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# DemoDiff: A Dataset for the Study of Family Change in Eastern (and Western) Germany

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## 1. Motivation for Conducting the Study

Researchers who study family and fertility view Germany as unique among countries. West Germany is a forerunner in trends towards very low fertility, high childlessness and low transition rates to higher order births in Europe. Furthermore, the particular demographic situation in East Germany represents an exceptional case. In 1990, a new institutional framework, that of West Germany, was implemented in East Germany. At reunification, it was generally expected that eastern Germans would quickly adopt western German behavioral patterns. While this did occur in many areas, marked East-West differences in behavior and attitudes remain more than 20 years after reunification (Krause / Ostner, 2010). In the realm of family life, pronounced differences between East and West in fertility and nuptiality patterns persist (Goldstein / Kreyenfeld, 2011). Marital behavior differs sharply between the two previously separate German states, as unmarried parenthood is very common in the East, where more than 60 % of children are born to unmarried mothers. In addition to a large East-West gap in nuptiality patterns, eastern and western Germans differ sharply when it comes to women's employment patterns and attitudes towards maternal employment, and these differences have been found to persist even among the generation of eastern and western Germans who were born and raised after reunification (Bauernschuster / Rainer, 2012).

This ongoing gap in family and fertility patterns suggests that women and men do not mechanically adjust their behavior to new constraints, but that attitudes have their own dynamics, and are resistant to change even under new economic and institutional conditions (Huinink et al., 2012). In this sense, eastern Germany can be seen as a 'natural experiment' (Mayer / Solga, 2010; Witte / Wagner, 1995) that allows us to study the interplay between attitudes, economic constraints, and institutional contexts. For demographic processes like marriage and fertility, we have so far been unable to provide a comprehensive answer to the question of why certain patterns converged rapidly in eastern and western Germany, while in other domains of family life large differences have persisted.

Part of the problem has been that demographic processes like marriage and fertility evolve over a lifetime. A longer time span of data, preferably by birth cohorts, is therefore needed for us to really understand demographic change. It is only now that sufficient time has elapsed since reunification that we are really able to provide conclusive answers to the questions of whether and to what extent the dynamics and patterns of East-West behavior have converged.

Despite the scientific and public significance of this topic, it has become increasingly difficult to study the demographic differences between eastern and western Germany because many survey datasets no longer oversample eastern Germans. While the Family and Fertility Survey (FFS) conducted in 1992 oversampled eastern Germans, this practice of oversampling was discontinued by the FFS's successor, the Generations and Gender Survey (GGS) of 2005. The family survey of the German Youth Institute, AID:A, which was conducted in 2009, also did not include an oversample of eastern Germans. This has neither been the case for the German family panel (pairfam), the first round of which was conducted in 2008/09. As the eastern German population made up only around 20% of the total German population at reunification and has been declining ever since, the sample sizes of eastern Germans in standard survey datasets are usually too small to allow researchers to study easterners as a separate population.

The project DemoDiff (Demographic Differences in Life Course Dynamics in Eastern and Western Germany), which was initiated by the Max Planck Institute for Demographic Research, tries to fill part of this research gap by supplementing the German family panel (pairfam) with an eastern German subsample. With this subsample, the sample size of eastern Germans of the cohorts 1971–73 and 1981–83 increases substantially. While there are only 1,562 eastern Germans in wave 1 of the German family panel (pairfam), there are 3,051 respondents if we combine pairfam and DemoDiff. This means that DemoDiff doubles the number of eastern German respondents available for study, making it possible for researchers to conduct separate analyses of behavior in the two parts of the country.

## 2. Data Structure and Sample

### 2.1 Concept and Content

DemoDiff is a panel study that contains a sample of eastern Germans of the cohorts 1971–73 and 1981–83. It basically uses the questionnaire of the German family panel (see below). When making East-West comparisons, the results of DemoDiff can be merged with those of the German family panel. Thus, DemoDiff may be seen as an additional eastern German subsample of the German family panel (Huinink et al. 2011).

The first round of DemoDiff was conducted in the years 2009/10, the second round in 2010/2011, and the third round in 2011/12. The first three rounds of DemoDiff were financed by the Max Planck Institute for Demographic Research. The subsequent waves will be merged with the German family panel, and will be financed by the German Research Foundation. As before, the survey will be conducted annually, which means that respondents will be questioned every year.

DemoDiff has a multi-actor design. Apart from the anchor respondent, the consenting partner of the anchor is interviewed at each wave. Resident as well as non-resident partners are interviewed; i.e., partners in more loose relationships, like living-apart-together (LAT) relationships, receive a questionnaire as well. The anchor respondent is surveyed via computer-assisted personal interviewing (CAPI), and, for intimate questions, via computer-assisted self-administered interviewing (CASI). The partner is asked to complete a standard paper and pencil interview (PAPI).

The questionnaires used by DemoDiff were adopted from pairfam. As DemoDiff closely follows the program of pairfam, no pre-test was conducted. Because it is a family panel, the data include information on fertility and family-related issues, such as fertility intentions, partnership quality, and intergenerational relationships. In wave 1, detailed retrospective partnership and fertility histories were gathered. Employment histories and residential histories were collected in the second round. All of the respondents' biographical information (i.e., employment, fertility, and partnership histories) are updated based on a monthly 'event history calendar', which surveys the period since the date of the last interview (Brüderl et al. 2012).

### 2.2 Synchronization of DemoDiff and Pairfam

Like pairfam, DemoDiff is a representative and longitudinal study. However, DemoDiff deviates from pairfam in some respects. In pairfam, interview data are gathered from a random sample of anchor persons of the three birth cohorts 1971–73, 1981–83, and 1991–93. DemoDiff only contains the cohorts 1971–1973 and 1981–1983. Furthermore, pairfam has a multi-actor design in which partners, children, and parents are surveyed. DemoDiff only surveys anchor respondents and the partners. The main differences between DemoDiff and pairfam may be summarized as follows:

- DemoDiff only samples respondents who live in eastern Germany (excluding West Berlin) at the time of the first interview.
- DemoDiff only samples the cohorts 1971–1973 and 1981–1983.
- DemoDiff only surveys anchor respondents and their partners, but not their children or parents, as the German family panel does.

The most important difference between the two studies is that the first wave of DemoDiff was conducted one year later than the first wave of pairfam: while pairfam was launched in 2008/09, DemoDiff began in 2009/10. In the first round, DemoDiff closely followed the questionnaire of the first wave of pairfam. In the second round, DemoDiff followed the program of the third wave of pairfam. Thus, from 2010/11 onwards, pairfam and DemoDiff have been synchronized, which means that the fieldwork for each wave has been conducted simultaneously and the questionnaires of the current year match (see Table 1). We have chosen to call the second round of DemoDiff wave 2/3, because it contains elements of waves 2 and 3 of pairfam.

*Table 1*

**Synchronization of DemoDiff with Pairfam**

| | 2008/2009 | 2009/2010 | 2010/2011 | 2011/2012 |
|---|---|---|---|---|
| **DemoDiff** | | | | |
| **Pairfam** | | | | |

The difference in the start dates of DemoDiff and pairfam has some drawbacks. A further complication arises from the fact that the first wave of DemoDiff followed the program of the first wave of pairfam, while this was not the case for the second round. Because, however, the core program in all of the waves has been rather similar, combining pairfam and DemoDiff is a straightforward process.

Cross-sectional weights for wave 1 and longitudinal weights for the subsequent waves have been generated, which allows us to conduct a standalone analysis of DemoDiff, as well as a joint analysis of pairfam and DemoDiff.

### 2.3 Sample and Field Work

The field work of DemoDiff was conducted by INFRATEST Sozialforschung, Munich. The sample that included men and women of the cohorts 1971–73 and 1981–83 was drawn using municipality registers (Einwohnermeldestichprobe) (Suckow et al. 2010, 2011; Wich et al. 2012). The sample was drawn without regard to nationality. It is important to note, however, that only a German version of the CAPI/CASI and the partner questionnaire was used. Furthermore, all correspondence with the respondents (letter reminding respondents of the survey, greeting cards that were sent in between panel waves) was conducted in German only.

An issue of critical concern was how migrants between eastern and western Germany should be treated. In principle, this mobile population is of particular

interest for any comparative analysis of behavior. However, we did not make specific efforts to reach this population because it would have been too difficult to draw a sample from this group. However, an accompanying dissertation project that uses other data sources has examined the behavior of East-West migrants (Vatterrott 2012).

Sixty sample points were drawn from the municipalities in the eastern German states, excluding West Berlin. We included additional questions in the questionnaire that surveyed the region of birth of the respondents and of their partners. As can be seen from Table 2, the majority of the respondents in the sample (90%) were born in eastern Germany. A small fraction of the respondents were born abroad (5%). Five percent of the sample was comprised of West-East migrants; i.e., people who came from western Germany, but who were living in the eastern states at the time of the first interview.

*Table 2*

**Place of Birth**

| Place of Birth at First Interview (2009/10) | Absolute | in % |
|---|---|---|
| **Western Germany (incl. West Berlin)** | 74 | 4.97 |
| **Eastern Germany (incl. East Berlin)** | 1,335 | 89.66 |
| **Other** | 80 | 5.37 |
| **Total** | 1,489 | 100.0 |

The response rate of the first round was 29% (Suckow et al., 2010). The number of valid anchor respondents in DemoDiff wave 1 was 1,489 (see Table 3). Field work was conducted between October 2009 and April 2010 (Suckow et al., 2010). The number of valid anchor respondents in DemoDiff wave 2/3 was 1,173. Field work was conducted between October 2010 and March 2011 (Suckow et al., 2011). In wave 4, 1,074 anchor respondents remained in the sample. Interviews had been conducted between November 2011 and April 2012 (Wich et al., 2012).[1]

*Table 3*

**Valid Interviews in DemoDiff**

| | **Wave 1** 2009/2010 | **Wave 2/3** 2010/2011 | **Wave 4** 2011/2012 |
|---|---|---|---|
| **Anchors** | 1,489 | 1,173 | 1,074 |
| **Partners** | 684 | 578 | 554 |

[1] A non-monotonic design was followed. This means that respondents who did not participate because, for example, they could not be reached in wave 2/3 were contacted again in wave 4.

## 3. Research Potential and Data Access

Since DemoDiff follows the program of the German family panel (pairfam), the positive attributes of pairfam also apply to DemoDiff (Huinink et al., 2011). For example, both studies include information that make it possible to examine detailed partnership trajectories. So far, the German family panel is the only dataset that provides complete retrospective monthly information on the partnership histories of respondents, including information on living-apart-together relationships (LAT). In addition, pairfam is one of the few datasets worldwide that allow for the unambiguous linking of children and partnerships, which is very important when studying the diversity of family arrangements in contemporary societies. The multi-actor design is an innovative feature of the project, and will enhance our understanding of the decision-making processes of couples, especially as all partners, including those who do not co-reside with the anchor respondent, are surveyed. The panel nature of the study will increase opportunities for causal analyses, and will provide sound evidence for addressing previously unanswered questions, such as those about the impact of partnership quality on dissolution rates or the role of fertility intentions in childbearing behavior. With the addition of DemoDiff, many family-related research questions may now be studied from an East-West perspective, which will further our understanding of the interplay of structural and cultural determinants of family dynamics. This is of particular importance given that, in a number of ways, family structures and family behavior differ considerably between eastern and western Germany.

The limitations of DemoDiff should nonetheless be mentioned. One of the problems with the data is that the cohorts who are included in the study (1971 – 73 and 1981 – 1983) are still rather young. The majority of the respondents have experienced major life course transitions, like leaving the parental home, finding a first partner, moving in with a first partner, and having a first child. However, for the study of family events that occur later in the life course, like divorce, remarriage, and entrance into a stepfamily, the data are still censored at a rather early point in time. Thus, the data so far only allow us to study the early family life course. With the passage of time, other life course events may be studied. The full potential of the data will be realized when several panel waves become available for use in analyses.

The DemoDiff data are currently distributed together with the pairfam data. For instructions on how to obtain the pairfam data, see http://www.pairfam.de/.

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