

## The Popular Debate about Low Fertility: An Analysis of the German Press, 1993–2001

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**Abstract.** Despite increasing research on the causes, consequences, and measurement of low fertility, questions about the nature and the extent of popular concerns over low fertility have yielded more speculation than examination. We address this gap in the literature through an analysis of 328 German newspaper and news magazine articles mentioning low fertility from 1993 to 2001. Our analysis reveals a paradox: while fertility rates have remained well below replacement levels and governmental discussions of low fertility have increased, discussion of low fertility as a concern in and of itself has been small and unchanging over time. We find this to be true because the problem of low fertility is rarely invoked as a concern in its own right, but is most often used as a tool in the popular debate to discuss other problems – political, economic, and cultural.

**Key words:** Fertility, Germany, media, newspaper

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**Résumé.** Malgré le nombre croissant de recherches sur les causes, les conséquences et la mesure de la basse fécondité, il n'existe pas de véritable analyse sur l'importance de la prise de conscience du phénomène par la population qui reste souvent de l'ordre de la spéculation. Nous essayons de combler cette lacune en analysant 328 articles de journaux ou magazines allemands qui traitent de la basse fécondité entre 1993 et 2001. Cette analyse montre un résultat paradoxal: alors que les taux de fécondité restent bien en dessous du niveau de remplacement et que les débats gouvernementaux sur ces bas niveaux sont de plus en plus fréquents, la basse fécondité est rarement considérée par la presse comme un problème en tant que tel et cette attitude a peu varié au cours du temps. La question de la basse fécondité est plutôt utilisée comme un moyen d'aborder d'autres problèmes, politiques, économiques et culturels.

**Mots clés:** fécondité, Allemagne, media, journaux

## 1. Introduction

Concerns about the causes, consequences, and measurement of low fertility have moved to the fore of professional and policy debates in the past decades. This move, in some part, has been justified by the sense that everyday people – parents, taxpayers, and voters – are concerned about the implications of low fertility. For example, some researchers characterize citizens as wanting governments to minimize the consequences of large-scale demographic changes, like low fertility, while also keeping parenting decisions private (e.g. Gauthier and Hatzius, 1997). Similarly, other researchers assert that people view policies that alter fertility levels – intentionally or not – as forms of taboo social engineering (e.g. Teitelbaum and Winter, 1985; Demeny, 1987). In contrast, some researchers report that people are not concerned about low fertility at all. For example, reporting “the present apparent lack of concern” (p. 11), Caldwell et al. (2002) write that “the most significant aspect of the present period of low fertility is the near-silence on the subject from governments and the public alike” (p. 10).

Yet such popular concern over low fertility (or lack thereof) has been more often assumed than analysed. In this paper, we ask *how* low fertility is debated popularly, taking the popular press as our exemplary forum: is low fertility debated as a concern in its own right; when is low fertility used to debate other issues; and how are such debates carried out? Understanding the contours of the popular debate over low fertility is important for several reasons. First, empirical evidence of the nature of popular sentiments towards low fertility would help eliminate some of the ambiguities outlined above. In addition, understanding popular concerns would allow demographers to appropriately correct or reshape debates, informing more accurate and productive exchanges. Finally, knowing the substance and tenor of popular concern may help demographers not only correct, but actively contribute to both public and policy debates in relevant ways. In sum, analysing, rather than assuming the nuances of popular debate may help demographers inform – and open possibilities for – the most appropriate policy decisions and professional conversations.

To analyse the popular debate, we draw on articles in the popular press, which offer a broad view of how debates are structured beyond research institutions (Woolley, 2000), and which are important for policymakers in prioritizing policy decisions (Nelkin, 1987). Thus, we use a new methodology applied to 328 German news articles to show that low fertility is used to debate issues beyond those tied directly to population concerns. In addition, we show that low fertility is appropriated in different ways in the popular press depending on the issue being debated – “population decline” being just one among many topics, such as economic stagnation or gender equity, that also deploy low fertility arguments. Finally, we identify variations in the way

that low fertility is invoked and debated depending on factors, such as the region addressed or the measurement used.

## **2. Current perspectives on low fertility: professional and policy debates**

Many policymakers in industrialized countries are facing problems that result from changing demographics, recognizing that policy decisions are unavoidable, and weighing their options – options that are, at least in part, influenced by popular sentiments. The tension for policymakers between needing to change policies and fearing popular outcry is apparent in the fact that “even in democratic countries where government concern with too-low levels of aggregate fertility has been explicit, and correcting such levels has been acknowledged as a role for government, governments behave as if the justification for bringing about higher birth rates was non-existent or at best marginal” (Demeny, 1987, p. 338). This tension is seen in the results of a 1999 survey by the UN, in which the leaders of countries with below-replacement fertility were asked about their positions towards their changing demographics. Commonly, governments (for example, the governments of Germany, Italy, Spain, and Switzerland) reported that fertility levels were “too low,” at the same time that their official policy was one of “no intervention” (Zoubanov, 2000).

### **2.1. PROSPECTS FOR CHANGING LOW FERTILITY**

While most governments avoid explicit pronatalism, many have enacted family-friendly policies using rights-based rhetoric with hopes of a welcome side effect: increased fertility. The idea that family-friendly policies, like tax breaks for parents or public childcare, would promote fertility as a welcomed side effect is grounded in economic rationalism: decreased fertility is caused by decreased economic incentives for parents, and reversing fertility trends would require governments to reverse incentive structures (Caldwell et al., 2002). Policies that remedy financial inequities between parents and non-parents might also boost fertility levels through minimizing lost wages and childcare costs, a rationale followed through policies helping women combine work and family with greater ease. In the case of Germany, since working mothers send their children to childcare at a younger age and more often than non-working women, policies enhancing public childcare might also raise fertility (Ondrich and Spiess, 1998; Brewster and Rindfuss, 2000), especially given the inflexible nature and insufficient supply of childcare facilities and the fact that mothers using public childcare bear fewer children than those using informal care arrangements (Hank and Kreyenfeld, 2003).

Still, policymakers' hopes of inducing the fertility side effect through family-friendly policies seems to overlook the complex causes of low fertility (Demeny, 2003; Keyfitz, 1987). Low fertility is not solely a function of people's rational response to economic conditions. Researchers find that low fertility is also an outgrowth of people's increasingly liberal and individualistic attitudes – especially towards marriage, family, education, work, gender roles, and lifestyle overall – coupled with greater access to contraception since the 1960s (Van de Kaa, 1987; Oppenheimer, 1994). In countries with extremely low – or lowest-low – fertility in particular, researchers suspect that the explanations of low fertility extend beyond household economics. For example, in some countries, like the Mediterranean states, extremely low fertility levels result from the conflict between liberalized gender roles and traditional notions of family (McDonald, 2000; Livi-Bacci, 2001; Bernardi, 2003).

Skepticism towards family-friendly policies as a long-term remedy for low fertility is well founded: empirically, there is little evidence that family-friendly policies raise fertility. In an analysis of 22 industrialized countries from 1970 to 1990, Gauthier and Hatzius (1997) found that increased family benefits resulted in negligible increases in long-term fertility while increased maternity leave resulted in no increase in aggregate fertility. A recent review of low fertility and policy responses similarly concluded that existing family policies had positive, but only weak, effects on reproductive behaviour (Sleeboos, 2003). One of the central tensions for researchers is the incompatibility between work and family for women. Even when policies appear generous enough to promote increases in fertility, women still curb child-bearing, which indicates that there are deterrents to combining mothering and working that are so heavily institutionalized that policies cannot alleviate them. That is, even with family-friendly policies in place, financial and opportunity costs to having children still exist for working women (Brewster and Rindfuss, 2000). In cases where family-friendly policies have raised fertility, the levels are unsustainable. Often, family-friendly policies change the timing of births but not the number of births to each woman. In Sweden, for example, policies that help parents combine work and family – including expanded public childcare, child benefits, parental leave provisions, and part-time opportunities – shifted the timing of births earlier, but not the number of children that women eventually bore (Hoem, 1990; Andersson, 2002). In addition, bringing family-friendly policies to a level at which they would be effective is unaffordable for governments (Gauthier and Hatzius, 1997). Finally, in cases like France and the pre-1989 German Democratic Republic where family-friendly policies seem to have increased fertility levels temporarily (Calot and Hecht, 1978; Büttner and Lutz, 1990), it is unclear whether the policies or other uncontrolled factors were actually responsible for fertility increases.

Some predict that because the fertility side effect has remained elusive, people will become more tolerant of explicitly pronatalist policies, even embracing parenting as an act of social good will (Lutz et al., 2003). In a similar vein, the US-based National Research Council leaves open the possibility that changing demographics could even fuel “popular movements to raise fertility” (Bongaarts and Bulatao, 2000, p. 6). Yet it seems likely that the negative association in many low fertility countries between pronatalism and social engineering would keep explicitly pronatalist policies or movements from gaining ground.

## 2.2. PROSPECTS FOR ACCOMMODATING LOW FERTILITY

Because empirical research so far has failed to demonstrate that family-friendly policies are decisively effective in low fertility contexts, and because pronatalist policies have been resolutely avoided due to their negative connotations, policymakers are also considering institutional changes to accommodate low fertility. While the aging of a population due to mortality decline alone can result in troubles for pension systems and social security funds (Lee and Tuljapurkar, 1997), problems are compounded when fertility levels decrease or remain substantially below replacement level for sustained periods of time. Rather than finding ways to increase fertility, governments could find other ways to increase funds for public systems or reduce demands on the systems. However, increasing funds for pension and other social security systems while accommodating low fertility is a difficult prospect. As Lutz et al. (2003, p. 1992) write, “With already very high tax rates...there is a limit to how much governments can squeeze out of a shrinking labor force.”

Yet one option for accommodating low fertility is to increase labour supplies through immigration. Some suggest that this may be unpalatable in receiving countries with no history of immigration (Caldwell et al., 2002). Yet policymakers’ resistance to immigration is not always indicative of zealous nationalism. Rather, it is unclear that immigration policies can even solve the problems caused by low fertility, since foreign-born workers, like native workers, also age, draw on pension systems, and require health benefits. Also problematic is the fact that in many countries, immigrants and natives alike face unemployment, so immigration could exacerbate problems stemming from low fertility. As one potential solution, a policy of controlled immigration (targeted at temporary workers with specific skills) has been embraced in countries like Germany, as an alternative to a policy of more permanent, open immigration like that of the US (Höhn, 2000). Targeted immigration aimed at alleviating problems caused by low fertility and mortality rates is what the UN (2000) calls “replacement migration”.

The labour supply could also increase by legislating an older minimum age at retirement, given that life expectancy has increased in low fertility countries in the time since public benefit systems were designed. Policies raising the retirement age would make the benefits of staying in the labour force greater than the benefits of retiring, which would serve the additional purpose of reducing people's entitlements upon retirement (McDonald and Kippen, 2001). Thus, increasing the retirement age would not only increase labour force participation, but also reduce pension payments. In some countries, like Germany, this option is feasible in terms of both logistics and public support (Höhn, 1990).

In addition to increasing the age at retirement, policymakers have considered a variety of policy options to mitigate demands on pension systems. One option is for governments to move the cost of care for elderly from the state to families, as seen in Japan (Ogawa and Retherford, 1997). Another option is for governments to shift from administering pay-as-you-go systems to encouraging workers to save privately (Council of Economic Advisors, 1997).

Still, the dilemma remains that changing public support systems, while more effective in mediating low fertility, is thought to be so disagreeable to voters that policy changes would be political death for supporting policymakers. This dilemma is compounded by the fact that older people would stand to lose the most in public resources through government attempts to accommodate low fertility at the same time that older people are gaining voting power in numbers (Preston, 1984), a trend that is particularly pronounced and rapid in very low fertility contexts.

### 2.3. PROSPECTS FOR THE CONTINUATION OF LOW FERTILITY

In addition to the substantive debates outlined above, methodological debates over low fertility have developed in recent years. Building on the work of Ryder (1956), debates over the most appropriate adjustments to the conventional period-TFR have left little question that more children were being born than the measure suggests. And while demographers agree that the period-TFR is a problematic measure, Preston et al., (2000, p. 104) explain that "there is no consensus on the conceptual issue..." of how to appropriately measure "...the single most important indicator of fertility".

Such a lack of consensus has sustained low fertility as an important methodological concern. Demographers continue to adjust fertility measures for quantum, tempo, and age-period interactions in low fertility settings (Bongaarts and Feeney, 2000; Kohler and Philipov, 2001; Kohler and Ortega, 2002). Despite these methodological concerns, demographers largely agree that, even if low fertility is in part an artifact of the measurements

demographers use, it is unlikely that very low fertility as observed in many European countries will rebound to replacement levels in most countries in the foreseeable future (Frejka and Calot, 2001; Bongaarts, 2002).

### **3. Current Perspectives on Low Fertility: Towards an Understanding of Popular Debates**

In previous work (Stark and Kohler, 2002), we analysed when and to what extent low fertility is framed as a harmful trend in the popular presses of 11 low-fertility countries. Often times, popular and professional concerns deviated regarding the nature and the extent of the threat of low fertility. For example, some of the countries least troubled by low fertility according to demographic measures – like New Zealand with a TFR just slightly below replacement at 1.8 and projected long-term growth – had the most inflammatory popular debates concerning low fertility. We also found that the consequences of low fertility were considered to be largely negative and worthy of alarm, despite the fact that the causes of low fertility – such as greater gender equity – were seen as decidedly positive trends.

In this paper, our interest is different: we ask how low fertility is debated in the broader context of social concerns. Specifically, we are interested in the conditions in which low fertility is seen as a problem in its own right – as implied by professional demographers – and the conditions in which low fertility is mobilized as one argument under a heading of broader issues.

As a model, we draw on Wilmoth and Ball's (1992) study of popular attention to population issues in Cold War America, in which they traced debates over high fertility in the American press from 1946 to 1990. They showed that rather than remaining a consistent interest, debates over high fertility varied with changing political climates and grassroots movements. Wilmoth and Ball's findings offer an important contribution to the study of popular debates over demographic issues. We expand on their work by examining debates over low fertility, and we remedy some of their methodological limitations by using innovative search techniques that are further discussed in Section 5.

### **4. The Case of Germany**

Unlike the problem of too many children, the problem of too few children remains a largely domestic concern in the popular press of industrialized countries (Stark and Kohler, 2002). Thus, we take the low-fertility country of Germany as our case study, and trace changes in the coverage of low fertility in its popular press. By UN definition, countries with a total fertility rate at or below 1.5 children per woman are categorized as low fertility, or very low

fertility according to Caldwell and Schindlmayr (2003). Countries are classified as “lowest-low fertility” countries when the total fertility rate drops below 1.3 (Kohler et al., 2002). According to the International Division of the US Bureau of the Census (2003), Germany can expect a 2003 period total fertility rate of 1.37, increasing to 1.53 in 2025, then to 1.70 in 2050. However, German demographers themselves do not expect a rise in fertility in coming years, as both UN and US Census Bureau projections predict (Höhn, 2000). Moreover, Germany’s federal statistics office projects the absolute size of the population to decrease between 2000 and 2050 (Council of Europe, 2000).

In addition to being an appropriate case, Germany also makes a fascinating instance because of its history of fertility policies under various political regimes. The Nazi eugenics movement used fertility as a tool of political control (Proctor, 1989) and built a reward system for mothers in which high fertility (four or more births) was honoured as a service to the Nazi regime (Espenshade, 1978). It is precisely because of Germany’s past that pronatalist policies had been seen as racist and as an infringement on civil liberties in the West (McIntosh, 1983).

During the Cold War division, East and West Germany followed distinctly different fertility patterns. The total fertility rate of East and West Germany, and for the unified Germany since 1990, is depicted in Figure 1. In East Germany, the government implemented a broad range of family policies that were decidedly pronatalist. Such efforts were especially vigilant after a

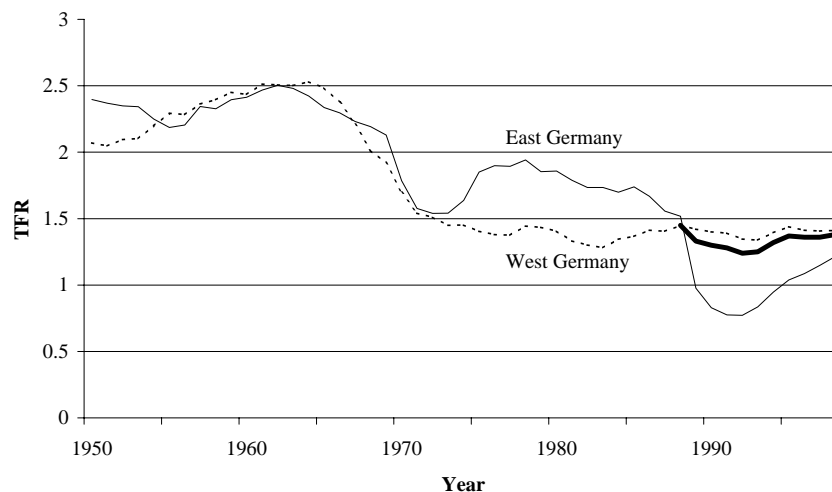


Figure 1. TFR of Germany, 1952–2000.

Sources: for East and West Germany: Statistisches Bundesamt. (2001) for unified Germany after 1990: Council of Europe (2002).



fertility downturn in the 1970s, and the East German government thereafter was successful in keeping fertility levels near replacement. Maintaining fertility levels was an important national goal, requiring constant effort, as seen by the East Germany government's sense in 1989 that fertility levels were unsatisfactory and too low, despite being higher than the levels of many other European nations. Explicit policy interventions were used to keep fertility levels near replacement and to perpetuate the ideal of the three-child family (United Nations, 1989).

In West Germany, with its liberal non-interventionist family policies (Gauthier, 1996), fertility dipped below replacement level fertility for the first time in the early 1970s and continued to decline. Very few policy measures in the West attempted to reverse this trend, either explicitly or implicitly. As one article in our study explains, "Since the time of the Nazis, birth regulations have been discredited." (April 21, 2001 *Süddeutsche Zeitung*).

After reunification, eastern Germany experienced a very rapid fertility decline with TFR levels reaching a trough of 0.77 in 1994. This sharp decrease in fertility after the fall of the Berlin Wall in 1989 and political unification with West Germany in 1990 may have been a "shock" effect stemming from people's sense of economic uncertainty about the future (Eberstadt, 1994; Witte and Wagner, 1995; Kreyenfeld, 2003). However, there have only been small amounts of convergence in recent years, and the fertility levels in eastern Germany remain below the western German levels. In 2000, eastern Germany had reached a TFR of 1.21 from its low 6 years earlier, while western Germany had been holding steady at 1.41.

Germany has experienced additional regional differences since its reunification. In addition to divergent fertility levels, eastern Germany has a high level of non-marital childbearing compared with western Germany. In 1999, 47.2% of births in eastern Germany were non-marital, compared to 15.9% of births in the western region. Germany has also seen massive east to west migration through the 1990s. However, internal migration steadily decreased through the 1990s, and by 1999, there were the lowest levels of east to west migration since reunification (Council of Europe, 2000).

For reunified Germany, these demographic issues implied a need for the nation to restructure the inter-generational pension system, bolster resources for families, cultivate an educated labour force through schooling and immigration, build a strong economy to fuel labour, and make parenting affordable while not penalizing the child-free. In the final years of our study, the German government made greater efforts to create a "child friendly" state, through increased child allowances in both 1998 and 1999 and tax breaks for parents in 2000, among other measures. Just as importantly, in a move to accommodate low fertility, the German government began a broad effort to restructure the pension system in June of 1999 (Council of Europe, 2000). Still, some of the demographic effects of reunification and the resulting

demographic shifts are not felt at the national level, but at local and regional levels. School closings, for example, are most visible in the east where the number of pupils has been declining rapidly in recent years.<sup>1</sup> Despite its singularity in politics and history, Germany offers a mid-range of contemporary fertility experience compared with other European countries, such as the lowest-low Mediterranean countries or pronatalist France. Moreover, the German press offers a conservative look at popular fertility concerns, since demographic management by the government is discussed with restraint rather than with the alarmist flourishes seen in the presses of countries with very different political pasts (Stark and Kohler, 2002).

## 5. Methodology

To explore the popular debate over low fertility in Germany, we coded all articles mentioning low fertility that appeared in *Frankfurter Allgemeine Zeitung*, *Süddeutsche Zeitung*, *Focus* and *Der Spiegel* between January 1, 1993 and January 1, 2002. *Frankfurter Allgemeine Zeitung* (FAZ) and *Süddeutsche Zeitung* (SZ) are Germany's largest nationally circulating news dailies. Both dailies were established in the 1940s, and by 2003, FAZ had a circulation of 471,000 and SZ a circulation of 470,200 (Editor and Publisher, 2003). Before the fall of the Berlin Wall, both dailies were not only among West Germany's nationally respected papers, but also two of the few internationally respected German newspapers, with FAZ considered a middle-class conservative paper and SZ on the liberal side of the political spectrum (Kurian, 1982; Groebel, 2004). In the past decade, they have maintained their international reputation as quality presses, as opposed to tabloid presses, at the same time that their politics have converged more (Kurian, 1982; Groebel, 2004).

To complement these news dailies, we also searched *Focus* and *Der Spiegel*, two of Germany's most prominent national weekly newsmagazines. These are considered the "opinion-leading socio-political" weeklies in Germany, along with *Stern* and *Die Zeit* (Groebel, 2004), which we were unable to search. Combining these four sources allowed us to cover the leading presses in Germany while surveying a range of news genres and intended audiences.

For each source, we searched for articles mentioning low fertility using the GBI database, which offers an electronic, full-text archive of these presses, among other news sources, in original language (for more information on GBI see <http://www.gbi.de>). This archive allowed us to search for all articles that included the following terms anywhere in the text or title: *Geburtenrückgang* (decline of births), *Bevölkerungsrückgang* (population decline), *Demographischer Wandel* (demographic change), *Kinderzahl* (number of children), and *Geburtenentwicklung* (fertility trends). These search terms

are the result of an extensive exploration of several search terms that the low-fertility debate specific to Germany and the German language might invoke. We chose this set of words after extensive trial searching because this set yielded all of the relevant articles that we could find with the minimal residual hits (meaning inappropriate articles, like those referring to the “low fertility” of soil for crops, for example). After manually culling out the residual hits and other irrelevant articles, the search yielded 328 newspaper and news magazine articles mentioning low fertility over these 9 years.<sup>2</sup>

Our method of collecting articles offers advantages over those relying on traditional article archiving methods. In most article databases used in the past, articles could be selected based only on the theme that the articles were organized around (e.g. those used by Wilmoth and Ball in their analysis of the population issues in the American popular press). Articles could only be searched by the theme because archivists manually cataloged each article using a few key words with which the articles could be searched. For example, using older methods, we would have only been able to search for articles that an archivist had catalogued as addressing fertility issues. As a result, we would only be able to analyse articles that take fertility as a central theme. In contrast, we used GBI to search the text of articles for any mention of low fertility. Importantly, this means that we were able to include in our analysis the many articles that mention low fertility as a secondary issue that is invoked in connection with other topics. We consider this a valuable step towards analysing population concerns because it offers a richer picture of how low fertility is discussed and understood in the popular debate. Thus, we analysed articles that took low fertility as a central theme, as well as articles that invoked low fertility as a secondary issue in relation to other central themes, like gender equity or economic change. In addition, we were not constrained by the potential inconsistencies of manual, keyword archiving. The trade off is that our full-text method was only available for 9 years of articles starting in 1993.

### 5.1. CODING AND “ORGANIZING THEMES”

We coded the articles using the coding sheet reproduced in the Appendix A. First, we collected standard identifiers and control variables: the article’s publisher, publication date, and word count. Next, we coded variables that we suspected would reveal variations in the debate over low fertility. These included the region that the article discussed: for example, a city in Germany, the European Union, or Germany as a nation. These also included the type of fertility measure reported, if any. And since, by journalistic standards, the most important information is reported in the lead of articles, we coded for the prominence of low fertility based on whether low fertility was mentioned in the lead or later in the article.

Finally, we coded for the theme of the article. After the fine-grained theme coding (see in Appendix A item VI), we noticed that some detailed themes were closely related to each other. Thus, we aggregated closely related themes into broader, cohesive categories or “organizing themes” (Appendix A item VII). We used these aggregated organizing themes for analysis.

We define an “organizing theme” as the main topic of an article to which other issues refer. The organizing theme answers the question “What is this article about?”. The organizing theme is apparent by looking at the way that the article is framed; that is, what the article is set-up to discuss in its title, subtitle, or lead. Since the organizing theme is one topic, to which all other concepts and arguments in the article relate, each article was assigned *one* organizing theme. All of the articles in our dataset mention the *concept* of “low fertility.” However, articles that mention the *concept* “low fertility” can have different *organizing themes*, such as “the economy” or “culture”. Nonetheless, some articles were organized solely around low fertility as a concern in and of itself.

We generated six distinctive organizing themes: low fertility and population decline; aging and immigration; policy; economy; culture; and, other articles. Articles organized around “low fertility and population decline” mentioned the concept of low fertility in reference to the declining number of births or to the declining absolute size of a population. Articles with this organizing theme were paradigmatic articles on low fertility – the ones that our analysis would have been limited to had we not been able to conduct a full-text search. An example of the “low fertility and population decline” organizing theme is an article that appeared in *Der Spiegel* on April 9, 2001 entitled “How fertile is the fatherland?. In Europe, the birth rate is decreasing, but at varying speeds”. The article begins: “Is this what the death of a people looks like? The German birthrate appears to be decreasing unstopably. In 1900, for every 1000 people, 36 children were born. But by the end of the century, there were only 9 children born per 1000 people.”

Other articles, organized around the theme of “aging and immigration” were similarly concerned with demographics. However, these articles only mentioned low fertility in its relation to the changing age structure of a population or in its relation to migrant populations. This organizing theme is exemplified in an August 29, 1994 *Focus* article called “Foreigners: The big silence”; a July 4, 1994 article in *Spiegel* called “The former East Germans: Migration to the west; An alarming exodus”; and an August 30, 1993 *Spiegel* article titled “Republic of the Aging.” In these articles, low fertility is invoked, but only secondarily to migration and aging, which are their primary concerns. Importantly, these articles do not centre on proposed or enacted policy change.

Distinct from these articles were others that did centre explicitly on “policy”. Often times, articles did not tie substantive concerns to policy change, but when articles did make this move towards being policy-centric,

we classified them as “policy” pieces. For example, “Pressure from the collapse of the east [*Wende*]: Low fertility forces pension reform” appeared in *Der Spiegel* on August 30, 1999. The article mentions low fertility only to explain the need for pension reform, focusing not on fertility but on how “The impending burden of pension payments scares both voters and policy makers.” In addition to discussing various types of pension reform, policy articles typically addressed public childcare and schooling, family policies, the positions of political figures, and less frequently, the military. Low fertility was mentioned only as it related to these topics.

The fourth organizing theme is “the economy.” These articles discussed economic conditions especially regarding real estate, the labour force, unemployment, and trade. One article appearing on April 25, 2001 in *SZ*, for example, reported on the nature of the economic upturn in a western German city: “ ‘Bytes and bratwursts’ – this slogan fits the image of Nuremberg better than the slogan that [Bavarian premier] Edmund Stoiber coined: ‘laptop and lederhose’ ”. In the end, the article cautions that people should be wary of the economic boom because of the implications of continued low fertility and a stagnating population size.

Articles organized around the theme of “culture” discussed attitudes and values – often changing attitudes and values – towards gender roles, the family, and religion. An article that appeared in the August 21, 1996 edition of *FAZ* offers a good example of an article with a cultural organizing theme. Entitled “The East German superwoman: A look at the life of women in the DDR,” the article drew on a recent book to discuss how East German women had combined work and family – addressing both the myth of the heroic woman and the reality of eastern family policies. The article concludes by contrasting contemporary eastern and western attitudes: “In reunited Germany, women who grew up and had careers in the DDR meet western German women who had quite different possibilities for combining work and family. Their perceptions of each other could not be in starker contrast.”

Finally, some articles did not fit clearly into any organizing themes and had few articles like it. We categorized these articles as “other”. Such articles mentioned low fertility in describing a place (e.g. a visit to Japan), discussing the environment (e.g. whether population decline is good for the environment), highlighting health issues (e.g. consequences of abortion or infertility), or reporting current events (e.g. the anniversary of a research institute).

## **6. The debate over low fertility in the German popular press**

The distributions of articles used for this study are displayed in Tables 1 and 2. There was a marked increase in the number of articles mentioning low fertility in 2000 and 2001, and 36% of all articles mentioning low fertility in

Table 1. Number of articles and words by year

Year	Articles		Words per article
	<i>N</i>	%	
2001	57	17	784
2000	63	19	912
1999	36	11	1241
1998	23	7	642
1997	20	6	775
1996	36	11	1055
1995	31	9	940
1994	33	10	979
1993	29	9	1040
Total	328	100	935

Table 2. Number of articles by press

Year	<i>FAZ</i>		<i>SZ</i>		<i>Focus</i>		<i>Spiegel</i>		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
2001	36	63	11	19	5	9	5	9	57	100
2000	31	49	26	41	5	8	1	2	63	100
1999	21	58	11	31	1	3	3	8	36	100
1998	8	35	15	65	0	0	0	0	23	100
1997	12	60	6	30	0	0	2	10	20	100
1996	17	47	11	31	2	6	6	17	36	100
1995	16	52	10	32	3	10	2	6	31	100
1994	21	64	1	3	8	24	3	9	33	100
1993	19	66	0	0	4	14	6	21	29	100
Total	181	55	91	28	28	9	28	9	328	100

our database appeared in the most recent 2-year interval. Balancing the larger number of articles, however, is a decrease in the average length of articles in more recent years.

It is to be expected that, consistently over time, around 80% of the articles are published in *FAZ* and *SZ*. These newspapers are published daily and tend to have a shorter article format (on average 805 words per article) as compared to articles in the news weeklies *Focus* and *Spiegel* (on average 1568 words per article). Of the two newspapers, for every year except 1998, *FAZ* published the largest number of articles mentioning low fertility.

### 6.1. ORGANIZING THEMES AND THE DEBATE OVER LOW FERTILITY

A key contribution of this research is to analyse whether and how the popular debate over low fertility emerges around issues that do not fall under the rubric of fertility concerns, strictly speaking. That is, we are interested in whether low fertility is not always a concern in and of itself, but also a tool used to argue about other concerns. In fact, our analysis shows that low fertility was most often mentioned in articles *not* organized around low fertility itself, but in articles addressing policy issues. Table 3 shows that the first year of this study (1993) is the only one in which low fertility is most frequently discussed as a concern in and of itself. In total and in most years, one third of the articles mentioning low fertility only did so as it related to the articles' central concern with policy issues. Overall, one quarter of the articles addressed low fertility as an issue in its own right.

The implications of low fertility for national and local culture are considered a primary concern in many countries (Stark and Kohler, 2002). However, cultural concerns – like changing attitudes towards family and traditional gender roles – received relatively little attention in Germany (8% overall). The reason for this may be that, unlike most countries, Germany's history of birth promotion through government policies makes the link between individual lifestyle preferences and collective fertility trends particularly tenuous.

In sum, the above analyses show that low fertility is most often discussed as it relates to other issues, not as an issue of concern or note in its own right. For instance, Figure 2, which is based on Table 3, shows the number of articles mentioning low fertility and the number of articles that have an explicit low fertility organizing theme. While attention to low fertility as a concern in and of itself has remained small and steady, use of low fertility as a tool to debate other issues, like the economy or policy, has markedly increased. That is, throughout the 1990s, low fertility was increasingly appropriated to discuss issues outside of fertility concerns themselves. This analysis shows that to understand the nature and extent of popular debate over population issues, and low fertility in particular, the full range of popular concerns must be considered.

### 6.2. CENTRALITY OF LOW FERTILITY TO DIFFERENT ORGANIZING ISSUES

While all of the articles in this study mentioned low fertility at some point, we are interested whether different types of articles mentioned low fertility in different ways. Of greatest interest is exploring the types of articles for which low fertility was a central concern, compared with articles for which low fertility was seen as less central.

Table 3. Distribution of articles by theme and year of publication

Issue	1993		1994		1995		1996		1997		1998		1999		2000		2001		All years	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low fertility	10	34	8	24	7	23	6	17	6	30	5	22	8	22	11	17	16	28	77	23
Aging and immigration	7	24	4	12	1	3	2	6	1	5	4	17	4	11	8	13	7	12	38	12
Policy	3	10	12	36	11	35	15	42	8	40	8	35	13	36	25	40	22	39	117	36
Economy	2	7	3	9	6	19	4	11	2	10	3	13	5	14	8	13	7	12	40	12
Culture	4	14	3	9	2	6	4	11	2	10	1	4	3	8	5	8	1	2	25	8
Other	3	10	3	9	4	13	5	14	1	5	2	9	3	8	6	10	4	7	31	9
Total	29	100	33	100	31	100	36	100	20	100	23	100	36	100	63	100	57	100	328	100



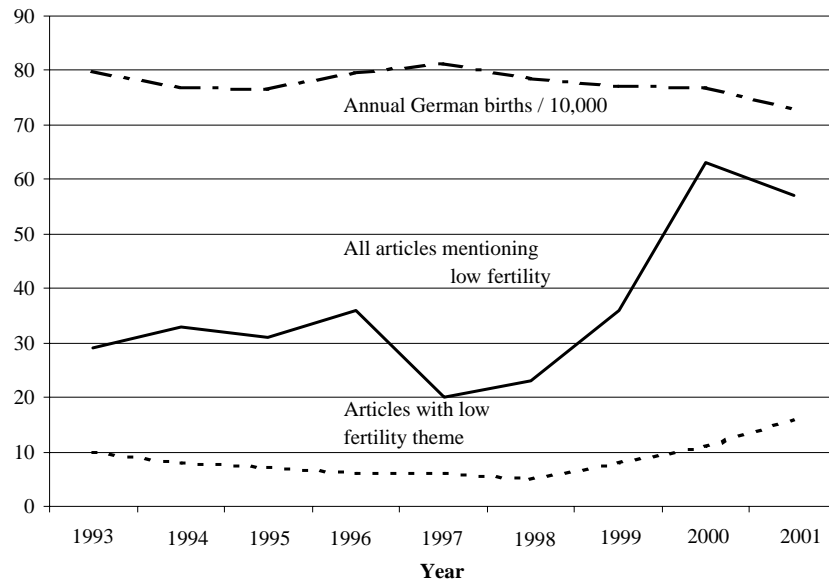


Figure 2. Total articles, articles with 'low fertility' organizing theme, and annual births. Source: Annual German births (Council of Europe 2002)

To explore this, we first analyse the instances in which articles appeared on the front page of the newspaper. (We exclude *Focus* and *Spiegel* here, because, as weekly newsmagazines, they do not have a front page.) Out of our 272 newspaper articles, 8% ( $n = 21$ ) appeared on the front page. Half of these front-page appearances occurred in just the last 2 years of this study. Since the number of articles that appear on the front page is small, further analysis is not appropriate. Still, it is worth noting that more than half of the articles mentioning low fertility on the front page were organized around policy concerns.

Second, and with the benefit of our full sample, we analysed which articles mention low fertility in the lead of the story. This indicator teases out qualitative differences in the importance of low fertility in an article. Since all of the articles that we analyse mention low fertility at some point – as the first words of a story or the last – we want to distinguish between articles that mention low fertility as an essential part of the issue at hand (thus earlier in the article) and articles that mention low fertility as peripheral to the organizing issue (thus later in the article).

The first paragraph, or “lead”, of an article has special importance among news journalists. In a chapter dedicated to teaching (English language) journalists how to write a lead, Fox (2001, p. 15) explains, “Given the number of items competing for attention in today’s presses, it is not hard to understand why the lead of a news story is so terribly important. In a matter

of seconds, a writer must convince readers to keep reading rather than skip to another story. That fact alone justifies what might seem to be excessive attention paid to constructing effective leads". In the lead, journalists highlight the central aspects of a story. In the subsequent paragraphs, journalists expand, explain, and evidence.

While most articles follow this format, not all do. Running stories and feature stories, for example, structure first paragraphs differently. Since not all articles include a standard news lead, we use articles with a low fertility organizing theme as a benchmark, and compare the appearance of low fertility in the lead of the remaining five organizing themes to the appearance of low fertility in the lead of articles organized around low fertility. That is, the concept of low fertility should most often be in the lead of articles with the low fertility organizing theme, net of article style, and we compare all other organizing themes to this benchmark. Indeed the vast majority of articles about low fertility did mention it in the lead (70%).

Overall, Table 4 shows that articles that refer to low fertility in the lead comprise 37% ( $n = 120$ ) of the articles we analysed. Moreover, there is a tendency towards an increasing centrality of low fertility over time: while only 36% of all our articles appeared during 2000 and 2001, 42.5% of all articles mentioning low fertility in the lead appeared during this period.

Importantly, not all of the articles mentioning low fertility as a central part of the story were organized around the theme of low fertility itself. Table 5 shows that one third of the articles addressing both economic concerns as well as policy concerns invoked low fertility in the all-important lead of the article. When we examined trends by both organizing theme and year, the policy organizing theme was the only one with an increasing proportion

Table 4. Articles mentioning low fertility in the lead by year

Year	Mention in lead	
	<i>N</i>	%
2001	23	40
2000	28	44
1999	14	39
1998	6	26
1997	9	45
1996	6	17
1995	12	39
1994	10	30
1993	12	41
All years	120	37

*Table 5.* Articles mentioning low fertility in the lead by theme

Issue	Mention in lead	
	<i>N</i>	%
Low fertility	54	70
Aging and immigration	7	18
Policy	37	32
Economy	15	38
Culture	4	16
Other	3	10
All issues	120	37

of articles mentioning low fertility in the lead. Hence, low fertility has emerged as a central theme of popular policy discussions in recent years, and throughout this period it has remained a strong presence in discussions about economic concerns.

### 6.3. FERTILITY MEASURES IN THE DEBATE OVER LOW FERTILITY

A substantial part of the professional debate over low fertility has centred on how to most appropriately measure fertility trends. The professional debate is partially fuelled by the hope that better measures of fertility trends will yield more informed popular debates. Yet the extent to which fertility measures – rather than assertions that low fertility exists – are used in popular debates had previously been unclear. Thus, in this section we ask which measures and to what extent measures are reported, given that popular discussion of fertility often diverges from professional discussion (Wilmoth and Ball, 1992; Stark and Kohler, 2002).

In the articles we analysed, the proportion reporting a fertility measure ranges between 15 and 48% over the years examined. Overall, approximately one third of all articles reported a fertility measure. When articles reported a fertility measure, the period-TFR was chosen only 48% of the time, and alternate measures, like the crude birth rate were chosen in the remaining instances. One could imagine that the professional debate over fertility measures actually would cause the popular press to report a measure other than the period-TFR. However, Table 6 shows that the period-TFR actually becomes a more common measure to report from 1998 onward.

Perhaps unsurprisingly, more than half of the articles organized around low fertility report a fertility measure. What is surprising, however, is that articles about cultural issues are more likely to report a fertility measure

Table 6. Articles reporting a fertility measure by year

Year	Report measure		Report TFR	
	<i>N</i>	%	<i>N</i>	%
2001	21	37	11	19
2000	14	22	6	10
1999	16	44	13	36
1998	6	26	3	13
1997	7	35	2	10
1996	8	22	6	17
1995	7	23	2	6
1994	5	15	0	0
1993	14	48	4	14
All years	98	30	47	14

Note: 'Report measure' is the proportion of articles reporting the TFR or any other fertility measure out of all articles analysed. 'Report TFR' is the proportion of articles reporting the period-TFR of all articles analysed.

Table 7. Articles reporting a fertility measure by issue

Issue	Report measure		Report TFR	
	<i>N</i>	%	<i>N</i>	%
Low fertility	44	57	22	29
Aging and immigration	11	29	7	18
Policy	22	19	10	9
Economy	8	20	1	3
Culture	9	36	6	24
Other	4	13	1	3
All issues	98	30	47	14

Note: 'Report measure' is the proportion of articles reporting the TFR or any other fertility measure out of all articles analysed. 'Report TFR' is the proportion of articles reporting the period-TFR of all articles analysed.

(36%) than articles on policy concerns (19%) or on the economy (20%) (see Table 7). It appears that the issue most distant from professional demography's focus on material issues is most likely to report a fertility measure

(aside from articles about low fertility itself). Most importantly, the proportion of articles reporting any fertility measure changed little over time. The increasing urgency of concerns related to low fertility may have balanced an increasingly taken-for-granted nature of low fertility during the 1990s.

#### 6.4. FROM NATIONS TO REGIONS

Low fertility is largely a domestic concern for countries (Stark and Kohler, 2002). Yet, it is unclear whether domestic concerns are fuelled by disparities within a country or by concerns for the country as a whole. This is a particularly salient question in the case of Germany, since fertility and immigration trends in eastern and western cities and states are divergent.

Consistent with our previous work, articles mentioning low fertility direct little attention outside of Germany. Yet when attention is focused internationally, concerns are directed at low fertility in other individual countries (12%) more often than at low fertility in super-national groups, like Europe or the European Union (4%).

While this confirms our findings that low fertility is largely a domestic concern, we are surprised that the bulk of articles (70%) centred on Germany as a whole. Since there are disparities in fertility trends between the former East Germany and the former West Germany (Figure 1), we expected the popular concern about low fertility in Germany to hinge on these internal debates. However, articles discussing concerns specific to eastern and western cities and states only comprised 14% of those mentioning low fertility. Of course, undetected by our study is the discussion of low fertility and its causes and implications in various local presses, and these discussions often feature the regional and local perspective. Nevertheless, in the leading national presses analysed in this paper, the focus on differential regional trends – including also the east–west divergence – are not featured prominently and overarching national discussions dominate.

Despite the small proportions of articles focusing within Germany, a trend may be emerging. While the proportion of articles centering on eastern Germany markedly decreased in recent years, the proportion of articles focusing on western Germany increased. This suggests that articles discussing the eastern German fertility “shock” following reunification dominated the early part of our period of study, but wore off over time (Table 8).

When we analysed the articles by organizing themes, the difference between eastern and western Germany persists. Across all organizing issues, articles mentioning low fertility focus on eastern Germany more often than western Germany. Perhaps this is a consequence of the more dramatic

Table 8. Regional focus of articles by year

Year	Europe/ EU		Germany		Eastern Germany		Western Germany		Other Region		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
2001	3	5	42	74	2	4	5	9	5	9	57	100
2000	2	3	48	76	6	10	2	3	5	8	63	100
1999	4	11	21	58	2	6	3	8	6	17	36	100
1998	1	4	15	65	0	0	2	9	5	22	23	100
1997	1	5	10	50	4	20	1	5	4	20	20	100
1996	1	3	26	72	3	8	2	6	4	11	36	100
1995	1	3	22	71	3	10	0	0	5	16	31	100
1994	0	0	23	70	6	18	0	0	4	12	33	100
1993	1	3	21	72	5	17	0	0	2	7	29	100
All years	14	4	228	70	31	9	15	5	40	12	328	100

*changes* in fertility level during the last decade. In contrast, articles organized around cultural issues (84%) centre on Germany as a whole, in a greater proportion than articles organized around policy (77%) or the economy (75%) (Table 9). This may be partly an artifact of a small number of articles organized around culture. Or this may indicate a tendency for articles on policy and the economy to centre also on local concerns of states and cities, while cultural issues eschew local debates.

Table 9. Regional focus of articles by issue

Issue	Europe/ EU		Germany		Eastern Germany		Western Germany		Other Region		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Low fertility	6	8	44	57	8	10	4	5	15	19	77	100
Aging and immigration	4	11	27	71	2	5	1	3	4	11	38	100
Policy	0	0	90	77	13	11	6	5	8	7	117	100
Economy	1	3	30	75	4	10	3	8	2	5	40	100
Culture	1	4	21	84	0	0	0	0	3	12	25	100
Other	2	6	16	52	4	13	1	3	8	26	31	100
All issues	14	4	228	70	31	9	15	5	40	12	328	100

## **7. Discussion and conclusion: Arguments and evidence of low fertility in popular debate**

In recent years, the population debate has shifted from concerns over too many people to concerns of too few (Stark and Kohler, 2002; Morgan, 2003). At the same time, our analysis of the low fertility debate in the popular press in Germany reveals a paradox: there has been little popular discussion of low fertility in and of itself over the past decade, despite the fact that fertility rates have persisted below replacement levels and governmental discussions of low fertility have increased. Though eastern Germany has recovered somewhat from “shock” fertility rates reaching their lows in 1994, eastern Germany has not yet reached the level of the west, which is itself well below replacement with a period-TFR of 1.41 in 2000. The number of births has also remained far below replacement level, and demographers do not expect the German fertility levels to rebound in the near to medium-term future (Council of Europe, 2000; Höhn, 2000). At the same time, attention to low fertility in the German parliament (the Bundestag) has increased through the 1990s. The archives of the Bundestag, for instance, show that, through the 1990s, attention to problems stemming from low fertility has increased – both in terms of policies legislated and requests heard. In addition, increasing governmental attention to problems stemming from low fertility is evident in three reports filed by special commissions created by the Bundestag: one report on demographic change filed in 1996, one on immigration filed in 2001, and most recently, a report on the pension system filed in 2003. Given the synergy between the popular press and policy concerns, we would expect popular discussion of low fertility to mirror political debate. It seems counterintuitive that both with actual fertility levels declining and with government discussion of fertility increasing, popular concern over low fertility has not also developed through the 1990s.

What has our analysis revealed about the paradox of the low fertility debate? While popular attention to low fertility as a concern in its right has remained small, low fertility has increasingly been used as a tool to debate other issues, like the economy or policy (Figure 2). That is, it may be less appropriate to think of low fertility as a problem on the collective minds of citizens and voters, and more appropriate to think of low fertility as a tool – a tool used to mobilize concern or give rationale for other problems. Because of this trend, our analysis suggests that the full range of popular concerns must be considered in order to understand the nature and extent of popular debate over population issues, and low fertility in particular.

Traditional search techniques focusing on title and keywords would have been unlikely to detect this pattern; the ability to conduct full text searches and to detect the reference to low fertility as an important secondary theme in discussion about policies, economic matters, culture and aging, was essential in recognizing this growing presence of low fertility in the popular debate. It

is only with the benefit of more advanced search techniques that we found that most news articles addressing low fertility do not centre on low fertility itself. Rather, low fertility is mentioned as it relates to other issues, most notably policy initiatives and economic concerns.

The types of issues debated popularly are parallel to professional concerns. Professional attention to low fertility has largely focused on material issues, like social security, health care, and child subsidies. Similarly, the popular debate in Germany remains remarkably focused on material issues, eschewing debates that link alarm over cultural change to low fertility. By admission of journalists writing the articles we analysed, this may be an artifact of Germany's political history. As a result, this lack of attention to cultural concerns may be dependent on the Germany context.

With the potentially German-specific exception of cultural concerns, our study finds that low fertility is not only drawn on peripherally to discuss a variety of issues; low fertility is discussed as a quite central part of some of these issues. Articles about policy and economic concerns often invoked low fertility prominently in the lead of the article. Again, based on our findings, it may be better to characterize low fertility as a tool used to debate other issues, rather than a self-sustaining concern itself.

In addition, we confirmed professional assumptions that fertility measurements are important in popular debate. In fact, we found that one third of the articles report some fertility measure, and half of those report the period-TFR, a problematic measure in the eyes of professional demographers, but one that is regarded as intuitive to non-specialists and is also routinely calculated for popular consumption.

Finally, our analyses give reason to stay attentive to popular debates. Some important trends may be just emerging in recent years. Namely, while the period-TFR has not been widely reported over the past decade in sum, as previously mentioned, the period-TFR is emerging as the measure of choice in recent years. Another potential trend involves attention to fertility debates centering on eastern and western Germany. While low fertility is largely a domestic concern, not an international concern, for most countries (Stark and Kohler, 2002), the nuance of domestic debate is worth noting. In Germany, the debate over low fertility still centres on the country as a whole, but concerns specific to western Germany are growing more frequent, as the demographic shocks felt in eastern Germany after reunification fade. With an eye to these emerging trends in the quality and focus of the low fertility debate and a conceptualization of low fertility as a tool rather than a self-supporting concern, the popular debate can be better understood, better informed, and better used as a foundation of appropriate policy initiatives.



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### Notes

<sup>1</sup> In the north eastern state of Mecklenburg-Vorpommern, for instance, the Ministry of Education, Science and Culture projects that the number of pupils in 2007–2008 will be 137,000, which is a 54% decline from the peak in 1994–1995 of 298,000 pupils. In addition, the number of elementary schools in Mecklenburg-Vorpommern has declined by 27% between 1991 and 2000 (Daubenmerkl, 2001).

<sup>2</sup> We excluded from our analysis articles that mentioned demographic concerns, but did not specifically mention low fertility. For example, our search hit many articles mentioning the search term “demographic change,” but a large proportion of these did not mention low fertility. Often times, the articles that we did include mentioned low fertility without using the standard buzz words, as in “the fertility of Germany may continue to spiral downward.”

### Appendix A

#### Coding Sheet: **The Popular Debate about Low Fertility**

I. Press (In what press is the article published?):

Press scale (1 = FAZ, 2 = SZ, 3 = Focus, 4 = Spiegel)

II. Year (In what year is the article first published?):

Year scale (1 = 1993 : 9 = 2001)

III. Number of words

IV. Page (On what page does the article start?):

A. page 1

B. page 2 through 15

C. pages 16 and over

V. Country or region (What geographic area is the article mainly about?):

A. Austria

B. Balkans

C. China

D. EU/Europe

E. France

F. Germany

G. German city, state, or region

a. Bayern

b. Berlin/Potsdam/Brandenburg

c. Eastern Germany

d. Frankfurt

e. Karlsruhe

f. Köln

- g. Marzling
  - h. Nürnberg
  - H. Hungary
  - I. Italy
  - J. Japan
  - K. Russia
  - L. Spain
  - M. Sweden
  - N. Switzerland
  - O. USA
  - P. World
- VI. Organizing theme:
- A. Immigration/Migration/Asylum
  - B. Real estate market (homes and business, renting and owning)
  - C. Population (low fertility and population decline in low fertility context, not high fertility)
  - D. Labour force: unemployment, worker shortages, job initiative
  - E. Schools and schooling: students, teachers, college, technical school, high school, kindergarten
  - F. Family policies (esp. Kindergeld, Erziehungsgeld)
  - G. Social security (Pension (or Pensionsreform); Pflegeversicherung; Krankenversicherung)
  - H. Abortion and the Pill
  - I. Aging population and age structure
  - J. Economy and trade
  - K. Changing values of women/men/parents/youth
  - L. Current events
  - M. Change in family structure
  - N. Election or political party/figure
  - O. Military
  - P. Ecological environment
  - Q. The Church
  - R. Health: epidemiology, infertility, etc.
  - S. "Place" feature
- VII. Aggregated organizing theme:
- A. Low fertility and population decline (C in section VI)
  - B. Immigration and Aging (A and I in section VI)
  - C. Policy (E, F, G, N, and O in section VI)
  - D. Economy (B, D, and J in section VI)
  - E. Culture (K, M, and Q in section VI)
  - F. Other (H, L, P, R, and S in section VI)
- VIII. Prominence of low fertility:
- A. Low fertility mention in title or lead
  - B. Measurement included
  - C. Both A and B
- IX. Measurement used:
- A. TFR
  - B. N births
  - C. GFR
  - D. Proportion childless
  - E. Percent decrease in birth rate

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