



# **Combining Data from the Generations and Gender Surveys and the German Family Panel to Conduct Comparative Research on Couples' and Family Dynamics**

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# 1 Introduction

There has been great progress in providing the social science community with cross-national comparative longitudinal data that allow considerable advances in research on couple and family dynamics. Panel data in which individuals are followed over time permit researchers to model individual decision processes and the determinants of behavioural intentions and to compare such processes across various country contexts. Examples of studies combining different data sources are still rare.

In this paper, we present two panel surveys — the Generations and Gender Surveys and the German Family Panel — and show how to combine data from them in order to encourage international scholars of the social sciences to combine data from these surveys to conduct comparative research on couple and family dynamics.

The Generations and Gender Programme (GGP) comprise a set of comparative surveys (GGS) collected since 2004 in 18 countries. Respondents are interviewed every 3 years. Currently, data of the second wave are available for 8 countries. The Program is led by 15 European research institutions. The Netherlands Interdisciplinary Demographic Institute (Anne Gauthier, Tom Emery) is responsible for the coordination of the GGP.

The German Family Panel (pairfam) has been initiated in 2008 and since then five yearly interview rounds have been realized (Huinink et al. 2011). The survey is funded by the German Research Foundation (DFG) for up to 14 years until 2022. The principal investigators of the German Family Panel are Josef Brüderl (University of Munich), Karsten Hank (University of Cologne), Johannes Huinink (University of Bremen), Bernhard Nauck (Chemnitz University of Technology), Franz J. Neyer (Jena University) and Sabine Walper (University of Munich). Josef Brüderl is responsible for the coordination of the project.

This paper is structured as follows. In section 2, we give a brief overview of the two surveys. We present their thematic focuses and the particularities of their design, pointing out their similarities and differences. In section 3, we elaborate on those instruments of the two surveys that are particularly suited for comparative research. We discuss potential problems in combining data from both surveys, in particular the different age structure of the samples and propose ways to handle this. Finally in section 4, we conduct an exemplary analysis based on data from the first two waves of the French GGS (United Nations 2005) and the first and the fourth wave from the German Family Panel (pairfam), release 5.0 (Nauck et al. 2014), to study cohabiters' transition to marriage.

## **2 The two panel studies: The Generations and Gender Surveys and the German Family Panel**

In this section, we introduce the Generations and Gender Surveys (GGS) and the German Family Panel (pairfam). We will elaborate on the aims of both surveys, their sample sizes and methods of data collection, as well as the topics they cover.

### **2.1 The Generations and Gender Surveys**

The Generations and Gender Programme (GGP) comprise a set of comparative surveys (GGS) collected between since 2004 in 18 countries (Austria, Belgium, Bulgaria, the Czech Republic, Estonia, France, Germany, Hungary, Italy, Lithuania, the Netherlands, Poland, Romania and Sweden; and Australia, Georgia, Japan, Norway, and Russia). Respondents are interviewed every 3 years. Currently, data of the second wave are available for 8 countries. 15 European research institutions cooperate in the program. The Netherlands Interdisciplinary Demographic Institute is responsible for the coordination of the GGP.

The national samples of the Generations and Gender Surveys (GGS) are representative for 18 to 79 year old resident population in each of the participating countries (Vikat et al. 2007). The overall sample size of the main samples differs by country but in most cases is about 10,000 cases in the first wave. The respondents have usually been interviewed by a computer assisted personal interview (CAPI) and in some countries by a paper and pencil interview (PAPI). The GGS aims at contributing to our understanding of the relationships between parents and children (generations) and between intimate partners (gender) by providing a data base for population research and supporting population-related policy formulation. A detailed description of the aim and the design of GGS is provided by Vikat et al (2007) and the United Nations Economic Commission for Europe (United Nations 2005, 2007, 2009) but see also the webpage of the Generations and Gender Program (GGP): <http://www.ggp-i.org/>.

The substantive topics of the GGS cover the key life course transitions of individuals such as leaving the parental home, the process of partnership formation, childbearing, retiring, as well as the nature of intergenerational relationships (Vikat et al. 2007). Perceived as well as actual economic and institutional constraints of these life course transitions but also attitudes and social norms guiding individuals in their life choices are addressed in the survey. The questionnaire includes information on education, work, income, housing, health, leisure

activities, and living environment but also, among others, measurements of religiosity and attitudes and norms related to union formation, marriage and having children.

## **2.2 The German Family Panel (pairfam)**

The German Family Panel (Panel Analysis of Intimate Relationships and Family Dynamics: pairfam) is a panel survey providing data on the formation and development of intimate relationships and families in Germany. Its special features are a multi-actor design and yearly conducted panel waves.

A nationwide random sample from the population registers in Germany for three age cohorts is drawn. At the moment of first interview, respondents are 15-17, 25-27, and 35-37 years old and born in 1971-73, 1981-83, and 1991-93, respectively. In each cohort about 4,000 men and women have been interviewed. The overall sample size is 12,402 interviews in the first wave. Respondents (called ‘anchors’ in the following) have been interviewed by a computer assisted personal interview (CAPI). The first wave of interviews has been conducted in 2008 and has been followed by five yearly panel waves until 2013.

In addition, a multi-actor design is implemented. From the first wave onwards partners of the anchors have been interviewed by self-completion questionnaires as far as the anchors agreed. Starting from wave 2 up to three (step-)parents are interviewed by self-completion questionnaires and children aged 8 to 15 are interviewed by CAPI. A detailed description of the aim and the design of pairfam is provided by Huinink et al. (2011). A description of the pairfam data give Brüderl et al. (2010) and Arránz-Becker et al. (2012) but see also the webpage of pairfam, [www.pairfam.de](http://www.pairfam.de).

The substantive topics of pairfam are the dynamics of partnership formation and dissolution, childbearing decision-making and actual fertility, parenting and child development, as well as intergenerational relationships. The survey moreover includes information related to life domains such as education, work, income, housing, health, religiosity, leisure activities, social network, and living environment.

There is a supplementary survey to pairfam — “Demographic differences in life course dynamics in Eastern and Western Germany” (Demodiff) run by the Max Planck Institute of Demographic Research (MPIDR, Rostock, Germany) that utilizes a largely identical set of instruments and adds 1,489 respondents living in former East Germany to the two oldest *Pairfam* cohorts (Kreyenfeld et al. 2011).

There are already examples of combining pairfam/Demodiff data with data of the GGS (Perelli-Harris et al 2010).

### 3 Comparability of GGS and pairfam

In this section we discuss instruments of GGS and pairfam that are particularly suited for combining data for comparative research. We will moreover discuss how to handle the different age structure of both panel surveys when combining data. GGS and pairfam do not only cover similar topics but use comparable instruments to collect the information. For eight major topics we report comparable measures in both surveys. These topics are:

- Basic information on the respondent
- Intimate relationships and couple dynamics
- Fertility and family dynamics
- Parenting
- Intergenerational relationships
- Social structure, economic situation, and living conditions
- Cultural factors
- Personality traits and well-being

We consider data from the first two waves of the GGS and from the first four waves of pairfam. Please note that we restrict the selection to those instruments, which are part of both questionnaires and are – as least in our view – sufficiently similar to serve as a basis for comparative research.

Table 1 shows that there is a large overlap of information collected in both surveys. This is particularly true for (1) the life histories, such as partner-, birth-, and employment history. This is also true for (2) information on several socio-demographic and economic variables. There is some overlap with regard to (3) information on the quality of social relationships between partners as well as parents and children and (4) intentions, attitudes and personality traits.

**Table 1: Outline of the GGS and pairfam questionnaire of the anchor**

	GGS	pairfam
<b>Basic information on respondent</b>		
<i>Sex, month and year of birth, country of birth</i>		
<b>Household structure</b>		
<i>Household type, household members (sex, age, relationship to person)</i>		

<b>Siblings</b>		
<i>Number of biological siblings</i>		
<b>Childhood</b>		
<i>Family structure after birth, age at leaving home</i>		
	Family structure: family structure at age 15, month and year of leaving the parental home	Retrospective partnership episodes since age 15 in wave 1 and tracking changes in wave 2 to 4. See extra data file 'biopart'
<b>Intimate relationships</b>		
<i>Relationship history (cohabitation, marriage, separation/divorce)</i>		
	Retrospective partnership episodes and information on ex-partners	Retrospective partnership episodes since age 15 in wave 1 and tracking changes in wave 2 to 4 including an ex-partner module. See also extra data file 'biopart'
<b>Attributes of current partner</b>		
<i>Sex, month and year of birth, country of birth, citizenship</i>		
<i>Highest level of education (ISCED), activity or employment status</i>		
<b>Organisation of the relationship and partnership quality</b>		
<i>If not cohabiting: frequency seeing partner, time to get to partner, intention to start living together, intention to marry</i>		
	Intentions to start living with a/the partner during next 3 years	Intention to set up a common household during next 12 months
<i>If not married: intention to marry</i>		
	Marrying partner during next 3 years	Marrying partner during next 12 months
<i>Division of household tasks in partnership (items are only partly congruent)</i>		
	Asked for all household members	Asked only for respondent and partner
<i>Evaluation of division of household tasks</i>		
	Satisfaction	Indicated fairness
<i>Financial matters in the partnership (items are only partly congruent)</i>		
<i>Satisfaction with partnership</i>		
<i>Frequency and issues of conflicts, conflict behaviour, thought relationship would break up (items are only partly congruent)</i>		
<b>Fertility and family dynamics</b>		
<b>Birth history</b>		
<i>Sex, year of birth/death, cohabitation status of own/adopted children</i>		
<b>Pregnancy and Fecundity</b>		
<i>Pregnancy of respondent or partner of respondent, statements about pregnancy (items are only partly congruent)</i>		
<i>Fecundity or infertility, wanting to get pregnant, procreative methods, contraceptive methods (items are only partly congruent)</i>		
<b>Fertility plans</b>		
<i>Children related values</i>		
	Beliefs about having children	Positive and negative values of children
<i>Intention to have a(nother) child, intended number of children</i>		
	Intention to have a(nother) child during the next three years; Number of children intended in total	Intention to have a(nother) child during the next two years, Expected number of (additional) children
<i>Expected effects of having a(nother) child, prerequisites for a(nother) child (items are only partly congruent)</i>		
<i>Social influence: friends, parents (items are only partly congruent)</i>		
<b>Parenting</b>		
<i>Child care, help with child care (items are only partly congruent)</i>		
<b>Intergenerational relationships</b>		

<i>Date of birth/death, country of birth, citizenship of biological parents</i>		
<i>Living arrangement, marital breakup, highest level of education of biological parents</i>		
		Education of biological parents in wave 3 only
<i>Frequency of contact, travel-time distance</i>		
<i>Financial and emotional support received and given</i>		
	Not only parents	Complementary information from Network of Relationship Inventory
<b>Social structure, economic situation, and living conditions</b>		
<b>Housing situation</b>		
<i>Type of housing/ownership, number of rooms</i>		
<b>Education and employment</b>		
<i>Schooling and employment history</i>		
	Retrospective information on activity episodes (wave 2)	Retrospective information on activity episodes since age 15 (wave 3) and tracking changes between waves 1 to 4
<i>Highest level of education, activity status, occupation, occupational status</i>		
	Occupation: ISCO Occupational status: one short scale	Occupation: ISCO, ISEI Occupational status: one long scale
<i>Work schedule, working at home, working with family members (Items are only partly congruent)</i>		
<i>Multiple jobs</i>		
<b>Leisure activities</b>		
<b>Economic situation</b>		
<i>Net household income, net personal Income, partner's income, social benefits: kind and amount of benefits</i>		
		Amount of benefits only wave 1 Partner's income only in partner questionnaire
<i>Subjective assessment on economic situation (Items are only partly congruent)</i>		
<b>Cultural factors</b>		
<i>Partnership, gender, and family values (Items are only partly congruent)</i>		
<i>Religious denomination, church attendance</i>		
<b>Personality traits and well-being</b>		
<b>Well-being</b>		
<i>Depressiveness, loneliness, and others (Items are only partly congruent)</i>		
<b>Satisfaction and preferences</b>		
<b>Health</b>		
<i>Subjective health assessment, handicaps</i>		

A major challenge for combining data from the two surveys is the different age structure of both samples. The GGS sample covers the adult population between 18 and 79 years of age. In pairfam, respondents born in the years 1971-73, 1981-83, and 1991-93 are followed over time. Taking the example of the French GGS, Table 2 displays how GGS respondents compare to pairfam respondents in their age distribution.

**Table 2: Number of respondents in pairfam and the French GGS by age**

	<i>pairfam</i> 1. wave	<i>pairfam</i> 2. wave	<i>pairfam</i> 3. wave	<i>pairfam</i> 4. wave	GGS France 1. wave	GGS France 2. wave
Year of data collection	2008/09	2009/10	2010/11	2011/12	2005	2008
Age						
18	79	1.158	1.012	920	76	
19		74	983	883	125	
20			78	837	144	9
21				47	162	67
22					153	80
23					138	90
24	36				158	84
25	1.167	14			142	67
26	1.370	745	8		159	95
27	1.279	893	656	15	142	83
28	158	865	777	574	139	82
29		104	770	689	161	87
30			79	668	144	90
31				62	167	98
32					180	107
33					197	111
34	38				190	126
35	1.040	15			212	131
36	1.312	726	7		224	131
37	1.480	935	628	8	209	142
38	184	1.100	810	604	195	143
39		117	935	744	212	154
40			99	857	205	148
41				65	204	137
18-41	8.143	6.746	6.842	6.973	4038	2262

At the moment of first interview, the youngest pairfam cohort is 15 to 17 years old and thus younger than the youngest GGS respondents. Moreover, due to the cohort sampling, certain ages are not covered in in the first wave of pairfam.

The panel design of pairfam implies that over calendar time, pairfam respondents age into the age ranges of the GGS. Table 2 illustrates how data from four pairfam waves can be combined in order to match the age groups covered by the GGS (years of age 18 to 41). There are two possibilities to combine data from different pairfam waves.

First, one might simply pool the data from all available waves and account for the particular correlation structure of the data (the same individual is observed multiple times). For eight years of age younger than 41 (21-24, 31-33) we have got still less than 100 cases in the pooled pairfam sample. The gap will be closed by the following panel waves, however.

Second, we do not work with a pooled sample of pairfam case what is required if we do longitudinal analyses. The number of cases is considerably smaller if one selects GGS respondents at ages covered by pairfam. For example, the number of respondents of the two older age groups in the pairfam sample is 8.064 in the first and 4.284 in the fourth wave three years later. The number of respondents of the respective ages (24 to 28 and 34 to 38) in the French GGS sample is 1.770 in the first and 1084 in the second wave three years later. Extending the age interval for GGS-cases by one additional year of age would lead to higher figures. Therefore, one gets reasonable numbers for an analysis with a considerable statistical power. The GGS-figures for other countries are comparable to the French ones.

In order to cover ages above 40 years researchers may include information on the parents of pairfam respondents. This might offer opportunities for the study of intergenerational relationships with pairfam data.

#### **4 An example of analysis**

In the following, we will present an exemplary analysis of a comparative study on a family related topic combining data from the French GGS and pairfam. Our illustrative research question concerns the prevalence of marriage transitions of cohabiting men and women between 18 and 40 years of age. We are particularly interested whether the birth of a child is associated with the transition to marriage and whether cohabiters with different level of educational and occupational status differ in the transition to marriage. Our assumption is that the birth of a child increases cohabiters' willingness to institutionalize their relationship in order to secure their rights and obligations towards the joint child. Higher educational attainment implies higher earning potential and a strong attachment to the labour market may be more compatible with the role of a spouse as well as providing the economic preconditions to enter marriage. We control for a number of other factors that might be associated with the choice of union type. We compare the French with the German context because we expect the effect of childbirth on the transition to marriage to be less pronounced in France given the higher prevalence and legal protection of children born outside marriage in France. We moreover explore differences between the eastern and the western part of Germany given that

prior research has shown large differences in both parts of Germany related to non-marital childbearing. Given the in-between wave spacing of three years in the case of GGS, we study cohabiters' transition to marriage between two waves of the French GGS and between wave 1 and 4 of the German pairfam survey.

#### 4.1 Measurements

Table 3 describes all variables of the French GGS and pairfam we used in this example of analysis.

**Table 3: Overview of variables included in the analysis**

Variable	GGS	Pairfam
<i>Dependent variable measured at subsequent wave(s)</i>		
Transition to marriage	bn304m, bn304y (measured retrospectively at W2)	Event history calendar of wave 2, wave 3 and wave 4 (ehc4px_) or data-file biopart
<i>Main independent variables of interest</i>		
• Birth between waves	b153y_, b253m_ (measured retrospectively at W2)	ehc8k_ of 2 <sup>nd</sup> , 3 <sup>rd</sup> and 4 <sup>th</sup> wave or data-set biochild
• Employment status	a801 (measured at W1)	sd23i1 – sd23i22
• Educational attainment	a148 (measured at W1)	Generated variables: school; vocat
<i>Control variables measured at Wave 1</i>		
• Cohabitation duration	a300m; a301y_	data-file biopart
• Age at start cohabitation	ahg6y_1; ahg6m_1	sd8e1bm, sd8eby, dobm, doby or data-file biopart
• Gender	ahg4_1	Generated variable sex
• Previously married	a335a_ (measured at W1)	rtr14p_ of 1 <sup>st</sup> wave or dataset biopart
• Biological child with partner at W1	ahg3_	sd15k_ and sd16k_
• Marital intentions at W1	a302s	pa11

In both panels information on the birth of a child between waves can be extracted from fertility histories that contain the month and year of the birth of any child the respondent has born (fathered). Both data sets contain the level of education attainment using the International Standard Classification of Education (ISCED). We distinguish three levels: 1= low (primary and lower secondary education, ISCED 1,2), 2= medium (upper secondary and postsecondary non-university education, ISCED 3,4) and 3 = high (all levels of university

education, ISCED 5,6). We also distinguish among employed, not employed and enrolled in education. Employed respondents are either employed or self-employed, helping a family member in a family business or are currently on parental leave. Non-employed respondents are either unemployed, ill for a long time, disabled, housewife or in “other” employment situation. Respondents classified as “enrolled in education” are in school, in vocational training, in apprenticeship, in paid training, or at university. In pairfam this was explicitly not limited to first education.

## 4.2. Descriptive results

Below, we describe our findings of the binary analyses of first, the French data and second, the German data.

**Table 4: Distribution of variables in the analysis (France)**

	N	%	Mean	Std. Dev.
<i>Dependent variable: Relationship status at wave 2</i>				
Married to W1 partner	93	17,68		
Still cohabiting with W1 partner	339	64,45		
Separated from W1 partner	54	10,27		
Civil union (PACS)	40	7,60		
<i>Main independent variables</i>				
<b>Children born between waves</b>				
No birth	399	75,86		
First birth	82	15,59		
Second or higher birth	45	8,56		
<b>Education</b>				
Low level of education	67	12,74		
Medium level of education	253	48,10		
High level of education	206	39,16		
<b>Occupation</b>				
Employed at W1	428	81,37		
Not employed at W1	70	13,31		
Enrolled in education at W1	28	5,32		
<i>Control variables</i>				
At least one child with partner at W1	265	50,38		
Female	317	60,27		
Marital intentions at W1	216	41,06		
Previously married at W1	28	5,32		
Age at start of union in years			24,5	4,5
Union duration in months			69,3	57,4

Source: GGS Wave 1 France V.4.2, GGS Wave 2 France V.1.1

Table 4 shows that 93 French cohabiters married their partner (18%) after the first interview. Two thirds of all cohabiters at Wave 1 were still cohabiting with the same partner three years after they had been interviewed for the first time. The remaining cohabiters had either dissolved their union or registered their partnership (PACS).

A quarter of all French cohabiters at Wave 1 had a child in between the waves. The majority of cohabiters has obtained at least secondary education and is employed in Wave 1. There are more women than men cohabiting at Wave 1 with their partner. The proportion of cohabiters who do not report having plans to get married is larger than cohabiters intending to marry and only a small minority has been married earlier. The mean age at the start of a union is 24,5. The observed duration of unions is 69.3 months on average.

Cohabiters who experience the birth of a child between waves more frequently make the transition to marriage than cohabiters who do not have a child between waves (Table 5).

**Table 5: The transition to marriage within three years by childbirth among French cohabiters**

	<b>Child born</b>	<b>No child born</b>	<b>Total</b>
<b>Not married at W2</b>	94	339	433
%	74.0	85.0	82.3
<b>Married at W2</b>	33	60	93
%	26.0	15.0	17.7
<b>Total</b>	127	399	526
%	100.0	100.0	100.0

Source: GGS Wave 1 France V.4.2, GGS Wave 2 France V.1.1

**Table 6: The transition to marriage within three years by level of education among French cohabiters**

	<b>Low educ</b>	<b>Medium educ</b>	<b>High educ</b>	<b>Total</b>
<b>Not married at W2</b>	64	209	160	433
%	95.5	82.6	77.7	82.3
<b>Married at W2</b>	3	44	46	93
%	4.5	17.4	22.3	17.7
<b>Total</b>	67	253	206	526
	100.0	100.0	100.0	100.0

Source: GGS Wave 1 France V.4.2, GGS Wave 2 France V.1.1

According to Table 6 highly educated respondents marry more frequently than respondents with a medium level of education who in turn marry more frequently than their low educated counterparts.

Table 7 shows that employed cohabiters more frequently got married between waves than their not employed counterparts. Most marriages are formed among cohabiters who were enrolled in education at the time of first interview.

**Table 7: The transition to marriage within three years by employment status among French cohabiters**

	<b>Employed</b>	<b>Not employed</b>	<b>In education</b>	<b>Total</b>
<b>Not married at W2</b>	349	64	20	433
<b>%</b>	81.5	91.4	71.4	82.3
<b>Married at W2</b>	79	6	8	93
<b>%</b>	18.5	8.6	28.6	17.7
<b>Total</b>	428	70	28	526
<b>%</b>	100.0	100.0	100.0	100.0

Source: GGS Wave 1 France V.4.2, GGS Wave 2 France V.1.1

Below, we describe our findings of the bivariate analyses of the pairfam data. About 30 percent of German cohabiters marry between wave 1 and 4 (Table 8). This figure is higher compared to France. More than half of all cohabiters were still cohabiting after three years and 15 percent dissolved their relationship.

**Table 8: Distribution of variables in the analysis (Germany)**

	N	%	Mean	Std. Dev.
<i>Dependent variable: Relationship status at wave 4</i>				
Married to W1 partner	237	31,23		
Still cohabiting with W1 partner	407	53,62		
Separated from W1 partner	115	15,15		
<i>Main independent variables</i>				
<b>Children born between waves</b>				
No birth	581	76,55		
First birth	53	6,98		
Second or higher birth	125	16,47		
<b>Education</b>				
Low level of education	65	8,55		
Medium level of education	364	47,96		
High level of education	330	43,48		
<b>Occupation</b>				
Employed in wave 1	593	78,13		
Not employed in wave 1	66	8,70		
Enrolled in education in wave 1	100	13,18		
<i>Control variables</i>				
At least one child with partner at W1	164	21,60		
Female	430	56,65		
Previously married at W1	66	8,67		
Marital intentions at W1	296	39,00		
Western Germany	539	71,01		
Eastern Germany	220	28,99		
Age at start of union in years			26,0	5,0
Duration of union in months			47,9	44,1

Source Pairfam V.4.0

Just as in the case of France, around a quarter of all German cohabiters had a child at the moment of last interview. The majority of cohabiters has obtained at least secondary education and is employed in Wave 1. There are more women than men cohabiting at Wave 1 with their partner. The proportion of cohabiters who do not report having plans to get married is larger than cohabiters intending to marry and only a small minority has been married earlier. The mean age at the start of a union is 24.5. The observed duration of unions is only 47.9 months on average.

**Table 9: The transition to marriage within three years by childbirth among German cohabiters**

	<b>Child born</b>	<b>No child born</b>	<b>Total</b>
<b>Not married at W4</b>	85	437	522
%	47.75	75.22	68.8
<b>Married at W4</b>	93	144	237
%	52.25	24.78	31.2
<b>Total</b>	178	581	759
%	100.0	100.0	100.0

Source Pairfam V.4.0

Table 9 shows that more than half of all German cohabiters who got married between waves also experience the birth of a child. This proportion is larger compared to France. It has to be noted however that also in total, more marriages have been formed in Germany compared to France. Table 10 shows a similar picture we drew from the French data. Marriage formation is more frequent among higher educated cohabiters in Germany.

**Table 10: The transition to marriage within three years by level of education among German cohabiters**

	<b>Low educ</b>	<b>Medium educ</b>	<b>High educ</b>	<b>Total</b>
<b>Not married at W4</b>	55	241	226	522
%	84.6	66.2	68.5	68.8
<b>Married at W4</b>	10	123	104	237
%	15.4	33.8	31.5	31.2
<b>Total</b>	65	364	330	759
%	100.0	100.0	100.0	100.0

Source: pairfam V.4.0

The results in Table 11 also point to a similar direction than the French descriptive analysis. Employed cohabiters more frequently marry than their non-employed counterparts.

**Table 11: The transition to marriage within three years by employment status among German cohabiters**

	<b>Employed</b>	<b>Not employed</b>	<b>In education</b>	<b>Total</b>
<b>Not married at W4</b>	396	50	76	522
%	66.78	75.76	76.00	68.8
<b>Married at W4</b>	197	16	24	237
%	33.22	24.24	24.00	31.2
<b>Total</b>	593	66	100	759
%	100.0	100.0	100.0	100.0

Source: pairfam V.4.0

### 4.3 Multivariate Analysis

In order to test the association between the birth of a child and economic resources and the transition to marriage net of other factors that may be associated with union formation processes, we calculate two logit regressions for France and Germany separately (Table 12).

**Table 12: Summary of binary logit regression model of the transition to marriage among cohabiters in France (n=526) and Germany (n=759)**

	GGF France		pairfam	
	Odds Ratio	p-Value	Odds Ratio	p-Value
Birth of a child (France)	1.66	0.07		
Birth of a child (Germany; Ref: West–no child born)				
West – child born			3.60	0.00
East – no child born			0.53	0.01
East – child born			1.37	0.35
Education (Ref.: low):				
Middle	2.80	0.11	3.35	0.00
High	3.00	0.09	2.81	0.02
Employment (Ref: employed)				
Not employed	0.51	0.17	0.59	0.15
Enrolled in education	1.33	0.58	1.04	0.90
Cohabitation duration in months	1.01	0.37	1.00	0.59
Cohabitation duration squared	1.00	0.19	1.00	0.21
Age at the start cohabitation	0.98	0.65	0.98	0.39
Female (Ref.: Male)	1.40	0.23	1.00	0.98
Prior Marriage	0.64	0.52	1.48	0.28
Children with current partner	0.83	0.56	0.97	0.89
Intention to marry	5.00	0.00	6.37	0.00
Constant	0.04	0.00	0.10	0.00
N	526		759	
Pseudo-R <sup>2</sup>	0.15		0.20	

Source: GGS Wave 1 France V.4.2, GGS Wave 2 France V.1.1; pairfam V.4.0

Compared to their childless counterparts, having a child is associated with higher odds of marriage for French as well as Western German cohabiters. In Eastern Germany we replicate findings from earlier studies that childbearing does not trigger marriage (Huinink and Kreyenfeld 2006; Huinink et al. 2012). Higher educated cohabiters exhibit higher odds of marriage in both countries. The effect of employment status is not significant in either of the

countries. Economic resources might be already captured by level of educational attainment. Oppenheimer (2003) concluded in her study on US American men that positive, long-term socio-economic perspectives represented by length of college education and a stable working situation lead to higher odds of leaving cohabitation by marriage (Oppenheimer 2003:146f.). Kalmijn (2011) drew similar conclusions testing Oppenheimer's uncertainty hypotheses in the European context. Köppen (2010) showed that highly educated men experience the transition from cohabitation to marriage by a higher rate in Western Germany compared to Eastern Germany (2010: 242). It could also be that the number not-employed cohabiters and those enrolled in education are relatively low which might imply some issues of statistical power. Some of our control variables are statistically significantly associated with the odds of marriage. Most importantly, cohabiters who plan to marry are much more likely to actually marry compared to cohabiters without marital intentions.

The two data sources would have allowed us to include more comparative information on respondent's level of religiousness or attitudes towards marriage in order to capture individual norms and values but also more measures of socio-economic background (i.e. income) as well as childbearing intentions rather than actual births.

## **5 Concluding remarks**

In this paper we demonstrated the opportunities for comparative research combining the German Family Panel (pairfam) and the pan-European Gender and Generation Surveys (GGS). We illustrated the large overlap in the aims and designs of both surveys in order to encourage researchers to combine data from both surveys for cross-national comparative research. We presented an example of analyses studying cohabiters' transition to marriage among German and French survey respondents.

Both surveys aim at providing a high-quality data infrastructure that allows studying the ongoing changes in families and relationships in an ageing Europe in order to provide answers to the question how policy and contextual factors play in the lives of people. They cover a wide variety of topics related to different dimensions of the individual life course such as partnerships, fertility, employment, wellbeing and health and the relationships between different generations of a family.

Both data infrastructures provide nationally representative samples of the adult population. Whereas GGS covers the whole adult life course between ages 18 and 79, pairfam employs a cohort design of the birth cohorts 1971-73, 1981-1983 and 1991-93. We have

shown that because of the panel design of pairfam, the sample will – wave by wave – increasingly cover the age ranges included in the GGS allowing researchers to run statistically powerful and comparative analyses when combining data across waves and of both surveys.

Finally, we have presented a practical example of combining data from GGS and pairfam in order to study union formation behaviour in two different contexts. We have shown large similarities in Germany and France in the association between childbearing and marriage formation among cohabiters as well as signs of social stratification of the decision to marry in both countries.

## References

- Arránz-Becker, Oliver, Josef Brüderl, Petra Buhr, Laura Castiglioni, Daniel Fuß, Volker Ludwig, Jette Schröder, and Nina Schumann. 2012. The German Family Panel: Study Design and Cumulated Field Report (Waves 1 to 3). Technical Paper of the German Family Panel, No. 1. Chemnitz.
- Brüderl, Josef, Laura Castiglioni, Uli Krieger, Volker Ludwig, Klaus Pforr, and Nina Schumann. 2010. pairfam Data Manual, Wave 1. Mannheim.
- Huinink, Johannes, Josef Brüderl, Bernhard Nauck, Sabine Walper, Laura Castiglioni and Michael Feldhaus. 2011. Panel Analysis of Intimate Relationships and Family Dynamics (pairfam): Conceptual framework and design. *Zeitschrift für Familienforschung* 23, 1, 77-101
- Huinink, Johannes and Michaela Kreyenfeld. 2006. Family formation in times of social and economic change: An analysis of the East German cohort 1971. In: Diewald, Martin, Anne Goedicke and Karl Ulrich (Eds.), *After the fall of the Wall: Life courses in the transformation of East Germany*. Stanford: Stanford University Press, 170-190
- Huinink, Johannes, Michaela Kreyenfeld and Heike Trappe. 2012. Familie und Partnerschaft in Ost- und Westdeutschland. Eine Bilanz. In: Johannes Huinink, Michaela Kreyenfeld, Heike Trappe (Eds.), *Familie und Partnerschaft in Ost- und Westdeutschland. Ähnlich und doch immer noch anders, Sonderheft 9 der Zeitschrift für Familienforschung*. Verlag Barbara Budrich: Opladen, 9-28
- Kalmijn, Matthijs. 2011. The Influence of Men's Income and Employment on Marriage and Cohabitation: Testing Oppenheimer's Theory in Europe. *European Journal of Population*, 27: 269-293
- Köppen, Katja. 2010. Marriage and Cohabitation in western Germany and France. Universitätsbibliothek Rostock
- Kreyenfeld, Michaela, Rainer Walke, Veronika Salzburger, Christine Schnor, Sonja Bastin and Anne-Kristin Kuhnt. 2011. DemoDiff – Wave 1; Supplement to the pairfam Data Manual. Wave 1. Version 1.0. Rostock
- Nauck, Bernhard, Josef Brüderl, Johannes Huinink, and Sabine Walper. 2014. The German Family Panel (pairfam). GESIS Data Archive, Cologne. ZA5678 Data file Version 5.0.0, doi:10.4232/pairfam.5678.5.0.0
- Oppenheimer, Valerie Kincade. 2003. Cohabiting and marriage during young men's career-development process. *Demography*, 14, 127-149
- Perelli-Harris, Brienna, Wendy Sigle-Rushton, Michaela Kreyenfeld, Trude Lappegård, Renske Keizer and Caroline Berghammer. 2010. The Educational Gradient of Childbearing within Cohabitation in Europe. *Population and Development Review*, 36, 775-801
- United Nations 2005. Generations & Gender Programme: Survey Instruments. New York and Geneva: UN
- United Nations 2007: Generations & Gender Programme. Concepts and Guidelines. New York and Geneva: UN
- United Nations 2009. How Generations and Gender shape Demographic Change: Towards Policies Based on Better Knowledge. New York and Geneva: UN

Vikat, Andres, Zsolt Spéder, Gijs Beets, Francesco C. Billari, Christoph Bühler, Aline Désesquelles, Tineke Fokkema, Jan M. Hoem, Alphonse MacDonald, Gerda Neyer, Ariane Pailhé, Antonella Pinneli and Anne Solaz. 2007. Generation and Gender Survey : Towards a better understanding of relationships and processes in the life course. *Demographic Research*, 17, 389-440