of classical patterns in union formation. That is to say, couples in which the woman has a lower educational level than the man are now less frequent than twenty years ago. Furthermore, the classical marriage between a female with a low educational level and a high earning potential man is not longer the dominant one. On the contrary, the matching behavior of the youngest and highly educated women denotes a change towards the establishment of more egalitarian partnerships (González 2001).

The recent arrival of immigrants to Spain is modifying current union formation patterns by introducing new marriageable partners into the marriage market. As a result, intermarriage rates are growing of and particular couples, regarding socio-demographic characteristics, are resulting.

Until 1990s, immigration flows to Spain were not considerable in number. This decade represents a turning point in Spanish immigration records, which have been constantly fed by the arrival of foreign nationals (Domingo 2004). By December 31, 2006, there were a total of 3,021,808 valid residence permits, a figure approximately 14 times higher than the one observed sixteen years ago in 1990.

According data drawn from the 2001 Census, there were 2,172,201 persons born abroad residing in Spain by that time (5.3 %). Moreover, more recent data from the Spanish Population Register¹ show that in 2007 11.6 % of the total

¹ It is important to update 2001 Census numbers with Population Register data because these are the most recent official records available and show the raising evolution of the foreign born population.

population is alien birth. Until this noticeable growth, there was not enough statistical support for the quantitative analysis of international migration impact in the Spanish demographic dynamics, but recently they have been subjects of a growing interest within the academic agenda.

In view of this context of notable changes, intermarriages have become a potentially important aspect of contemporary nuptiality patterns in Spain. The Marriage Records (MR) show that the percentage of marriages in which at least one of the spouses is foreign has risen from 7.5 % in 1996 to 21.3 % in 2006, an increase of approximately fourteen points in ten years. Moreover, for the last year 75.3 % of them are mixed (referred to Spanish-foreigners unions).

Previous research has examined marriage patterns of the foreign national population in Spain, by looking at the age at marriage, the order of marriages and the degree of intermarriage (Cortina, Esteve & Domingo 2006). There are marked disparities in the out-marriage rates regarding to national origin and gender in Spain. These are also consistent with the findings obtained by scholars dedicated to the study of intermarriage trends in other countries (McCaa 1993; Muñoz-Pérez & Tribalat 1996; Kalmijn 1998; Lievens 1999).

In fact, last available data from the Marriage Records illustrates the importance of considering the existence of gender differentials in mixed marriages. In 2006, marriages between Spanish men and foreign women were 55 % higher than those of Spanish females and foreign males. Moreover, in Spanish man/foreign woman couples remarriage percentages and average age-differences are higher when they are compared to first marriages.

Statistical sources

Spanish Marriage Records (MNP)

Since 1893, the MNP includes the register of births, deaths and marriages in Spain (flow data). All the statistical information about marriages occurring in Spain year by year and people who are getting married is collected in the Marriage Records. The data collected gives information about the marriage, and the attributes of each of the spouses, including statistics related to their co-residence.

It is not until 1989 that two important phenomena's like marriage patterns involving foreigners and remarriage, can be analyzed in socio-demographic studies thanks to the inclusion of country of citizenship, marital status (the one previous to the actual marriage) and marriage order.

The examination of Marriage Records data allows the characterization of both husband and wife according to variables as data of birth, age, marital status, profession, country of citizenship and place of residence. The analysis of marriage records can be carried out at two different levels: one by one, as individuals; and, both at the time, as a married couple. In this research these records are used for testing the existence of gender differences in mate selection within mixed marriages regarding attributes such as country of citizenship, age at marriage and marital status. In the study, the information is divided in three five-year periods, starting in 1992 and finishing in 2006. Although, in some of its sections, the analysis is limited to the last period (2002-2006). Only when significant changes in some trends are observed, the other periods are also introduced.

But this source is not free of analytical constraints for the purposes of this research. Two of the greatest limitations are related to the lack of certain statistical information. The first limitation is that the country of birth of both husband and wife is not reported. In some cases it is necessary to contrast citizenship with birth place in order to avoid bias in the investigation. This happens with Spanish citizens that were born in other countries. An issue that is especially important for some specific groups that have been traditionally linked to Spain through their migratory background, such as Latin American countries like Argentina and Venezuela. Intermarriage view through the county of citizenship lens hides some marriages that have been taking place between Spanish and alien births that have the Spanish nativity.

The second limitation is linked to the nonexistence of other socio-demographic characteristics like educational attainment, which restrict the analysis to variables that are collected (date of birth, age at marriage, marital status, place of residence and country of citizenship).

It is also important to highlight that MNP Marriage Records only gathers data concerning marriages that have been celebrated in Spain, and do not inform about those celebrated abroad. Obviously, it only refers to marriages so it does not include consensual unions.

Spanish Labor Force Survey (EPA)

The Spanish Labor Force Survey (EPA) is a periodical sampling survey that interviews each trimester more than 200,000 individuals in, approximately, 65,000

households. The first EPA round was in 1964 and was designed to collect specific data about the labor force in Spain. In the sample of the II Trimester of 2007 140,488 individuals and 42,785 couples were included.

In order to answer to the significant demographic changes occurred in Spain during the last decades, mostly related to international immigration, the estimations that the Spanish Labor Force Survey (EPA) needs to weight the information collected were updated in 2005. The sample data frame was unaltered, but the weights of each register changed according to new data derived from the 2001 Census and the consecutives updates of the Spanish Population Register².

Afterwards, there was an increase on the population base due to the introduction of different weights, among them, the ones referred to the alien-birth and foreign population residing in Spain, introduction that reflects the arrival of immigrant flows during the last years.

Thanks to this revision, data drawn from the EPA are now more representative of the current socio-demographic dynamics and answer better to the selection of population groups for analytical purposes, especially when foreigners or alien births are considered.

In EPA microdata couples can be identified by the person number and their relation with the household-head. Thanks to that the attributes of one of the partners can be attached to the attributes of the other creating a new file that contains all the couples' information available in a single row.

One of the mayor constraints of this survey is linked to its particular sample nature so, the greater the detail, the higher the sampling error. That is the reason why the analysis of Spanish intermarriage is limited to certain partners' origin groups, the largest that are the ones that can be considered statistically significant.

The EPA records include both birth place country and country of citizenship. In this study birth place country is selected over nativity because doing so the possibilities of not excluding mixed marriages where both partners have the same citizenship but different places of births are reduced. But do not have information about the marital history, for instance, do not collect previous marital status or marriage date.

The limitations of statistical sources lead to the necessity of mixing different but complementary perspectives when studying intermarriage gender

² Until the 4th trimester of 2004 the EPA matrix of weights was based on a 1991 Census population base revised in 2002.

gaps and relations. Precisely, this is covered by the use of both Marriage Records (flow) and Labor Force Survey (stock) data. The first answers to recent gendered mating patterns of Spanish intermarriage according to age and country of citizenship, while the second, answers to the mating patterns by educational attainment³ and the nature of gender relations in mixed marriages.

Gender gaps in mate selection: homogamy and heterogamy patterns within Spanish intermarriage

Matching by citizenship

Intermarriage rates and gender gaps

Until 1989, Marriage Records do not report information about spouses' country of citizenship. Since then the study of marriage patterns can be done also distinguishing by this attribute. This way it is possible to investigate: a) to what extent Spanish men and women are marrying foreign born individuals, b) the most frequent countries of citizenship of their spouses and, c) the combined attributes of intermarried couples (like age at marriage, age difference, marital status and marriage order). It is relevant to remember that when the citizenship is examined all marriages that involved an alien birth escape to the analysis.

From 1989 to 2006, intermarriage rates have tripled, from 6.5 % to 21.1 %. An increase that has been translated into the growth of marriages between Spanish and foreigners, that represent 75.3 % of total mixed marriages; and, in a much lesser extent, the raise of foreign-foreign marriages during the whole period.

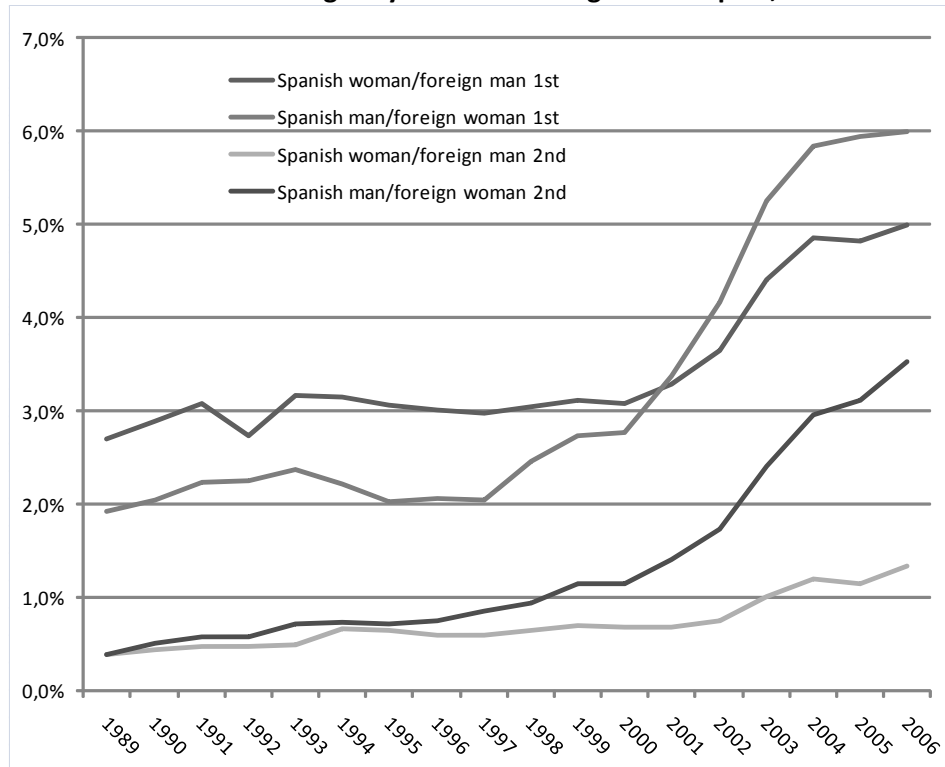
Figure 1⁴ shows a more detailed examination of mixed marriages percentages by sex among Spanish and foreign citizens. The curves reveal important unbalances between men and women, 2001 constitutes a turning point-year in which Spanish man/foreign women (SM/FW) marriages become more frequent than Spanish women/foreign men (SW/FM) marriages. In fact, in 2006, the first combination above mentioned was 65 % higher than the second. A distinction by marriage order helps identifying first marriages as responsible for this changing trend, because intermarriage percentages in remarriage are

³ For educational attainment examination the fact that EPA does not include foreigner students residing in Spain independently of the time of their study program could be an important restriction.

⁴ In order to facilitate the analysis of the intermarriage based on the MNP records, the year of marriage is grouped in three five-year periods: 1992-1996, 1997-2001 and 2002-2006. Previous data (1989-1991) is excluded.

systematically higher in Spanish men/Foreign women couples.

Figure 1. Percentage of marriages between Spanish and foreign citizens over the total number of marriages by sex and marriage order. Spain, 1989-2006.



Source: Own calculation MNP, series 1989-2006.

The gaps between female and male intermarriage have grown both in first marriages and remarriages⁵, but the gender gaps are higher in the latter. In 2006, second order marriages involving a Spanish woman and a foreign man were 68 % lower than the Spanish man/foreign woman combination. While, in first marriages this relation represented a 27 %. These findings are congruent with other investigations in which remarriage is higher among men (Solsona 1998; Esteve & Cortina 2007). Thus, on one hand, men remarry more than women and, on the other, they also intermarry more than women.

⁵ Marriage order is included as an analytical axis in this section because data confirm the existence of mayor gender differences between the orders. Unfortunately, not every statistical source collects information that allows the identification of marriage orders.

Spouses country of citizenship: Spanish married to foreign nationals

As shown, intermarriage rates have grown systematically since 1989 and differ for Spanish men and women. Now well, the question is: are the differences observed by gender maintained when the country of citizenship of the spouses is introduced in the analysis? Are the Spanish men and women getting married with foreign nationals of the same countries? There has been a change in the distribution of the country of citizenship of their spouses along time?

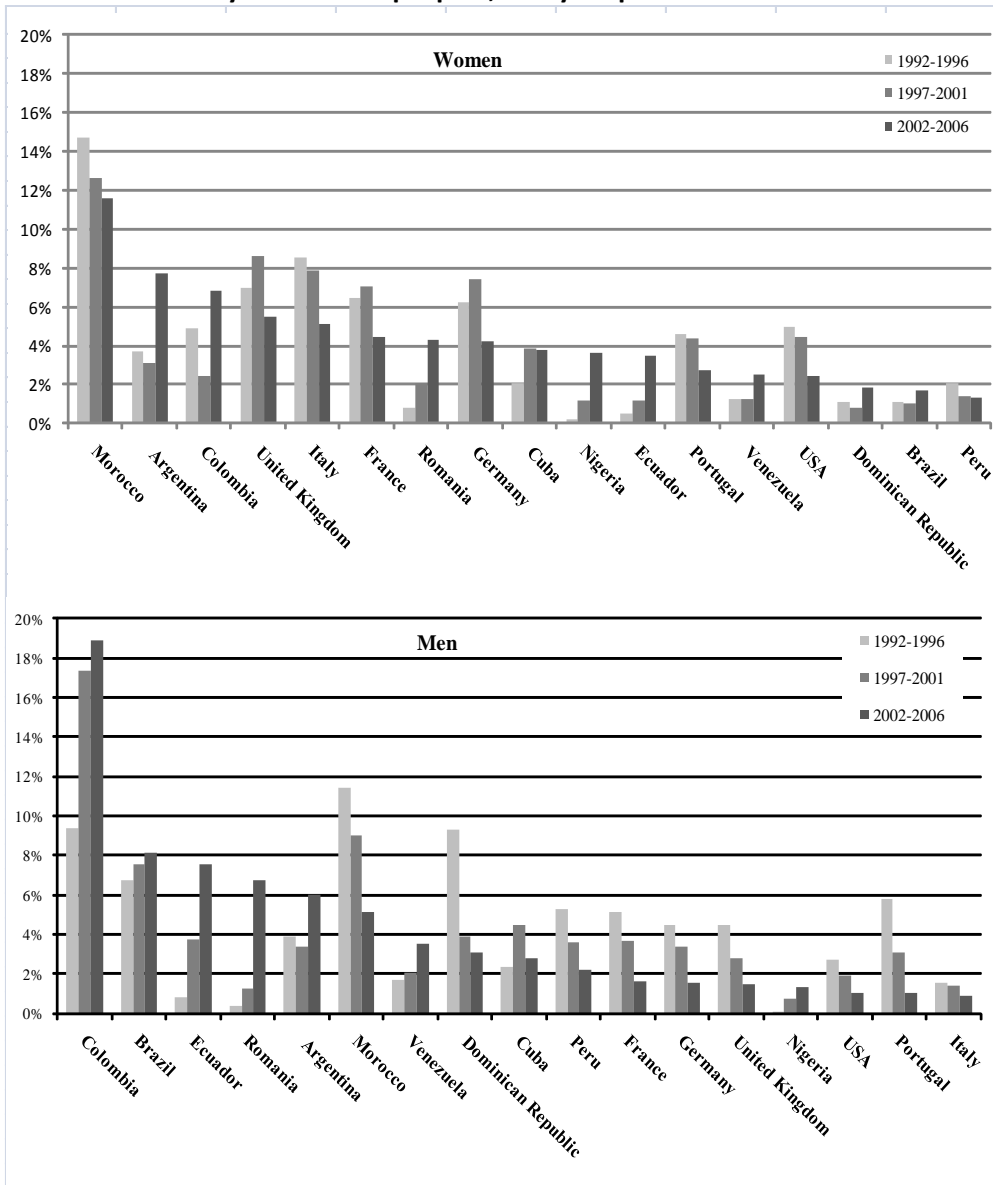
Figure 2 illustrates the percentage distribution of foreign national spouses of Spanish men and women by country of citizenship grouped in there periods of five years each. This figure shows that: first, there is a higher heterogeneity in the country of citizenship of the foreign national spouses of Spanish men and women over time. A variety that is accentuated in the last period due to the arrival of considerable immigrant flows to Spain⁶. Second, there are important differences between Spanish men and women spouse country of citizenship rankings, illustrated by discrepancies in its frequency distribution which differs for men and women. That is to say, Spanish men and Spanish women are not marrying partners of the same range of origins.

For the last period observed (2002-2006), the five more frequent spouse country of citizenship of men married to Spanish women are Moroccan, Argentinean, Colombian, British and Italian, all of them with percentages that represent between 5 % and 12 % of total mixed marriages. The first and second country of citizenship of the ranking (Morocco and Argentinean) are separated by a 4 percentage points distance not observed among the other countries.

The classical preponderance of European countries in the spouses citizenship of Spanish females in both the first (1992-1996) and the second period (1997-2001) – not including East Europeans- (like the one headed by Italian, French, German and British's men), is now part of a greater scope that includes Colombian, Romanian, Argentinean, Nigerian and Ecuadorian males. Between 1992 and 2006, in SW/FM marriages, a 50 % increase is registered in those marriages in which he is Argentinean and she is Spanish. Significant grows are also observed for Rumanian and Ecuadorian nationals marrying Spanish women. But the opposite tendency is in marriages of Spanish women with Moroccans and Italians which exhibit important decreases. In 2002-2006 both marriage combinations are two times lower than they were in 1992-1196.

⁶ According to the Spanish Population Register in 1996 there were 542,314 foreigners residing in Spain and, in 2007, the record is 4,519,554 foreigners.

Figure 2. Distribution of foreign national spouses of Spanish men and women by country of citizenship. Spain, five-year periods 1992-2006.



Source: Own calculation MNP, series 1992-2006.

Note: 17 more frequent nativities have been selected for men and women separately.

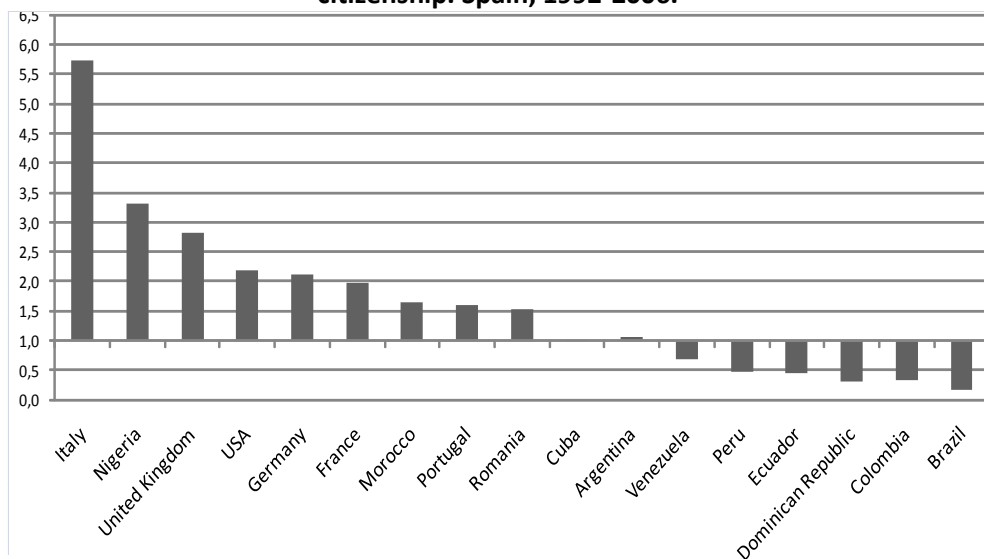
In Spanish men intermarriage, the spouse country of citizenship distribution shows different results. Spanish males get married in 2002-2006 mostly with Colombian, Brazilian, Ecuadorian, Romanian and Argentinean females.

Marriages of Spanish men and Rumanian women are in this period

eighteen times higher than they were in 1992-1996. This is the highest increase registered in the Marriage Records and is followed by marriages to Ecuadorian and Colombian women, which are nine and two times higher, respectively. On the contrary, marriages between Spanish men and Moroccan and Dominican women exhibit a 50 % reduction between both periods.

Changes in Spanish men and women spouse country of citizenship along the periods examined are related to the increasing availability of Latin American, Rumanian and Nigerian in international migrations flows to Spain.

Figure 3. Ratio of marriages SW/FM over SM/FW by spouse country of citizenship. Spain, 1992-2006.



Source: Own calculation MNP, series 1992-2006.

In the Figure 3 is represented the ratio of marriages between Spanish women and foreign men over marriages between Spanish men and foreign women. As shown, for some particular country of citizenship combinations marriages between Spanish women and foreign men are more frequent if they are compared to marriages in which he is the native and she is the foreigner. For instance, between 1992 and 2006, marriages of Spanish women with Italian men were 6 times higher to those of Spanish men and Italian women.

In the case of Spanish men, they get marry 80 % more with Brazilian females than their counterparts with the same country of citizenship men and 70 % more with Colombian and Dominican.

Just two of the selected countries of citizenship (Cuba and Argentina) show

parity in their ratios, which means that there is almost the same number of Spanish men married to Argentinean women than Spanish women to Argentinean men, the same for Cubans.

The empirical evidence above presented suggests the existence of some kind of selection or preference by origin, which differs between men and women. It could be either a matter of preferences by the Spanish population or the availability of the foreign nationals in the marriage market.

Matching by age

The relation between the ages of the spouses is now explored. Here the main interest is to identify particularities in this relation according to the mixed nature of the marriages. In first place, it is tested if, on mixed marriages, the usual pattern of a positive mean age difference⁷ between husband and wife is also observed (Cortina 2007) and whether is this age gap persists regardless the sex of the Spanish partner.

Different figures are used for the analysis of age homogamy: first, the distribution of spouses by marriages country of citizenship combinations and age at marriage (both in marriages and re-marriages); second, the distribution of marriages by age relation of spouses and mean age difference⁸ between spouses.

When Spanish females get married, generally, they are younger than their foreign male partners. And, on the contrary, mean age at marriage of Spanish men married to foreign women is higher. The distance between curves (Figure 4) suggests that there are greater age differences for Spanish man/foreign woman marital unions than for Spanish woman/foreign man and for Spanish/Spanish. With respect to the age at marriage of Spanish/foreigner couples by sex and marriage order along the three periods observed. There are changes in marriage timing of males and females involved in Spanish/foreigners marital unions. In the last period, Spanish women have been getting remarried with younger foreign men compared to the other periods where Spanish women were younger than her husband's. This is a behavior that has characterized most of the Spanish man/foreign woman marriages and remarriages but it is completely new for females.

Intermarriage is more age heterogamous, mean age differences between spouses are higher in Spanish male and foreign female marriages (Figure 5). For the

⁷ A positive age difference refers to those cases where the man is older than his wife.

⁸ See methodology for the explanation of age difference calculation.

three periods, the mean age differences between husbands and wives for SM/FW have increased from 4.5 to 5.9 years mean. Whereas in the case of Spanish women married to foreign man such divergence does not reach 2 years in the maximum point, and is reduced to just 1 in the last period. This combination exhibits the lower mean age difference. Marriages in which both spouses are Spanish have not experienced significant changes (2.8 in 1992-1996 and 2.5 in 2002-2006).

The figure 6 shows the mean age differences between Spanish intermarriages by the marriage order. Mean age differences are more noticeable in remarriages than in first marriages. Again, the greater gap is on Spanish man/foreign woman marriages, in which the male is, in average, between 7.1 and 8.6 years older than his female counterpart. For Spanish woman marrying foreign man this difference does not reach a mean of 2 years and in 2002-2006 and, is negative for the first time, which means that Spanish women are marrying with foreign younger men.

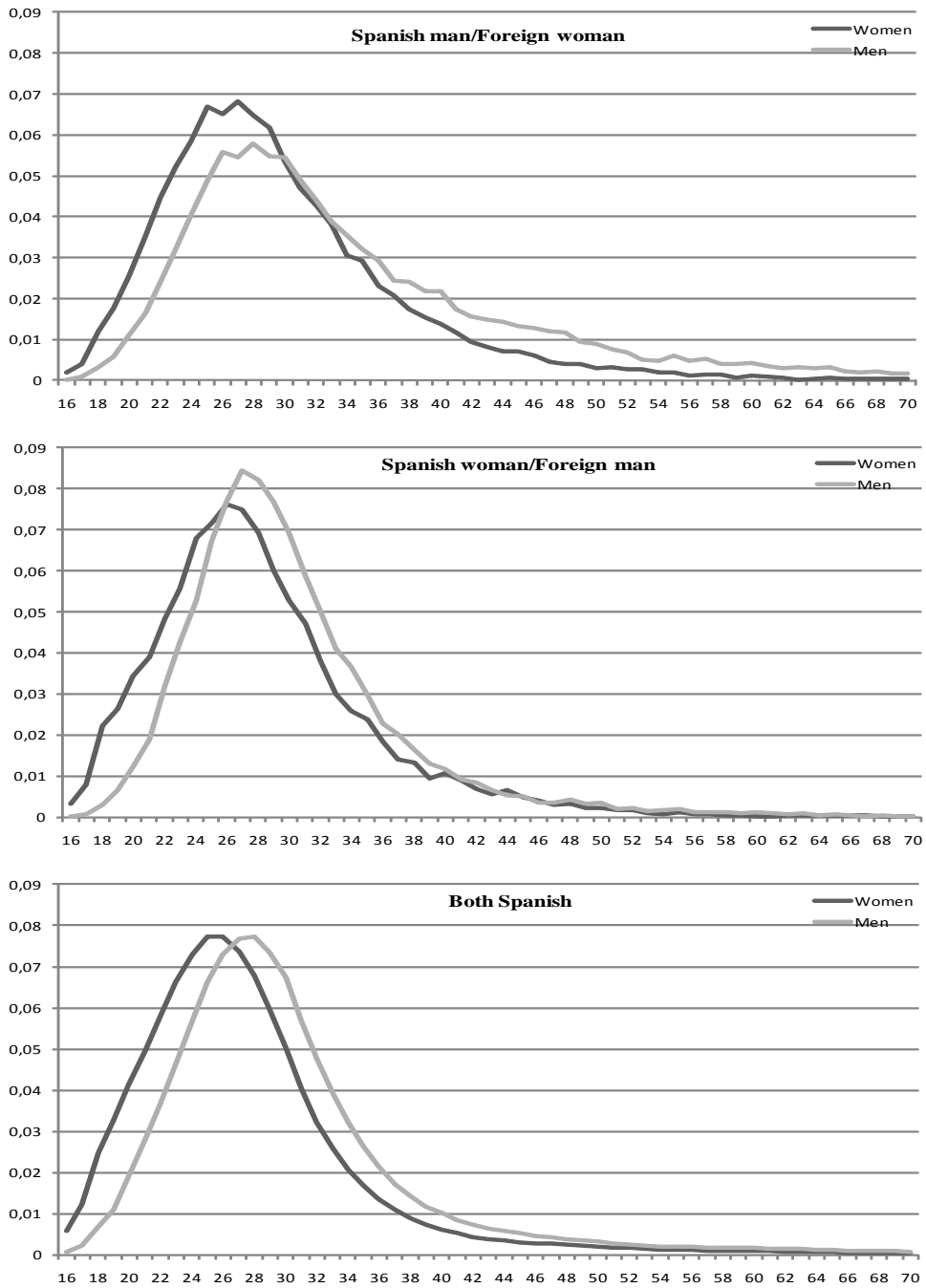
Summarizing, the analysis of age selectivity in Spanish intermarriage shows the existence of two opposite trends:

- 1) For marriages in which he is Spanish and she is a foreign national, mean age differences between spouses have grown over time and have been the highest registered for the periods observed.
- 2) For marriages between Spanish females and foreign males, age differences have decreased and have been systematically lower than the ones of Spanish/Spanish marriages.

But the question is: what is hidden behind such age differences between Spanish men who are getting married with foreign women? And, what is hidden behind the changes that mean age differentials have experienced in both periods?

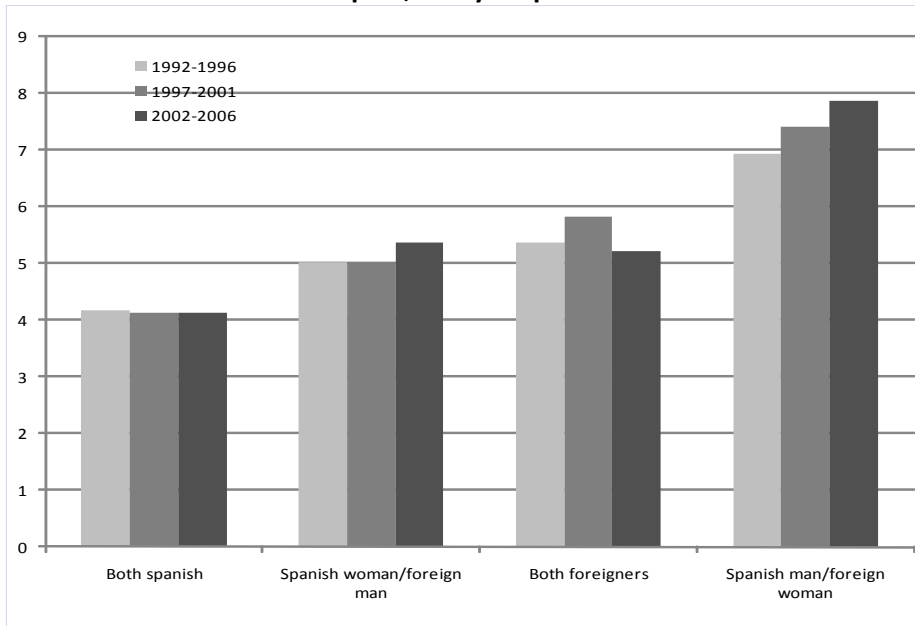
Normally, age differences between men and women who are getting married can be explained by the age at marriage and the age and marital status composition of the spouses (Ní Bhrolcháin 1992). But when these differences are observed between Spanish and foreigners, a particular intermarriage pattern concerning national origin have to be included within such explanatory frame.

Figure 4. Age at marriage by sex and country of citizenship combination of both spouses. Spain, 2002-2006.



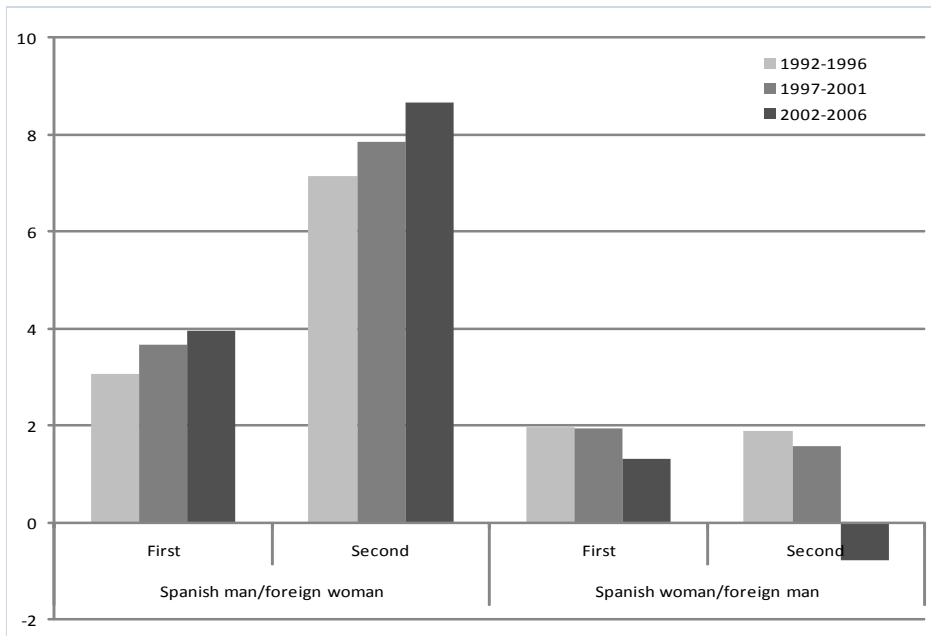
Source: Own calculation MNP, series 2002-2006.

Figure 5. Mean age differences between spouses by country of citizenship combinations. Spain, five-year periods 1992-2006.



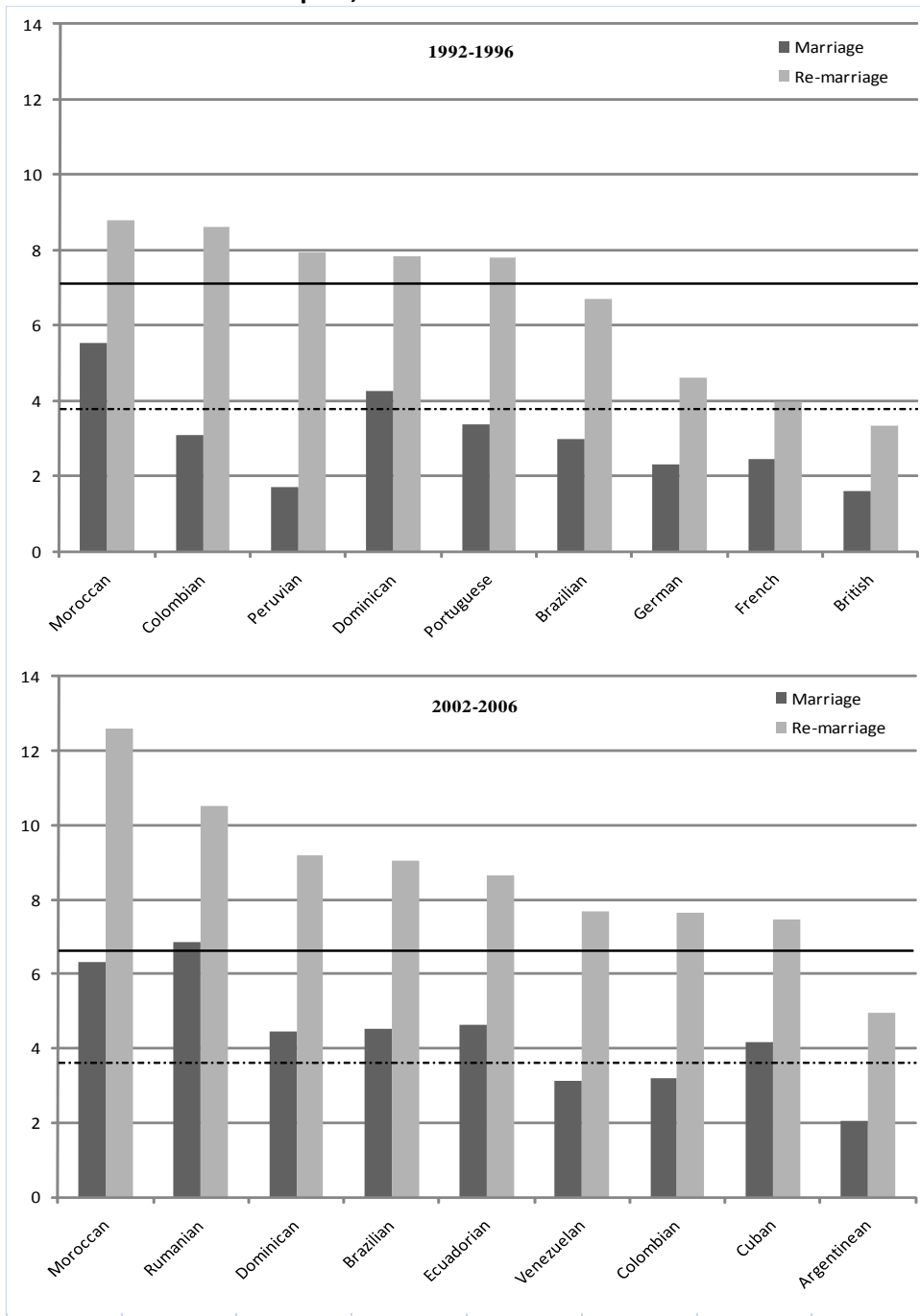
Source: Own calculation MNP, series 1992-2006.

Figure 6. Mean age differences between Spanish/foreign national spouses by marriage order. Spain, five-year periods 1992-2006.



Source: Own calculation MNP, series 1992-2006.

Figure 7. Mean age differences in marriage and remarriage of Spanish men. Spain, 1992-1997 and 2002-2006.



Source: Own calculation MNP, series 1992-2006.

Note: 9 more frequent nationalities have been selected.

The lines show mean age difference of Spanish/Spanish marriages and re-marriages.

Particularities in spouses country of citizenship

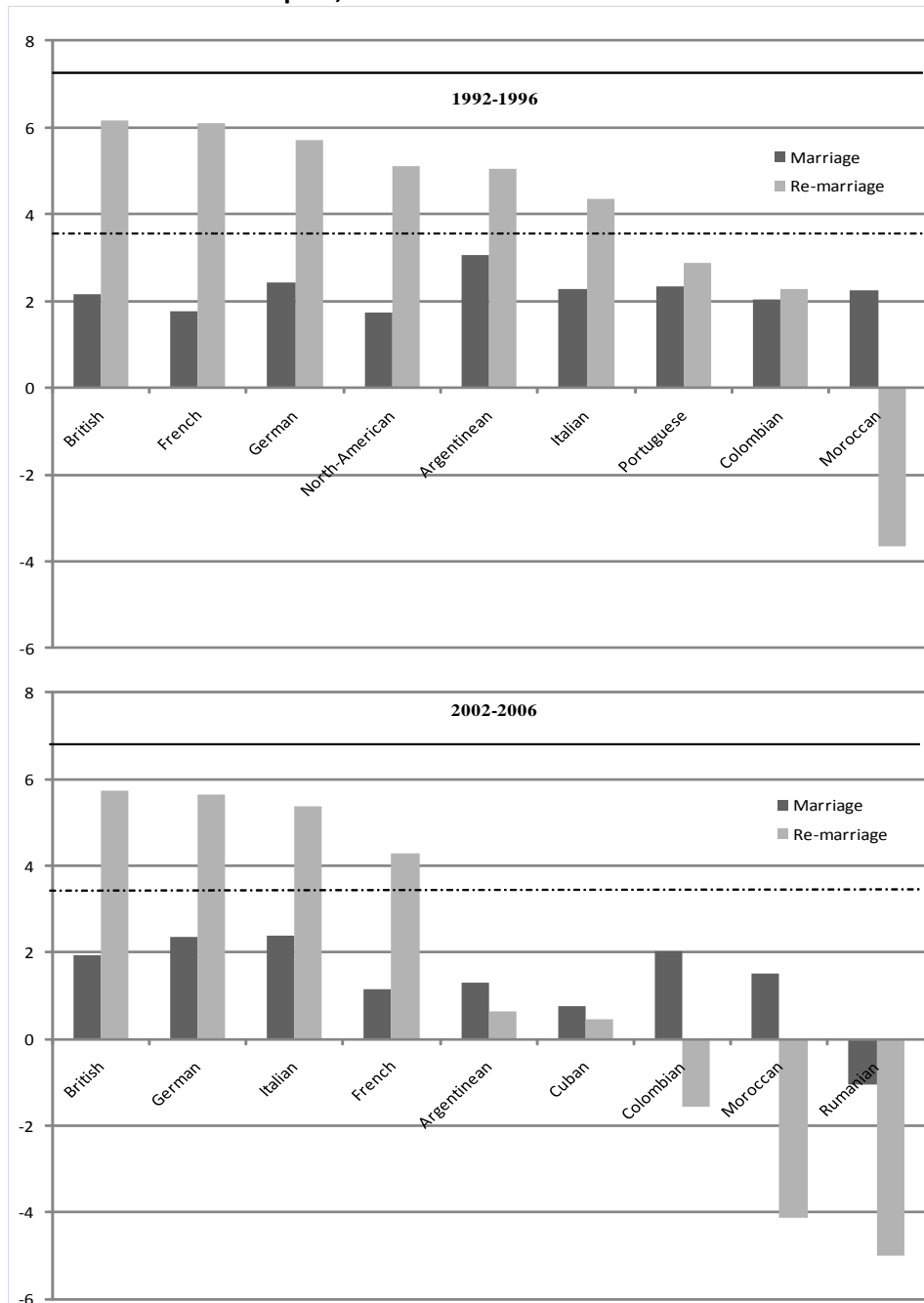
The aims of this section are: first, to explore if mean age differences show discrepancies according to spouse country of citizenship, that is to say, if age gaps between husbands and wives differ when Spanish men and women marry with foreigners of distinct countries of citizenship. And, second, to identify if those differences have changed along time compared to the correspondent mean age gap of Spanish/Spanish marriages, always considering in the analysis both first marriages and remarriages.

When mean age differences between spouses are examined in Spanish intermarriage, it is necessary to make some distinctions: the first distinction is by gender. As noted in the first pages of this chapter, Spanish men and women have been getting married neither with foreigners of the same country of citizenship nor in the same frequency. Added to these facts are the transformations in the countries of citizenship range of Spanish men and women foreign spouses, which were in 2002-2006 different from those observed for 1992-1996 period. Moreover, as stated previously, mean age differences between spouses have changed over time, following an increasing trend in Spanish men intermarriage and a decreasing one in Spanish women intermarriage.

In Figure 7 the mean age differences between Spanish men and foreign national women in first and second order marriages are represented for 1992-1996 and 2002-2006. It only shows the 9 more frequent countries of citizenship for each period. The mean age differences in Spanish/Spanish marriages and remarriages are added as references (lines) to guide the analysis.

Among first order marriages, during the 1992-1996, mean age differences were higher than in Spanish/Spanish marriages just when Spanish men were getting married with Moroccan and Dominican women. While in remarriages this situation seems to be more common and replicates for Moroccan, Colombian, Peruvian, Dominican and Portuguese women. When the spouses of Spanish men are European (German, French, British) the mean age differences are not quite significant and are always below the Spanish one. Such differences were never higher than 7 years, even in remarriage where age gaps for this combination tend to be higher.

Figure 8. Mean age differences in marriage and remarriage of Spanish women. Spain, 1992-1997 and 2002-2006.



Source: Own calculation MNP, series 1992-2006.

Note: 9 more frequent nationalities have been selected.

The lines show mean age difference of Spanish/Spanish marriages and re-marriages.



In 2002-2006 mean age differences were, in most of the cases, higher than in 1992-1996 period, due to the increasing number of marriages with Latin-Americans. For first order marriages, most mixed marriages show higher age differences than marriages between Spanish. Note that for remarriages while in the first period just 5 countries of citizenship were slightly over the Spanish/Spanish line that represents mean age differences, in the second period (2002-2006) eight countries of citizenship age differences were over this mean. Moreover, gaps between both mean age differentials (the Spanish/Spanish and the Spanish men/foreign women) got wider.

For both marriages and remarriages, the greater age differences are found between Spanish men marrying Moroccan and Rumanian women. The mean age differences of Spanish men/Rumanian women marriages is 7 years in first order marriages and 10 years in second order ones. For Spanish men marrying Moroccan women, the mean age difference between partners is 6.3 years, in first marriages, and 12 years in remarriage. On the contrary, a completely different pattern is observed among mixed marriages involving a Spanish woman.

Figure 8 illustrates mean age differences in marriage and remarriage of Spanish women/foreign national men between 1992-1996 and 2002-2006. In both periods observed, age gaps in Spanish women/Foreign men marriages systematically show lower mean age differences between spouses than S/S marriages.

The European countries of citizenship (British, German, Italian and French) have not experimented significant changes over time. In 2002-2006 mean age differences were even lower than they were in 1992-1996 and, inclusive, they became negative in some countries of citizenship. In this period Spanish women were getting remarried to Colombian, Moroccan and Rumanian males who were younger than them. The higher mean age differentials were in SW/FM remarriages which exhibit a 5 year mean favorable to females.

To summarize, results show that mean age differences between spouses have experienced important changes over time as the distribution of countries of citizenship of the Spanish foreign spouses have also changed. But, are these changes influencing the increases (observed for Spanish men/foreign women) and the decreases (in Spanish women/foreign men) of mean age differences between spouses along time? In order to answer, a standardization procedure of mean age differentials has been followed.

For instance, to know if the increase in mean age differences in Spanish men/foreign women marriages between 1992 and 2006 is due to the changes occurred in the country of citizenship composition of their female spouses, it is necessary to test what would have happened if this composition had not changed over time. That is to say, that among that country of citizenship distribution of foreign national women married to Spanish men remained the same than in 1992-1996 for the two periods, what would it happened with the mean age differences between spouses?

Following these assumptions, mean age differences were estimated for each period and separately for men and women (Table 1). This table illustrates how in Spanish men/foreign women marriages the increasing trend of mean age differences is maintained if no changes in the distribution of the spouses country of citizenship had occurred, but it also shows that this grow is a little less accentuated. Mean age differences would have grown to 5.2 years in 2001-2006, while the observed values for 2002-2006 was 5.9, 0.7 years higher.

On the contrary, for Spanish women, age differences between spouses would have decreased regardless of the distribution by countries of citizenship of their spouses. The estimated mean age difference in 2002-2006 is 1.3, 0.4 years higher than the observed.

Table 1. Results of mean age differences standardization.

| <i>Spanish men/foreign women</i> | | | |
|----------------------------------|-----------|-----------|-----------|
| | 1992-1996 | 1997-2001 | 2002-2006 |
| Observed | 4,6 | 5,3 | 5,9 |
| Estimated | 4,6 | 5,0 | 5,2 |
| <i>Spanish women/foreign men</i> | | | |
| | 1992-1996 | 1997-2001 | 2002-2006 |
| Observed | 2,0 | 1,9 | 0,9 |
| Estimated | 2,0 | 1,9 | 1,3 |

Source: Own calculation MNP, series 1992-2006.

Age at marriage and age at marriage structure

It is known that age-gaps between spouses do vary by age at marriage (Ní Bhrolcháin 1992). As men marry older, the age gap with their spouses gets wider, while as women marry older the gap gets smaller.

Table 2. Mean age differences by age at marriage, marital status and country of citizenship combination of both spouses (Men). Spain, 2002-2006.

| Age groups | Marital status | Both Spanish | Spanish men/Foreign women | Foreign men/Spanish women | Both foreigners |
|-------------------|------------------|--------------|---------------------------|---------------------------|-----------------|
| Under 25 | Single | -0,5 | -2,4 | -2,8 | -1,5 |
| | Widow | -5,9 | -8,8 | 2,3 | 0,0 |
| | Divorced | -7,2 | -8,1 | -4,4 | -5,2 |
| | <i>Sub-total</i> | <i>-0,6</i> | <i>-2,4</i> | <i>-2,8</i> | <i>-1,5</i> |
| 25-29 | Single | 0,5 | 0,5 | -0,8 | 0,6 |
| | Widow | -3,5 | -2,5 | -1,2 | 0,4 |
| | Divorced | -0,2 | 0,1 | -2,7 | 0,5 |
| | <i>Sub-total</i> | <i>0,5</i> | <i>0,5</i> | <i>-0,9</i> | <i>0,6</i> |
| 30-34 | Single | 2,2 | 2,9 | 1,2 | 2,3 |
| | Widow | 0,1 | -1,5 | 0,3 | 4,5 |
| | Divorced | 2,0 | 3,3 | -0,1 | 2,6 |
| | <i>Sub-total</i> | <i>2,2</i> | <i>2,9</i> | <i>1,1</i> | <i>2,3</i> |
| 35-39 | Single | 3,8 | 5,5 | 3,5 | 4,0 |
| | Widow | 3,4 | 6,5 | -1,0 | 4,5 |
| | Divorced | 4,0 | 6,3 | 2,3 | 4,3 |
| | <i>Sub-total</i> | <i>3,8</i> | <i>5,7</i> | <i>3,3</i> | <i>4,0</i> |
| 40+ | Single | 6,0 | 11,0 | 6,3 | 7,1 |
| | Widow | 11,1 | 19,5 | 11,1 | 11,0 |
| | Divorced | 8,2 | 13,9 | 7,3 | 10,3 |
| | <i>Sub-total</i> | <i>7,4</i> | <i>13,1</i> | <i>6,9</i> | <i>8,6</i> |
| Total | | 2,5 | 5,9 | 0,9 | 2,5 |
| Total standarized | | 2,5 | 3,8 | 1,5 | 2,8 |

Source: Own calculation MNP, series 2002-2006.

Table 2 shows how mean age differences vary from negative values to positive values as age at marriage increase. Younger men marry women older than themselves and older men marry each time to younger women.

This pattern is observed for each type of marriage, although there are significant differences among them. For men marrying between ages 25-29 years old, there are not significant differences by type of marriage, differences become larger as age at marriage increases. Spanish men marrying foreign national women show systematically higher age differences than the other groups. For instance, the increase of mean age differences across age groups is more abrupt for Spanish men marrying foreign females (from 2.9 at 30-34 to 13.1 at more than 40) than for other combinations.

As stated before, Spanish men marry at older ages when they marry a foreign national wife compared to Spanish men marrying Spanish woman and foreign national men marrying Spanish women. Therefore, the fact that their timing is the most delayed and that their mean age difference is the one that

increases the most, could partially explain that their global mean age difference is 5.9 years, 2.36 times higher than the mean age difference of Spanish men marrying Spanish women. Moreover, when standardizing those age differences by age and marital status, the gap between the different combinations shows a significant reduction; instead of being 2.36 times higher, is now 1.52.

As standardization has controlled by both age at marriage and marital status and the marital status seems to be as significant as age at marriage, its effect over mean age differences between spouses deserves a more detailed examination, which follows.

Marital status composition

As for age at marriage, previous empirical evidence suggests that marital status or marriage order affect mean age differences between spouses (Ní Bhrolcháin 1992). On one hand, when marriage order is examined, men tend to marry younger women when they remarry. On the other hand, women tend to marry similar ages or even younger men when they remarry.

This relation is observed for the Spanish case as well. Regardless of the country of citizenship combination, singles present the smaller mean age differences with their spouses (2 years) while divorced and widows present a much higher mean age difference, 7.1 and 11.9 respectively. Nevertheless, this huge differences by marital status are not significant at younger ages; it might be assumed that remarriage before 35 years of age is rather similar to the first marriage, mostly because the short duration of the first marriage has not significantly influenced mate selection opportunities and choices.

This same pattern applies to each one of the four countries of citizenship combinations. Nevertheless there are important discrepancies among their values: marriages between foreign men and Spanish women and marriages in which both spouses are foreigners or Spanish present the lowest mean age difference. The contrary, the combination Spanish man/foreign woman exhibits age differences that are largely over the global: 3.8 for singles, 18.5 for widows and 11.2 for divorced.

In 2002-2006, 33.6 % of Spanish man who married a foreign woman was either divorced or widow while for Spanish men marrying foreign woman the

percentage was only 15.2 %. Thus, Spanish men marrying foreign women not only tend to marry younger women but they remarriage rates are higher, more concentrated in divorced and widows, also contributes to make mean age differences for this combination higher (Table 3).

Both husband's marital status and age at marriage trends and structure explain better the singularity of marriages between Spanish men and foreign women. The role played by wives and husbands attributes, namely, their country of citizenship, is a continuation one because changes in spouse country of citizenship composition are reinforcing mean age difference trends but not explaining them.

Table 3. Mean age differentials according to marital status and country of citizenship combination of both spouses (Men). Spain, 2002-2006.

| Marital status | Both Spanish | Spanish men/Foreign women | Foreign men/Spanish women | Both foreigners | Total |
|-------------------|--------------|---------------------------|---------------------------|-----------------|-------|
| Single | 1,9 | 3,8 | 0,5 | 1,8 | 2,0 |
| Widow | 10,3 | 18,5 | 8,5 | 10,2 | 11,9 |
| Divorced | 6,4 | 11,2 | 3,7 | 7,1 | 7,1 |
| Total | 2,5 | 5,9 | 0,9 | 2,5 | 2,7 |
| Total standarized | 2,5 | 4,8 | 1,0 | 2,5 | 2,7 |

Source: Own calculation MNP, series 2002-2006.

As demonstrated until this point, age at marriage, marital status and country of citizenship composition of the spouse, do explain part of the large differences in age observed between Spanish men and foreign national women. The main reason is that foreign national women who marry Spanish men are younger in average than Spanish women marrying Spanish men. But, despite this fact, it is possible to identify what seems to be a mating pattern: those particular Spanish men search younger women to marry with than men who do not choose foreign women as wives. Whether it is a matter of choice or of opportunity is another big issue which has to be examined.

Matching by educational attainment

In the previous sections was elucidated how people are getting married in Spain, focusing on matching by age and citizenship and its variations by gender over time. There were also identified different matting patterns among country of citizenship combinations within first and second order marriages. It

was demonstrated that age differences between spouses do vary depending on the citizenship combinations of spouses. Spanish men marrying foreign national women show the largest differences, while and Spanish women marrying foreign national men show the lowest.

To explore further differences between partners (i.e. educational attainment) it is necessary to turn into a different dataset: the Spanish Labor Force Survey EPA (II trimester 2007) which provides information, among others variables, on the educational level of household members that are over 16 years old. This is a completely different source from the MNP because it collects stocks not fluxes. The information available in the microdata is a picture of the people who are married or in union in Spain. International immigrants can be identified either by birth place or country of citizenship, the former is the one used in this analysis. Unfortunately, the EPA does report neither where nor when the union was formed. Marriage order is not reported either.

To get some clues about mate selection by educational attainment within couples, an indicator of educational homogamy has been calculated according to the combination of both members educational attainment. The aim here is to complete assortative mating patterns by examining the relation between the educational levels of both partners. And to identify gender differences across types of marriages based on partners place of birth.

The analysis here presented is limited to women between 30-39 years old because the greatest percentages of mixed unions are concentrated in this range of ages and to avoid samples attrition due to union dissolution. This way there is an improvement in the comparability of the different couples's combination by place of birth and an approach to the most recent couples. This way are guaranteed: the comparison of women generations that have been forming unions and the differences and similarities that exist in this time axis when unions between Spanish men and women and foreign born are examined. This strategy will be used also in the next section.

Table 4 is divided in two boxes. In the first box there is the percentage distribution of the educational homogamy/heterogamy of the partners by their place of birth combinations. This table shows that regardless the nativity combination of partners, most of the couples are educationally homogamous. The lowest percentage of educational homogamy is found among couples between Spanish men and foreign born women (54.1 %). No significant

differences are observed for the other combinations. When partners do not share the same educational attainment, women have higher levels of schooling than their partners. Compared to previous cohorts, this is an unprecedented change due to the expansion of women's schooling in Spain (Esteve & Cortina 2007).

Foreign born women in union with Spanish men are likely to be more formally educated. This is observed in 26 % of the SM/FBW couples, a percentage that is that is 1.6 times higher than in Spanish/Spanish couples. This situation in which females involved in a union with Spanish born males are more formally educated could be related to the fact that immigrant women marry older and less educated men compared to Spanish women.

The second box of Table 4 represents the percentage distribution of the educational relation of the different birth place combinations controlling by the relative age differences of partners (same age, she is 3 years older or he is 3 years older). Negative values indicate that she is older than him.

Educational homogamy levels are lower in couples between Spanish men and foreign born women couples regardless of the age differences between them. On the contrary, the higher levels of educational homogamy are found in Spanish women/foreign born men couples, especially in the unions where she has the same age (69.8 %) or where she is older than her partner (84 %). Homogamy decreases when men are older than women.

Regarding heterogamous couples, hypogamy (couples in which she has a greater educational attainment than her partner) is the rule, except for the age homogamous unions between Spanish men and foreign born women.

The percentage of Spanish women/foreign born men couples in which he is older than she is and he has a greater educational level is quite important, though is not the most representative. A 21.5 % of Spanish women are in union with immigrant men who are older than they and had also a higher educational level. This percentage is 44 % lower when unions in which both partners are Spanish are examined.

Table 4. Percentage distribution of educational homo/heterogamy by partners' birth place combinations. Spain, 2007.

| Age difference (grouped) | Educational homogamy/heterogamy | Combinations by birth place | | | |
|--------------------------|---------------------------------|-----------------------------|--------------------------------|--------------------------------|-----------------|
| | | Both Spanish | Spanish women/allien-birth men | Spanish men/allien-birth women | Both foreigners |
| | Homo | 62,0% | 65,5% | 54,1% | 63,0% |
| | Hypo (she +) | 24,8% | 20,8% | 26,0% | 20,3% |
| | Hyper (he +) | 13,2% | 13,7% | 19,9% | 16,7% |
| Same age | Homo | 63,8% | 69,8% | 59,0% | 63,5% |
| | Hypo (she +) | 23,7% | 20,2% | 19,0% | 19,8% |
| | Hyper (he +) | 12,5% | 10,0% | 22,0% | 16,8% |
| She is older | Homo | 53,9% | 84,0% | 58,9% | 73,0% |
| | Hypo (she +) | 28,3% | 10,1% | 24,5% | 23,1% |
| | Hyper (he +) | 17,8% | 6,0% | 16,6% | 3,9% |
| He is older | Homo | 59,2% | 53,6% | 48,6% | 60,5% |
| | Hypo (she +) | 26,7% | 24,9% | 33,2% | 20,3% |
| | Hyper (he +) | 14,1% | 21,5% | 18,2% | 19,2% |

Source: Own calculation EPA, II Trimester 2007.

Note: Women between 30 and 39 years old have been selected.

In general, it was shown how women have more schooling than their male counterparts independently of their birth place combinations and the age differences that exist between them.

When marrying foreign born individuals, Spanish women do marry more homogamously than Spanish men. There seems to be a pattern in couples where she is Spanish and he is a foreigner. These females are with partners that have more similar attributes to theirs, that is to say, SW/FBM couples are the most homogamous (in terms of age and educational attainment) if they are compared to the couples in which Spanish women are with Spanish men or Spanish men with alien birth women. On the contrary, the couples that show the greater differences regarding age and education are those in which he is Spanish and she is a foreign born. Only when she is older than him the educational homogamy percentage is not the lowest but, in the rest of the age differentials this couples' combination is the less homogamous.

Concluding remarks

Intermarriage is not gender neutral. When examining both matching patterns within couples, significant gender differences in intermarriage are observed. Results have shown that the largest gender differences are found in unions between Spanish men and foreign women, when compared to couples where both partners are Spanish. Since 1989, intermarriage rates have been



growing systematically in Spain either for men and women although at a different pace. Marriages between Spanish men and foreign national women are now more frequent than marriages between Spanish women and foreign national men. There is also a growing trend in remarriage, which is highly significant for Spanish men marrying foreign national women.

The analysis of *matching patterns* has been held at three different stages. The first stage, called *matching by citizenship*, showed that Spanish men and women do not intermarry with spouses of the same nationalities. The arrival of important immigrant flows to Spain during the last years has increased the availability of foreigners in the Spanish marriage market. In the second stage, *matching patterns by age* have been examined. Intermarried couples are more age heterogamous. Among these heterogamous marriages, Spanish males are older than their foreign national female counterparts. As a result, mean age differences between spouses are higher in Spanish male and foreign female marriages compared to any other type of marriage and tend to increase over time, contrary to what happens in marriages between Spanish women and foreign-citizen men. At this point, several factors have been considered to explain the presence of large age differences between Spanish men and foreign national women and its increasing trend over time. The width and widening of the gap is only partially explained by the age and marital status structure of the Spanish men that marry foreign national women. In addition, changes in the distribution by country of citizenship of the spouses have contributed to reinforce mean age differences between spouses although this is neither the main factor.

In the third and final stage, *matching patterns by educational attainment*, it has been seen that couples between Spanish men and foreign born women shows the lowest percentage of educational homogamy. Females in union with Spanish born males are higher educated than they are despite of the age differences between them. Thus, when marrying foreign born individuals, Spanish men do marry more age and educational heterogamously than Spanish women.

Once proved that unions between Spanish men and foreign women differ from the rest of unions because of the singularities observed in their matching patterns, it is still pending to ask about the reasons of the existence of such differentiated pattern. Why are Spanish men marrying younger and more formally educated foreign women? Why unions between Spanish women and foreign men do not reproduce a similar pattern? Two possible answers arise. It could be related

to a matter of preferences in mate selection or could be explained by structural factors. Future research on this matter should be carried out.

At the end of this paper there are still some questions that are waiting to be answered. First, it is necessary to test if the differences observed in matching patterns are maintained when the origin of the partner is detailed. That is to say, the age and educational attainment homogamy patterns are the same for Spanish men in union with European women than for Spanish men in union with Latin American women. Second, it also has to be examined the possible existence of filters in mate selection by analyzing the individual attributes of both the foreigners and the natives involved in unions.

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