Two Is Best? The Persistence of a Two-Child Family Ideal in Europe

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Does ideal family size in low-fertility countries differ from actual fertility trends? Surveys conducted in the last several decades suggest that intended and ideal family size in Europe and many low-fertility settings outside Europe might have stabilized around the replacement level. Hagewen and Morgan’s (2005: 510) analysis of data for the United States concluded that “there is a remarkably pervasive desire (and supporting norms) for a family size of two children.” This stability has contributed to a general decline in demographers’ interest in the concept of ideal family size and has prompted some researchers to question the usefulness of studying fertility ideals and preferences, especially when making inferences about likely future changes in family size (Simons 1978; Demeny 2003).

Nevertheless, there seems to be no intrinsic reason why individuals deciding about their family size should embrace a replacement-level ideal of having two children (Bongaarts 2002). Very low fertility might be unlikely to persist over the long term without being accompanied by a corresponding change in family-size ideals (Coleman 1998; Testa and Grilli 2006; Goldstein, Lutz and Testa 2003). This mechanism of adjustment is part of the hypothesized “low-fertility trap” (Lutz, Skirbekk, and Testa 2006), which suggests that declining fertility rates lead to a spiral of falling number of births, rapid population aging, diminishing economic opportunities for younger generations, and, eventually, fewer encounters with children and declining family-size ideals. Cultural changes may also contribute to the eventual erosion of a two-child family ideal: as societal norms related to family, living arrangements, and gender roles become more permissive over time and across cohorts (Inglehart 1990; Lesthaeghe 1995), women and men should feel free to express less-conventional family-size ideals. Furthermore, increasing family instability, complexity of living arrangements,
and longer periods of single living are likely to put downward pressure on fertility ideals, especially among the cohorts experiencing family instability in childhood and young adulthood.

We revisit data on ideal family size in Europe and provide a systematic analysis of their trends since the late 1970s, focusing especially on the possible erosion of two-child family ideals. We address two questions: 1) How persistent and universal has the two-child family ideal been in Europe during the last three decades? and 2) Is there evidence of an emerging preference for small family size (zero or one child) in European countries with a long history of subreplacement fertility?

To address these questions, we analyzed 168 surveys conducted in 1979–2012 in 37 European countries (data for eastern and western Germany are analyzed separately). This extensive dataset allowed us to go beyond the existing analyses and, despite relying on slightly different questions on ideal family size, yielded a long and remarkably stable time series of ideal family size in a large sample of countries.

We focus on the responses of women of reproductive age (15–49) regarding the ideal number of children for a family. First we discuss the motivation for studying trends in ideal family size in Europe, the recent literature, and available data. After analyzing time trends in ideal family size across all surveys, we discuss developments for broad European regions and the evidence for selected countries. We assess whether observed declines in mean ideal family size tend to slow down or reverse when they reach a low level. Following the low-fertility trap hypothesis, we discuss whether the countries experiencing a fall in fertility to very low levels subsequently saw a fall in ideal family size to subreplacement levels. The concluding discussion looks at the reasons why a two-child ideal continues to dominate in all parts of Europe.

The motivation for studying fertility ideals

Questions on ideal family size were first asked in a 1936 Gallup poll in the United States (Blake 1966). Since then they have appeared in different forms in hundreds of surveys globally. Such surveys have repeatedly attracted criticism for their perceived shortcomings, including the bewildering variety of questions on the ideal number of children and possible interpretations of these questions, encompassing the distinct concepts of personal/individual, societal, group-specific, and situational ideals (see discussions in Ware 1974; Philipov and Bernardi 2011). In addition, the term “ideal family size” may not include the choice of childlessness in the minds of many respondents, preventing them from mentioning zero as an ideal (Blake 1974). Some researchers have even questioned the validity of the concept of reproductive ideals. Hauser (1967: 404) considered the question meaningless, suggesting that since fertility ideals are closely correlated with
completed family size, the “ideal tends to be what has actually occurred.” Ryder and Westoff (1969, quoted in Ware 1974: 7) concluded their comparison of intended, expected, desired, and ideal family size in the United States with a clearly negative assessment for the concept of ideal family size, seeing it as “the least profitable variable to explore further” and positing that it “lacks face validity, is relatively unreliable, and it has small variance.” Over time, studies have highlighted the failure of questions on ideal family size to predict actual fertility behavior. In the European context of low fertility, attention has repeatedly been paid to the perceived “gap” between ideal and actual family size (e.g., Testa 2012), which suggests either that respondents might be unrealistic about their fertility preferences or that ideals are too abstract and removed from real decisionmaking. As Demeny (2003) speculated, fertility preferences may turn out to resemble the title of a Günter Grass novel, Kopfgeburten—births that increasingly occur only in the minds of would-be parents.

Some of these criticisms are clearly valid. The concept of ideal family size remains ambiguous and open to various interpretations (Blake 1966): there is no consensus among demographers about the preferred way(s) of asking about fertility ideals (Philipov and Bernardi 2011). But some of these perceived shortcomings are subjective and might even be interpreted as strengths of the measure. Ideals, as distinct from intentions that are conditioned by structural constraints, can be seen as a reflection of societal norms (Trent 1980; Philipov and Bernardi 2011). Their interchangeable use with intentions or desires, found in some of the past research, is misleading. Ideals are also clearly not well suited for predicting fertility levels. Past research shows that ideals may evolve quickly in times of rapid cultural change and thus can give useful signals about shifting family norms and images about “desirable” family size. Such a shift was documented by Blake (1974) for the United States between the mid-1960s and 1972, when ideal family size fell especially among those below age 25 and a two-child ideal became most common.

Reproductive ideals, preferences, desires, and intentions are relatively “soft” concepts since they are open to uncertainty, doubt, and revision (e.g., Quesnel-Vallée and Morgan 2003), but nevertheless form a basic link in the chain leading to the decision to have a child. They are often considered as key determinants of reproductive decisionmaking (Philipov and Bernardi 2011) and behavior (Schoen et al. 1999). Ideals reflect more general societal pronatalist or antinatalist norms (Trent 1980). Family size ideals, especially personal ones, can also be seen as reflecting the number of children people would like to have if they lived under “ideal conditions” and faced no constraints such as poor health, infertility, not having a suitable partner, a demanding job, precarious economic circumstances, or inefficient contraception (Philipov and Bernardi 2011). Under these assumptions, change over time in ideals could be
seen as reflecting the *air du temps*, in particular the changing attitudes toward family, childbearing, and the value of children in society.

**Trends in fertility ideals: Shifting to subreplacement levels?**

While an extensive literature in the last two decades has been devoted to studying short-term fertility intentions and their determinants and realization in low-fertility countries, less attention has been paid to aggregate-level fertility preferences. In particular, research on fertility ideals has fallen out of fashion and the question has been removed from a number of recent international surveys (Philipov and Bernardi 2011). This may be the result of the widespread notion that family-size ideals are stable and do not matter much for reproductive decisions. Consequently, little is known about ongoing trends in fertility ideals in different parts of the world.

Tentative evidence suggests that ideal family size has fallen below the replacement level in several low-fertility settings. Goldstein, Lutz, and Testa (2003) suggested that Austria and Germany might be the first countries experiencing such a shift. Their analysis of Eurobarometer data from 2001 indicated that the mean ideal family size in these two countries has dipped to 1.6–1.7 children per woman. They expect that a similar decline is likely to take place in other low-fertility countries. Testa and Grilli (2006) reported a close link between actual family size among older generations (women aged 40–60) and ideal family size among younger women aged 20–39 in Europe. Outside Europe, a shift toward one-child preferences has been reported for younger and better-educated women in urban China (Ding and Hesketh 2006), where mean ideal family size fell well below two children (Merli and Morgan 2011; Basten and Gu 2013).

**Data**

We assembled data from cross-sectional surveys conducted since 1979, especially drawing from the World Values Survey (WVS), the European Values Study (EVS), the International Social Survey (ISSP), and the Eurobarometer (EB) surveys. We analyzed complementary datasets for selected countries and years, specifically data from several surveys conducted in France, the Swiss Household Panel Survey (SHP), and the Generations and Gender Survey (GGS) in Austria, as well as tabulated data from the Demographic and Health Survey (DHS) in Albania and Ukraine.

Data sources and questions asked are listed in Appendix 1; supplementary online Appendixes 2 and 4 list all individual surveys considered and selected. We focus on general
family-size ideals and do not study personal ideal family size, which has been included only in the Eurobarometer surveys.³

The questions on ideal family size were identical in the WVS and EVS and were very similar in the ISSP and EB surveys. The first two included an additional qualifying statement, “if any,” following the general question on “how many children” the ideal family should have (see Appendix 1). The question in DHS surveys clearly differed from the other surveys considered. The DHS results are, however, closely aligned with the other surveys analyzed for these two countries.⁴

Does adding “if any” to the question on family-size ideals make a difference? While our use of multiple surveys with somewhat different questions on ideal family size can make our results more difficult to interpret, we found remarkable consistency in responses to different surveys. Overall, these responses seem to be very little affected by slight differences in questions on reproductive ideals (see online Appendix 3 at http://videurrep.oeaw.ac.at/two-is-best-pdr/ for further discussion). This consistency is also illustrated in the reconstructed time trends in fertility ideals for selected countries, which are derived as a combination of different surveys.

We carefully considered the criteria of data selection. We were particularly concerned with the small number of respondents in some surveys and with missing responses to the questions on ideal family size. To obtain a reasonable sample size, we included all women of reproductive age, broadly defined as 15–49 years. We might have selected a younger and narrower group of respondents, but that would have limited the sample size in most surveys to very small numbers.⁵

In the questionnaires, the “don’t know” option was not explicitly included in the ISSP surveys, and it cannot be inferred from the questionnaires whether it was offered by the interviewers in the WVS and EVS. The Eurobarometer surveys additionally included in 2001–11 the response option “there is no ideal number, it depends.” Again it is unclear whether EB respondents were explicitly presented with these options or whether they were included for the interviewers’ coding only. In the latest EB survey in 2011 the interviewers were instructed to keep the question open-ended (see Appendix 1). In addition, the distinction between missing responses and “don’t know” answers is often not available in the datasets. In the 1979 Eurobarometer survey, nonresponse in the questionnaires was coded “0,” the same way as an ideal of having no children. After investigating the subsequent surveys from the 1980s, we adjusted these data by considering all these responses as either missing or “do not know” answers—that is, assuming no respondents were choosing a zero-child ideal family size. Indeed in the 1980s, the proportion of respondents in different surveys choosing an ideal family size of zero was negligible, reaching highest values of only 1.1–1.3 percent in Austria, Belgium, and the Netherlands in 1988 (ISSP survey).
In all the surveys and for each country, we identified the proportion of respondents who did not give a numerical answer to the question on ideals or whose responses were missing. Eurobarometer surveys overall had a higher proportion of these answers, exceeding 25 percent in four surveys. After inspecting the proportion of unspecified values in all the surveys, with high levels signaling potential data quality problems, we chose a threshold of 18 percent, above which the survey was not included for further analysis (online Appendix 3 gives more detail on the selection of this threshold).

Indicators such as mean ideal number of children and ideal family-size distribution for each survey were computed from individual data, applying individual survey weights. We computed two alternative indicators of ideal family-size distribution for each country and survey: 1) the proportion of women by their ideal family size, retaining nonresponse and non-numerical responses as a distinct category, and 2) the adjusted distribution of respondents with a specific ideal family size computed only for women indicating their ideal number of children. This adjustment has no influence on the computation of mean ideal family size, which is derived from numerical responses only and cannot capture uncertain or missing responses. Main results for each survey by country are presented in online Appendix 4.

Finally, we excluded datasets for countries with a population below 1 million (Cyprus, Iceland, Luxembourg, Malta, and Montenegro) and Northern Ireland. Except for the two surveys available for Iceland and the 2001 Montenegro WVS, these surveys had low sample size (82 to 194 female respondents aged 15–49; see also online Appendix 3). Altogether 168 surveys for 37 European countries and regions, out of the total of 202 datasets considered, met our selection criteria and were selected for our analyses (see the list of all considered, included, and excluded surveys in online Appendix 2 and, with more details, in online Appendix 4).

The analysis of time series of reproductive ideals constituted a good check of the accuracy of results for different countries, which were typically based on small samples. Partly to compensate for the small sample size in most surveys, we conducted additional analyses for broader European regions that also reflect major differences in fertility patterns across Europe (Sobotka 2013). We used the following regional groupings:

- **Western and Northern Europe**: Belgium, Denmark, Finland, France, Netherlands, Norway, Sweden, United Kingdom.
- **Southern Europe**: Greece, Italy, Portugal, Spain.
- **German-speaking countries**: Austria, eastern and western Germany, Switzerland.
- **Central Europe**: Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia.
- **Eastern and South-eastern Europe**: Albania, Belarus, Bulgaria, Macedonia, Moldova, Romania, Russia, Serbia, Ukraine.
Changes in ideal family size in Europe since 1979

Trends over time: All surveys combined

We first inspect changes across Europe in ideal family size and in the proportion of women expressing a two-child ideal, computing selected key indicators for all analyzed surveys in the period 1979–2012. To improve comparability of data over time and obtain a reasonable number of surveys for each period, we grouped the surveys into six periods that do not cover equal time intervals, but rather are centered on the years of the important multicountry surveys analyzed here. Potentially, this analysis can be biased by the changing composition of countries and surveys analyzed in different periods, including the repeated presence of some countries in one period.

Despite uneven country and survey coverage, Table 1 gives a concise picture of the changes over time. First, it shows a gradual decline in the average value of mean ideal family size (MIFS)\(^8\) by about 0.1 per decade: the average ideal family size in the analyzed surveys dropped from 2.53 in 1979–83 to 2.21 in 2008–12. The median ideal family size across all surveys declined more slowly and from a lower initial value of 2.38 in 1979–83 to 2.19 in 2008–12. At the same time, the orientation toward a two-child family ideal has slightly strengthened. In the surveys conducted since 1993, around 60 percent of respondents expressed a two-child ideal when the data were adjusted for nonresponse and non-numerical answers, up from 55 percent in the 1980s. More important, the proportion of surveys where over half of respondents express a two-child ideal has risen over time, from 58 percent in 1979–83 to 76–78 percent in the 1990s and early 2000s, and 85 percent in 2008–12. In only two of 109 surveys conducted since 1993 did the most frequent ideal differ from two: in Norway in 1996 (WVS survey) and in Finland in 2006 (EB survey), the proportion of women stating a three-child ideal slightly surpassed that with a two-child ideal. While a two-child ideal firmly prevails today throughout Europe, the gradual decline in mean ideal family size was fuelled by a declining proportion of women with an ideal of three or more children, accompanied by a slower increase in the proportion of women expressing a subreplacement ideal of zero or one child. Across all surveys, this proportion has more than doubled from 5 percent in 1979–83 to 11 percent in 2008–12 when adjusting for nonresponse.

Figures 1 and 2 offer a more detailed look at the change in ideal family size. The decline in the variance of mean ideal family size in different surveys and countries (Table 1) has been driven especially by a diminishing number of countries with high ideal family size. This fact is also illustrated by the rapidly declining level of the highest reported MIFS in each analyzed period, from 3.88 in 1979–83 (Ireland in EVS in 1981) to 2.54 in 2008–12 (Albania in DHS, 2008–09).\(^9\) By contrast, the minimum reported MIFS suggests that there is
<table>
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<th>Period</th>
<th>No. of surveys</th>
<th>No. of countries</th>
<th>Average</th>
<th>Median</th>
<th>Standard deviation</th>
<th>Surveys with &gt;50% stating 2-child ideal (%)</th>
<th>Average % of women with ideal 0 or 1</th>
<th>Average % of women with ideal 2</th>
<th>Average % of women with ideal 3+</th>
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<td>1979–83</td>
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<td>1987–91</td>
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<td>2.42</td>
<td>0.26</td>
<td>63</td>
<td>5</td>
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<tr>
<td>1993–97</td>
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<td>1998–2002</td>
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<td>0.20</td>
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<td>2.25</td>
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<td>2008–12</td>
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<td>85</td>
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FIGURE 1  Mean ideal family size in Europe, summary results for all selected surveys by period, women aged 15–49

FIGURE 2  Percent of respondents with an ideal of two children, summary results for all selected surveys by period, women aged 15–49
a lower floor to the decline in ideal family size, as it was remarkably stable and close to 2.0 in all the analyzed surveys and periods except in 1998–2002 (Figure 1). Since the mid-1990s a majority of surveys show a MIFS in the range of 2.0–2.5, with a slightly declining tendency.

There was a clear trend toward greater uniformity in a two-child ideal across surveys, as illustrated also by a sharp rise in the minimum proportion of respondents with a two-child ideal from 17 percent in the earliest period (Ireland in 1981) to 43 percent in the latest (Finland in 2011). A majority of the surveys conducted in 2008–12 fall into the narrow range of 50–60 percent of respondents expressing a two-child ideal (Figure 2), suggesting a considerable convergence across Europe.

Comparison of major European regions

Did the trends in ideal family size, evidenced in the analysis of all surveys combined, progress similarly in different parts of Europe? Our analysis focuses on broad time periods since the late 1980s—except for Western and Northern Europe—in order to increase the number of surveys in each region and make the regional data more comparable over time. Subtle shifts and regional differences can be seen in trends in mean ideal family size and in the ideals of larger family size (three or more children) and smaller family size (none or one child). Gradual declines in MIFS can be observed in Central, Southern, South-eastern, and Eastern Europe, with only Western and Northern Europe and German-speaking countries showing general stability (Figure 3a). The

FIGURE 3 Mean ideal family size (a) and percent of respondents with an ideal of two children in broader European regions (b), women aged 15–49, average values across all surveys in a given period

NOTE: Figure 3b adjusted for nonresponse and non-numerical responses.
average value for Eastern Europe in 2005–12 reaches a low of 2.0, followed by Southern Europe and German-speaking countries with an average of 2.1.

The data depict considerable stability in the ideal of having two children (Figure 3b). By the late 1980s, and probably earlier, this ideal had become dominant in all parts of Europe. None of the regions studied shows any sign of an erosion of the two-child ideal between the late 1980s and 2005–12. In the most recent period, the adjusted average proportion of respondents expressing a two-child ideal surpasses 60 percent in all parts of Europe except Western and Northern Europe, where the proportion has been slightly lower during the analyzed period.

Trends in selected countries

To gain a finer-grained picture of changes in reproductive ideals, we analyze trends in ideal family size in selected countries with a longer time series of data (Figure 4; data for more countries are analyzed in Figure 5 in Sobotka and Beaujouan 2014). We focus especially on the largest European countries and on providing contrasting examples for each region. Data for the two German-speaking countries plus predominantly German-speaking Switzerland are discussed separately. We do not analyze trends in countries in Eastern and South-eastern Europe, for which we lack longer time series of comparable data.

France represents the higher end of the European range of ideal family sizes. The slightly prevailing ideal of two children coexists with the high proportion of women expressing an ideal of three children, whereas the ideal of one or no child remains rare. Corresponding to that distribution, mean ideal family size approaches 2.5 children. Similar results were obtained for the Nordic countries (country trends not shown here). In France, where we have compiled a longer time series beginning in 1955, the two-child ideal started to prevail continuously over the “three or more” option only in the 1990s. In Belgium, the ideal of two dominates more strongly, and a slight increase can be observed in the proportion of women with an ideal of zero or one.

Spain, alongside other countries in Southern Europe, depicts a trend toward a low MIFS around 2.0, a sharp decline in the proportion of women with a larger family ideal, and a concurrent rise in the preference for a small family size. In Portugal and Italy (country trends not shown for the latter), the proportion of women with a zero or one-child ideal has already surpassed the proportion with an ideal of three or more children. The sharp decline in family-size ideals between 2006 and 2011 in Portugal and Greece (country trends not shown for the latter) suggests the possible negative influence of the protracted economic recession (Testa 2012; Testa and Basten 2013).

In Central Europe, the Czech Republic already had a very strong orientation toward a two-child ideal in 1990, with only about 20 percent of women
FIGURE 4  Changes in ideal family size in selected European countries, women aged 15–49 (data adjusted for nonresponse)

a) Western and Northern Europe

b) Southern Europe

c) Central Europe
at that time having an ideal of three or more children. By 2011, this latter proportion has further eroded, and the one-child ideal has become more prevalent, pushing the MIFS to the lowest level in Europe (1.93). Slovenia, despite having low fertility similar to that in the Czech Republic, shows a strong stability in ideal family size and a very low proportion of women with an ideal of zero or one, which does not increase over time.

Ideal family size in Austria, Germany, and Switzerland

The three predominantly German-speaking countries of Europe share a long history of low fertility (Sobotka 2011). With the exception of two surveys that do not align well with longer time trends—the Austrian 1994 ISSP survey and the 2001 EB survey in eastern Germany—the time series for Austria and Germany show remarkable stability in fertility ideals, especially in western Germany (Figure 5). This is best illustrated by comparing the earliest and latest surveys, conducted in 1979 and 2011. The two surveys show identical mean ideal family size for western Germany of 2.10 and an identical proportion of respondents with a two-child ideal of 67 percent when adjusted for nonresponse and non-numerical responses. There are no noticeable shifts in the distribution of large or small family-size ideals.

Research indicates that women and men in western Germany had adopted a two-child family ideal at least two decades earlier: a 1957 survey of married women and men aged 15–45 showed that 45 percent had an ideal of two children, with a MIFS of 2.5810 (Freedman, Baumert, and Bolte 1959, Table 2). A comparison of the eastern German 1990 EVS with the 2011 EB reveals striking continuity, with the MIFS increasing marginally from 1.96 to 1.98. The data for Austria suggest a slight decline in MIFS going hand in hand with a gradual increase in the proportion of women having an ideal of one or no children. In Switzerland we observe a trend to a lower family-size ideal, with a notable decline in the ideal of having three or more children. Unlike in Austria and Germany, the ideal of having one or no children remains marginal in Switzerland.

Our results do not support the widely discussed findings of Goldstein, Lutz, and Testa (2003) that younger cohorts of women in Austria and Germany, after experiencing decades of low fertility, have begun holding fertility ideals well below the replacement threshold. What is the main reason for the lack of supporting evidence in our study? First, we analyze general ideal family size, whereas Goldstein, Lutz, and Testa looked at personal ideals, which in Austria have been slightly lower than the general ideals. Second, we excluded the 2001 EB surveys for Austria and western Germany, which did not conform to our selection criteria because of the high proportion of nonresponse and of respondents who stated that “there is no ideal family size,” altogether 19 percent in western Germany and 23 percent in Austria. These surveys reported very low ideals that were not replicated in subsequent surveys in
these countries, as shown in our analyses and in additional surveys analyzed by Philipov and Bernardi (2011: 503, Table 1). One of the surveys analyzed by Goldstein, Lutz, and Testa, the 2001 EB in eastern Germany, is included in Figure 5, but it constitutes an interruption in an otherwise relatively stable time series. In our whole dataset, this survey showed the lowest value of MIFS at 1.78, well below the next-lowest value of 1.93 reached in Romania in 2006 and in the Czech Republic in 2011, which adds to our suspicion that the 2001 EB survey in eastern Germany might suffer from methodological problems, such as having a sample selection not well representative of the eastern German population.¹¹
Does a decline in mean ideal family size slow down when it reaches low levels?

Our analyses suggest that a mean ideal family size around two constitutes a low threshold that so far has not been consistently crossed in Europe, except for a few one-off surveys and some variation around this value. This finding is remarkable because the prolonged experience of very low fertility in a number of countries could be expected to eventually bring about a corresponding fall in ideal family size (Lutz, Skirbekk, and Testa 2006). There is no pertinent reason to believe that ideals should follow the homeostatic logic of the “replacement level of fertility” model and stop falling when reaching levels around two.

To investigate this topic in a more systematic fashion, we analyzed changes in mean ideal family size depending on the initial level of MIFS. Specifically, we selected for each country all pairs of consecutive surveys that occurred within a period of up to ten years and analyzed the changes in MIFS from one survey to the next. To standardize the results, we computed the annual change in MIFS between the year of the initial survey and the year of the subsequent survey. The results displayed in Figure 6 are by defi-

FIGURE 6  Average annual change in the mean ideal family size (MIFS) between two consecutive surveys, conditional on the initial MIFS value; 127 pairs of surveys in Europe, 1979–2011

NOTES: For the initial MIFS level only the data with an initial MIFS at or below 3.0 were selected (this resulted in the omission of four data pairs). The trendline is a second-order polynomial curve supplied by MS Excel package.
nition affected by the fact that we combined different surveys with not fully comparable questions, sample sizes, nonresponse options, and other features. This should increase the noise in our time series as well as instability in the analyzed results. This concern aside, our analysis suggests that there is a relationship between the initial MIFS and its subsequent change: the lower the initial MIFS, the weaker its subsequent decline. A crossover even occurs when the MIFS falls below 2.3 children: when a survey shows a MIFS below this threshold, it is more likely to increase rather than to decline in the next period. Although this effect is not very strong, it nevertheless suggests a broad stabilization of mean ideal family size once it reaches a level close to replacement. We found a similar relationship for the two-child family ideal with the stabilizing level at around 60 percent. Above that level, the proportion of respondents with a two-child ideal is more likely to fall than to rise in the next survey (see Figure 7b in Sobotka and Beaujouan 2014).

The links between subreplacement fertility and ideal family size

If the changes in ideal family size tend to follow, at least partly, the changes in fertility behavior as hypothesized by Lutz, Skirbekk, and Testa (2006), two predictions related to its possible decline to levels significantly below replacement can be made: 1) the earlier a country experiences a decline in fertility to very low levels, the more likely it is to see a shift to MIFS below replacement; and 2) the lower fertility falls in a country, the more likely that the country will experience a shift to below-replacement MIFS.

We addressed these predictions by ranking European countries by the timing and intensity of their fertility declines to low levels and analyzing their most recent MIFS levels. To avoid tempo and parity composition distortions present in the most conventional measure of fertility, the period total fertility rate, we used the completed cohort fertility rate (CFR). There appears to be no systematic relation between the early spread of low fertility and recent ideal family size. Among the four countries where completed fertility fell below 1.8 children per woman in the cohorts born before 1960—western Germany, Austria, Switzerland, and Italy—the first three countries retain comparatively higher MIFS at 2.1–2.3 than many countries with later cohort fertility declines, including eastern Germany and Spain (Sobotka and Beaujouan 2014).

When we rank countries with the lowest fertility levels, as measured by their estimated cohort fertility rate among women born in mid-1970s, a tentative link emerges between the magnitude of cohort fertility decline and MIFS level (Table 2). Specifically, all countries except Greece with a CFR below 1.6 children per woman have reached a low MIFS in the narrow range of 1.95–2.11. Even in these countries, however, ideal family size remains very close to the replacement threshold.
Main findings

In the last several decades a two-child ideal has become nearly universal among women in Europe, with countries that used to display higher ideal family size converging over time toward a two-child norm. Six out of ten women in Europe consider two children ideal, and this proportion is very similar in different regions, irrespective of their fertility patterns and levels. Similarly, the mean ideal family size has become relatively closely clustered around 2.2 in most countries. Gradual shifts can be documented toward more women expressing an ideal of one child (and, quite rarely, no children), which goes hand in hand with the decline in an ideal of three or more children. These trends are regionally differentiated and have been more pronounced in Southern Europe (possibly in part due to the recent economic recession) and in Eastern and South-eastern Europe. However, there are no signs that women in any of the European countries we analyzed are abandoning a two-child ideal in favor of an ideal of having only one child, as has been evidenced in urban China (Basten and Gu 2013).
An increasing number of European countries, especially those that have reached a low level of completed fertility around 1.6 or lower, saw their mean ideal family size fall to a relatively low level around 1.95–2.15. But with the exception of one survey for eastern Germany and a few additional surveys not included here because of high nonresponse, none of the analyzed surveys suggests a decline in mean ideal family size to levels considerably below replacement—that is, below 1.9 children per woman. Indeed, once a relatively low ideal family size below 2.3 is achieved, the next survey is more likely to show a slight increase rather than a further decline in MIFS. Evidence for the stability of reproductive ideals around replacement level is most surprising for Austria, western Germany, and Switzerland, which share an early fertility decline to levels well below replacement. Women in western Germany born in the mid-1950s reached low completed fertility around 1.6, yet their daughters born in the 1980s continue to express considerably higher ideals, averaging around 2.1. This evidence is at odds with earlier reports on fertility ideals in Austria and Germany falling to the very low levels of 1.6–1.7 (Goldstein, Lutz, and Testa 2003), which might have been partly affected by high nonresponse, low sample size, or other data-related problems in the 2001 Eurobarometer survey (see also Philipov and Bernardi 2011: 502, fn 4).

Our conclusions are based on the largest collection of data on ideals analyzed to date. The use of multiple surveys reinforced our results and allowed us to reconstruct country-specific trends over time. In the absence of detailed information on uncertainty, nonresponse, and non-numerical and missing responses in different surveys, we excluded datasets with high proportions of these responses. The “don’t know” answers often have substantive meaning inasmuch as uncertainty is inherent to fertility decisionmaking (Morgan 1981; Ní Bhrolcháin and Beaujouan 2011). However, sensitivity analysis showed that our results on the whole are stable and robust to different survey selection criteria (see more details in online Appendix 3). While we have not analyzed fertility ideals for men, available studies indicate that they come very close to those of women in most countries (see Testa 2012: 57, Table A.2.1, for the 2011 Eurobarometer survey).

The two-child family ideal is not unique to Europe. The evidence presented here is similar to that for non-European countries with low or very low fertility, including Canada, the United States, Australia, Japan, South Korea, and Taiwan. In those countries, having two children became a dominant ideal decades ago, and it remains widely adhered to (see discussion in Sobotka and Beaujouan 2014, Section 5.7). Furthermore, an analysis based on reproductive preferences in the Demographic and Health Surveys and Reproductive Health Surveys suggests a spread of a two-child orientation in many middle-income countries in Asia and Latin America where the fertility transition is still in progress (Sobotka and Beaujouan 2014).

Our study shows a divergence between near-replacement reproductive ideals and below-replacement fertility in European societies. The difference
between completed fertility in the EU, namely 1.7 children per woman born in 1972 (VID 2014), and the most recent data on family size ideals, averaging around 2.2, is on the order of 0.5 children. Several factors contribute to this mismatch between preferences and outcomes. They include competing career and leisure preferences, inability to find the right partner, marriage and partnership disruption, disagreement between partners, and the fact that many women and men face unstable employment conditions, economic difficulties, problems with combining work and childrearing, health problems, or infertility (Bongaarts 2002; Adsera 2006a; Morgan and Rackin 2010; Iacovou and Tavares 2011; Testa, Cavalli, and Rosina 2011). Considering that couples in most European countries use reliable contraception and women often have access to abortion or emergency contraception, one might find it surprising that the observed differences in Europe are not even larger.

Why an ideal of two?

The spread and subsequent persistence of a two-child family ideal in Europe are remarkable. Neither long-term experience of below-replacement fertility nor major social and economic upheavals or cultural and technological changes seem to have altered the widespread perception that having two children is ideal, both personally and for society. The factors identified in earlier studies as influencing fertility ideals and preferences, such as religiosity (Adsera 2006a), unemployment and labor market position (Adsera 2006b), experience of single living (Waite, Goldscheider, and Witsberger 1986), number of siblings and siblings’ fertility (Axinn, Clarkberg, and Thornton 1994), as well as rising family instability, might be expected to erode the two-child family ideal as societies progressively become more secular, actual family size shrinks, more women enter the labor market, employment becomes more precarious, and more children grow up in unstable family environments. It can be argued that these forces have contributed to the observed gradual increase in the prevalence of the one-child ideal, but so far have not made any significant dent in the widespread adherence to a two-child family norm. Moreover, it is plausible that these developments have had a stronger influence on reducing fertility intentions, which in contrast with ideals imply a degree of commitment to act (Bachrach and Morgan 2013), or on the extent to which these intentions are eventually realized (Spéder and Kapitány 2014).

The notion that fertility ideals and norms might not remain permanently centered on two or more children has a long history. Coleman (1998: 20, 21) argued that the basic question is “whether there is any imaginable reason why the average should be two…. It is difficult to think of a mechanism, outside the realm of psychological ‘instincts’, or of biology, how such norms could be permanently protected.” But childlessness is often viewed as an “extreme” choice and an “illogical” ideal that would imply a population collapse in one generation (Hagewen and Morgan 2005). From the perspective of evolution-
ary biology and psychology, Foster (2000: 211) argued that humans, and in particular women, are biologically predisposed to nurturing behavior, and this “need to nurture” is strong enough to ensure that “women will, other things being equal, want to bear at least one child, despite the substantial costs of so doing.” Research on the value of children to parents has identified a broad array of reasons why people want to have children, ranging from economic motivation to “stimulation and fun” (e.g. Hoffman and Hoffman 1973; Hoffman and Manis 1979). Since parenthood is perceived by most people as a unique, valuable, and desired experience, childless couples may attain the status of parents and satisfy their “baby longing” by having just one child (Rotkirch et al. 2011).

There are many pertinent arguments why having only one child might be best from an individual point of view. Parents can allocate more time and resources to interacting with their only child while minimizing the negative effect children have on their leisure time, employment, career prospects, and income. Their resources and attention can be concentrated on one child, who does not have to experience conflict and competition with siblings (Mancillas 2006). From the perspective of parents, having one child is “the ‘cheapest’ option for those wishing to experience parenthood” (Jefferies 2001: 4). Wilson (2013: 1383) suggested that if the demographic transition “is hypothesised as a change from quantity to quality in children, then the logical endpoint is one child, not two.” Striessnig and Lutz (2013: 411) argued that “at the individual level it is sufficient to have one child (under low child mortality conditions) if the primary goal is to pass on one’s genes and continue to live on in the next generation.” Blake (1981), reviewing the contemporary evidence on only children, found that despite widespread negative stereotypes, they are intellectually superior, record better educational achievement, tend to count themselves as happy, and suffer no obvious character or personality defects or disruptive behavior when compared with children from larger families. A more recent review by Mancillas (2006) broadly corroborated these findings, citing high achievement and intelligence as “the most consistent and strongest advantages of only children” (pp. 270–71). Finally, the first child may substantially increase parents’ happiness, while the second child increases happiness only slightly or not at all (Kohler, Behrman, and Skytte 2005; Myrskylä and Margolis 2012).

We have identified five broader factors, outlined below, that motivate people in contemporary low-fertility settings to view having more than one child as an ideal. With the exception of the last one (fitting the social norm), they do not necessarily provide a rationale for preferring two children rather than, say, three or four, but they do provide a clear case for preferring more than one. Given that parents face high opportunity costs of having children, two children provide an “ideal strategy” to conform to the factors discussed below with the least effort.
Having one child of each sex provides a strong motivation for preferring two children. Interacting with a boy and with a girl may be perceived as qualitatively distinct experiences linked with different kinds of practical and psychological benefits, enjoyment, stimulation, communication, and play. Having two children is then a minimum needed to experience an interaction with one child of each sex. Indeed, research on sex preferences and actual fertility behavior documents considerable motivation among couples to have at least one child of each sex. This is most clearly illustrated in the studies of fertility behavior among the parents of two or more children, where “a distinct and stable preference for at least one child of each sex can be observed as a common pattern ... across many different social, economic and cultural contexts, whether they be located in developing countries or in highly industrialized nations” (Hank 2007: 765).

A single child is viewed as spoiled. Even in contemporary low-fertility societies there are enduring negative stereotypes about only children, who are often perceived as spoiled, self-centered, domineering, and quarrelsome (Mancillas 2006; Hagewen and Morgan 2005; Blake 1981; Almodovar 1973). Mancillas (2006: 268) traces these stereotypes to the psychologist G. Stanley Hall, who claimed in his 1898 study that “being an only child is a disease in itself.” The “onlies” are also expected to suffer from their status, experiencing loneliness, anxiety, and deprivation. Although most of these stereotypes are unfounded (Blake 1981; Mancillas 2006), they create a negative perception of parents who have only one child as selfish.

A companion for the first child. Closely related to the negative views of only children, many parents consider it desirable to provide a companion, a brother or a sister, to their first child—someone with whom the first child can play, interact, quarrel, and mutually develop (Jefferies 2001). This sibling interaction might provide unique emotional rewards and evolve into a relationship with a high level of trust, care, and attention matched only in parent–child and in couple relations. In line with this, earlier studies found that providing companionship for a sibling is the most prominent value cited in support of desiring a second child (e.g., Bulatao 1981).

Two children as an insurance strategy. In high-mortality societies, individuals had a strong motivation to “produce” many offspring to achieve a high likelihood that at least one survived to adulthood and would be able to reproduce. This motivation for having more than one child has sharply diminished as almost all children now survive to middle age or beyond. But the possibility that the only child may die or be seriously harmed has not entirely vanished, and this thought may still affect the decisionmaking of more anxious parents as well as those who know a family with such an experience. Furthermore, a more subtle “insurance strategy” to have more than one child may still be at work. If one child does not meet parental expectations because it is troublesome and, later in life, drops out of school, experiences poor health, abuses
drugs, turns violent, or severs ties with parents, having another child greatly improves the chances that at least some of the parents’ expectations and desires related to their children will be met. In many societies, children still serve as the main providers of care for their ailing parents, and having two children strongly increases the likelihood that parents will have someone to care for them when they get old.

**Fitting the social norm.** In Europe and many countries outside Europe, having two children has become a norm widely shared across generations and social groups. Because this norm is widespread, most people know about it. Individuals uncertain about their preferences may state, for convenience, that their ideal family size is two since they know this conforms to general expectations. Moreover, many people may receive cues from their parents, other relatives, friends, peers, and colleagues, perpetuating the notion that two children are ideal. People responding to the question on the “societal ideal” may also answer it having in mind a rational (and broadly correct) perception that in order for the population to replace itself, each couple needs to have at least two children.

Finally, some respondents expressing a two-child ideal may be influenced by their current family size and the size of their family of origin. An online survey focused on fertility ideals revealed that respondents with children had difficulties stating their ideals “retrospectively” without being affected by their current family status (Hin et al. 2011: 147, fn 9). At younger ages, respondents may base their preferences on the size of their family of origin (Régnier-Loilier 2006; Hayford 2009), which now frequently means two children.

Clearly, these are pertinent explanations for the persistence of two-child ideals. These ideals, even more so than intentions, seem to be sustained by enduring underlying schemas about the image of a family and the affective value of family life, discussed for intentions by Bachrach and Morgan (2013). But since these ideals are partly based on misconceptions (negative stereotypes about only children) or on perceived social norms that may eventually erode, the current near-universal dominance of the two-child ideal in Europe may not prevail in all parts of the continent. Although the earlier predictions of the imminent spread of subreplacement ideals have not materialized, subtle shifts toward a higher proportion of women with one-child ideals are observed in many countries. They provide a signal about the potential for a future further spread of one-child ideals in Europe. Whether this will indeed take place is an open question.
Appendix 1: Surveys and questions analyzed

All surveys considered for inclusion and those selected for the analysis are listed in online Appendix 2; online data Appendix 4 provides a more detailed list with selected key indicators for each survey. Discussion of the selection criteria and of the robustness of the presented results is provided in online Appendix 3 (all supplementary online materials are available at http://videurrep.oeaw.ac.at/two-is-best-pdr/).

Multicountry surveys


Data source: European Commission, Brussels: Eurobarometer 11, 56.2, 65.1; TNS OPINION & SOCIAL, Brussels (Producer); GESIS, Cologne (Publisher): ZA1036, ZA3627, ZA4505, ZA5564.

Questions and predefined response options:
EB 1979: “In (country name) today, what do you think is the ideal number of children for a family?”
Coded response options: 0 none; DK; NA; 1 one; 2 two; 3 three; 4 four; 5 five; 6 six; 7 seven; 8 eight; 9 nine or more.
EB 2001, 2006, and 2011: “Generally speaking, what do you think is the ideal number of children for a family?”
Coded response options (partly survey- and country-specific), including 9 there is no ideal number, it depends; 10 don’t know.
It is not clear whether the interviewers were expected to explicitly list all the response options. Only in the 2011 survey were the interviewers explicitly instructed to allow open-ended responses and not to read the pre-coded options.

—European Values Study (EVS, 1981–2008)


Question: “What do you think is the ideal size of a family—how many children, if any?”
Coded response options (in master questionnaire):
EVS 1981: open question.
EVS 1990 (it is not clear whether the pre-codes were read out):
0 none; 1 one child … continuing up to 9 nine children; 10 ten or more children; 99 don’t know.
EVS 1999: Asked only in Sweden, coding information not available.

—International Social Survey (ISSP, 1988 and 1994)


Question: “All in all, what do you think is the ideal number of children for a family to have?”
Coded response options: no predefined codes; open question (write number in box).

Question: “What do you think is the ideal size of a family—how many children, if any?”
Coded response options (in master questionnaire):

WVS 1981: open question.

WVS 1990 (no clear interviewer instruction is available on this question, so it was not necessarily read out): 0 none; 1 one child … continuing up to 9 nine children; 10 ten or more children; 99 don’t know.

WVS 1995, WVS 2000 (again, no clear interviewer instruction): 0 none; 1 one child … continuing up to 7 seven children; 8 eight or more children; 9 don’t know, no answer.

—Demographic and Health Survey (DHS)

Question: (a) Has living children: “If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?”

(a) No living children: “If you could choose exactly the number of children to have in your whole life, how many would that be?”

Coded response options (phases 5 and 6): None 00; Number … (specified); Other (specify) 96.

Individual country surveys
—INED and INED-INSERM surveys in France, 1955–2010
Data sources:


• Attitudes des Français sur la conjoncture démographique, la natalité et la politique familiale à la fin de 1976, INED. Enquête conjoncture (1976 EC).


• L’opinion sur la politique démographique, la nuptialité et les nouvelles techniques de procréation en mai 1987, INED. Enquête conjoncture (1987 EC).


• Enquête Fècondité-Contraception-Dysfonctions sexuelles FECOND – juin 2010–janvier 2011, INED/INSERM.

Question (identical in all surveys) : “D’après vous, quel est le nombre idéal d’enfants dans une famille?” (In your opinion, what is the ideal number of children in a family?).
Coded response options: open-ended question, only in 1998 was it possible to give a range (we selected the minimum value in our computations).
Data source: Swiss Household Panel Surveys, Swiss Centre of Expertise in the Social Sciences (FORS), data accessed in April 2014
Question: “What would you say is the ideal number of children for a family living in Switzerland?”
Coded response options: open-ended question.

—Generation and Gender Surveys (GGS) Austria, wave 1 (2009) and wave 2 (2012–13)
Data source: Austrian Generation and Gender Surveys, Statistics Austria/Vienna Institute of Demography.
Question: „Was glauben Sie, ist die ideale Zahl von Kindern für eine Familie in Österreich?” (What do you think is the ideal number of children for a family in Austria?)
Coded response options: open-ended question.

Notes

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1 This separation of datasets for eastern and western Germany is based on the fact that they formed two separate countries until 1990, but even more so on the distinctiveness of family and fertility patterns in these two areas that has persisted after reunification (Kreyenfeld 2003; Goldstein and Kreyenfeld 2011; Sobotka 2011).

2 The question of ideal family size was not included in GGS conducted in other countries.

3 The question of ideal family size was not included in GGS conducted in other countries.

4 Our inclusion of these DHS datasets was motivated by the effort to expand the available datasets for Central and Eastern Europe, where only a few relevant recent surveys exist.

5 It might be argued that by selecting a wide age range for our analyses we would miss the opportunity to detect shifts in ideal family size among young adults, who could be early adopters of low family-size ideals. However, the available literature does not suggest any important shift among young respondents. A detailed analysis of the data from the
The 2006 and 2011 Eurobarometer survey by Testa (2007, 2012) shows that mean general ideal family size is relatively little differentiated by age. In a large majority of countries, women in the youngest age group, 15–24, showed somewhat higher mean ideal family size (with an EU-wide average of 2.27) than the next two age groups considered, 25–39 and 40–54 (EU average of 2.11 and 2.13, respectively). Further analysis (not presented here) showed that these differences are too small to cause shifts in the overall ideal family size for the broad age group 15–49 when the population progressively “ages” over time. In other words, our results are robust to age-group selection and would not change if we considered narrower age groups.

The high proportion of respondents choosing the answer “There is no ideal number” in some of the Eurobarometer surveys provides indication of the possible erosion of the notion of ideal family size. This issue is worth analyzing more fully, but since that option is not available in the other surveys, we did not analyze these responses and treat them merely as “statistical noise” that may affect the aggregate results. Moreover, in many countries there is little consistency in the share of missing and non-numerical responses across different Eurobarometer surveys (see online Appendixes 3 and 4), which makes it difficult to pursue a substantive interpretation in terms of uncertainty being systematically higher or lower in specific countries.

We did not include data for Ireland in this regional comparison. The surveys consistently displayed considerably higher fertility ideals in Ireland than in the other countries in this region but were only available for the earlier period until 1994. This affected the regional comparison of trends after 1994 when no survey was available for Ireland (the EB 2001–11 surveys for Ireland showed a high proportion of non-numerical responses between 23 and 30 percent and, in accordance with our selection rule, were not included in the analyses).

These averages refer to the simple average of the aggregate country-level results across all surveys considered in a given period; these data were not weighted by population size of the analyzed countries.

The contrast between the earlier and later period is partly affected by excluding the 2001–11 Eurobarometer surveys for Ireland because of the high proportion of nonresponse and non-numerical responses. If we included these data, the maximum MIFS value would remain higher, amounting to 2.70 in 2008–11.

If the survey also included unmarried men and women—as has been common practice in surveys since the 1990s—the mean ideal family size would probably be lower since some of those who were unmarried conceivably formed a select group with lower family-size ideals.

The study by Philipov and Bernardi (2011: 503, Table 2) reported a similarly low mean ideal family size of 1.70 in the 1992 Fertility and Family Survey (FFS) for eastern Germany.

Despite some correspondence between fertility level and ideal family size among the countries with the lowest cohort fertility in Europe, relatively low levels of MIFS are also found in some countries with higher cohort fertility. For instance, the country with the lowest MIFS in the 2011 Eurobarometer survey, 1.93 in the Czech Republic, has comparatively high CFR estimated at 1.77–1.78 for the 1974–75 cohorts (Prioux and Barbieri 2012).

In addition, as discussed above, ideals may be seen as abstract general statements that are often disconnected from the actual fertility plans of individual men and women. From this perspective, it is preferable to compare reproductive intentions, not ideals, with realized fertility (Sobotka and Lutz 2011).
References


