Allegiance and Alliance: Low fertility in the long shadow of WWII

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Introduction

Viewing comparative fertility trends in developed countries through a prism of World War II (WWII) alliances, an odd pattern emerges. From the 1940s until 1965, as shown in Figure 1, Total Fertility Rates (TFRs) of the major Allied and Axis powers are indistinguishable and the trajectories show no coherent pattern. Over the decade 1965-75, there is a general synchronization—fertility falling in countries of the former Axis and Allies alike. But then, two distinctive paths emerge: fertility in the former Axis powers falls almost monotonically from 1975 onward; in the former Allies, by contrast, fertility is largely flat, or even increasing. By the period 1985-90, there is no overlap between the two groups, and by the period 2005-10, the difference has become dramatic: in all three members of the Tripartite Pact (Germany, Japan, Italy), TFRs are between 1.2 and 1.4; the former Western allies (France, UK, USA), by contrast, have TFRs between 1.8 and 2.1.

Figure 1 about here

This paper argues that the emerging association between wartime alliances and contemporary fertility is not a product of chance. The experience of victory or defeat half a century ago has influenced subsequent fertility through two distinct mechanisms. The first, operating on the macro-level, addresses the ways in which Axis powers' defeat circumscribed the range of family policy available to those countries' post-war leaders, relative to their Allied counterparts. This effect on fertility through policy has been discussed at some length in the literature but, in our view, is not sufficient to explain the divergent post-1970s fertility trends. Our main theoretical and empirical focus in this paper is therefore on a second, micro-level mechanism. It describes how military victory and loss affected subsequent fertility by modifying the relationship between individuals and the state. Like the first mechanism, it shares an assumption that many of the economic and cultural factors most critical to fertility have deep political roots, and that childbearing, like all forms of social action, turns on allegiances and alliances that both reflect and reproduce older cultural patterns salient to family formation. Underlying this paper, in other words, is a more general theoretical claim that to understand contemporary low fertility, we need to attend to politics in general, and to political history in particular.

The paper has five main sections. We first describe the main hypothesized relationship between WWII and fertility: differential post-war constraints on family policy in old Allied and Axis powers. Next, we point to limits of this mechanism, arguing that it is necessary but insufficient to explain the emerging differences in fertility. Third, extending prior arguments about cultural "schemas," we develop our own idea linking victory and loss in WWII to fertility through a microlevel commitment to some extrafamilial identity. Fourth, we test these ideas empirically using data from the World Values Survey looking, parsing the fertility effects of gender differences in this commitment across older Allied and Axis powers, and parallel differences in confidence in different types of extrafamilial institutions. Empirical results are consistent with our argument, pointing to an important new avenue of research on fertility differences in low fertility countries including, potentially, pathways to their resolution.

Post-war constraints on policy

Variation in fertility levels across more developed, low fertility countries has been ascribed to several factors. These include: differences in access to contraception and abortion; differences in age at which a person leaves the natal home ("living with parents is a strong contraception"); different cultural expectations regarding how to raise a child; varying levels of labor market flexibility and public, financial support for fertility irrespective of a woman's marital status; differences in gender attitudes in general; and in the contribution of immigrants from high fertility countries (for reviews see: Chesnais 1996; McDonald 2000; Gauthier 2007; Boling 2008).

Most of these factors implicate "family policy," broadly understood as the laws that governments implement to both directly and indirectly affect the composition of families, as well as the support and care offered to different members of the family. In turn, several scholars have noted how WWII affected the kinds of family policy the respective governments could implement, and therefore the kinds of social- and family institutions that emerged in the decades following the war. The gist of the argument is that governments in the former Allies could pursue a wider range of policy alternatives than could governments in the former Axis countries. Constraints on the latter arose from the collective memory of interventionist, often coercive family policy under fascism. This began with Italy's "Battle for Births," a bid to increase Italy's population initiated in 1927 and involving the gradual imposition of restrictions on women's non-familial roles, and the redefinition of contraception, abortion and bachelorhood (defined as "desertion of paternity") as crimes against the Italian nation (Horn 1994). But it reached its apogee in Germany, where Hitler declared fertility the "battlefield of women," and set out to limit women's roles to "marriage and motherhood." Within a year of coming to power, Nazi legislation had severely circumscribed women's professional opportunities, prohibiting them from practicing as physicians, lawyers, and school principals, limiting their university enrollment to 10% of incoming classes, and compelling those lucky few to spend six months in labor camps prior to university where they would learned how to cook, sew and take care of children (Norwood 2009: 115). Later, following a French model instituted in 1920 (the *Médaille d'honneur de la famille française*, still around, though now without the "of honor"), Nazi policy instituted bronze, silver and gold medals for reaching specific fertility goals—for four, six and eight children, respectively.[1] More generally, Chesnais argues that "Nazi Germany, Fascist Italy, Franquiste Spain,… each involved the collectivization of children and an absence of respect for the free choice of individuals, especially of women, in demographic as in other matters." As a result, there emerged in post-fascist Europe the "widest consensus…that choices concerning family formation and fertility are private matters, hence the state must abstain from trying to influence them" (1996:734). Having so crudely attempted to police families and fertility with an array of "social technologies," post-fascist authorities were forced to adopt a more laissez-faire approach.[2]

[1] Receiving the *Mutterehrenkreuz* in Germany was bureaucratically complicated and caught up in the intricacies of Nazi racial ideology and moral codes. In addition to having the required number of children, qualified mothers needed to demonstrate a pure German bloodline, no history of infidelity, miscegenation, abortion, mental illness or similar deviations from Nazi behavioral ideals.

[2] In contrast, anxiety about low fertility was also heard in non-Axis countries in the pre- and post-WWII period. Yet equivalent pronatalist policies enacted in those settings during the same

The effects of this new post-fascist consensus on family policy was felt in two ways. First, politicians in the former Axis powers could not directly advocate higher fertility in the name of the nation without associating themselves with a fascist past. So whereas former Australian Treasurer Peter Costello could quip "One for mum; one for dad; one for country"[3], encouraging Australians to have more children, no mainstream German or Italian politician could take such a position. This is not to imply that all Australians—or even most—find Costello's call to procreate compelling. Many may find it laughable, or laudable but implausible. What matters is that they find it neither profoundly offensive nor grounds to exclude him from public life. In a country without a fascist past, you can equate childbearing with virtuous action on behalf of the nation without offence.

A similar phenomenon can be found in Asia. The South Korean government has instituted a monthly evening when they turn off office lights for "family day." Singapore has a social marketing campaign to raise fertility coordinated with the candy maker Mentos.[4] But Japan has no similar policy. Like their counterparts in Europe, Japanese politicians appear constrained by the mid-century echoes of any pronatalist publicity campaigns.

The second effect of the new post-fascist consensus on family policy is that politicians in the former Axis states have also been limited in the degree to which they can institute pronatalist policies that *circumvent* the nuclear family, such as by providing cash assistance to single parents or intervening directly on behalf of children. Instead, politicians must give greater regard to the dominion of the nuclear family. In West Germany, this stance was formalized in the 1949 Grundgesetz, of which Article six begins, "Marriage and the family shall enjoy the special protection of the state." This is often interpreted to mean that state interventions that could weaken "traditional" marriage, such as the kinds of dual-parenting projects commonly pursued today in Scandinavian countries, violate the Grundgesetz. Indeed, "Nazi practice provoked a backlash against state intervention in the family and social experiments of any kind" (Harsch 1993:31). Japan's family law similarly assumed married, nuclear families as the basis of social organization, and children born outside of marriage receive half the inheritance share of their siblings born within marriage.

The tension between a state's moral claims over its members and the dominion of a nuclear family can also be seen in differences in childcare for young children. Whereas in France, universal state-provided childcare is a natural step in the early formation of French *citoyens*—indeed, demographer Gilles Pison (quoted in Willard 2006) claims that sending children to childcare is encouraged "because it teaches them to be sociable" — such an approach is politically complicated, if not outright unfeasible, in Germany, Italy, and Japan.

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period—examples include France's 1939 "code de la famille" that offered financial incentives for motherhood, and the Soviet Union's Order of Maternal Glory and Mother Heroine medals (from 1944)—were not discontinued after the war.

[3] See, for example, http://www.heraldsun.com.au/news/peter-costello-is-still-kidding-around/story-e6frf7jo-1225824495082)

[4] Korea and Singapore examples are taken from http://mentalfloss.com/article/33485/5-creative-ways-countries-tried-their-birth-rates.

Conjunctures: Hunkering down and opening up

These WWII-tied constraints on policy formation—limiting politicians' ability to directly exhort families to higher fertility in Axis countries, or to undercut more traditional family formation patterns—appear to have come into play most dramatically in two historical conjunctures: immediately following the war, and then during the international economic crisis of the 1970s.

The end of the war meant radically different things for winners and losers, perhaps most clearly seen in the contrast between the United States and Germany. In 1945, Americans veterans returned to tickertape parades, new suburbs, and growing wages. Nationalism and optimism about the future were linked, and both were high. Continued territorial integrity, no damage to infrastructure, and a stable, functional government made the transition to peacetime seamless. Although the civilian population had faced rationing during the war, it was never on the scale seen in Europe, and the rations were lifted in 1946. The New York Times Headlines on May 8 were jubilant: "The War in Europe is Ended! Surrender Is Unconditional; V-E Will Be Proclaimed Today; Our Troops on Okinawa Gain." The emotional tenor of the time was buoyant: our boys had defeated the greatest evil humanity had ever known, and now they had come home to our own greatest country.

By contrast, Germany at the end of the war faced massive reconstruction projects, not only of tangible infrastructure destroyed during the war, but also of a sense of nationhood and of the future. Many civilians were brought to witness the inconceivable cruelties that the Third Reich had executed, either intimately through mandatory tours of the liberated concentration and extermination camps, or more remotely through the graphic photographs and descriptions that were circulated as part of the Allied denazification programs. In the US, these gruesome images reinforced the moral rightness of the war; in Germany, these same images forced people to rethink who they were and what they, as a nation, had done. Borders, too, were unstable. Following the surrender, not only were all territorial gains after 1938 reversed, but eastern lands that had been part of the Kingdom of Prussia prior to 1918 were annexed to Poland and the Soviet Union, resulting in the expulsion of some 6 to 10 million ethnic Germans. What remained of the country was divided into four allied occupation zones. Life in all of the zones was difficult for some time after the war. War rationing of food was not lifted quickly, as food was not available. Estimates of food consumption for Germans in the American zone in 1946, for example, vary from just 700 to 1200 kcal per day. Germans lived without a government of their own until 1949, when the Federal Republic of Germany was established in the western tripartite zone and the German Democratic Republic in the eastern zone occupied by the Soviets. It is important to note that the FRG was established without a constitution. The Grundgesetz (or 'basic law') of the FRG was intended as a temporary legal document to serve the needs of the provisional West Germany, until it could be reunified with East Germany. That reunification did not occur until 1990, by which time Germany and France had in some ways moved beyond mere statehood, become instrumental players pushing western European states toward a new continent-wide political union. But even without that new emerging layer of supra-national identity, until reunification and the establishment of a constitution (*Verfassung)*, there was a very real sense in which Germans were still living in the aftermath of the war.

Both in the United States and Germany, women's work had been essential to the war effort. In both countries, women had staffed the factories, farms, and ministries that maintained the home front. And in both countries, women left those paid positions after the war in large numbers to become housewives and mothers, supporting the nation in a different way. However, the emotional texture of this "retreat" into the domestic sphere was very different in the two contexts. For Americans, it came with the baby boom and rapidly growing suburbs. In Germany, the retreat was associated with the effort to recreate sense and meaning amidst extraordinary upheaval. The result was much less of a departure from the domestically-focused approaches of the preceding eras than is commonly thought. Rather, as Harsch (1993) describes, although some German women played a very public, active role in the immediate post-war period, they were oriented toward the restoration of the "traditional" family, which they saw as an oasis within the chaos of post-war society. Their critique of the Third Reich rested heavily on the state's intrusion into this sphere. The family, Harsch argues, was widely seen as the only pillar of society that stood firm, in contrast to the "diminished standing of the state" (1993:33). The "traditional" structure of the family was supported and retained as a central social institution in Germany after the war in part because it was the only one that retained any credibility after the Nazi atrocities—though not with everyone, as we shall argue below.

Similar dynamics applied in post-war Italy, although some scholars argue that the Catholic Church played a much more important role there (see especially Bernini 2008:307). Article 29 of the constitution of the reconstructed Italian state "recognizes the rights of the family as a natural society founded on matrimony," and guarantees "equality of the spouses within the limits laid down by law to guarantee the unity of the family." Recognizing the family as the basis of society was crucial in 1947, as the new state sought to differentiate itself from the recent fascist past and to legitimate itself as a moral institution. As a result, family policy in Italy was built from the beginning assuming a male breadwinner model: the family's "gendered and generational division of responsibility and labor" has been "the explicit partner of the Italian welfare state (Saraceno 1994:61) for over half a century. The state does provide some assistance to families, mostly in the form of income support. But receive support as "mothers and wives, rather than as citizens or workers." (Ibid: page 67-68).

The results of these differential constraints on family policy making in Allied and Axis powers were not obvious between 1945 and the mid-1970s. During this period, male wages were high, and both public and employer policies assumed male breadwinners and female stay-home-mothers. But the long shadow of WWII on family policy became clear after the global economic downturn of the 1970s. In the former Axis countries, where family-supporting policies remained relatively fixed in the male-breadwinner model, fertility continued to fall. In the former Allies, by contrast, fertility remained flat, or even started to rise, as alternative policies and institutions emerged that made work "family friendly" in a new way. As Rosenbluth (2007:4) argues, since about 1980, fertility has become positively associated with women's work; "fertility tends to be depressed where vested interests impede female access to the workforce, and higher where easy labor market accessibility and childcare support make it easier for women to balance family and career. Contrary to the possibility that women discouraged from the labor market will go home and have babies, women may instead expend more effort—forgoing children in the process—to get in the door, climb the promotion ladders, and struggle Even against glass ceilings."

This, then, is the major hypothesized effect in population studies of how WWII affected subsequent and contemporary fertility. Tied to a specific model of the family by their post-War constitutions, and limited by collective memory of a fascist past from pursuing certain other policy alternatives, politicians in the former Axis countries continued to foster policies that are today associated with extremely low fertility. Working full time as a mother was systematically discouraged, whether by targeting transfers to "families" rather than individuals, by fiscal policies (e.g., tax systems) which incentivized a single source of income for married couples, by the lack of robust public or otherwise affordable childcare, by pensions and "benefits" being tied to full-time continuous employment, or by long normative working hours. All of these combined with the gender-wage gap, gendered expectations of childcare (Boling 1998, 2008; Chesnais 1996; Grunow 2006) and, in Germany, Japan, and Italy, the fact that "public policy assumes—indeed insists—that households must carry the principal responsibility for their members' welfare" (Esping-Anderson 1999: 51). The result: after the global economic downturn of the 1970s fertility dipped in the former Axis countries.

The policy-making mechanism is real, but insufficient

We agree with the wide consensus in population studies that national family policies instituted since 1945 matter for fertility, but with two qualifications: that winning or losing the war mattered more for determining these differences in family policy than is usually acknowledged; and also that the effects of that family policy on fertility are more muted than is often claimed. More exactly, we argue that family policies since the war have affected fertility through a different pathway than is commonly assumed. It is not so much that the familist stance of the former Axis raises the costs of childbearing, or of combining childbearing with full-time work for women, according to a universally rational utility function. The costs of childbearing are highly sensitive to their social and political framing: making daycare free cannot influence childbearing if everyone agrees that it is immoral to use it. Rather, family policy matters because it a significant, visible, and *widely salient materialization of shared schemas* about families, gender, children, and the state. Thus, although policies may matter in terms of their direct material effects, especially over longer time frames, they also matter because they reflect how people think about childbearing in relation to the state. They are as much an ideological formation rooted in shared schemas as a concrete material and structural constraint.

Our argument that the policy-making mechanism is insufficient to explain differences between the Allies and the former Axis consists of four parts. First, national policy is only one part of the resource landscape in which couples make decisions about reproduction. German school children do typically go home to eat lunch, arguably making it more difficult for both parents to work full time; however, grandmothers, neighbors, or paid childcare workers can feed children lunch just as well as can a parent, as long as parents consider these alternatives acceptable. Indeed, a range of social institutions and market alternatives interact with state policy to accentuate or blunt its effects on fertility. Our own cross-tabulations of OECD data for the six target countries in this paper demonstrate that a number of factors that are supposed to affect fertility are not consistent with fertility differentials. Among the notable examples (see Appendix A): formal childcare in Germany and Japan is lower than in the UK and US, relative to average wage; the number of hours per week that children aged 0-2 spend in informal childcare is equivalent in Germany, UK and France (higher in Italy, much higher in US),

suggesting that looking to the much maligned German *ravensmutter* may make sense in trans-Atlantic comparisons, but it makes much less sense in the European context; total public spending on cash and services for families is more than twice as high in Germany as the US (though less than UK and France); the ratio of children-to-teachers lower in Axis countries (see Gauthier 2007 for a more systematic review of these and related parameters). Yet for all of these differences, the fact that fertility remains stubbornly higher in the US and UK than in Germany and Italy confirms that the state's direct effects on fertility through policy are limited. Family policy affects only one set of institutions relevant to childbearing and childrearing.[5]

Second, even if states alone really did set the material constraints within which potential parents made reproductive choices, a large corpus of scholarly work shows that material constraints explain only a fraction of fertility outcomes. At least since the Princeton project (see especially Coale and Watkins 1986), if not longer (for example, Lorimer 1970), it has been clear that local cultural logics at least mediate between economic factors and fertility. For example, everyone may agree that you should not have more children than you can afford while disagreeing very strongly as to what "affording" children means. As a result, state family policy may correspond to common cultural practices without being their cause. In Germany, Hank and Kreyenfeld (2003) observe no significant statistical effect of access to childcare on individual fertility. Comparing Germany and France, Salles, Rossier, and Brachet (2008:1059) argue that the "fertility-increasing effects of policies supporting the family-work balance are conditional on a cultural shift, i.e. on the acceptance of the idea that mothers can resume work without harming their children. Before this cultural change occurs, even the provision of generous childcare options will not change individuals' family and work decisions overnight."

A third explanation for the insufficiency of the policy-making mechanism is related to the relative power of intrinsic and extrinsic motivation. Attempting to influence fertility through increased cash transfers, child allowances, childcare facilities, and so on, targets extrinsic motivation since each seeks to either reduce (financial) costs associated with children or increase family (or mother's) income. The problem with this is that since the 1970s, it has been shown that extrinsic rewards—that is, material benefits and rewards—reduce individual motivation for certain types of altruistic activities. For example, Titmuss (1970) argued that payment for blood donations in Britain would "crowd out" the supply of donors (subsequently confirmed experimentally by Mellström and Johannesson 2008). Frey and Oberholzer-Gee (1997) showed how experimental participants were less likely to respond positively to a request to house a nuclear facility in their own community if they were offered compensation. Similar results are given in Deci (1971) and Kruglanski et al. (1971). The principal explanation of this pattern is that monetary payments reduce non-monetary gains that individuals receive from being altruistic (Frey and Oberholzer-Gee 1997; Moody 2008). To the extent that there is an altruistic element to fertility—we return to this below—pronatalist policies that are focused on material rewards are not likely to be effective. Indeed, this was Mussolini's

[5] This is not only a macro-phenomenon. A series of microlevel studies has shown quite different results across settings. For example, increasing access to day care has been related to marginal increases in fertility in Norway and Italy (Kravdal 1996; Del Boca 2002) but not Germany or Sweden (Hank and Kreyenfeld 2003; Andersson, Duvander and Hank 2004). But even in those studies that find effects, they tend to be relatively small, for example, a predicted 0.05 increase in cohort fertility for a 20% increase in childcare enrolment in Norway (Kravdal 1996).

lament 40 years prior to the European Fertility Project. A decade into his extensive set of pronatalist policies he openly admitted their failure (Horn 1994). One of the main reasons for his misfortune, in our view, was that he was pushing for extrinsic rewards just as local cultural logics were changing—as per the second part of our explanation—buffeted by new models of low fertility and high quality childrearing (Horn 1994; Krause 2005).

Fourth, we can make more progress if we think of national family policies as material instantiations of widely shared schemas about the family and its relation to the state. That is, very few policies have economic consequences on a scale that would move childbearing behavior independent of other factors. They matter, instead, as parts of a larger structure of *schemas* (beliefs, ideas, and values)—to which we return in greater detail below—and materials (tangible expressions of those schemas) pertaining to fertility. When the French state provides universal preschool, it does not only decrease the direct costs parents pay for children or increase women's ability to work during the years that they have preschool aged children. It also legitimates childcare for young children as an ethically acceptable option. And, where the state itself has the moral authority to shape the minds and wills of young *citoyens*, even circumventing the claims of parents on their own children, universal preschool becomes part of a moral exchange between parents and the state, with children as the currency.[6]

In summary, comparisons among our six target countries (and high fertility of small minorities in low fertility countries) highlight the limits of using a state's set of family policies to affect fertility. A mutually reinforcing combination of extra-familial schemas and intrinsic motivation for high fertility overpower other constraints on high fertility. In the case of densely clustered religious minorities, this is usually framed and justified in religious terms. The same cannot be said for the fertility differentials that emerged between the Allied and Axis powers in the 1970s. The latter suggests that there may be some equivalent extrafamilial source of higher fertility that is related to national experience and that extends beyond constraints on policy formation. It is to this, which we frame as a microlevel commitment to some extrafamilial identity, that we now turn.

Commitment to the nation as a fertility-related schema

Imagine prospective parents living in the shadow of WWII. Like others, they are in need of life-affirming identities. The central factor in the micro-level effect of victory or defeat on their fertility lies in the tension between Harsch's (1993:33) "diminished standing of the state" in the aftermath of total military evisceration and this need for a life enhancing narrative about the collective self.

[6] Similar claims can be made about high fertility groups within low-fertility settings. Ultraorthodox Jews provide a particularly useful example. Members of ultraorthodox communities have substantially elevated fertility relative to sociodemographic counterparts affiliated with other denominations, or who are religiously unaffiliated. These fertility levels are not the product of unspecified "cultural" differences or differences in women's labor force participation, levels of education or similar characteristics (El-Or 1994). Rather, they arise because here, too, children are a currency. Higher fertility is therefore a tangible expression of underlying schemas whose key focus is community survival, regeneration and growth (managed through distinct gender roles). The centrality of fertility in this schema also explains why it appears easier to increase fertility among the ultra-orthodox by augmenting material rewards than to reduce fertility by cutting those rewards (see Berman 2000).

The primary way in which this tension affects fertility is through an individual's motivation for having children. We suggest that commitment to some type of extra-familial unit can be treated as a fertility-related "schema" in the sense described by Johnson-Hanks et al' theory of conjunctural action (TCA) (2011:2), that is, a "largely underdetermined, and often taken-for-granted, way of perceiving and acting through which we make sense of the world and motivate our actions." In one application of TCA, Morgan and Kohler (2011) have distinguished "individual-first" schema—beliefs, ideas, and values that push personal fulfillment as an individual's primary normative goal—from "family-first" schema—in which an individual's primary goal is the generation and preservation of family relationships. An additional schema that indexes an affiliation with some extra-familial aggregate may augment our understanding of fertility if beliefs, ideas and values associated with that schema make an individual's primary goal *in some instance of fertility decision making* the preservation of that collective. For now we refer to that extra-familial schema as "nation-centered," embodying deep commitment to the state. However, since we can imagine parallel schema rooted in a meaningful ethno-religious association, or even meaningful affiliation with a corporation—consider, for example, the reported emotional attachment of Japanese "salarymen" to fellow workers and the corporation (Vogel 1971)—we empirically evaluate the fertility effects of some competing types of extra-familial identity later in the analysis.

The specific empirical expectation arising from this nation-centered schema is that we should expect to see a quite different relationship between commitment to the state and fertility in Axis and Allied powers, over and above any difference in reported commitment to the state itself. This relationship will stem directly from different post-war experiences. We return to the prospective parents living in the long shadow of WWII. Germans and Japanese born after the war grew up in states that were profoundly different from their pre- or early-WWII counterparts: occupied by foreign forces, physically divided (Germany), coerced into multi-party democracies with entrenched checks on sovereignty (e.g., no foreign deployments for West Germany and Japan) or into joining the Soviet bloc (East Germany), forced to pay reparations, and whose major cities were either destroyed by allied air power (Dresden, Berlin) or obliterated entirely (Hiroshima, Nagasaki). But beyond mere physical destruction, defeat and occupation, loss in the war comprehensively discredited the creeds that had animated German and Japanese totalitarianism—militarism, unequivocal racial ideologies, and strict hierarchies—and after so great an investment. The predictable result was a crisis of legitimacy in which the meaningfulness of the prior social order and its core values—Berger would refer to this as its *nomos*—was profoundly undermined in the eyes of most citizens.

We have already described how this crisis of legitimacy reoriented people away from national projects associated with the fascist era—in Germany's case, to revitalize the *Volksgemeinschaft*—toward more reliable, traditional institutions such as the family, and how, as policy makers set about reconstructing their societies, this affected family policy. This process was part and parcel of a more general reorientation and reeducation instituted throughout the post-war period. For example, young post-WWII Germans and Japanese were educated with completely different curricula. Instead of a highly gendered and race-obsessed curriculum (Germany), or gendered and autocratic imperial one (Japan), they were exposed to more liberal democratic models focused, in part, on the sins of their forefathers and the dangers of nationalism. This continues to this day. In

Germany, in particular, WWII appears centrally in the history curriculum in 10th, 11th, and 12th grades, inculcating young people with the view that their nation had acted in ways that were profoundly, deeply wrong. This continues beyond formal schooling since German culpability for the war and their behavior in it, remains vibrantly represented in the German media to this day. For example, in January 2011 *Der Speigel* ran a lengthy and largely descriptive review of a book about the role of German civilians in the massacre of Jews in death marches in the final months of the war. The text describes the perpetrators as both ordinary civilians and "merciless sadists."

Contrast this with post-war childhood and adolescence in the UK and US. Foreign forces never controlled domestic UK or US territory during the war. Even with the Cold War and, in the UK's case, post-WWII rationing and the loss of empire, the postwar experience in general was one of ideological continuity. The effort to win the war may have been painful and costly, but it ended in success, validating national political ideals and the sacrifices invested in them.[7]

Since national ideologies are one of the sources of life enhancing narratives, any nation-centered schema would feed off these different national experiences and, therefore, off the distinct alliances and allegiances from which they arose. This suggests that in addition to the somewhat tenuous link between family policy and fertility, the national reorientation seen in Axis countries in the post-War period not only affected family policy. Perhaps more important for actual fertility decision making, the crisis of legitimacy that followed defeat and national reeducation, reorientation and reconfiguration, sapped an important source of the national, emotional energy that drives many costly personal investments, fertility decisions and childrearing among them. No equivalent sapping of childrearing energy would have occurred in the victorious allies.

An equally important observation about fertility arises from this line of thought. If loss in war depresses fertility because of a perception that the state's unique character is less valuable and not worth preserving, then fertility can be treated as a type of "gifting" toward the state, and a child can be seen as currency used to negotiate moral exchanges between parents and the state. In other words, just as the Fatherland or Motherland[8] can be seen as having gifted its citizens a meaningful identity, and a physical and cultural home, those citizens might in turn root themselves in the state by gifting it children. But if a discredited state has little identity to give beyond defeat, then fertility can only draw

[7] Experiences in Italy and France stand somewhere between these two extremes, pointing to neither an absolute win nor loss. Although a founding Fascist state, Italy's fascism was softer, with less of the racial underpinning and more modest imperial ambitions than the German or Japanese variants, and with continued opposition to Nazi policies—Horn (1994), for example, documents how Italy's social planners emphasized population growth rather than population purity, the favored goal of eugenical planners in Germany (and the UK and US). Likewise, France: some French may have stood shoulder-to-shoulder with the Allies, and were certainly portrayed as such in the forging of post-WWII alliances and historiography. But France's actual struggle with Fascism and its underlying racial creeds includes extensive Vichy collaboration and, in the preceding two centuries, its history as one of the intellectual founts and hubs for modern racial ideology and activism (e.g., Leclerc, Gobineau, Drumont).

[8] These terms are used widely in European languages: Fatherland in Germanic languages; Motherland in most Romance languages. It is an open question whether they augment the relationship between national outcomes—victory or loss—and energies remaining for childrearing.

on personal and family energies, not on a nation-centered or equivalent extra-familial schema.[9]

Here lies the contrast with WWII's winners. In the US and UK, the demobilized troops who made up the "greatest generation" may have been no less traumatized by their combat experiences than their German and Japanese counterparts. But they returned victorious to a victorious society, not to a losing one (Germany, Japan) or to an ideologically divided one (Italy, France). In this sense it is no coincidence that this generation gave birth to the baby boomers—winning strengthened their national identity and the national schema that, in part, encourages the gift of a child and the effort devoted to raising it. For similar reasons, that same victorious generation transmitted the pride in nationhood and faith in the credibility of its institutions to their children more effectively than their counterparts in the Axis powers.[10]

Empirical tests

If this nation-centered schema exists then we should expect to see a quite different relationship between commitment to the state and fertility in Axis and Allied powers, over and above any difference in reported commitment to the state itself. In fact, this is the specific empirical question that we now address.

We use data from the World Values Survey (WVS), restricting our analyses to 63 districts or regions within the six countries—US, UK, France, Germany, Italy and Japan—where multiple rounds of the WVS were fielded (see list in Appendix B). Individual sample sizes in these regions vary across types of analysis described below.

As a first step we sought signs of differential identity across the six Allied and Axis countries. Here we used a question on a person's primary geographic affiliation. In the wave-4 survey instrument, respondents in all six countries were asked: "Which of

[9] Among the considerable anecdotal support for this effect are two related to Germany. First, on June 29, 1938, five years into his diary documenting the experience of living under Nazi rule, Victor Klemperer reports discussing the 34th anniversary of his marriage: "34 years—we could have a twelve-year-old grandson; we said to each other: Thank God, at least not that!" (Klemperer 1990:260). Second, and a more extreme example: in the 2012 documentary, *Hitler's Children*, Bettina Goering, grand niece of Hermann Goering, declares how "my brother and I had the sterilization done in order not to give life to other Goerings."

[10] We mentioned that there may be two ways in which tension between Harsch's (1993:33) "diminished standing of the state" in the aftermath of total military defeat and people's need for life enhancing myths might affect fertility. The secondary mechanism is biological. Briefly, the total defeat of core fascist regimes and the hypernationalist and racist ideologies associated with them—Germany and Japan in particular—may have triggered a longer term reduction in physical motivation and desire that was related to the state, at least relative to state-related fertility desires in Allied countries. This would occur through a reduction in dopamine production associated with state-related victory. Drugs that reduce dopamine activity (e.g. antipsychotics) have been shown to reduce motivation, reduce the ability to experience pleasure in general (anhedonia), and more specific to fertility, lower levels of estradiol and progesterone in women, and levels of testosterone and DHEA in men, alongside a host of related reductions in lab animals (loss of libido, sexual dysfunction, impotence) (Lambert et al 2003; Raji et al 2005). We imagine that these biological effects would magnify the emotional turmoil caused by defeat and, consequently, any distancing from pronatalist behavior.

these geographical groups would you say you belong to first of all?" They were then given the option of local, regional, national, continental (e.g., European), or the world. We lumped the first two of these into a "subnational" category, and the last two into a "supranational" category, yielding a 3-category variable. Figure 2 graphs the frequency of responses across the six countries.

Figure 2 about here

There are quite distinct patterns. The percentage of respondents claiming "national" as a primary geographic affiliation ranged from 27-35% in Allied countries, and 12-24% in Axis countries. Most of this difference is reflected in the much higher percentage of German and Japanese respondents, in particular, claiming a subnational identity as their primary one, relative to their counterparts in all three allied countries.

The lower appeal of national identity in older Axis powers is consistent with our description of the diminished credibility of the Axis states. This begs a range of questions about the relative effectiveness of a national or nationalist pronatalist policy across countries where there is substantial cross-national variation in affiliation to the state? But our main focus here, as noted, is to evaluate whether commitment to some larger entity like a state—along the lines of the extra-familial schema referred to earlier—helps states in order to avoid lowest low fertility.

We set out to answer these questions by constructing a measure of a person's commitment to a state out of four variables: their general pride in their nationality, willingness to fight for their country, and level of confidence in the armed forces and police, those two state-institutions whose credibility would be most damaged by loss in war. Not surprisingly, across all individuals in these six countries there are strong correlations between these four items (0.29-0.43). In addition, as seen in Table 1, the distribution breaks down in expected ways: it is highest for the central allied powers, US and UK, lowest for Germany and Japan, and intermediate for France and Italy.

Table 1 about here

Our central explanatory variable is a combination of these four measures—pride in nationality, willingness to fight for one's country, and confidence in the state's armed forces and police. That is, we combined them into a single factor that we refer to as commitment to the state (eigenvalue=1.61; factor loadings were respectively 0.76, 0.69 and 0.75, the last for a combined measure of confidence in armed forces and police). For ease of interpretation we recoded this factor into quartiles.

Two series of models were specified, each comprising two sets. In the first series, which we discuss in greater detail, the dependent variable is *number of children ever born*. In the second series, the dependent variable is the *ideal number of children*.

All models include individual-level controls for age, education, gender, marital status and religiosity. Core explanatory variables are: a dummy for whether the country was associated with the Allies (US, UK and France) or not (Germany, Japan, Italy); the single factor indexing commitment to the state; and an interaction between these two variables. In all models, standard errors are adjusted for clustering at the regional level.

To sidestep the problematic temporal order of looking at the effects of current commitment to the state on actual or ideal number of children, we place two constraints on our main models. First, we restrict the analysis of children ever born to wave-4

respondents (surveyed 1999-2004) aged less than 30. Second, we specify our measure of commitment to the state as the regional average measured in a WVS wave fielded at least 10 years before (i.e., wave 2 WVS). Together, these restrictions allow us to identify the regional average level of commitment to the state when those respondents were in their childhood or teens. Since these are MDC settings, this precedes fertility decisions for all but a small minority of men and women. Sample sizes in this more restrictive subsample are 1,443 individuals living in 63 regions.

In addition to these core models, we also specified two sets of parallel models. The first relaxed the age restriction, looking at number of children for wave-4 respondents aged 30-39. In this case, measures of commitment to the state are the regional average from these respondents' 20s, with a sample size of 1,618. The second set of models looks at the relationship in the cross-section, substituting a regional average of commitment for the lagged indicator, in line with the idea that commitment to the state is a relatively stable element in the cultural ether. In these models, sample sizes are 4,000 (up to age 30) and 3,894 (ages 30-39) women and men.

Beyond these baseline results, we extended the core models to look at gender differences in the effects of commitment to the state. The key question here is: does this level of commitment affect men and women's actual or desired fertility differently? It would if, for example, the fertility of men, who are stereotypically depicted as being drawn toward more formal and coercive spheres of politics—"boys and their toys" (Yuval-Davis 1997:113)—was more sensitive to fluctuations in military outcomes than that of women.

A final series of analyses digs back into the four component measure. As described, it includes both national pride and willingness to fight and confidence in state's coercive institutions. This final series looks at the fertility effects of confidence in other types of extrafamilial institutions, both state- and non-state related. Our goal here is both conceptual clarification and as a type of sensitivity analysis for core series of models.

Baseline results

Discrete results by age-group are presented in columns (1) and (2) of Table 2. We see positive effects on number of children of being married (or divorced) relative to never married, being female, and negative effects of education. Across the two age groups, these effects tend to be stronger for those in their 30s. In addition, the positive and significant effect of religiosity on fertility can only be seen among individuals in their 30s.

Table 2 about here

The dummy for Allies shows its expected effect. Net of controls, respondents in Allied countries had 0.3 and 0.5 more children than their counterparts in Axis countries. Given the differences in national fertility levels discussed above, this predicted difference has good face validity. More intriguing is the effect of commitment to the state and the interaction between commitment and being in an Allied country. That effect is negative for the Axis countries—the reference group in variable 'Allied'—but positive for Allied countries. In both cases, the effect is statistically significant. In other words, over and above the expected positive effect on actual fertility of living in an Allied country, the

positive fertility effects of commitment to, and pride in, the state and its security forces can *only be seen in Allied countries*. In older Axis powers the same effect is negative and significant.

Columns (3) and (4) in Table 2 show parallel results for models of *ideal* number of children. We briefly summarize the effects here. Across the four dimensions of confidence, predicted number of children varied between 2.31-2.41 in Axis countries, and 2.49-2.54 in Allied countries. Across all four quartiles of commitment to the state, the average difference in ideal number of children between Allied and Axis countries never exceeds 0.2 children.[11]

Two observations arise from these results. First, loss in WWII appears to have lowered actual fertility a lot more dramatically than desired fertility. Second, and related, since the Allied versus Axis differences in ideal fertility are much smaller than the differences in actual fertility, even in the under 30 age group (whose members are many years away from completing their fertility), these results suggest that these schema push people toward achieving their fertility goals, but only in Allied countries. In Axis countries, they have no observable effect.

Women and men

To compare how these effects impact women and men, an additional series of models run on the main wave-4 sample look at the effects on actual fertility and ideal number of children of interactions between allied versus axis history, commitment to the state (as measured in prior rounds), and respondent's sex, net of controls in Table 2. Cumulative effects are summarized in Figure 3. Panels (a) and (b) graph the predicted number of actual children ever born and ideal number of children by commitment to the state (disaggregated into quartiles) for men and women under 30. Panels (c) and (d) present equivalent estimates for men and women aged 30-39.

Figure 3 about here

Results show that the effects of commitment to the state on actual fertility vary by allied versus axis history *and* sex. In the under-30 subsample in Axis countries, actual fertility is flat then declines at the highest levels of commitment to the state, for both women and men. In Allied countries, in contrast, it is relatively flat for women but rises linearly for men—implying a greater effect of these security-related schemas on men's than women's fertility decisions. The result is that at the highest level of commitment to the state, men and women aged less than 30 who live in an Allied country have at least half-a-child more than their counterparts in Axis countries, irrespective of sex.

[11] In substantive terms, almost identical effects across core variables of interest are found when we substitute a cross-sectional regional average of commitment to the state for the lagged variable used in Table 2. In particular, the interaction term between allied and commitment to the state is only significant in the regression on actual number of children. The only notable difference between the two sets of regressions is that the main effect of commitment to the state in the under-30 regression on ideal number of children is statistically significant at the 5% level (negative) in its cross-sectional form. Direction of effect is the same and point size of the estimate is similar.

Predicted fertility by commitment to the state is somewhat different in the 30-39 subsample. Men in Allied countries have approximately half a child more than their equivalents in Axis countries, but there is little variation across prior, region-specific measures of commitment to the state. Among women, in contrast, the trajectories of effects differ dramatically across levels of commitment to the state: positive in Allied countries and negative in Axis countries. This translates into no significant fertility differences in the second quartile, a 0.6 child difference in the third, and almost 1.5 children difference in the highest quartile.

Gender differences in ideal family size are completely different. First, in both cohorts, gender differences are negligible within these national clusters of WWII alliances: predicted ideal number track almost perfectly. Second, in the under-30 cohort, our main analytic subsample, the direction of the association between commitment to the state and ideal number of children is the inverse of the association between commitment to the state and actual fertility, at least in the upper two quartiles. Thus, as commitment to the state increases, there is a moderate *reduction* in ideal number of children for people in Allied countries, and a relatively sharp *increase* for their counterparts in Axis countries. The result is that at highest levels of commitment to the state, the ideal number of children reported by people in Axis countries exceeds that of people in Allied countries. No equivalent patterns can be found in the 30-39 cohort. Among these older respondents, ideal family size falls with commitment to the state for both Allied and Axis countries along relatively parallel tracks.

Confidence in institutions in general, or particular institutions

The indicator of commitment to the state used thus far is composed of four types of regional averages, each measured in a prior round: willingness to fight, general pride in nationality, and confidence in the state's security apparatus (the army and police). Arguably, this cluster of components glosses over two distinct fertility-inducing mechanisms. Pride in nationality and willingness to fight may be quite different to confidence in specific institutions associated with the state, or equivalent extra-familial institutions that are not state-related. This may be especially likely where non-coercive institutions provide more opportunities for meaningful contact between citizens and the state, as may be the case in many modern states, where the provision of welfare is a more salient state function in most people's daily lives than the protective functions embodied in its security apparatus. In this case, then, extra-familial identity related to the state may be rooted more in the quality of its non-coercive institutions.

Institutions that are organizationally and financially independent of the state apparatus may also vie with those which are state-related to provide a meaningful extra-familial identity. In this category we would place religion, corporations, various cultural groups and the array of local and regional organizations around which many people organize their lives and livelihoods. In relation to fertility, can a meaningful extrafamilial schema be rooted in these types of affiliations, too?

Two empirical questions arise from these concerns. The first is related to the possibility that competing identities' have equal effects on fertility, since the extra-familial schema merely needs one powerful type of meaningful identity. To look at this, we specified a series of models that looked at the effects on fertility of reported confidence in one of four types of extra-familial institutions. Two of those types—

confidence in the armed forces and in combined educational/social security systems—are directly state-financed and profoundly associated with core state functions. The other two are focused on different non-state institutions: churches and corporations (no parallel question on ethnic pride or confidence in ethnic leaders was asked in the WVS). As in the core models above, we restrict our indicators of confidence to regional averages measured in prior rounds and aggregated into quartiles.

The second question builds on the idea that disaggregating these dimensions of confidence into discrete types may be more an artifact of how we choose to ask and analyze questions than of how these actually exist in people's minds. That is, even if the correlations between different types of confidence are marginally higher within the categories we have already delineated (e.g., the association between confidence in army and police is stronger than between army and education system), overall, there are the high correlations between each of the types of confidence mentioned here. That suggests that each type of confidence may be additive, which in turn implies that a general level of confidence state institutions may be a more accurate determinant of fertility than discrete measures. It is analogous to business or consumer confidence insofar as it refers to an array of largely intangible but mutually reinforcing feelings.

To look at the effects of this additive measure of confidence, we constructed a single summary measure consisting of the confidence in the armed forces, police, education system, social security system, and civil service (the last being the day-to-day face of government). As in all other models, we generated a regional average of this measure and looked at its lagged effect on subsequent, wave-4 fertility of those under age 30.

Results of both series are presented in Figure 4 (full models available from authors). Panels "a" to "d" refer, respectively, to confidence in the army and police, confidence in the education and social security system, confidence in churches, and confidence in corporations. Panel "e" refers to the single summary measure.

Figure 4 about here

Over and above the substantial main effect between Allies and Axis powers in all panels, we see substantial variation in fertility by level of regional confidence on some dimensions but not others. Consistent with results in Table 2, there is a positive and statistically significant effect of prior regional confidence in the army on fertility, but only in Allied countries. More specific to comparing fertility effects of confidence in other institutions, we see a similar positive effect of regional confidence in the education and social security system on fertility, but again only in Allied countries (from 0.54 in the lowest level of confidence to 0.80 children at the highest) and with substantial non-linear fluctuations. There is a marginally negative effect on fertility in Axis countries (from 0.26 to 0.16 children). Note that these diverging trends generate enormous fertility differences among those most confident in the state: a 0.7 and 0.6 difference in children ever born, respectively, for those in the two upper levels of confidence.

Moving to non-state institutions, we see more variable results. The regional measure of confidence in churches has no observable effect on fertility in Allied countries and a moderate negative effect in Axis countries (0.31 to 0.18 children). And there is a nonlinear effect of regional trust in corporations in both Axis and Allied countries. In Allied countries, in particular, fertility marginally declines across the first three quartiles of confidence in corporations, but there is then a massive increase in the

highest confidence quartile. Again, this yields substantial difference in the number of children born in Allied and Axis countries: a full child less in Axis countries in the under-30 age group (though this trend is not statistically significant).

Overall, then, within these national clusters of WWII alliances, the association between fertility and confidence in the state's coercive institutions—it's armed forces and police—are similar to the association between fertility and confidence in its primary welfare institutions—its educational and social security systems. More intriguing, yet, the confidence in corporations also has a similar association with fertility within these two clusters of WWII alliances. In each of these three dimensions of confidence, we see a positive relationship in Allied countries and a flat or marginally negative effect in Axis countries. Only the fourth dimension, confidence in churches, breaks this pattern: there is no association between fertility and confidence in churches in either Allied or Axis countries.

Turning to the second question—which looks at the fertility effects of an additive measure of confidence in five state-related institutions, and is graphed in panel "e"—we see no clear relationship. In Allied countries, fertility rises, dips, then rises again across the four levels of confidence. In Axis countries, the pattern is reversed. While the predicted fertility gaps are large in the first (highest) and third quartiles of confidence (0.53 and 0.57 children respectively), the convergence in the second quartile (0.23 children) makes it harder to interpret the total effect. These nonlinear fluctuations are consistent with our general argument that the meaningfulness of different types of institutions, and therefore their role in filtering any effect of military victory or loss on fertility, varies across countries, making them too heterogeneous to be captured meaningfully in a single additive measure. In contrast, though following the same line of argument, it is notable that only one type of confidence in a state institution demonstrates a linear positive effect on fertility across the four quartiles: confidence in the state's coercive institutions.

Discussion and conclusion

Thinking about fertility in the context of World War II alliances, we see that the winners from over a half-century ago have considerably higher fertility today than do the losers. This was not true immediately after the war; indeed, the pattern does not emerge clearly until after the global economic slowdown of the 1970s. Coming in to the 1980s, fertility in the former Axis continued its fall, while fertility in the United States, the United Kingdom, and France stabilized and even increased. As a consequence, women born in the first decades after WWII in one of the winning countries bore almost a half-child more than did their contemporaries born in a losing country. To the extent that replacement-level fertility represents a desirable state of demographic autarky—national rhythms of consumption, saving, and investments are profoundly affected by the age structures that fertility generates—those WWII winners won more than the war. Something about winning brought them closer to demographic regeneration.

We agree with other scholars that this pattern is partly a product of differential constraints on family policy: politicians in the former Axis have been far more circumscribed in the kinds of experiments that they could try as the link between women's work and fertility began to shift. But our central argument here is that family policy is only part of the story. Policy matters less because it alters the costs of

childbearing in some abstract way than because it is part of a structure of schemas and materials that link the family and the state, a moral exchange between potential parents and the state, in which the legitimacy of the state matters significantly. "One for Mum, One for Dad, One for Country" is a plausible position if, and only if, your country is an honorable partner in this moral exchange. By honorable, we mean that it provides you with a meaningful life-enhancing narrative that you can use to make sense of your place in the world.

Our analyses of individual level data confirms that how people relate to the state—and to some extent to extra-familial institutions in general—matters for their reproductive behavior. Differences in levels of commitment to the state are associated with significant fertility differences over and above any main effect of living in a country that was associated with a particular WWII alliance. That main effect would also capture national-level differences in welfare or migration policy. The key difference which we focus on here is in the effect of prior regional variation in "commitment to the state." **It works in opposite directions across allied and axis countries, elevating *subsequent* fertility in the former, and depressing it in the latter.** So, for example, Americans who are more committed to their country—by which we mean have higher pride in their nationality, greater willingness to fight for their country, and higher levels of confidence in the armed forces and police—have higher fertility than do their less nationalist compatriots, whereas Germans who are more committed to their country have lower fertility than do their more nationalist compatriots. These divergent effects have a substantial impact on fertility. Among men in the 30-39 age group who are most committed to the state, there is a 0.5 difference in number of children ever born. Among equivalent women, whose fertility is *more* sensitive to these political histories—a tantalizing finding in itself—there is a difference of 1.5 children.

In contrast to these powerful effects, how people relate to the state matters much less for their fertility ideals. Differences between Allied and Axis powers are more moderate on this dimension, and differences between men and women are almost non-existent.

For Americans, then, and their counterparts in the UK and, to some extent, France, there is a powerful nationalist narrative that, for better or worse, constructs their states as worth reproducing in, or even reproducing for[12]. People who subscribe to this nation-centered schema experience childbearing, in part, as participating in a great national heritage with an unbroken chain of political and cultural credibility that extends back to the checks on monarchic power (e.g., England's "Glorious Revolution") and eventual American and French Revolutions. So whether as sons of the American Revolution or the children of new immigrants or even socially and geographically immobile, they are Americans or Englishmen or Frenchman, and that is a point of pride that can act as a source of moral and emotional energy for making the leap into having a child. By contrast, nationalist Germans must wrestle with ambivalence. Between the collapse of the state, history of occupation, war reparations, constitutional constraints on military deployments, and a lengthy duration of division between east and west, nationalism in Germany has been morally fraught in ways that American nationalism has

[12] This is not to imply that this schema is right, or even all that coherent, given the many gravely unethical acts of the US state. However, without a major war loss, history of occupation, or regime change, the narrative remains credible with some fraction of the population.

not been. So even if one feels deeply committed to the state, it is more complicated to imagine gifting that state with a child when one's ancestors are described in one's own newspapers as "merciless sadists," as in the January 2011 book review in *Der Speigel*, mentioned above.

A number of larger questions arise from these observations. The first addresses the generalizability of the microlevel mechanism discussed here. At first glance, it does not appear to be restricted to postwar fertility of WWII Allies and Axis powers. Very low fertility is also found in Spain, Portugal, and throughout the former Soviet sphere of influence. Beyond the central players in WWII that we have focused on, there appears to be a distinct post-totalitarian—Fascist and Socialist—fertility regime. The result: although not all countries with a TFR of less than 1.6 have totalitarian histories, among those with a totalitarian history, all have a TFR of 1.6 or less, with most in the 1.3 to 1.4 range. This is substantially lower than the 1.9-2.0 range associated with WWII victors and other European countries without an equivalent totalitarian history (e.g., Denmark, Norway, Sweden) (PRB 2011). Likewise, our WWII-related explanation extends a model more typically used to explain how reproductive decisions are framed during national political struggles, especially when that struggle is intense. Examples include fertility of blacks in Zimbabwe (Kaler 1998) and of Palestinians and Jews in Israel (Fargues 2000). We would argue that the mechanisms which underlie these examples "nationalization of reproduction" (Kanaaneh 2002:65) extend into post-war periods, allowing the allegiances and alliances forged during those struggles to caste a long shadow over subsequent fertility.

A second question—perhaps the most crucial one for leaders and policy makers intent on raising fertility toward replacement level—is how to generate the "right" type of relationship between commitment to the state and fertility, that is, a positive relationship. What makes this more interesting is that current leaders of some of the lowest fertility countries are becoming more openly nationalistic and geopolitically assertive. For example, a New York Times editorial recently lamented "Japan's unnecessary nationalism" (NYT 2013) after Prime Minister Shinzō Abe's plans to empower Japan's defense forces. Likewise, Vladimir Putin has sketched out a plan to create a new nationalist ideology in Russia, in part constructed around Cossack identity (Barry 2013). Will either of these raise fertility? Without breaking the post-WWII negative relationship between commitment to the state and fertility, there will be no effect in Japan. However, if becoming enmeshed in geopolitical conflict reduces national apathy and rouses a new nationalist schema, then this could reignite a positive victor's relationship between commitment to the state and fertility. In turn, we would expect a rise in Japanese fertility, all the sharper if augmented by the liberalization of family policy since that would allow for simultaneous and mutually reinforcing effects of intrinsic *and* extrinsic fertility motivation.

Are there are other, less painful ways to excite a positive effect of national sentiment on fertility than political or military struggle? For example, perhaps we can think of ways to identify the titillating effects of flag-waving or singing the national anthem. Or perhaps we can think of ways to identify the situations in which these types of jingoistic rituals are in fact titillating. Even if we can do either of these, however, there is nothing to say that nationalistic stirrings of the loins extend to a willingness to bear the cost of childbirth, to sacrifice things in order to have children. Just as sex is now largely divorced from actual fertility, so too, arguably, are statements about ideal family size.

This is the reason that political histories affect one but not the other. Statements about ideal family size are speech acts rooted in a dreamy make-believe world, only loosely drawing on the schema that more directly and emphatically affect actual reproduction. Actual fertility, in contrast, as we have shown in this paper, is strongly associated with these extrafamilial schema. And those schema, in turn, wax and wane alongside History as it was once conceived: not only social in the narrow sense, but also political and military. It is the long shadows of such conflicts that the roots of contemporary fertility are to be found.

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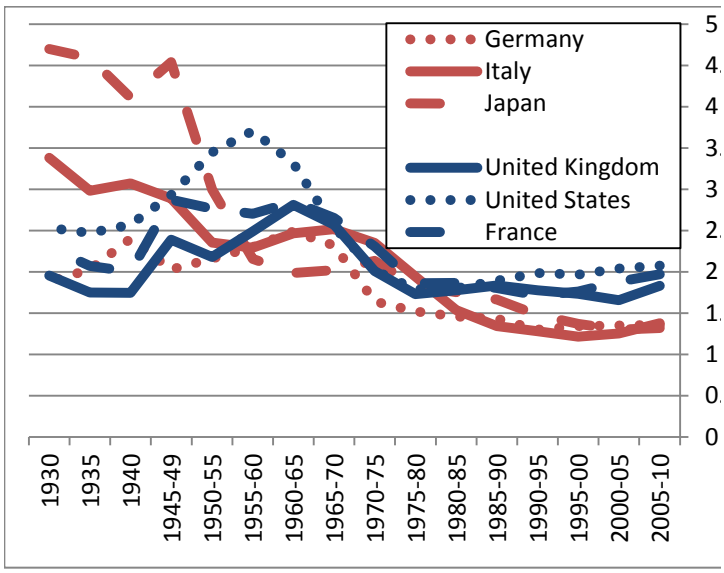


Figure 1: Total Fertility Rates 1930-2010 (various sources)

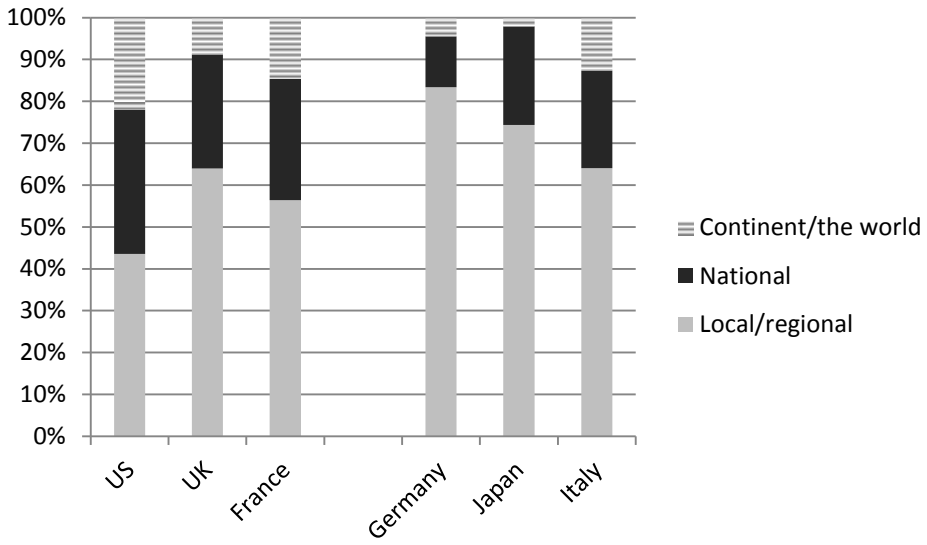
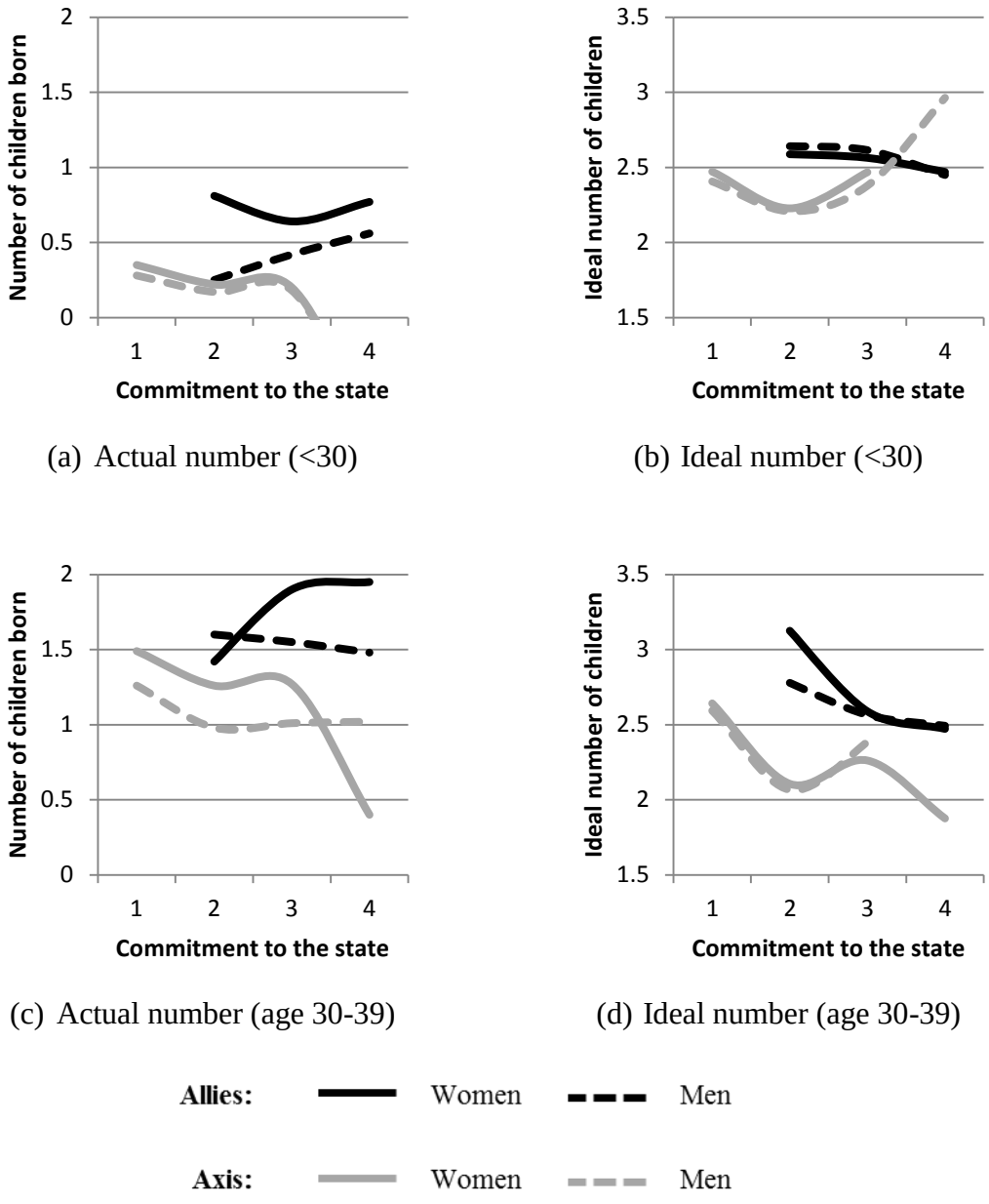


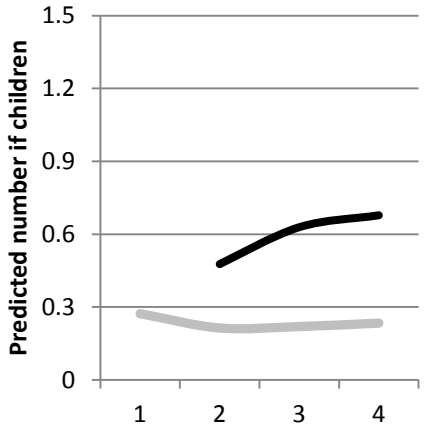
Figure 2. Primary geographic affiliation by country, wave-4 only



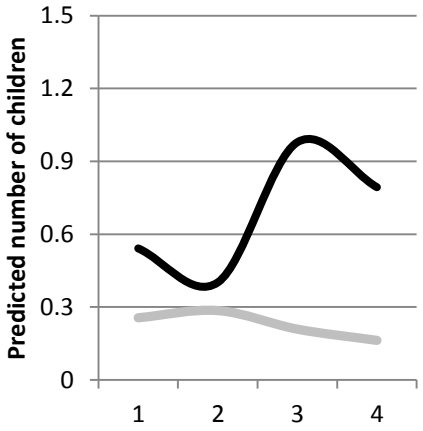
(a) Actual number (<30) (b) Ideal number (<30)

(c) Actual number (age 30-39) (d) Ideal number (age 30-39)

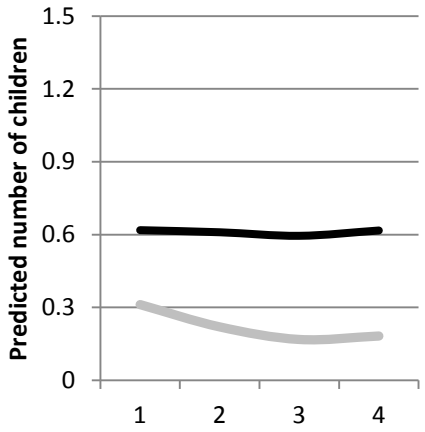
Figure 3. Predicted actual number of children ever born and ideal number of children, by commitment to the state, cohort, sex and WWII alliance (net of age, education, marital status and religiosity)



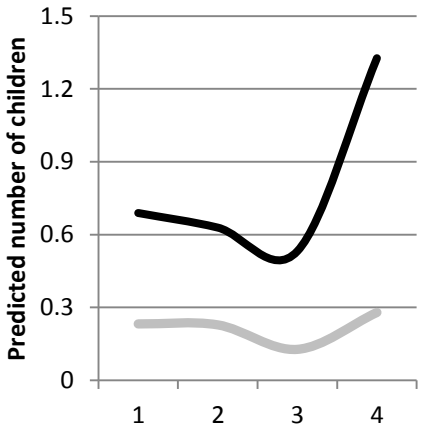
(e) Army & police



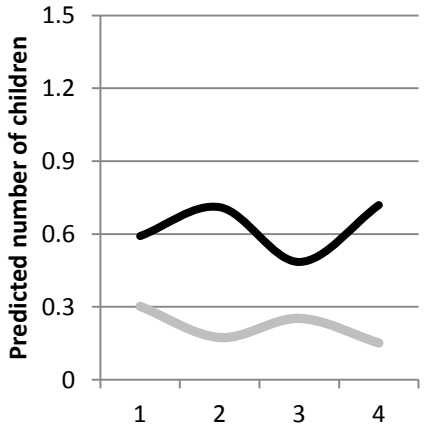
(f) Social security & education



(g) Churches



(h) Corporations



(i) Combined measure: Army, police, civil service, social security system, education system

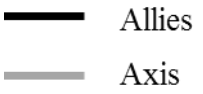


Figure 4. Predicted number of children ever born for respondents under 30, by confidence in different types of institutions and WWII alliance (net of age, education, marital status and religiosity)

Table 1. Components of "commitment to the state," by WWII alliance and country

	Allies				Axis			
	US	UK	France	*Mean*	Germany	Japan	Italy	*Mean*
Willingness to fight for country	67.1	64.5	48.1	*59.9*	35.5	16.0	36.2	*29.2*
Very proud of nationality	74.1	48.9	33.3	*52.1*	18.2	25.1	38.7	*27.3*
Claims "a great deal of confidence in"								
- the armed forces	33.2	32.0	13.9	*26.4*	4.4	6.5	11.1	*7.3*
- the police	22.2	26.9	11.3	*20.1*	9.0	11.3	13.9	*11.4*

Table 2. Actual and ideal number of children, by age group and selected covariates

	Actual number of children		Ideal number of children	
	<30	30-39	Age <30	30-39
VARIABLES	(1)	(2)	(3)	(4)
Age	-0.110	0.455*	-0.025	0.363***
	(0.095)	(0.247)	(0.093)	(0.114)
Age^2	0.003	-0.005	0.001	-0.005***
	(0.002)	(0.004)	(0.002)	(0.002)
Female	0.153***	0.285***	0.032	0.008
	(0.040)	(0.062)	(0.029)	(0.041)
Ever married	0.562***	0.658***	-0.074**	-0.024
	(0.058)	(0.051)	(0.036)	(0.049)
Age completed schooling	-0.034***	-0.030***	0.008*	0.003
	(0.008)	(0.008)	(0.004)	(0.003)
Frequency attends religious services *[coded 1-4]*	0.035	0.071**	0.153***	0.160***
	(0.024)	(0.034)	(0.029)	(0.028)
Allied country (US, UK, France) *[relative to Axis]*	0.000	-0.244	0.409**	0.070
	(0.169)	(0.311)	(0.159)	(0.209)
Commitment to the state (regional average in prior wave *[coded 1-4]*	-0.075***	-0.157***	-0.060	-0.270***
	(0.024)	(0.056)	(0.039)	(0.060)
Interaction term: - Allied X Commitment	0.139***	0.287**	-0.062	0.129
	(0.048)	(0.115)	(0.059)	(0.079)
Constant	0.936	-8.515**	2.662**	-3.346*
	(1.028)	(4.243)	(1.150)	(1.995)
Observations	1,445	1,611	2,931	2,483
R-squared	0.327	0.257	0.031	0.040

Appendix A. Selected aspects of social/family policy relevant to fertility and childrearing

	CHILDCARE					FERTILITY VS. WORK		TOTAL BENEFITS	EDUCATION	
	Costs	ratio children (0-3) to teaching staff	child main-tenance payments	informal childcare		% paid employment				
				children (0-2)						
	% average wage			% using	av. Hrs/wk	sole moms (15-64)	partnered moms (15-64)	Total cash benefits tax % GDP	Public expenditures prim/secondary % GDP	Spending per child, US$ (PPP converted)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Germany	9.1	13.9	30.1	14.5	2.7	66.0	66.0	3.1	4.5	860
Italy	.	12.5	25.2	31.5	3.8	76.0	55.0	1.6	4.2	1558
Japan	19.4	17.7				85.0		1.5	3.5	2683
Average	*14.3*	*14.7*	*27.7*	*23.0*	*3.3*	*75.7*	*60.5*	*2.0*	*4.1*	*1700*
US	19.5	14.5	34.1	33.1	25.2	72.0	73.0	1.2	5.2	794
UK	24.7	17.6	21.9	31.7	2.9	52.0	69.0	4.2	5.3	3563
France	25.1	18.8	46.3	17.7	2.6	70.0	71.0	4.0	5.2	2856
Average	*23.1*	*17.0*	*34.1*	*27.5*	*10.2*	*64.7*	*71.0*	*3.1*	*5.2*	*2404*

Source by column number: OECD database

(1) PF3.4.A Childcare fees per two-year old attending accredited early-years care and education services as % of average wage, 2004

(2) PF4.1.A Ratio of children (aged 0-3) to teaching staff

(3) PF1.5.B Percentage of Sole-Parents Receiving Child Maintenance Payments, 2000

(4) PF.3.3.A Percentage of children (0-2) using informal childcare

(5) PF.3.3.A Average hours/week children (0-2) using informal childcare

(6) LMF1.3.A Sole mothers aged 15 to 64 in paid employment, 2008

(7) LMF1.3.A Partnered mothers aged 15 to 64 in paid employment, 2008

(8) PF1.1.A Total public spending on family benefits in cash, services and tax measures, in per cent of GDP, 2009

(9) PF1.2.A Public expenditure on primary, secondary and (non-tertiary) post-secondary education as a % of GDP, 2009

(10) PF3.1.B Public expenditure on childcare support per child, in US$ (PPP converted)

Appendix B: Sample sizes, by country, region, and survey wave

		Wave 1 (1981-84)	Wave 2 (1989-93)	Wave 3 (1994-99)	Wave 4 (1999-2004)	**Wave 4 (Under-30)**	total
France	fr: bassin parisien	0	140	0	324	**30**	464
	fr: est	0	107	0	100	**23**	207
	fr: ile de france	0	185	0	299	**61**	484
	fr: méditerranée	0	105	0	235	**51**	340
	fr: nord	0	91	0	84	**14**	175
	fr: ouest	0	142	0	201	**39**	343
	fr: sud ouest	0	109	0	163	**30**	272
Germany	de: schleswig-holstei	0	92	41	23	**3**	156
	de: hamburg	0	25	30	20	**7**	75
	de: niedersachsen	0	249	104	126	**12**	479
	de: bremen	0	26	14	24	**1**	64
	de: nordrhein-westfal	0	626	293	289	**41**	1,208
	de: hessen	0	191	89	103	**18**	383
	de: rheinland-pfalz	0	125	60	54	**9**	239
	de: baden-wurttemberg	0	0	160	160	**26**	320
	de: bayern	0	380	173	181	**24**	734
	de: mecklenburg-vorpo	0	0	121	115	**20**	236
	de: sachsen	0	0	296	290	**56**	586
	de: sachsen-anhalt	0	0	169	175	**21**	344
Italy	it: piemonte	0	142	0	147	**23**	289
	it: valle daoste	0	10	0	10	**1**	20
	it: lombardia	0	247	0	320	**69**	567
	it: trentino-alto adi	0	30	0	33	**1**	63
	it: veneto	0	184	0	159	**33**	343
	it: friuli-venezia gi	0	35	0	43	**8**	78
	it: liguria	0	140	0	61	**9**	201
	it: emilia-romagna	0	110	0	145	**22**	255

	it: toscana	0	79	0	133	**26**	212
	it: umbria	0	59	0	30	**6**	89
	it: marche	0	70	0	47	**6**	117
	it: lazio	0	156	0	181	**31**	337
	it: abruzzo	0	47	0	29	**3**	76
	it: molise	0	12	0	29	**8**	41
	it: campania	0	313	0	185	**29**	498
	it: puglia	0	74	0	136	**18**	210
	it: basilicata	0	3	0	21	**2**	24
	it: calabria	0	86	0	66	**11**	152
	it: sicilia	0	200	0	168	**30**	368
	it: sardegna	0	20	0	57	**8**	77
Japan	jp: hokkaido/tohoku	146	133	143	187	**32**	609
	jp: kanto	388	320	343	450	**88**	1,501
	jp: chubu,hokuriku	200	167	175	225	**40**	767
	jp: kinki	206	161	166	228	**36**	761
	jp: chugoku,shikoku,k	264	230	227	272	**40**	993
Great Britain	gb: north east	0	135	0	56	**20**	191
	gb: north west	0	134	0	138	**21**	272
	gb: east midlands	0	63	0	61	**19**	124
	gb: west midlands	0	139	0	99	**22**	238
	gb: eastern	0	75	0	46	**14**	121
	gb: london	0	56	0	90	**30**	146
	gb: south west	0	83	0	79	**10**	162
	gb:wales	0	282	0	59	**11**	341
	gb: scotland	0	291	0	84	**18**	375
US	us: new england	0	121	118	60	**11**	299
	us: middle atlantic s	0	287	269	168	**40**	724
	us: south atlantic	0	258	118	228	**47**	604
	us: east south centra	0	146	160	84	**22**	390

us: west south centra	0	198	163	144	**49**	505
us: east north centra	0	329	312	180	**47**	821
us: west north centra	0	172	92	72	**16**	336
us: rocky mountain st	0	79	40	60	**12**	179
us: northwest	0	59	59	48	**10**	166
us: california	0	170	156	156	**48**	482
Total	1,204	9,088	4,214	9,036	**1,533**	23,542