Union dissolution in the Second Demographic Transition? A longitudinal analysis of educational differentials in France, Germany, the Netherlands and Belgium.

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INTRODUCTION

Postwar demographic trends in Europe are frequently referred to in terms of a second demographic transition (Lesthaeghe and Van De Kaa 1986). The period under consideration is characterized by rising ages at marriage, a fall in proportions marrying, increasing cohabitation, increasing divorce, postponement of fertility, the emergence of subreplacement fertility and increasing non-marital childbearing (Lesthaeghe and Neels 2002). Lesthaeghe and Van De Kaa link changing demographic behaviour with changes in the societal background such as the emergence of higher-order needs, secularization, rising symmetry in gender roles and flexible life course organization. Although the time paths of these aggregate demographic trends largely coincide, reconstruction of the trends based on Belgian census data indicates that the hallmarks of the second demographic transition do not always make up coherent behavioural patterns at the individual level (Neels 2006; Neels 2006). In Belgium, the regional pattern of unmarried cohabitation, non-marital fertility and divorce is closely associated with regional leads and lags in secularisation and are also more frequent among lower socio-economic groups. Fertility postponement, on the other hand, is clearly associated with the regional patterning of educational attainment. The profile of higher educated women is further characterised by more stable labour market positions, a preference for stable living arrangements, increasing transitions into parenthood as a result of policies aimed at reconciling work and family life initiated in the early 1970s and frequent progressions to second and third births (Neels 2009). The narrative of the second demographic transition and the association with postmaterialist values thus seems to conceal considerable differentials by socio-economic position. Cohabitation may also be a rational choice in the face of uncertainty, insecurity, unemployment and socio-economic disadvantage (Kiernan 2004). British and Swedish research provides clues that unmarried parenthood may be more closely associated with impoverishment than empowerment. Focusing on union dissolution this paper turns to the reconstruction of trends by level of education in France, Germany the Netherlands and Belgium over the last decades.

DATA & METHODS

The analyses for France, Germany and The Netherlands are based on the data of the Generations and Gender Programme (GGP). The Generations and Gender Programme is a set of national Generations and Gender Surveys (GGS) with accompanying contextual databases. The surveys can be well compared cross-nationally because national panel surveys followed similar sampling, interview and follow-up rules. The data contain detailed information on union formation including partnership history. For Belgium, Neels (2006) published results on socio-economic differentials in family formation and dissolution based on 1991 and 2001 census data (Neels 2006; Gadeyne, Neels et al. forthcoming).

PRELIMINARY RESULTS

To analyze socio-economic differences in union dissolution from a longitudinal perspective, we focus on first unions in which partners live together. Relationships with non-resident partners are not included. We follow these first unions until divorce or separation occurs or until the union is censored after fifteen years. For this analysis the moment partners stop living together is considered as the moment of divorce. This can be different of the moment of legal divorce. For this paper, we distinguish four different union cohorts who started their unions between 1951 and 1990: 1951-1960, 1961-1970, 1971-1980 and finally 1981-1990. The moment when partners start living together is considered as the start of a union.

Discrete time event history models are used to explore the effect of education on union dissolution over time. The GGS allow us to take into account individual time-constant and even time-varying characteristics. As a result, trends, such as the fall in proportions marrying, increasing cohabitation and particularly for this paper, increasing union dissolution, can be analyzed in combination with other relevant covariates. The focus of this paper is on educational level. Education is time-constant and measured by the ISCED classification and recoded into three categories. Parity is included in the models as time-varying covariate. Other covariates are duration of the relationship, age at start, gender, presence of stepchildren in the household, homogamy with respect to educational level.

Tables 1 - 3 present descriptive statistics on union dissolution for three countries, France, Germany and The Netherlands.

To explore the data of each country under consideration we construct two indicators of union dissolution: i) percentage of marriages followed by divorce and ii) percentage of unmarried cohabitations followed by separation. To understand the relevance of the educational gradient in union dissolution, we also analyze the effect of education on entry into different types of unions. Understanding the role of educational level in the selection mechanism at the start of a partnership is crucial to figure out the selection mechanism in union dissolution. For that purpose we construct the following additional indicators: iii) percentage "married at start of the union", iv) percentage "marrying after cohabitation" and v) percentage "ever married within union cohort". The third indicator, percentage "married at start of the union" represents first unions in which partners don't live together before their marriage. The fourth indicator takes the remaining group as denominator (e.g. partners not marrying at start) and counts the percentage of these partners who did marry after a period of cohabitation. The last indicator, percentage "ever married within union cohort", summarizes the percentage of partners who ever marry over all first unions.

Only first unions are considered and the period under consideration in which the event of divorce, separation and marriage after cohabitation can occur is limited to fifteen years. Descriptives are broken down by level of education. These breakdowns by individual characteristics provide additional insight in differentials in union dissolution within countries that are largely concealed in analyses based on aggregated data.

Results for three countries are given in table 1 to 3. The overall rates illustrate the well-documented evolutions in union formation and dissolution associated with the second demographic transition. Furthermore, the breakdowns by individual characteristics shown in the next tables provide a first insight in

educational differentials in union dissolution within countries that are largely concealed in analyses based on aggregated data.

Results for France

Table 1 gives the results of the five different indicators for France. Percentages are given for four different cohorts and broken down by educational level within each cohort. Education is recoded in three categories. The lowest level of education (ISCED 0 – 2) represents primary and lower secondary education, the middle category (ISCED 3 – 4) represents upper secondary and post-secondary non-tertiary education, the highest level (ISCED 5-6) represents first and second stage of tertiary education.

The overall percentages of the first indicator, percentage divorce in first unions, increases for the cohorts of 1961 and 1971 but decreases for the cohort of 1981. This trend over time differs between educational levels. In recent decades the trend of divorce for low educated people is still increasing and so, reversed to the other categories of education. As a result, lower educated people of the cohort of 1981 end their marriage more frequently than higher educated respondents. Percentages "divorced in first union" for the cohort of 1981 attain 24.63, 14.69 and 9.64 per cent for subsequent categories of education respectively.

The overall percentages of the indicator ii, separation in first union, are much higher for all cohorts compared to the divorce percentages but they show the same trend over time. After an increase for the cohorts of 1961 and 1971, the percentage of unions ending in separation diminishes in the last cohort. The breakdown by level of education differentiates this overall trend. For the highest level of education a substantial increase of separation emerges in the cohort of 1971, while the percentage of unions ending in separation decreases in all cohorts for low and middle educational level. In recent cohorts the percentage of separation is lower for lower educated people.

As mentioned above, conclusions on union dissolution have to be interpreted with regard to the selection mechanism at the start of relationships. Indicator iii, iv and v give some relevant findings on union formation.

First, we conclude that marriage at start and also marriage after cohabitation have decreased over time. Second, comparing different educational levels, we see that premarital cohabitation is more typical for higher educated people. The percentages of people who marry immediately at the time they start living together are higher for lower educated people in all union cohorts. Conversely, the percentage of unmarried cohabitations being converted to marriages in subsequent years is higher among the higher educated. The increase of cohabitation without marriage is more prominent for the lowest educated people. Third, the indicator "ever married within union cohort" summarizes some findings on union formation. The fall of proportions of married clearly shows a different trend by level of education. Cohabitation without marriage was more frequent in earlier cohorts for highly educated people but in the last cohort under consideration, the percentage ever married is highest for this group.

Results for Germany

Conclusions concerning overall trends in the proportions getting divorced or separated are similar to those drawn earlier for France. First, union dissolution is more frequent among cohabitants than in marriages. Second, the trend of decreasing union dissolution for the cohort of 1981 following increasing percentages for the previous cohorts is similarly found in both countries.

Union dissolution differs within categories of educational level. Especially for lower educated people divorce increases in the cohort of 1971 compared to 1961. The decrease in the cohort of 1981 compared to previous cohorts is, however, more pronounced for highest educated people. Consequently, percentages "divorced in first union" for the cohort of 1981 attain 17.65, 8.97 and 5.96 per cent for subsequent categories of education respectively. Educational differentials for separation are less explicit. Only in the cohort of 1981, the percentage of separation decreases most for higher educated people. In contrast to France, highest percentages for separation are observed for people with lowest educational level.

Information about union formation is necessary to improve conclusions on union dissolution. Indicator iii, iv and v give some relevant findings. The results in table 2 shows that "marriage at start" decreases over time and this decrease has occurred in earlier cohorts for higher educated people. In the cohort of 1981, the percentage "marriage at start" is lowest for highest educated people. Conclusions concerning the trend of marriage after cohabitation are similar for Germany and France. The overall percentages decreases for subsequent cohorts but higher educated respondents (ISCED 5-6) tend to marry more frequently after cohabitation than lower educated people (ISCED 0-2). As a consequence the percentages "ever married within union cohort" decrease over time, especially for low educated people.

Results for the Netherlands

Table 3 gives results for the Netherlands. Indicator iii) and iv) are missing in table 3 owing to data limitations. Marriage at start of the union and marriage after a period of cohabitation cannot be distinguished since the exact date of marriage is not known for dissolved unions.

Similar trends to France are found for the indicator on divorce. The observed overall trend of decreasing divorce in the cohort of 1981 following increasing percentages in previous cohorts is not characteristic of all educational levels. For the lowest educational level, the percentage of divorce still increases in the youngest union cohort. As a result, percentages of divorce differ among educational levels. Percentages "divorced in first union" for the cohort of 1981 attain 25.57, 11.82 and 6.12 per cent for subsequent categories of education respectively.

The overall percentages of separation exceed the percentages of divorce. The percentage decrease for all educational levels but this trend is more pronounced for highest educational level.

The same conclusion emerges for the percentages "ever married in first union". We report a decreases over time but this trend is also more pronounced for higher educated respondents. In contrast to France and Germany, lower educated people marry more frequently than higher educated people.

CONCLUSION

The results indicate that substantial educational differentials exist which are relevant in considering demographic change over time concerning union dissolution. In this paper, these educational differences are explored in depth using discrete-time event history models. A multivariate approach is required to account for parity, variation in the age when relationships first started, the duration of the relationship as well as various period effects (e.g. economic recession, varying access to labor markets due to unemployment, divorce legislation).

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TABLES

Table 1. Differentials in union dissolution and type of union formation by education (ISCED), France, union cohorts 1951-1990

i) % divorce	ISCED 0-2	ISCED 3-4	ISCED 5-6	OVERALL
COHORT 1951-1960	9.54	13.91	*8.56*	10.99
COHORT 1961-1970	18.25	18.86	16.55	18.17
COHORT 1971-1980	22.68	19.53	20.42	20.60
COHORT 1981-1990	24.63	14.69	9.64	14.15

ii) % separation	ISCED 0-2	ISCED 3-4	ISCED 5-6	OVERALL
COHORT 1951-1960	*36.36*	*55.00*	*92.86*	53.73
COHORT 1961-1970	65.67	66.67	65.71	66.02
COHORT 1971-1980	65.38	66.29	78.57	69.51
COHORT 1981-1990	60.99	65.16	68.20	65.57

iii) % marriage at start	ISCED 0-2	ISCED 3-4	ISCED 5-6	OVERALL
COHORT 1951-1960	77.70	74.07	63.68	74.40
COHORT 1961-1970	59.77	58.48	40.56	55.04
COHORT 1971-1980	29.69	16.43	15.20	19.38
COHORT 1981-1990	12.36	5.14	6.29	6.72

iv) % marriage after cohabitation	ISCED 0-2	ISCED 3-4	ISCED 5-6	OVERALL
COHORT 1951-1960	78.98	84.85	80.82	81.49
COHORT 1961-1970	72.43	75.70	67.29	72.20
COHORT 1971-1980	56.08	58.99	62.71	59.49
COHORT 1981-1990	41.49	50.33	51.28	49.38

v) % ever married within union cohort	ISCED 0-2	ISCED 3-4	ISCED 5-6	OVERALL
COHORT 1951-1960	95.31	96.07	93.03	95.26
COHORT 1961-1970	88.91	89.91	80.56	87.50
COHORT 1971-1980	69.12	65.73	68.38	67.34
COHORT 1981-1990	48.73	52.88	54.34	52.79

Source: GGS; wave 1; France, 2005 (calculations by author)
italic:small samplesize (<20)

Table 2. Differentials in union dissolution and type of union formation by education (ISCED), Germany, union cohorts 1951-1990

i) % divorce	ISCED 0-2	ISCED 3-4	ISCED 5-6	OVERALL
COHORT 1951-1960	*5.26*	7.65	11.44	8.62
COHORT 1961-1970	*12.12*	13.21	10.04	12.27
COHORT 1971-1980	19.61	14.12	10.71	13.45
COHORT 1981-1990	17.65	8.97	5.96	9.15
ii) % separation	ISCED 0-2	ISCED 3-4	ISCED 5-6	OVERALL
COHORT 1951-1960	*0*	*25.00*	*55.56*	37.04
COHORT 1961-1970	*28.57*	69.23	72.97	66.28
COHORT 1971-1980	*81.25*	80.20	80.30	80.54
COHORT 1981-1990	67.57	61.11	58.90	60.56
iii) % marriage at start	ISCED 0-2	ISCED 3-4	ISCED 5-6	OVERALL
COHORT 1951-1960	67.91	62.30	61.63	62.46
COHORT 1961-1970	51.89	45.21	36.93	43.35
COHORT 1971-1980	34.75	24.40	23.88	25.19
COHORT 1981-1990	23.72	18.99	17.32	18.85
iv) % marriage after cohabitation	ISCED 0-2	ISCED 3-4	ISCED 5-6	OVERALL
COHORT 1951-1960	97.67	92.49	90.43	92.56
COHORT 1961-1970	86.27	87.81	80.83	85.04
COHORT 1971-1980	79.22	83.19	78.43	81.41
COHORT 1981-1990	68.91	73.44	75.34	72.85
v) % ever married within union cohort	ISCED 0-2	ISCED 3-4	ISCED 5-6	OVERALL
COHORT 1951-1960	99.25	97.17	96.33	97.21
COHORT 1961-1970	93.40	93.32	87.91	91.53
COHORT 1971-1980	86.44	87.30	83.58	86.09
COHORT 1981-1990	76.28	78.49	79.61	77.97

Source: GGS; wave 1; Germany,2005 (calculations by author)
italic:small samplesize (<20)

Table 3. Differentials in union dissolution and type of union formation by education (ISCED), Netherlands, union cohorts 1951-1990

i) % divorce	ISCED 0-2	ISCED 3-4	ISCED 5-6	OVERALL
COHORT 1951-1960	11.92	12.77	*8.86*	12.03
COHORT 1961-1970	*21.06*	17.96	*17.48*	19.18
COHORT 1971-1980	23.00	18.48	19.80	20.08
COHORT 1981-1990	25.57	11.82	*6.12*	13.93

ii) % separation	ISCED 0-2	ISCED 3-4	ISCED 5-6	OVERALL
COHORT 1951-1960	*66.67*	*70.00*	*100.00*	76.00
COHORT 1961-1970	77.78	87.72	89.19	86.10
COHORT 1971-1980	88.18	82.97	74.00	83.12
COHORT 1981-1990	69.64	55.06	59.00	58.35

v) % ever married within union cohort	ISCED 0-2	ISCED 3-4	ISCED 5-6	OVERALL
COHORT 1951-1960	98.63	98.04	92.94	98.01
COHORT 1961-1970	93.81	85.42	73.57	87.58
COHORT 1971-1980	78.43	75.59	66.89	75.58
COHORT 1981-1990	61.11	60.06	49.49	58.87

Source: GGS; wave 1; Netherlands, 2002-2004 (calculations by author)
italic:small samplesize (<20)