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Population, English edition, Volume 63, Number 1, 2008, pp. 173-193 (Article)

Published by Institut national d'études démographiques *DOI:* https://doi.org/10.1353/pop.0.0003



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In Italy, marital dissolution was made legal in 1970 and entails two stages: a period of legal separation followed by divorce. Both legal separation and divorce become effective after a court verdict. The Divorce Act (1970) stipulated the minimum interval between legal separation and divorce to be five years, but in 1987 this was reduced to three years. Although only about 50% of legal separations are actually followed through to a final divorce (Table 1), with total dissolution of marital status, only a negligible proportion of legal separations lead to a reconciliation between spouses (Barbagli, 1990).

Given this context, an analysis of the continuous increase in legal marital dissolution in Italy is best carried out by focusing on legal separations. Data on each separation verdict are collected by the Italian National Institute of Statistics (Istituto nazionale di statistica, ISTAT). In this paper, we use these data from 1970; before 1970, legal separations were permitted, but they were very uncommon.

Table 1. Marriages, legal separations and divorces in Italy (in thousands), 1971-2004

	1971	1980	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Marriages	404	323	320	290	279	278	280	280	284	264	270	259	251
Legal separations	12	29	44	52	58	60	63	65	72	76	80	82	83
Divorces	17	12	28	27	33	33	34	34	38	40	42	44	45
Sources: ISTAT several editions of Demographic Yearhooks													

The aims of this short paper are first, to illustrate the trends in legal separation in Italy by year of marriage and duration and second, to forecast possible tendencies in the near future. In order to elaborate on our second point (i) we project the probabilities of legal separation by duration; (ii) we

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carry out a territorial analysis of the 20 Italian regions, offering several possible explanations for observed territorial differences; (iii) we compare Italy with Spain (where divorce became legal in 1981) and with other western countries where marital dissolutions are more common and became widespread earlier (United States, United Kingdom and France). Our intention is not to provide a complete overview of differences in marriage dissolution among western countries. Considering Spain and forerunner countries, our aim is to catch a glimpse of the future of legal marital dissolution in Italy.

We adopt a cohort approach, constructing legal separation life tables by year of marriage. This technique is commonly used by demographers, but has seldom been employed in analyses of marriage dissolution. The most recent and quoted comparative article on this topic (Andersson and Dimiter, 2001) uses a period approach, which is of little use in explaining a rapidly changing pattern of marital dissolution such as that in Italy over the last few decades. We therefore provide a detailed explanation of the methodology employed (Section 1) in the construction of the separation life tables, and address the problem of interaction with mortality. In order to illustrate the relevance of the cohort approach, the period life tables are constructed and results are compared.

The legal separation life tables by year of marriage provide answers to a number of important questions. Is separation increasing in intensity? Are there any "period-shocks" (i.e. period changes of probabilities of separation affecting each cohort of marriage, apart from the duration of marriage)? Has the timing of separation changed by marriage cohort? Is the increase in the number of separations equally distributed by duration of marriage, or is it concentrated in the earlier or later years of marriage?

1. Method

1.1. The construction of marriage-cohort legal separation life tables

ISTAT has published national data on legal separations by year of marriage since 1969. Consequently, our analysis deals with those marriages celebrated from 1969-2003. In this section we describe the method of building the marriage-cohort separation life tables. The results are reported and discussed in section 2.

The first step in constructing a marriage-cohort separation life table is to calculate the probability of separation by duration of marriage. Data on legal separation for the years 1969 through 2003 were collected and organized as shown for the most recent marriage cohorts in Table 2. The first column shows marriages $_tM$ celebrated during the year t. The following columns show legal separations $_{t+x}S_x$ (that is, those separations occurring in the year t+x, of marriages celebrated during the year t, i.e. x years after marriage).

Year Number Legal separations by duration x of marriage (years) of marriages of marriage x = 0x = 1x = 2x = 3_τM 1997 277,738 322 1,116 2,237 3,182 1998 280,034 2,543 3,444 258 1,040 1999 280,330 217 1.172 2.707 3.709 2000 284,410 1,314 2.736 3,788 103 2001 264,026 91 1,256 2,750 2002 270,013 118 1,299 2003 257,662

Table 2. Legal separations occurring during the first four years after marriage, celebrated in Italy between 1997 and 2003

Source: ISTAT, several editions of Demographic Yearbooks.

The probability of a couple separating x years after marriage for those marriages celebrated in year $t(_{t}q_{x})$ can be calculated as follows (in part 1 of Table 3 these probabilities are calculated using the data in Table 2):

$$_{1997}q_{0} = \frac{_{1997}S_{0}}{_{1997}M} \quad 1,000 = \frac{322}{277,738} \quad 1,000 = 1.16\%$$

$$_{1997}q_{1} = \frac{_{1998}S_{1}}{_{1997}M - _{1997}S_{0}} \quad 1,000 = \frac{1,116}{277,738 - 322} \quad 1,000 = 4.02\%$$

$$_{1997}q_{2} = \frac{_{1999}S_{2}}{_{1997}M - _{1997}S_{0} - _{1998}S_{1}} \quad 1,000$$

$$= \frac{2,237}{277,738 - 322 - 1,116} \quad 1,000 = 8.10\%$$

$$_{t}q_{x} = \frac{_{t+x}S_{x}}{_{t=0}} \times 1,000$$

Beginning with the series $_{l}q_{x}$ (t = 1969...2003), the other parameters (surviving marriages $_{l}l_{x}$ and number of separations $_{l}d_{x}$) are easily calculated using the standard methodology of life-table analysis.

The probability of separation just defined, however, does not take into account mortality, and the number of surviving marriages in the denominator is overestimated. Hence, the number of surviving marriages in the life table l_x is overestimated and the number of separations l_x is underestimated. If we hypothesize independence between the probability of separation and that of death, and no difference in mortality by marital status, then the

Table 3. Legal separations occurring during the first four years after marriage, celebrated in Italy between 1997 and 2003: life-table parameters

PART 1 Probabilities of separation Year at tq_x (‰)						PART 2 Surviving marriages _t / _x					PART 3 Number of separations of the life table ${}_td_x$			
Marriage	Duration of marriage				Duration of marriage					Duration of marriage				
	0	1	2	3	0 1 2 3				0	1	2	3		
1997	1.2	4.0	8.1	11.6	100,000	99,884	99,482	98,677	116	402	805	1,146		
1998	0.9	3.7	9.1	12.5	100,000	99,908	99,536	98,628	92	371	908	1,230		
1999	8.0	4.2	9.7	13.4	100,000	99,923	99,505	98,539	77	418	966	1,323		
2000	0.4	4.6	9.7	13.5	100,000	99,964	99,502	98,540	36	462	962	1,332		
2001	0.3	4.8	10.5	_	100,000	99,966	99,490	98,448	34	476	1,042	-		
2002	0.4	4.8	-	-	100,000	99,956	99,475	-	44	481	_	-		
2003	0.3									_				
Source: aut	Source: authors' calculations based on ISTAT data (see Table 2).													

correct estimate of marriages ${}_{t}M_{x}$ surviving after x years, for denominators in [1], is:

$${}_{t}M_{1} = {}_{t}M \quad \frac{{}_{m}l_{a(m)+1}}{{}_{m}l_{a(m)}} \quad \frac{{}_{f}l_{a(f)+1}}{{}_{f}l_{a(f)}} - {}_{t}S_{0}$$

$${}_{t}M_{2} = {}_{t}M_{1} \quad \frac{{}_{m}l_{a(m)+2}}{{}_{m}l_{a(m)+1}} \quad \frac{{}_{f}l_{a(f)+2}}{{}_{f}l_{a(f)+1}} - {}_{t+1}S_{1}$$
[2]

and so on, where ${}_{m}l_{a(m)}$ is the number of surviving individuals from a mortality life table of males, and a(m) is the mean age at marriage for males (the same goes for females). We applied both methodologies (with and without mortality) in order to estimate the separation life tables for the 1969 marriage cohort (the cohort with the highest mortality) (1). The differences are negligible. For example, if we do not consider mortality, 30 years after marriage the proportion of marital unions ending in legal separation is 7.7%, while it is 8.0% if we do consider mortality. Consequently, in order to simplify calculations the probabilities of separation estimated in this paper use formula [1], which does not take into account mortality. However, it should be noted that if the above described methodology was applied to countries with higher adult mortality, this simplification would not hold.

⁽¹⁾ According to the Italian 1980 life tables calculated by ISTAT, the probability of a man dying between the ages of 28-58 is 17%, while for a woman between the ages of 25-55, the probability is 5%. The same parameters from the 2000 life tables are respectively 10% and 3%.

Finally, as migration was not taken into account, our probabilities regarding legal separation may be under- or over-estimated due to a number of factors: strength and direction of the migratory flows, their composition by marital status, migrants' place of marriage and eventual legal separation. Since the mid-1980s, Italy has become a receiving country for migration. By the close of 2003, approximately three million people from poor countries were living in Italy (ISMU, 2006). However, most of these migrants were young, single, or had spouses who had remained abroad. Consequently, any distortion induced by failing to correct for migration should be limited, although this will become an increasingly important factor in the future.

The probabilities $_tq_x$ calculated above are also used to construct the period separation life tables, by compiling the data of the different cohorts. For example, in 2003, q_o is the ratio of legal separations which occurred in 2003 in marriages of that same year over the total number of marriages in 2003 ($_{2003}q_o$); q_{10} is the ratio of legal separations which occurred in 2003 in marriages which took place in 1993 over the marriages which took place in 1993 which were still surviving at the beginning of 2003 ($_{1993}q_{10}$)⁽²⁾.

1.2. Projection of separation probabilities

As enough data on marital dissolution by duration of marriage are available (1969-2003), it is possible to project trends in legal separation probabilities. For the marriages which took place in year t, we can only calculate the probability of separation up to duration 2003 - t, given that 2003 is the last year for which data on legal separations by duration of marriage are available. In order to estimate the proportion of recent marriages that might be dissolved by a legal separation after, say, 10, 15, or 20 years, the probability of separation q_x was projected for each duration x. Several curves were fitted to the empirical data. For each duration up to 24 years, the quadratic polynomials fit data with $R^2 > 0.97$, whereas the fitting of the linear interpolation was poorer and the increase of fitting for higher order polynomials was negligible. For example, for the duration of 15 years, the goodness-of-fit increases from 0.875 (linear interpolation) to 0.982 (quadratic interpolation), rising only to 0.989 with cubic interpolation (Figure 1). We decided not to estimate probabilities after the duration of 24 years, as the number of interpolating points was below ten.

Aside from the plausibility of this projection, it is important to note that the goodness-of-fit of the quadratic interpolation is quite a bit better than the linear one. This is caused by changes which have occurred in the last 10-15 years. Indeed, when the same procedure is applied to the early 1990

⁽²⁾ Using only data on marriages and legal separations by duration of marriage, the period life tables are derived by cohort probabilities. An alternative source for the denominator of the period probabilities of separation by duration of marriage would be the population classified by marital status and year of marriage. In Italy these data are available from the censuses of 1971 (sample of 20%), 1991, and 2001, or from some sample surveys (1983, 1998, 2003).

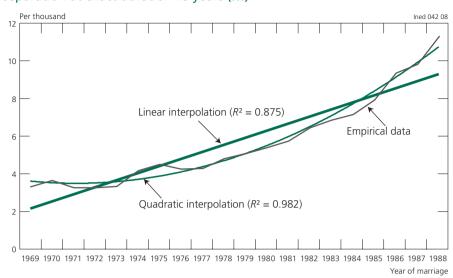


Figure 1. Linear and quadratic interpolation of probability of legal separation at exact duration 15 years (%)

data, there is an appreciable goodness-of-fit of the linear functions when interpolating $_{i}q_{x}$ at each duration x (Castiglioni and Dalla Zuanna, 1994). This result suggests that the increase in the probability of separation accelerated from 1990 to 2003, for each duration x, providing further evidence of the rapid diffusion of marital dissolutions which took place in Italy after 1990.

1.3. Estimation of regional differences

For the 20 Italian regions, we use a simplified method to estimate the proportion of marriage cohorts (1973-98) dissolved before 20 years of marriage. Following the life-table technique already presented (formula [1]), the proportion of marriages celebrated at year t and ended before their $20^{\rm th}$ anniversary is:

$$\sum_{x=0}^{19} {}_{t+x}S_x$$

$${}_{t}M$$
[3]

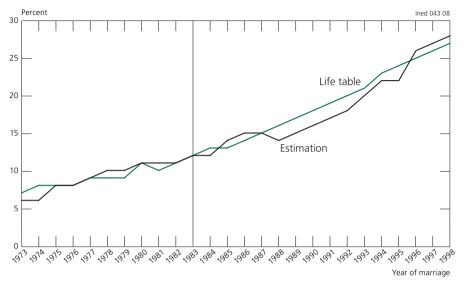
We substitute the quantity $\left(\sum_{x=0}^{19} t_{+x} S_x\right)$ with the number of separations registered *k* years after *t*:

$$\underbrace{t+k}_{t}S$$

$$\underbrace{M}$$

where k is chosen with the aim of obtaining values of the two ratios [3] and [4] that are as close as possible.

Figure 2. Percentage of marriages ended by legal separation in Italy before their 20th anniversary. Comparison between the calculation using the life table (formula [3]) and the estimation (formula [4] with k=4)



For Italy as a whole and for marriages celebrated from 1973-1998, the best estimations are obtained if k = 4 (Figure 2). For the marriage cohorts of 1973-83, this result is entirely based on calculated life tables; for the following cohorts, the results are based on partially projected life tables.

Using this empirical technique, we estimated the proportion of marriages celebrated each year from 1973-1998 which ended in legal separation for each of the twenty Italian regions. We worked under the hypothesis that the elimination process is almost the same in each region, despite the different levels of probability of separation (i.e. in each region the ratio $_{t+4}S /_t M$ may approximate the proportion of $_t M$ broken by duration $_t M$).

[3] becomes:
$$\left(\sum_{x=0}^{19} t_{-x} S \times w_x\right) / t_t M$$
 where w_x is a standard distribution of separation by marriage

duration. However, this new formula is applicable only if we know the number of total separations for the 20 years following marriage. Thus, in our case, this approach could be used for estimating the proportion of marriages dissolved before 20 years only for those weddings celebrated before 1984. The empirical comparison shown in Figure 2 shows that the numerator $_{t+4}$ S of formula [4] is a good

substitute for both
$$\sum_{x=0}^{19} t + x^S x$$
 and $\sum_{x=0}^{19} t - x^S \times w_x$. In order to stabilize our estimations at a regional

level, in formula [4] we used the mean number of separations: $\binom{t+3}{t+4} + \binom{t+5}{t+5} > 1/3$ instead of $\binom{t+4}{t+5}$. Ferro and Salvini (2006) constructed regional life tables for the marriage cohorts of 1979-99. More

⁽³⁾ This method for estimating the proportion of broken marriages at a regional level may seem rather approximate. Other methods might be more accurate. For example, we could employ an approach similar to the Gini index, used for estimating the fertility of marriages (without knowing births) by duration of marriage (1934), but rearranged to allow for a cohort point of view. Formula

This technique does not take into consideration interregional mobility for marriage. If a region "attracts" the marriages of non-resident couples, the ratio between legal separations and marriages is underestimated due to the fact that marriages are classified by place of celebration, and legal separations by place of residence. During the 1970s, interregional mobility for marriage was not negligible. About 10% of spouses living in the north (mainly in Piedmont and Lombardy) celebrated their marriage in a southern region, returning to the north shortly afterwards. These couples were often southerners who had earlier migrated to the northern regions. Interregional mobility decreases over time, dropping below 5% in the first few years of the twenty-first century. Consequently, the technique applied in this short paper overestimates the separation probabilities in the north and underestimates the same probabilities in the south. However this distortion is never above 10% and it decreases with time.

2. Results: legal separation in Italy by year of marriage and duration

The parameters $_{l}q_{x}$, $_{l}d_{x}$ and $_{l}l_{x}$ for the legal separation life tables of marriages celebrated in each year between 1969 and 1998 were estimated, although they are not reported here $^{(4)}$. In order to discuss change over time, we group marriage cohorts in years of five. Table 4 shows the probabilities of legal separation by five-year duration of marriage (i.e. the probabilities for abridged life tables). In figure 3, we report the probabilities for the first ten durations of marriage, which we were able to calculate for the 1969-93 marriage cohorts and partially project for the 1994-98 marriage cohort. The projection results will be discussed in the next part.

The probability of separation has steadily increased for each duration, cohort after cohort. For all of the marriage cohorts, the probabilities increase until marital duration 5, and then remain constant until duration 10 (see Figure 3). Subsequently, probabilities drop, slowing for the 1969-78 cohorts as the durations increase (see rows of Table 4). On the other hand, for the cohorts of 1979-88 the probabilities are constant or higher after duration 10. However, this change may be the result of a "period-shock" rather than a postponement of the duration pattern: the increase in the probabilities of separation accelerates after 1995 for each five-year cohort, notwithstanding the duration (see the figures in bold type in Table 4).

specifically, for the cohorts married in 1979-84 (i.e. those observable for at least 20 years), their results overlap with our own estimates (second and third columns of Table 5). These kind of procedures might be proposed in order to estimate the proportion of marriages ended with a separation before anniversaries other than 20. Our choice is a compromise between a measure of the final proportion of marriages dissolved by legal separation and the desire to avoid estimating quantities too far over time. (4) See the Working Paper No. 24, 2007, Dept. of Statistical Sciences, University of Padua, www.stat.unipd.it

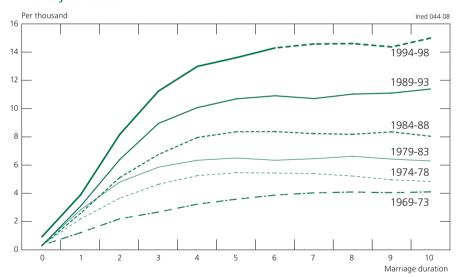
Table 4. Probabilities of legal separation by marriage cohort and five-year duration, and proportion of marriages dissolved at some exact duration

		Probabi	lities of	Marriages dissolved (%)						
Marriage Cohort		of	Dura marria	Exact duration of marriage (years)						
	0-4	5-9	10-14	15-19	20-24	25-29	10	15	20	25
1969-73	9.6	19.5	18.9	16.5	14.8	12.7	3	5	6	8
1974-78	16.0	26.2	23.0	21.3	20.6	-	4	6	8	10
1979-83	20.0	31.9	29.8	30.3	29.9	_	5	8	11	13
1984-88	22.5	40.8	42.6	44.7	42.7	_	6	10	14	18
1989-93	28.5	53.3	60.7	63.5	58.8	_	8	14	19	24
1994-98	36.7	69.4	82.3	86.7	78.2	-	10	18	25	31
Total	22.2	40.0	42.3	42.6	39.2	_	6	10	14	17

Interpretation: The figures in bold type refer to the most recent available data. Data in italics were projected.

Source: Authors' calculations based on ISTAT data on marriages and legal separations.

Figure 3. Probabilities of legal separation (‰) by marriage cohort and one-year duration



Note: For the 1994-1998 cohort, dotted lines are estimated.

Source: Authors' calculations and estimations based on ISTAT data on marriages and legal separations.

Figure 4 compares the legal separation life tables by cohort and by period. The shape of the probability q_x by period looks quite different from that by cohort, with a maximum around the durations 3-8 years. However this pattern – which mirrors the growing trend of probabilities for each duration – does not correspond to the experience of any of the marriage cohorts.

Per thousand Per thousand Ined 045 08 Cohort Period Marriage duration Marriage duration

Figure 4. Probabilities of legal separation (‰) by cohort (marriages celebrated in 1973, 1983, 1993) and period (1983, 1993, 2003)

3. Results and future trends

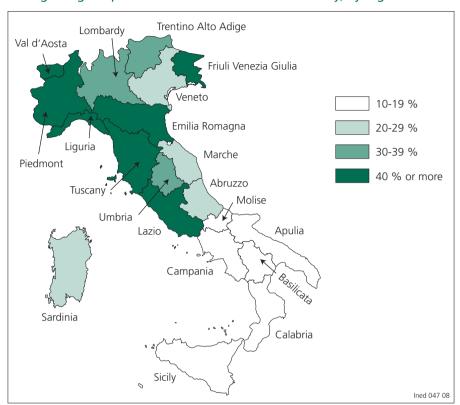
3.1. Legal separation life tables by marriage cohort: analysis of projected probabilities

According to our projections, the proportion of marriages dissolved before their 10th, 15th, 20th and 25th anniversary rises cohort after cohort, accompanied by a progressive acceleration (Table 4, last four columns). Among the marriage cohort of 1994-98, one marriage out of four will end before the couple's 20th anniversary. This result seems to be realistic, because the period life table for 2003 (not reported here) shows that 20% of marriages are dissolved before their 20th anniversary, and 24% at the duration 30. For the years that follow it is difficult to imagine that the probability of separation for each duration will fall below the values of 2003, thus 20% and 24% are the "minimum" for the proportion of marriages celebrated during the 1990s which will end in legal separation up to a duration of 20 and – respectively – 30 years.

For all of the marriage cohorts, after a rapid increase in the probability of separation during the first few years of marriage, the projected probabilities of separation are quite similar. This result suggests that Italian marriages are not characterized by well defined "sensitive periods", (i.e. durations that are at a particularly high risk for legal separation). We shall see below that this characteristic is not shared by other developed countries when the intensity of separations increases.

3.2. Regional differences and trends

Legal separations were and still are more widespread in the north-western regions (Piedmont, Val d'Aosta and Liguria), in the north-eastern region of



Map. Estimation of the percentage of marriages celebrated in 1998 ending in legal separation before their 20th anniversary, by region

Friuli-Venezia Giulia, and in the two predominantly "red" central regions (Tuscany and Emilia-Romagna, where the Communist Party maintained the majority of votes throughout the second half of the twentieth century – see Map and Table 5). The region of Lazio, where half of the inhabitants of the region live in the urban area of Rome (the biggest Italian city), also tends to have a higher proportion of separations. The south, on the other hand, displays the lowest levels of separations. Our estimations suggest that only 15% of southern marriages celebrated in 1998 will be dissolved by a legal separation before their 20th anniversary. This is the same percentage for those marriages celebrated 20 years earlier in the "forerunner" regions. In the other regions, the occurrence of separation is at a medium level. The region of Veneto (where Venice and Verona are located) presents an interesting case in that it is characterized by the lowest levels of separations in the north. Indeed, Veneto has been called "the vineyard of the Lord", due to the influence of the Catholic Church during the nineteenth and twentieth centuries.

Table 5. Estimation of the percentage of marriages ending in legal separation before their 20th anniversary, by year of marriage and region.

Marriages celebrated in Italy, 1973-98⁽¹⁾

	1973	1978	1983	1988	1993	1998	1998 / 1978
Centre- North							
Piedmont	8	16	20	23	28	40	2.50
Val d'Aosta	8	21	22	34	40	42	2.00
Liguria	10	18	24	25	31	46	2.56
Lombardy	6	13	17	19	25	34	2.62
Trentino-Alto Adige	5	11	13	17	23	30	2.73
Veneto	4	8	11	11	22	25	3.13
Friuli-Venezia Giulia	7	13	16	32	31	40	3.08
Emilia-Romagna	6	14	23	25	31	42	3.00
Tuscany	5	11	16	20	28	40	3.64
Umbria	2	8	11	15	25	31	3.88
Marche	2	6	8	13	17	28	4.67
Lazio	7	16	15	21	26	42	2.63
Abruzzo	2	5	5	7	18	25	5.00
Molise	1	2	3	5	11	18	9.00
Sardinia	1	5	8	10	15	21	4.20
South							
Campania	3	5	6	7	11	15	3.00
Apulia	2	4	5	8	11	14	3.50
Basilicata	1	3	3	4	9	10	3.33
Calabria	1	3	5	5	8	11	3.67
Sicily	3	5	7	8	12	17	3.40
Italy (mean)	5	10	12	15	20	27	2.70
Variation coefficient ⁽²⁾	0.56	0.57	0.57	0.61	0.46	0.44	-
Linear correlation with 1998 series	0.87	0.92	0.92	0.91	0.95	1.00	- 0.45

⁽¹⁾ The estimation technique is described in part 1.3.

The geography of separation is relatively stable: the territorial linear correlation between the proportions of legal separation for marriages celebrated during the years 1973-1998 is never below 0.87 (last row of Table 5). Regional differences, however, have declined during the last 15 years with regard to the proportion of marriages dissolved before their 20th anniversary (i.e. noticeable is the increase in the regions which had lower levels of separations during the 1970s and 1980s (last column of Table 5). These results are indicative of a territorial convergence towards higher levels. Some care should be taken in examining the interregional differences of the past, however, as these figures

E.g. $100 \times (_{1976, 1977, 1978} Separations_{Piedmont} / _{1973} Marriages_{Piedmont}) / 3 = 8$

⁽²⁾ æ/moan

Table 6. Linear correlation between the estimated proportion of marriages of 1998 ending in legal separation before their 20th anniversary and some indicators of socioeconomic development and secularization.

The 20 Italian regions and the 15 regions of the Centre-North

	Education	Fertility decline	Income	Secular- ization ⁽¹⁾	Secular- ization ⁽²⁾	Secular- ization ⁽³⁾
Italy	- 0.85	- 0.83	0.88	- 0.75	0.79	0.84
Centre-North	- 0.76	- 0.82	0.71	- 0.77	0.76	0.71

Indicators and sources:

Education: Cohort when 50% of the women were literate (Population Census, several years, Castiglioni and Dalla Zuanna, 1988).

Fertility decline: Estimation for the female cohort when marital fertility declined 10% without subsequent recovery (Castiglioni and Dalla Zuanna, 1988).

Income: Per-capita income at the end of the 1990s (ISTAT, General Yearbook of 2005).

Secularization: ⁽¹⁾ Proportion of people (14 years or older) attending Mass once or more a week, 2001; ⁽²⁾ proportion of people (14 years or older) who never attended mass in the previous year (ISTAT, Informazioni, 24, 2003); ⁽³⁾ proportion of out-of-wedlock births during 2004 (ISTAT, General Yearbook of 2005).

may be overestimated in the north and underestimated in the south as a consequence of marriage mobility (see above).

Generally speaking, the territorial association between separation and several indicators of socioeconomic development and secularization is very high, even when the relatively less developed regions of the south are excluded from the analysis in order to avoid polarization (Table 6). The diffusion of legal separations follows the same geographical gradients of literacy, diffusion of birth control, and wealth. Table 6 also shows the territorial consistency between the diffusion of separation and three indices of secularization (concerning frequency of Mass attendance and out-of-wedlock births). The strength of secularization in influencing the pace of diffusion of new marital and reproductive behaviours in Italy is also confirmed by more sophisticated empirical results, relative to various phases of demographic change⁽⁵⁾.

These territorial results are far from exhaustive⁽⁶⁾. They are, however, robust enough to suggest that the geographical distribution of legal separations

⁽⁵⁾ Taking the 95 Italian provinces as units of analysis, Livi Bacci (1977) showed that the linear correlation between votes for the 1974 referendum on divorce and levels of marital fertility in 1911, 1931, 1951, and 1961 is higher than the correlation with contemporary indicators such as education, industrialization and urbanization (mainly in the central and northern part of Italy). Dalla Zuanna and Righi (1999) conducted a similar analysis using a wider dataset. Their results showed that a geographical view (on a provincial scale) of levels of cohabitation and out-of-wedlock fertility at the end of the twentieth century is quite similar to the geographical pattern of diffusion of the great fertility decline in the first half of the twentieth century. This perspective also overlaps with the territorial diffusion of secularization (measured using different indicators) even when other variables such as income and urbanization, were statistically controlled for.

⁽⁶⁾ The region does not provide a very informative unit. For example, the region of Lombardy (9.5 million inhabitants at the beginning of 2006) should ideally be divided into two parts. One part should include the two eastern provinces, Bergamo and Brescia, as they belonged to the Republic

in Italy recounts a familiar tale. Despite recent changes (i.e. the rapid secularization of Veneto and Sardinia in the last few years), the territorial pattern of the diffusion of legal separation overlaps with the diffusion of socioeconomic development and secularization during the last century. Consequently, it seems reasonable to suppose that the process of territorial diffusion of separations will continue, such that the regions of the south and the "less developed" regions of the centre-north will follow in the footsteps of the "forerunner" regions in the centre-north.

3.3. International comparison

To further examine the future of legal separation in Italy, we will now consider some countries where marital dissolutions started increasing some years earlier (United States, United Kingdom and France). Although these comparisons are only descriptive, and do not explain differences and similarities, the idea is to see if Italy will follow the path that other countries have already trodden. We adopt the same cohort perspective. We compare first the levels (proportion of marriages dissolved before 20 years), and secondly the pattern by duration.

This analysis is preceded by a short comparison between Italy and Spain, which is interesting because – until the new law introduced in 2005 – Spain shared with Italy the two-step process of marriage dissolution (at least one year of legal separation before the final divorce). Moreover, Spain is a Catholic country like Italy and divorce was introduced relatively late, in 1981. Data on legal separation by duration of marriage (single year) in Spain are available only from 1995. For the marriage cohorts of 1995-2002, the probabilities of separation during the first years of marriage are similar in Spain and Italy, although Spain shows a more rapid increase in the number of legal separations for the more recent marriages (Figure 5)⁽⁷⁾.

During the second half of the twentieth century, marriage dissolution increased in the countries considered here, as throughout the developed world. Italy (like Spain) was characterized by a delayed diffusion (Figure 6). If our estimates prove to be true, 20% of marriages celebrated in Italy at the beginning of 1990s will end in legal separation before their 20th anniversary. This same level was reached or slightly surpassed for those marriages celebrated in the early 1940s (in the USA), in the 1960s (United Kingdom), and in the 1970s (France). However, as seen above, the low level of marriage dissolutions in Italy conceals tremendous regional differences. We surmise that in the forerunner

of Venice up until 1797 and are less secularized. The other part would include the provinces that have more in common with Piedmont and Liguria. Indeed, half of the marriages celebrated in Milan around the year 2000 were preceded by pre-marital cohabitation (De Sandre and Ongaro, 2003).

⁽⁷⁾ We are grateful to Montse Solsona director of the Research Group on Divorce (Demographic Studies Centre) for having elaborated the micro-data on legal separation by duration and year of marriage.

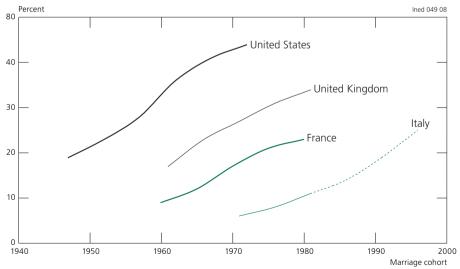
Per thousand 70 q_{5-9} Italy 60 q₅₋₉ Spain q₀₋₄ Spain 50 q_{0-4} Italy 40 30 20 10 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 Year of marriage

Figure 5. Legal separation probabilities (‰) in the first five years of marriage (q_{0-4}) and in the five following years (q_{5-9}) by year of marriage, Italy and Spain

Note: For Italy, dotted lines are estimated.

Sources: For Italy, authors' calculations based on ISTAT data; for Spain, official data on marriages (http://epp.eurostat.ec.europa.eu, accessed 4 May 2007) and M. Solsona (Demographic Studies Centre) for legal separations.

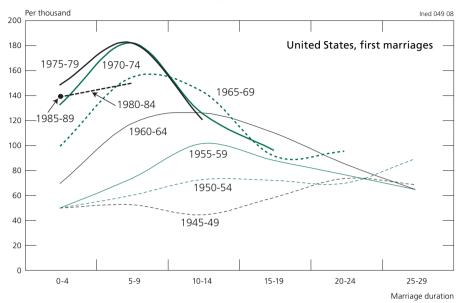
Figure 6. Percentage of marriages dissolved before duration 20, by year of marriage, United States, United Kingdom, France, and Italy



Note: For Italy, data for marriage cohorts following 1983 are estimated (dotted line).

Sources: United States: Kreider and Fields, 2002, survey data on divorces; United Kingdom: www.statistics. gov.uk (accessed in spring 2006), official data on divorces, five-year cohorts; France: Prioux, 2005, official data on divorces, one-year cohorts; Italy: our calculations and estimations (see Table 4), official data on legal separations, five-year cohorts.

Figure 7. Probability of marriage dissolution (%) by duration and year of marriage, United States, United Kingdom, France and Italy



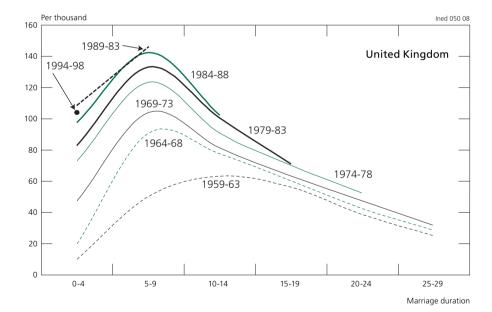
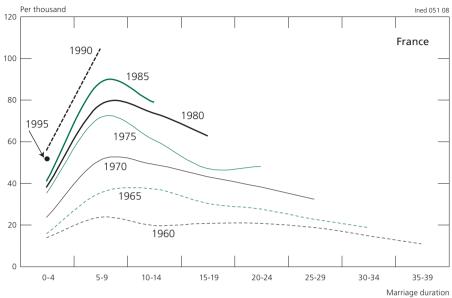
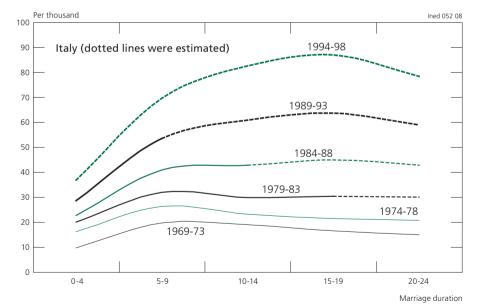


Figure 7. (Continued) Probability of marriage dissolution (‰) by duration and year of marriage, United States, United Kingdom, France and Italy





Sources: United States: Kreider and Fields, 2002, survey data on divorces; United Kingdom: www.statistics.gov.uk (accessed in spring 2006), official data on divorces, five-year cohorts; France: Prioux, 2005, official data on divorces, one-year cohorts; Italy: our calculations and estimations (see Table 4), official data on legal separations, five-year cohorts.

regions (Piedmont, Val d'Aosta, Liguria and Emilia-Romagna), the proportion of marriages celebrated in the early 1980s ending in legal separation before their 20th anniversary surpassed 20%. This equals the level registered in France for the same marriage cohorts (compare Table 5 and Figure 6).

As shown earlier, the shape of the q_x function in Italy is similar for each marriage cohort; increasing until duration 5 and then remaining nearly constant (Figures 3 and 4). This shape closely resembles that observed for marriages celebrated in the United States around 1950, in the UK around 1960, and in France in 1960-70 (Figure 7) – when the proportion of dissolved marriages was at the same level as our projection for Italian marriages celebrated during the 1990s.

Figure 7 shows that for marriages celebrated in the years which followed, the shape of the q_x function changed in a similar manner in the United States, the UK and in France; there was a progressive increase in the peak observed for the 5-9 year duration. It is not possible to ascertain if this empirical result reveals a "general rule" that other countries will follow, and this is not the place for discussing possible interpretations⁽⁸⁾. We do not know if Italy will follow the pattern observed in United States and in the other two European countries, or whether it will continue to have stable or growing probabilities at higher durations (as our projections suggest).

Conclusion

We conclude by answering the questions posed in the final paragraph of the introduction to this paper, both with regard to recent trends in legal separation levels in Italy, as well as to what may lie ahead in the future.

Beginning with the marriages celebrated in the early 1970s (when the law legalizing divorce was introduced), the number of legal separations in Italy has consistently risen. The rate of increase in the probability q_x of a marriage being dissolved accelerated at a similar pace for each marital duration up until the mid-90s, when data then show evident period changes of probabilities of separation affecting each cohort of marriage, whatever the duration of marriage.

Data and projections suggest that after a rapid increase in the probability of separation during the first few years of marriage, the risk of a marriage ending in legal separation will hold almost constant during the long interval between the 5th and the 25th wedding anniversary. These probabilities by duration of marriage emerge clearly thanks to an analysis by marriage cohorts. A similar overall pattern can be observed in the United States, the United Kingdom, and in France, when the level of dissolved marriages was similar to

⁽⁸⁾ A concentration of divorces at duration 3-4 has been shown, for example, by Fisher (1992, chap. 5) who compared period data from 62 societies, and suggested some explanations.

that of contemporary rates in Italy. A different pattern, however, emerged in these countries when the level of marital dissolution grew: the risk of legal separation has become concentrated in the 5-9 year duration.

In order to reflect on possible future trends regarding legal separations in Italy, we used four analytical tools: projection of q_x on a national level; estimation of legal separations after 20 years of marriage for marriage cohorts on a regional level; study of the ecological correlation between marriage dissolution and several indicators of socioeconomic development; selective comparison on an international level. Taken together, the results strongly suggest that the number of legal separations in Italy is still increasing.

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MARIA CASTIGLIONI AND GIANPIERO DALLA-ZUANNA • A MARRIAGE-COHORT ANALYSIS OF LEGAL SEPARATIONS IN ITALY

This short paper presents the trends in legal separation in Italy by marriage cohort and duration, and discusses future prospects. To catch a glimpse of the future of legal marital dissolution in Italy, the authors: (i) project the probabilities of legal separation by duration; (ii) perform a territorial analysis of the twenty Italian regions, suggesting the possible explanations for territorial differences; (iii) compare Italy and Spain (where divorce became legal in 1981), and examine the situations in other western countries, where marital dissolutions became widespread earlier (United States, United Kingdom, and France). Many clues suggest that legal separation will becoming increasingly frequent over the coming years for all marriage cohorts.

MARIA CASTIGLIONI AND GIANPIERO DALLA-ZUANNA • ANALYSE DES SÉPARATIONS LÉGALES PAR PROMOTIONS DE MARIAGES EN ÍTALIE

Cette note de recherche présente l'évolution des séparations légales en Italie par promotions de mariages et par durée de mariage. Pour avoir un aperçu des perspectives des séparations légales en Italie, les auteurs effectuent : (i) une projection des probabilités de séparation légale par durée du mariage ; (ii) une analyse comparée des 20 régions italiennes, qui permet d'avancer des explications possibles aux différences spatiales ; (iii) une comparaison de l'Italie avec l'Espagne (où le divorce a été légalisé en 1981) et avec d'autres pays occidentaux où les ruptures d'unions se sont répandues antérieurement (États-Unis, Royaume-Uni et France). Plusieurs indices suggèrent qu'en Italie, les séparations légales vont s'accélérer durant les prochaines années dans toutes les promotions de mariages.

MARIA CASTIGLIONI AND GIANPIERO DALLA-ZUANNA • ANÁLISIS DE LAS SEPARACIONES LEGALES POR COHORTES DE MATRIMONIOS EN ITALIA

Esta nota de investigación presenta la evolución de las separaciones legales en Italia por cohortes de matrimonios y por duración de matrimonio. Para tener una idea general de las perspectivas de las separaciones legales en Italia, los autores efectúan: (i) una proyección de las probabilidades de separación legal por duración del matrimonio; (ii) un análisis comparado de las 20 regiones italianas, que permite avanzar explicaciones posibles a las diferencias espaciales; (iii) una comparación de Italia con España (en donde se legalizó el divorcio en 1981) y con otros países occidentales en donde las rupturas de uniones se generalizaron anteriormente (Estados Unidos, Reino Unido y Francia). Varios indicios dejan suponer que en Italia, las separaciones legales van a acelerarse en los próximos años en todas las cohortes de matrimonios.

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