

More Work, Fewer Babies:

*What Does Workism
Have to Do with
Falling Fertility?*

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I. Executive Summary

Birth rates have reached extremely low levels in many countries around the world, including virtually all high-income countries. The causes of this decline and the solutions to it are of great interest to policymakers. People’s attitudes toward work—specifically the elevation of career advancement to a very high place in individual values—may influence fertility. The rise of “work-focused” value sets and life courses means that achieving work-family balance isn’t just about employment norms adjusting to the growing complexity of individual aspirations; it can also mean that many men and women find their preferred balance to be more work and less family.

This report builds on existing theories seeking to explain low fertility. The “Second Demographic Transition”¹ theory emphasizes the rise of individualist attitudes as a cause for falling fertility. In contrast, the “Two-Part Gender Revolution”² theory suggests that change in gender equality occurred first in *public* contexts (legal, educational, workplace), and only later in *private* contexts (shared child care and domestic work). This delay yields continued *private* inequities, curtailing fertility as women shoulder a disproportionate share of work at home. If men bore an equal share, fertility limitation might be less necessary.

We argue that the importance people ascribe to work and family matters for fertility. To demonstrate the implications of these values, which we refer to as “workism” and “familism,” we explore the relationship between work, family, gender role attitudes, and fertility across four different datasets.

Our primary analysis uses data from the World Values Survey/European Values Survey to assess how the survey-reported importance of family and work interact with gender role attitudes to influence national- and individual-level fertility outcomes across numerous societies and time periods. We find that high-income countries that become more workist experience large associated declines in fertility. More specifically, we show that:

- Highly work-focused values and social attitudes among both men and women are strongly associated with lower birth rates in wealthy countries.
- The decline in birth rates over the last decade across many high-income countries—including some Nordic countries—can be partly explained by the rising importance individuals assign to work as a source of value and meaning in life.
- Government policies that try to increase fertility by providing more benefits aimed at workers, such as universal child care or parental leave programs, may undermine their efforts as they strengthen a “workist” life-script rather than a “familist” one.

This strong relationship between work attitudes and fertility outcomes is an important finding for countries with low fertility. For governments, it highlights the difficulty of attempting to boost fertility by making work more compatible with family. To the extent that family policy helps encourage more time at work, policies aimed at achieving “work/life balance” may be doomed to failure. Reforms that substantially reduce the burden of market work on families are more likely to yield benefits in the long run.

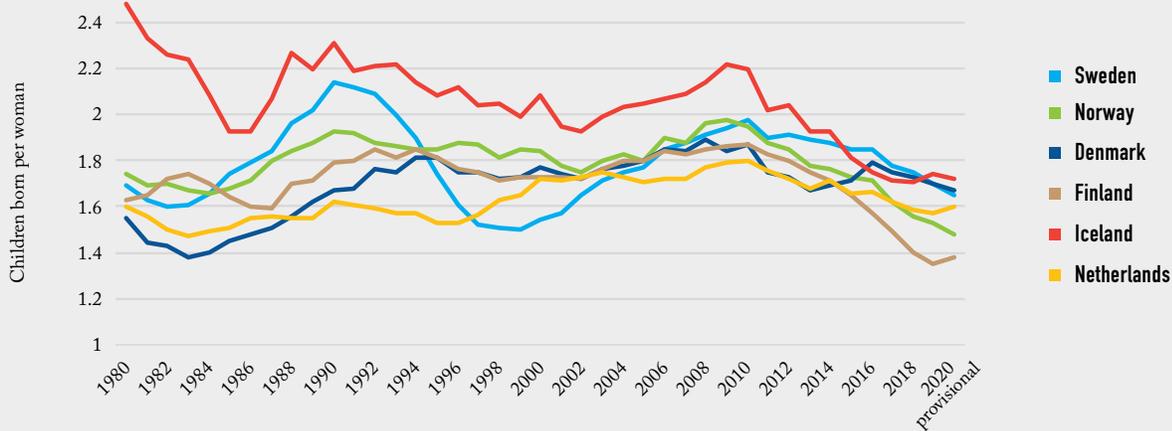
¹ Van de Kaa, D.J. “Europe’s second demographic transition”, *Population Bulletin*, 42 no. 1 (1987): 1-59.

² Frejka, T., Goldscheider, F., & Lappegård, T. “The two-part gender revolution, women’s second shift and changing cohort fertility,” *Comparative Population Studies*, 43 (2018): 99-130.

II. Introduction: The Case of the Nordics

In recent years, fertility rates have fallen sharply in many countries formerly believed immune to very low fertility. Egalitarian values and generous social welfare states had been credited with protecting the Nordic countries in particular from very low fertility rates, yet since 2008, birth rates in those countries have nonetheless plummeted, as Figure 1 shows.

Figure 1. Fertility Rates in Selected Northern European Countries



Source: IFS analysis of historic data from national statistics agencies; 2020 forecasts based on change in total births.

Historically, researchers have identified the “Nordic” countries³ as successful cases of relatively high fertility rates alongside highly egalitarian societies. Recent remarkable declines, then, present a crucial challenge for dominant theories of fertility change. What could possibly explain such a large, decade-long decline in fertility to historically unprecedented lows (including the lowest birth rates ever recorded in Finland, Norway, and Iceland)—even in societies that support childbearing through generous policy supports, and where gender egalitarian values have progressed further than anywhere else in the world?

In this report, we suggest that part of the answer relates to a previously under-studied social force: the changing social, moral, and even *ideological* place of market labor in the life course. As social values change over time, some wealthy countries with highly individualist and egalitarian values have also begun to adopt a new values-based emphasis on work and career success as a key source of meaning and value in life, which may compete with family goals.

Some theoretical background is necessary to explain both why the decline in fertility in northern European welfare states is so unexpected, and why our theory can help explain it. Developed countries have averaged less than two children per woman for over 40 years.⁴ Nonetheless, the idea that fertility rates in advanced societies could be kept

³ We note that Finland is not technically Nordic, but it is often included as part of the Nordic success story.

at or near the replacement rate of about two children per woman is buttressed by a body of literature arguing that a return to the two-child family becomes more practical with advances in gender equity. In other words, when men “lean in” more on the home front,⁵ and both corporate and national policy become more supportive of combining work and childrearing, the lowest fertility levels will be avoided.⁶ The Nordic countries are the test cases *par excellence* for this theory.

There are challenges to this thesis, of course: as men “lean in” more, they face the same work-life balance issues facing women, and fertility intentions and achievement often fall.⁷ Research focusing on the durability of low fertility emphasizes individualism, family diversity, and country-specific fertility trajectories.⁸ Thus, while increasing progress towards a more gender egalitarian society *might* yield stable and high fertility rates, countries face other challenges.

We argue that the debate about the potential for fertility recovery can be enriched by highlighting attitudes toward work and family *per se*. Questions about whether families can manage to have more children by dividing the same work in ever-more-egalitarian ways, or whether individual self-actualization must forever be at odds with childbearing, both miss an important fact: families must interact with the market to achieve their goals. When work/family reconciliation is viewed through a gender equity lens, the focus is on the division of labor, with not enough attention on the value that individuals and societies directly place on work and family. Thus, our approach concurs with Ron Lesthaeghe and others,⁹ who suggest that change in value orientation may influence fertility. But whereas Lesthaeghe credits low fertility to a shift from materialist to post-materialist values, we emphasize that increasingly work-related attitudes (while putatively “materialist”) may in fact be connected to how individuals find meaning in their life. Work can be a place of socialization, friendship, public service, and status, i.e., post-materialist values.

In particular, social and values surveys measuring attitudes towards work may measure different phenomena in different countries. In lower-income countries where severe economic precarity is more common, individuals who rate work as “very important” in their life may be highly motivated by basically “materialist” concerns—work is “very important” merely for survival, let alone flourishing.

But in wealthy countries with robust social welfare states, individuals who rate work as highly important may be expressing a very different value set. In countries like Sweden or Norway, where individuals who work less are unlikely to experience food insecurity or dramatic shortfalls in life expectancy, those who place the highest subjective valuations on work may be identifying the importance of career success to their social or psychological well-being,

⁴ Castles, F. G. “The world turned upside down: below replacement fertility, changing preferences and family-friendly public policy in 21 OECD countries,” *Journal of European Social Policy* 13, no. 3 (2003): 209-227.

⁵ Goldscheider, F., Bernhardt, E., & Lappegård, T. “The gender revolution: A framework for understanding changing family and demographic behavior,” *Population and Development Review* 41, no. 2 (2015): 207-239.

⁶ McDonald, P. “Societal foundations for explaining low fertility: Gender equity,” *Demographic Research* 28, no. 34 (2013): 981-994; Esping-Andersen, G. “Education, gender revolution, and fertility recovery,” *Vienna Yearbook of Population Research* 15 (2017): 55-59.

⁷ Okun, B. S., Raz-Yurovich, L. “Housework, gender role attitudes, and couples’ fertility intentions: Reconsidering men’s roles in gender theories of family change,” *Population and Development Review* 45, no. 1 (2019): 169-196.

⁸ Kolk, M. “Weak support for a U-shaped pattern between societal gender equality and fertility when comparing societies across time,” *Demographic Research* 40, no. 2 (2019): 27-48; Lesthaeghe, R. “The second demographic transition, 1986-2020: sub-replacement fertility and rising cohabitation—a global update,” *Genus* 76, no. 1 (2019): 1-38.

⁹ Lesthaeghe R, van de Kaa DJ. “Twee demografische transitie?” *Bevolking: groei en krimp*. (1986): 9-24; Lesthaeghe R, Surkyn J. “When history moves on: The foundations and diffusion of a second demographic transition,” *International Family Change: Ideational Perspectives* (Taylor and Francis Group, 2008) :81-118.

or their accomplishment of personally motivated projects, rather than on their material well-being. Given that the total number of work hours tends to decline as countries become wealthier, which is consistent with more people using surplus income to finance leisure, people in high-income countries who continue to place a major emphasis on work are likely to be very different from people in low-income countries who report a similar emphasis. Moreover, fully egalitarian couples may express their commitment to one another by supporting each other's public sphere success and sharing the private sphere work necessary to accomplish it.

Indeed, attitudes towards work and family have changed in highly developed, highly egalitarian northern European countries. Figures 2a and 2b show the average importance rank assigned to “work” and “family” by respondents ages 18 to 55 in World and European Values Survey (WVS/EVS) questions, on a scale of zero (not at all important) to three (very important).

Between 2010 and the latest survey wave, the average importance assigned to work rose appreciably in Norway, Sweden, Finland, and the Netherlands, while falling in Denmark and Iceland. While in the long run, pro-work attitudes remain below previous record-highs, this rise in “workist” attitudes is unusual given the previously noted general *decline* in assessed importance of work as countries become wealthier. Assessed importance of family has been more stable and remains far higher than assessed importance of work in almost all countries and survey waves.

But do changes in work attitudes really predict changes in fertility? As a first approach to this question, we compare work attitudes in the latest

Figure 2a: Importance of Family

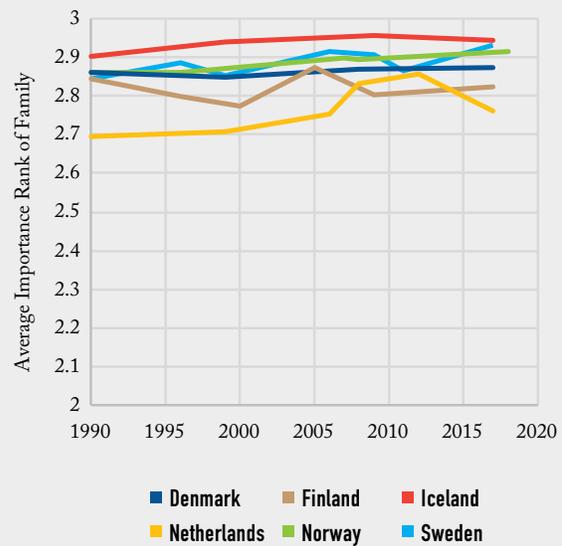
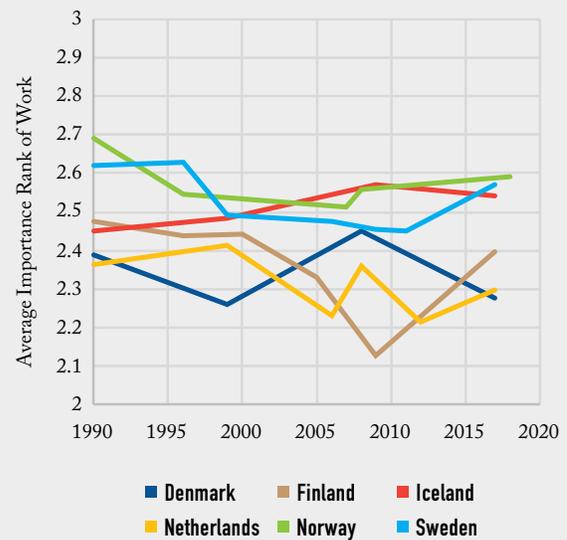


Figure 2b: Importance of Work

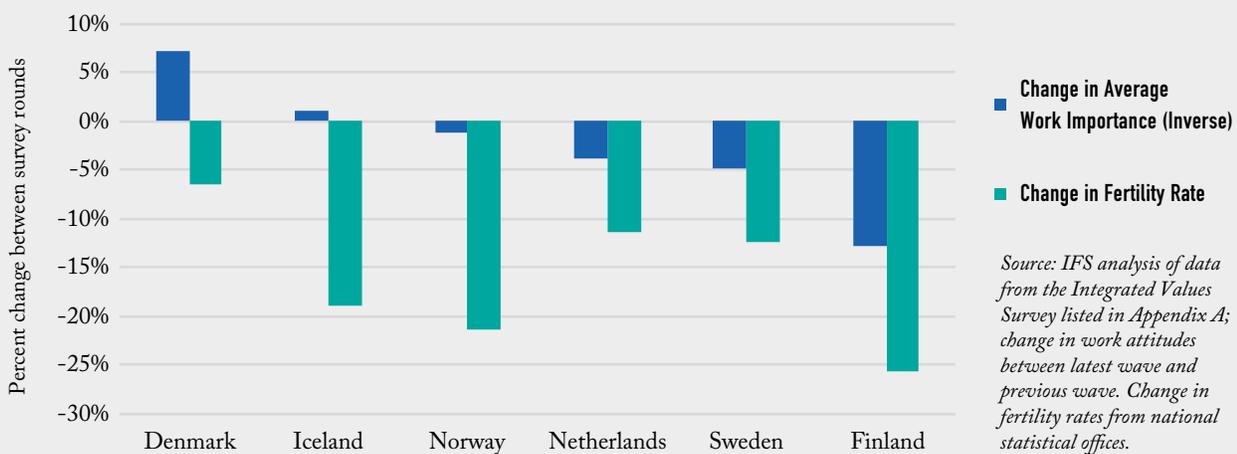


Source: IFS analysis of data from the Integrated Values Survey listed in Appendix A; work/family importance ranks as described in text.

WVS/EVS round to the prior round, as well as fertility in those years, as shown in [Figure 3](#). If countries with large increases in workism, like Finland, have very different trends from countries with large decreases, like Denmark, that would suggest support for our theory connecting work attitudes to fertility.

Denmark, the only Nordic country with a decrease in work importance, also had the smallest decline in fertility over the period measured. Finland, meanwhile, had the biggest rise in work importance, along with the largest fertility decline. Trends for Iceland and Norway do not fit the pattern as well, but it is no surprise that in this simple, uncontrolled approach, the correlation between work attitudes and fertility outcomes is imperfect.

Figure 3: Where Work Became More Important, Fertility Fell Most



To address this more systematically, we built a model of fertility that includes a country’s Human Development Index (HDI) score, a measure of gender attitudes (described in detail below), and “net workism,” defined as the average importance assigned to work *minus* the average importance assigned to family. Wolfgang Lutz¹⁰ noted that the recent fertility decline in Nordic countries:

is particularly puzzling given that these countries used to be seen as the prime examples for the premise that ensuring the compatibility of work and family and having generous child support systems will result in relatively high fertility levels... Demography is still groping in the dark for explanations for these changes.

Given that the literature on advanced countries already emphasizes work/family reconciliation, our explicit modelling of workist and familist values is hardly “groping in the dark.” It is, nonetheless, an innovation because previous research has included work and family as behavioral or policy variables, rather than attitudinal ones.

¹⁰ Lutz, W. “Fertility will be determined by the changing ideal family size and the empowerment to reach these targets,” *Vienna Yearbook of Population Research* 18 (2020): 1-8.

As Figures 4 a through f reveal, we have hardly cast a flood lamp on the Nordic puzzle: there are two countries where our model did not improve upon predictions from human development and gender equity alone. Even so, fertility trajectories in most Nordic countries are better understood when appreciating that workism is associated with suppressed fertility at high levels of socioeconomic development.

First, consider Norway and Iceland (Figures 4a and 4b), two of the three Nordic countries with sharp recent fertility declines. It seems fair to say that both our model and a more conventional one without net workism fail to predict *increases* in fertility in the early 2000s, and that they also fail to predict the sharpness of recent decline. Indeed, in the latest years, including net workism yields a less accurate prediction.

Next, consider Sweden and Denmark (Figures 4c and 4d). Although our model underpredicts both fertility decline and fertility recovery in Sweden, it comes closer to the actual trajectory than when net workism is omitted. Neither model explains the fertility increase through 2008 in Denmark, but ours accurately predicts 2018 fertility levels. For these two countries, integrating net workism helps some.

Net workism clearly helps make sense of recent fertility developments in the Netherlands and Finland, including the particularly sharp recent fertility downturn in Finland, as Figures 4e and 4f show. That nation has seen the population share supporting gender equity rise from 69% to 87% across the time period assessed, and its recent increase in gender equity explains why predicted fertility (*the dotted line with predictions without net workism*) has flattened, even though its further increases in the HDI might have contributed to

Figure 4a: Iceland

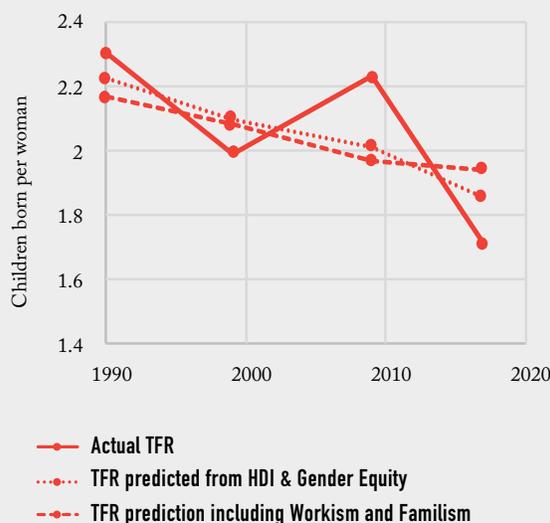
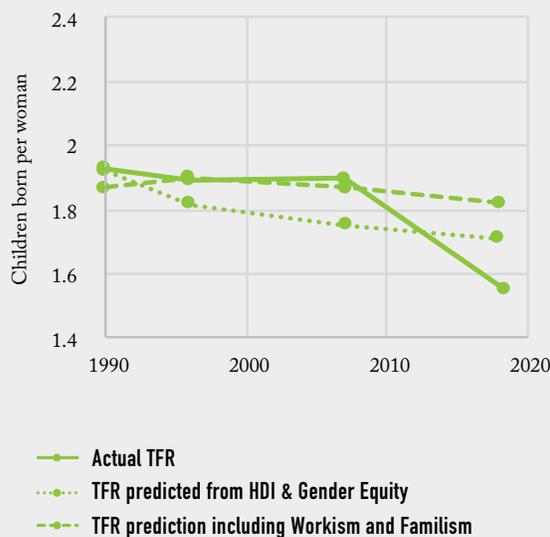


Figure 4b: Norway



Source: IFS calculations based on estimated model coefficients.

Figure 4c: Denmark

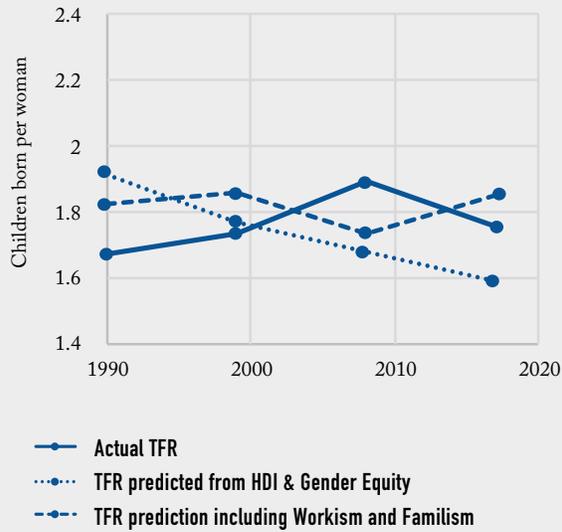


Figure 4e: Netherlands

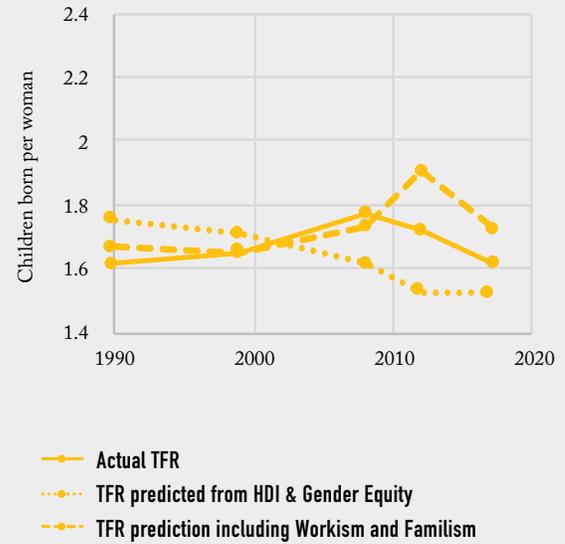


Figure 4d: Sweden

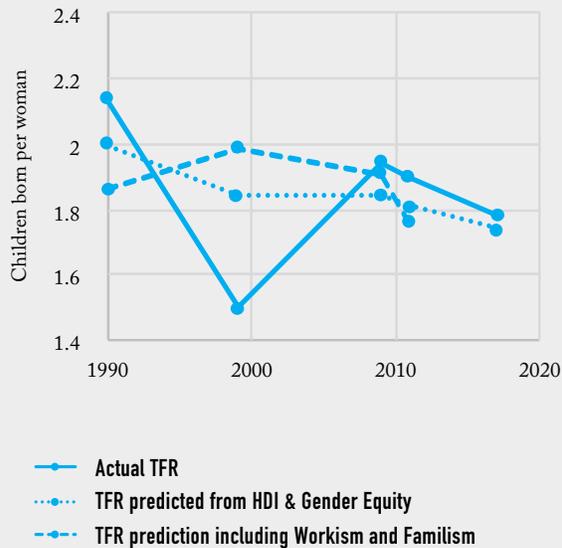
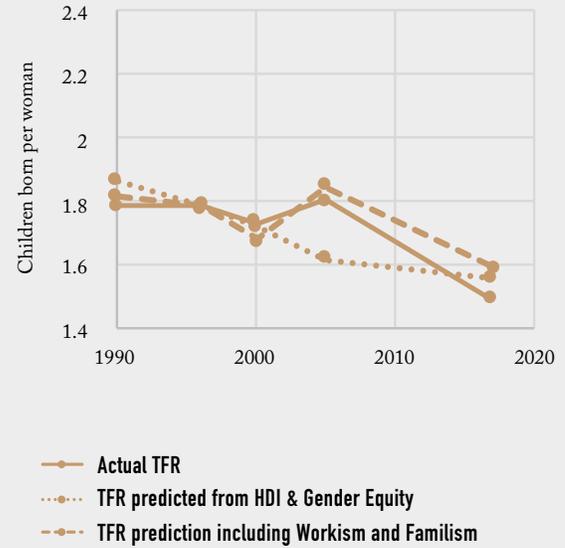


Figure 4f: Finland



Source: IFS calculations based on estimated model coefficients.

Source: IFS calculations based on estimated model coefficients.

lower fertility. Note, however, that the dashed line, which accounts for the negative effect of net workism at higher HDI levels, captures the recent downturn in fertility. When fertility was at its highest in 2012, the proportion rating work very important in the Netherlands was particularly low at 0.31. Similarly, workism in Finland declined sharply from 2000 to 2005, only to rebound again by 2017: fertility followed the opposite trajectory of increase with low net workism and then decrease with higher net workism.

Finally, we note that regardless of the relationship between public attitudes and fertility, higher Human Development Index scores are associated with lower fertility. This means that if countries progress in both overall human development and gender equity, their fertility would not necessarily see a large recovery. Across all the Nordic countries, predictions without net workism show—at best—steady fertility: in most time periods, it is declining. In contrast, net workism helps explain some of the ups and downs in country-level fertility in recent decades, even though we are still “groping in the dark” to understand the trends in Norway and Iceland.

The unique experience of the Nordic countries has motivated a great deal of theorizing about fertility and family in the past, especially as they make up a large share of countries in heavily-cited sources like the OECD’s family policy database. But whether or not the dynamics observed in the unique context of the high-income, highly-egalitarian Nordic welfare states generalizes to other contexts is a crucial question.

The rest of this report broadens the scope of analysis from a few admittedly interesting northern European countries. We demonstrate that “workism” as a concept is a useful predictor of fertility in a large sample of periods and countries, and thus can improve on existing theories linking social attitudes and fertility outcomes. Therefore, we move to testing whether variation in the values ascribed to work and family tell us more about variation across low-fertility societies and the potential for fertility recovery than a narrative that treats gender inequality and gender ideology as the primary obstacles to achieving common fertility goals.

If the value placed on family—which we refer to as familism—supports procreation, more familistic people could desire to have more children, be more persistent when facing obstacles to having more children, or both. Societies where familistic values are more common would share these fertility advantages. In contrast, placing a high degree of value on work can dampen fertility desires and make them less likely to be realized: workist individuals would be expected to have fewer children, and societies where workism is common would have low fertility reinforced by prevailing norms.

The desire for meaningful or important work, not simply well-compensated work, is powerful, and has significant and negative implications for childbearing.

III. Workism and Individual Fertility Worldwide

Much previous research on the effect of attitudes on fertility assumes that gender role ideology conditions people's orientations toward work and family. While it certainly does, that approach fails to reveal how attitudes toward gender, work, and family each independently affect fertility. We disentangled these related attitudes using integrated data from the WVS and the EVS—data that cover countries from Belgium to Brazil as well as Thailand to Turkey.¹¹ We paid particular attention to whether or not placing a high value on work compromises the potential of egalitarian gender role attitudes to contribute to fertility recovery.

We constructed categories at the intersection of the importance of work and family in people's lives before integrating the importance of gender ideology. The Integrated Values Survey (IVS) provides items that have clear relevance for assessing the importance of work and family. Specifically, it asked participants to rank the importance of various aspects of life separately, using four answers, ranging from “very important” to “not at all important.”

The list of aspects included *family*, friends, leisure time, politics, work, religion, and service to others (in that order). In every country, rating family “very important” was the most common response, but there was nonetheless great variation among countries with 56% to 100%¹² saying that family was “very important” (88% overall, weighted average¹³). A clear majority, 69%, rated work “very important,” and here the range was from 27% to 95%. We combined individual's responses on work and family to create four categories. In total, we find that 63% of respondents identify both work and family as very important, 25% identify just family, 6% just work, and 6% neither as very important.

We then estimated the effects of work-family attitudes on fertility among 20- to 50- year-old men and women, controlling for age, education, survey year, and the country's HDI value, a measure summarizing a range of indicators related to economic and social well-being.¹⁴ The importance of work and family did, in fact, significantly predict the number of children for respondents, as shown in [Figure 5](#).¹⁵

Women who valued family over work had the most children: 0.03 more than those saying work and family were both very important, 0.30 more than those saying neither was very important, and 0.39 more than those valuing work over family. Among men, those who responded that family was “very important” had equally high fertility, regardless of whether they attached the same importance to work or valued work less. But men who attached less value to family had 0.25 fewer children if work and family were equally important, and 0.37 fewer children if they assigned more value to work than to family.

¹¹ World Values Survey and European Values Survey. Data description provided in Appendix A.

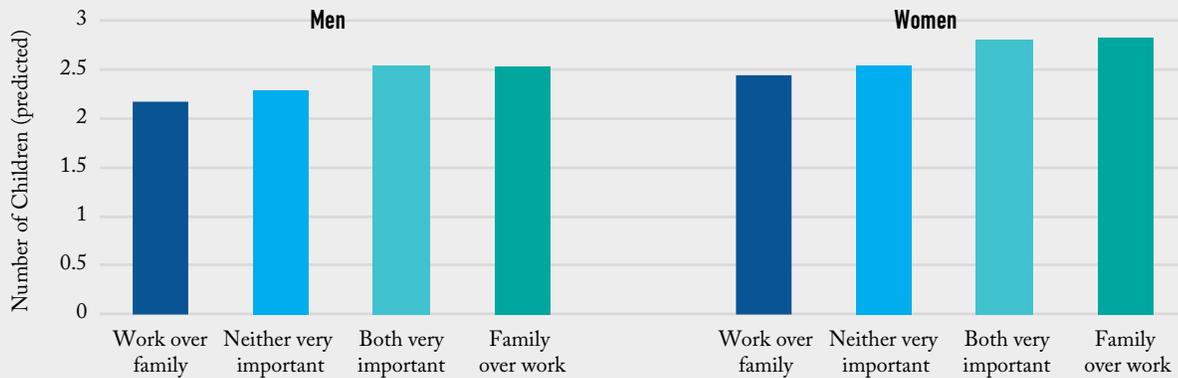
¹² The greatest share responding “very important” for family rounded up to 100% from 99.7%.

¹³ The weight of each country is proportional to its population size, regardless of how many times the WVS and the EVS have been conducted since 1990 (observations from more populous countries are upweighted; observations from countries with numerous surveys are down weighted).

¹⁴ HDI Data are from: National Statistics, Republic of China (Taiwan), Fuentes-Ramírez, Ricardo R. “An Approximation of Puerto Rico's Human Development Index.” *Caribbean Studies* 42, no. 1 (2014): 253–58; Institute for Management Research, Radbound University, Sub-National Human Development Index (Northern Ireland). The World Bank. 2019. World Bank Open Data. Washington, D.C.: The World Bank.

¹⁵ We used a multilevel model controlling for country fixed effects at level 2. Fertility was measured by children ever born and is therefore influenced by both the timing of fertility (tempo) and the average number of children (quantum).

Figure 5: Workism and Familism Both Associated With Fertility



Source: IFS analysis of data from the Integrated Values Survey listed in Appendix A. Children ever born predicted for 2018 at age 50 from a multilevel fixed effects model with individuals nested within countries and with controls for individual age, education, the country's Human Development Index, and the survey year.

The differences between men and women are small when compared to the fertility differential associated with high versus low familism (*the green bars to the right in Figure 5 versus the blue bars to left*) regardless of gender. People who value family as very important—both those who value it more than work (dark green bars) and those who also value work as very important (lighter green bars)—have more children than others.

We also confirmed this relationship by using the full detail of individual-level importance ratings to construct a “net importance” rating for work and family, using all surveys together in one integrated sample. While the WVS/EVS did not require respondents to rank items about which importance is queried, some respondents identified either very few or very many items as “very important,” suggesting respondents differ considerably in their threshold for “importance” in general. Likewise, intermediate ratings may also reflect import gradations. Using the *net* of work and family directly identifies respondents who regard family or work as being more important than the other. The full list of included countries is provided in Appendix A.

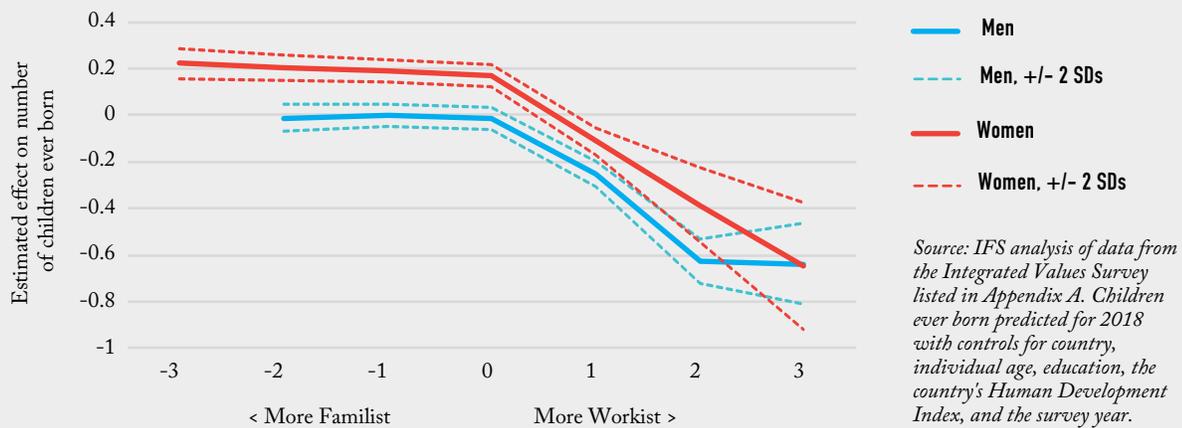
Figure 6 shows that the observed negative fertility effects are indeed concentrated among those who rate work as *more important than* family for both men and women. Those who rate family as *much* more important do not have radically different fertility than those who rate the importance of work and family similarly; but the most workist and least familist individuals have about 0.6 fewer children, on average, than index individuals. This is quite a large difference.

Returning to our primary analysis, the interaction of workism and familism was significantly positive among men, meaning that the lower fertility of those with workist values was significantly offset among those valuing both work and family highly.

In the wealthiest countries in our sample,¹⁶ the pattern is more pronounced. Among men, the lower fertility associated with high workism (-0.07 children) was more than offset if they also had high familism (+0.12 children), while for women,

¹⁶ Countries where HDI>0.8: Argentina, Australia, Austria, Belarus, Belgium, Bulgaria, Canada, Chile, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain, Greece, Hong Kong, Hungary, Iceland, Ireland, Italy, Japan, Kazakhstan, Latvia, Lithuania, Luxembourg, Malaysia, Malta, Montenegro, Netherlands, New Zealand, Northern Ireland, Norway, Poland, Portugal, Puerto Rico, Romania, Russian Federation, Singapore, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Taiwan, Turkey, United States.

Figure 6: Effect of Detailed Net Workist Attitudes on Fertility



the lower fertility associated with high workism (-0.15 children) was only partly offset by the interaction with high familism (+0.08 children). This points to the especially significant effect of workist attitudes in higher-income countries.

In order to understand how gender ideology influences this picture, we identified respondents holding gender essentialist attitudes within each of the four work/family categories. We used agreement/disagreement with the statement: “When jobs are scarce, men should have more right to a job than women.” Respondents who hold gender essentialist attitudes, i.e., believe men have greater responsibility for provision and women for homemaking, are more likely to agree with favoring men when jobs were scarce or to say they didn’t know.¹⁷ This question also measures gender

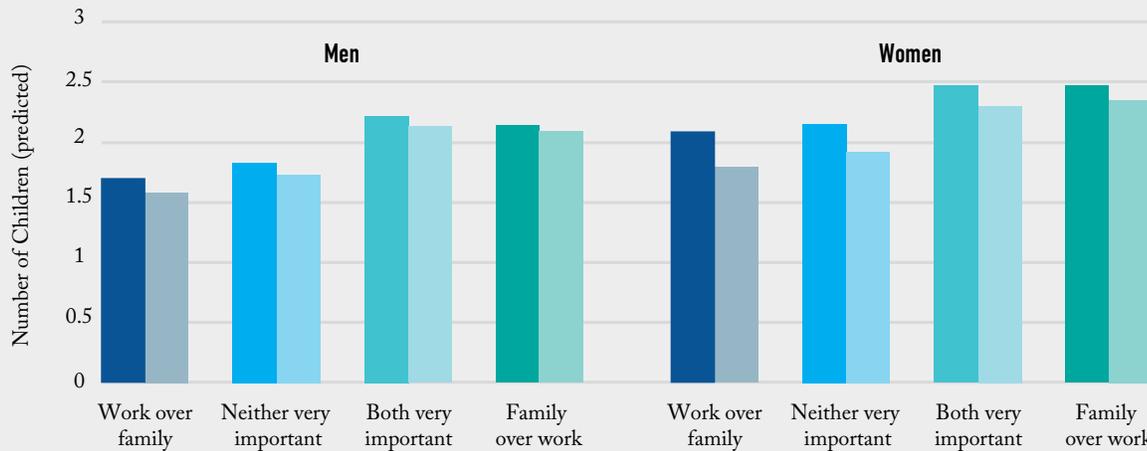
Table 1: The Effect of Workism Varies with Human Development

ALL COUNTRIES	Men	Women
Work very important	-0.04 †	-0.07 ***
Family very important	0.30 ***	0.33 ***
Work very important*Family very important	0.07 *	0.01
ALL COUNTRIES	Men	Women
Work very important	-0.07 ***	-0.15 ***
Family very important	0.41***	0.47 ***
Work very important*Family very important	0.12 ***	0.08 ***

Source: IFS analysis of data from the Integrated Values Surveys. Coefficient for children ever born from a model of individuals with controls for age, country, and survey year.

Figure 7: Adding Gender Ideology to Workism and Familisim

*Darker bars reflect gender essentialist attitudes
Lighter bars reflect gender egalitarian attitudes*



Source: IFS analysis of data from the Integrated Values Survey listed in Appendix A. Children ever born predicted for 2018 at age 50 from a multilevel fixed effects model with individuals nested within countries and with controls for individual age, education, the country's Human Development Index, and the survey year.

equity more explicitly than other IVS questions about gender role attitudes, e.g., “A working mother can establish just as warm and secure a relationship with her children.”¹⁸ The results of this analysis are shown in [Figure 7](#).

Three things are striking about this picture. First, even though research has supported the notion that “feminism is the new natalism” by showing that *societies* with widespread gender egalitarian ideals tend to have higher fertility,¹⁹ more egalitarian *individuals* have lower fertility. For all four work/family categories and across both genders, egalitarians had fewer children than essentialists (note: the difference between egalitarians and essentialists only failed to achieve statistical significance among men who valued family over work).

Second, this difference was more pronounced for women than for men: the fertility differential associated with gender role attitudes was more than twice as large among women in every category.

Third, gender ideology matters the *least* among those who value family over work. Within this category, gender ideology does not significantly differentiate fertility among men, and egalitarian women have only 0.12 fewer children than gender essentialists. Gender role ideology matters far *more* for those who value work over family; in that group, egalitarian men have 0.13 fewer children than gender essentialists, and egalitarian women have 0.30 fewer. It is

¹⁷ Seguino, S. “Plus Ça Change? Evidence on global trends in gender norms and stereotypes,” *Feminist Economics* 13, no. 2 (2007): 1-28.

¹⁸ Davis, Shannon N., and Theodore N. Greenstein. “Gender Ideology: Components, +Predictors, and Consequences,” *Annual Review of Sociology* 35 (2009): 87-105. There are two further reasons for favoring use of only the jobs scarce question: 1) a gender equity index constructed using the multiple gender attitude indicators in WVS has low reliability relative to the jobs scarce question, and 2) because the correlations between the gender-items vary across countries, building an index across observation regardless of the country would not be appropriate when seeking to understand the association between attitudes and fertility (see supplementary material in Arpino, B., G. Esping-Andersen, & L. Pessin, “How Do Changes in Gender Role Attitudes Towards Female Employment Influence Fertility? A Macro-level Analysis,” *European Sociological Review* 31, no. 3 (2015): 370-382).

¹⁹ Arpino, B., G. Esping-Andersen, & L. Pessin, “How Do Changes in Gender Role Attitudes Towards Female Employment Influence Fertility? A Macro-level Analysis,” *European Sociological Review* 31, no. 3 (2015): 370-382.

also apparent that gender role attitudes matter more for fertility among women who value work more highly from comparing the two groups that value work and family equally (the middle two sets of bars; the gap between the dark and light bars is far greater where work has higher value). Men and women who place a high value on work *and* expect a high degree of gender equality have the lowest fertility, whereas gender equality expectations are less predictive of fertility among men and women who see work as a less important element of life.

IV. Workism and Country Fertility Rates

We further assessed whether prevailing attitudes toward work and family were associated with fertility levels and change over time within the 90 countries²⁰ that were surveyed more than once by either the EVS or the WVS (341 total surveys). This is exactly the same data that we used above for describing how work, family, and gender attitudes of individuals are related to the number of children they have (*described in Appendix A*), but here we explore how the work, family, and gender attitudes of societies are related to their total fertility rates (TFRs).²¹ We use a panel model approach with fixed effects for country and time, with robust standard errors clustered at the country level.

We defined workism at the country level as the proportion of 20 to 50-year-old respondents saying that work was very important; country-level familism is similarly defined. We also calculated net workism, i.e., country-level workism minus country-level familism, or the relative importance of work and family at the societal level. Previous research²² has suggested that egalitarian gender role attitudes may provide an escape valve from the low fertility trap: even though the decline of gender essentialist values initially corresponds to lower fertility, fertility recovers as egalitarian attitudes become widespread (the relationship between the proportion supporting workplace equality is U-shaped). Therefore, we included the proportion of gender equitable respondents and its square as a predictor of the TFR. [Table 2](#) provides the coefficients estimated from these analyses.

Model 1 was generally consistent with a U-shaped relationship between fertility and egalitarian attitudes, as expected. Workism and familism did not initially predict the TFR when controlling for socioeconomic development using the HDI, and the estimated effects were near zero (*workism and familism are shown separately in model 1; a model substituting net workism also yielded insignificant results*).

Model 2, however, shows that net workism is associated with lower fertility at high HDI values. Increases in net workism (i.e., higher self-rated importance of work alongside lower self-rated importance of family) predict fertility *increases* among lower-HDI countries, possibly consistent with the importance of work in these countries for enabling material survival and health.

On the other hand, in higher-HDI countries (*represented by the Net workism*HDI interaction term*), where even very poor individuals tend to have long life expectancies and so work is less essential for survival, the story is different. Increases in the relative importance of work are associated with considerable *decreases* in fertility. The relationship is

²⁰ Great Britain and Northern Ireland were surveyed separately.

²¹ TFR data come from the Human Fertility Database (Taiwan), the UK Office for National Statistics (Great Britain and Northern Ireland), and the World Bank (all other countries).

²² Arpino, B., G. Esping-Andersen, & L. Pessin, "How Do Changes in Gender Role Attitudes Towards Female Employment Influence Fertility? A Macro-level Analysis," *European Sociological Review* 31, no. 3 (2015): 370-382.

Table 2: Workism and familism at the country level

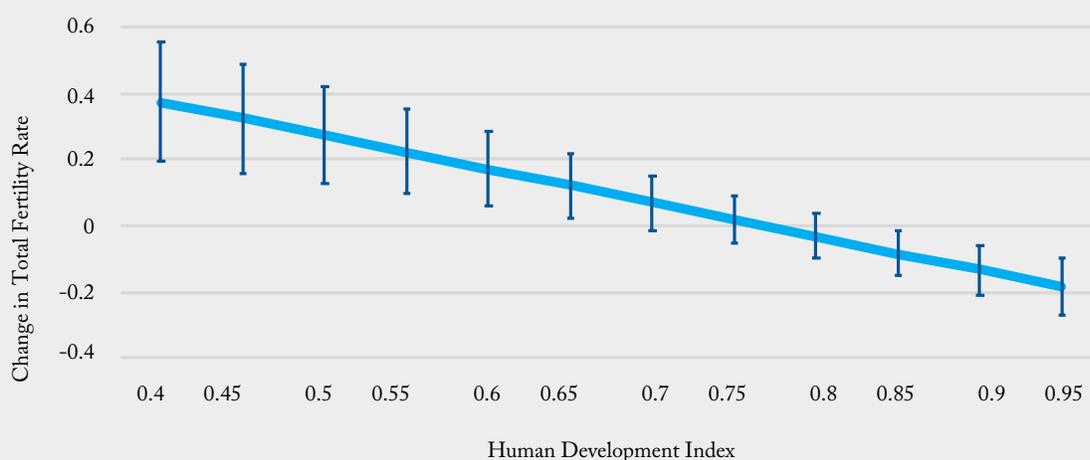
	Model 1	Model 2
Work very important (proportion)	-0.06	
Family very important (proportion)	-0.13	
Net workism (workism-familism)		4.34 ***
HDI	-2.82 ***	-4.5 ***
Gender equitable respondents (proportion)	-0.88	-0.61
Gender equitable respondents squared	1.01 *	0.47
Interactions		
Net workism*HDI		-5.65 ***
Constant	4.52 ***	5.6 ***
Within-R	0.233	0.341
Between-R	0.651	0.711
Overall-R	0.547	0.602
F Stat	7.66	10.56

Source: IFS analysis of data from the Integrated Values Survey listed in Appendix A. Panel model with fixed effects with the total fertility rate as the dependent variable

depicted in Figure 8, which shows that net workism loses its positive effect on fertility when the HDI reaches about 0.65, and that net workism begins to have a negative effect when HDI is about 0.85.

Some country examples may provide clarity. From 2009 to 2018, Model 2 predicted a decline in Italian TFR of 0.21 children per woman, largely because net workism in Italy rose from -0.31 in 2009 to -0.13 in 2018: in reality, Italian TFR fell by 0.16 children in that period, a pretty close match. The model accurately predicted that case of a high-HDI country experiencing rising workism would also have falling fertility. Meanwhile, in Poland, where net workism *declined* by 0.13 between 2012 and 2017, Model 2 predicted a fertility *increase*; and Poland’s TFR did indeed rise from 1.33 to

Figure 8: Estimated Effect of One Standard Deviation Change in Net Workism, by Initial HDI Value



Source: IFS analysis of predictions from model 2. Countries for the analysis listed in Appendix A.

1.48. But in a country with a lower-HDI score like Lebanon, net workism rose 0.16 between 2013 and 2018, leading Model 2 to predict that TFR would also rise by 0.06 (TFR actually rose by 0.02, after decades of decline). So similar increases in net workism in Italy and Lebanon were associated with opposite changes in fertility associated with those countries' different socioeconomic conditions.

In Appendix D, we test the relationship between workism, familism, and fertility across three other surveys. Each survey provides different sets of countries and covariates. Further, each has unique question wording, allowing us to test alternative operationalizations of the concept of “workism.” We find the familiar, negative relationship between workism and fertility in high-income countries across all datasets.

V. Conclusion

The recent and rapid decline in fertility across many countries, including highly egalitarian societies like Finland and Sweden, has challenged existing research paradigms. While we share areas of agreement with existing models of fertility, we differ from these theories in highlighting the importance of generalized attitudes towards family life and work. Regardless of how postmaterialist or egalitarian a couple may be, if their highest priority is located in increasingly competitive and unstable workplaces, and if neither partner regards the household-based element of their life as primary, then fertility is likely to be low.

Certainly, expressive attitudes may matter as well, and doubtless women facing a “second shift” due to unequal domestic responsibilities have reasons to limit their fertility. Further, the incomplete gender revolution may contribute to “net workism” because of the private sphere conflict over gender roles making work (relatively) peaceful.²³ Nonetheless, it is striking that the relationship between workist attitudes in highly-developed countries is significantly greater, in terms of the effect on fertility, than the relationship between the much-heralded “U-curve” of gender equality and fertility. When we explicitly test the Two-Part Gender Revolution's claims in a survey of U.S. women (*presented in Appendix D*), controlling for women who report unhelpful partners at home, workism remains independently and highly predictive of fertility outcomes and preferences. Furthermore, also in Appendix D, we demonstrate that the concept of workism is predictive of fertility outcomes and preferences in numerous datasets, and that different operationalizations of the concept of workism in different surveys yield consistent estimates of the rank-ordering of countries by workist attitudes. Workism is a clearly identifiable social phenomenon significantly associated with fertility outcomes.

Workism is a clearly identifiable social phenomenon significantly associated with fertility outcomes.

Meanwhile, an outstanding question for the Second Demographic Transition theory has been *why* expressive norms are associated with lower fertility, or rather which *specific* expressive norms drive low fertility (or why couldn't individuals find their personal expression through an identity as parents?). Given that large shares of women report desiring more than two children, couldn't expressive values be consistent with higher parities?

²³ Hochschild, A. R. *The Time Bind: When work becomes home and home becomes work* (Metropolitan Books, 1997).

We show that a key element of the general change towards expressive or individualist values is the changing significance of extremely career-focused attitudes among both men and women. The desire for meaningful or important work, not simply well-compensated work, is powerful, and has significant and negative implications for childbearing.

Thus, policymakers confronting low fertility face a number of challenges. Efforts to achieve full private sphere gender equality between partners are not likely to yield large fertility recoveries, *especially* if they are achieved in a way that raises the salience of career-mindedness even more. So, for example, the “Womenomics” component of “Abenomics,”²⁴ far from providing a boost to gender equity and birth rates, may have the effect of raising the salience and normativity of career-mindedness *per se*—for women *and* men. Likewise, South Korea’s campaign to get men to do more chores, or many countries’ efforts to expand day care, also seem likely to fail as they do not fundamentally challenge the primacy of work itself.

While efforts to achieve gender equality are *prima facie* desirable to governments for many reasons, gender equality that primarily rests on the normativity of career-mindedness may have unintended consequences, including low fertility rates. From the perspective we have advanced in this paper, a better path to gender egalitarianism—particularly in countries with highly inflexible and two-tiered labor markets like South Korea or Italy—would be to enable men to work less, rather than seek means for women to work *more*. This is especially important, since in many very low-fertility countries like Japan and Korea, men’s total paid and unpaid working hours are similar to or higher than women’s; men do not have a large excess of free time for leisure compared to women, suggesting that the problem is work *per se*, not the intra-household division of that work.

Likewise, the dynamics we describe here may help explain why most empirical studies have found that cash allowances increase fertility rates by more per public dollar spent than funding for child care. Cash allowances allow families to reduce work, whereas universal child care policies normalize work-focused family models even more.²⁵ More generally, encouraging more flexible work arrangements, rolling back strict licensure and certification rules for work, and tackling “salaryman” norms could all be beneficial pro-natal strategies—not because they would give women greater equality at home and work (although they certainly would), but because they would facilitate reprioritization of family life over work life for all parents.

A better path to gender egalitarianism—particularly in countries with highly inflexible and two-tiered labor markets like South Korea or Italy—would be to enable men to work less, rather than seek means for women to work *more*.

²⁴ Policies implemented under Japanese prime minister Shinzo Abe, including female hiring quotas, expanded childcare and improved leave benefits.

²⁵ Luci-Greulich, A. & Thévenon, O. “The Impact of Family Policies on Fertility Trends in Developed Countries,” *European Journal of Population* 29 (2013): 387–416.

VI. Appendix A

The World Values Survey has had seven waves:

- WVS Wave 1 (1981-1984)
- WVS Wave 2 (1990-1994)
- WVS Wave 3 (1995-1998)
- WVS Wave 4 (1999-2004)
- WVS Wave 5 (2005-2009)
- WVS Wave 6 (2010-2014)
- WVS Wave 7 (2017-2020)

and the European Values Survey has had five waves.

- EVS Wave 1 (1981-1984)
- EVS Wave 2 (1989-1993)
- EVS Wave 3 (1999-2004)
- EVS Wave 4 (2005-2009)
- EVS Wave 5 (2017-2019)

We omitted surveys that did not ask about the importance of work and family: all surveys from Colombia and all first wave surveys. We restricted the sample to individuals aged 20 to 50 in countries that were observed in at least two time periods. Of the 351,170 individuals in the 90 countries meeting our selection criteria, 3,804 (1.08%) had missing data on the importance of either family or work, and therefore on our measure of their relative importance. Given the small percentage, we dropped these cases rather than imputing their values.

Table A.1: IVS Samples Used

	IVS 1989-1994	IVS 1995-1999	IVS 2000-2004	IVS 2005-2009	IVS 2010-2014	IVS 2015-2020	Total
Albania	0	680	661	1,007	0	785	3,133
Algeria	0	0	985	0	878	0	1,863
Azerbaijan	0	1,539	0	0	657	1,197	3,393
Argentina	617	1,449	0	607	625	616	3,914
Australia	0	1,254	0	673	559	699	3,185
Austria	799	829	0	883	0	810	3,321
Bangladesh	0	1,267	1,344	0	0	935	3,546
Armenia	0	1,293	0	893	601	903	3,690
Belgium	1,632	1,104	0	813	0	0	3,549
Bosnia and Herzegovin	0	878	800	991	0	890	3,559
Brazil	1,381	858	0	1,020	937	1,004	5,200
Bulgaria	649	1,096	0	1,229	0	636	3,610
Belarus	764	1,259	619	951	908	883	5,384
Canada	2,278	0	1,141	1,107	0	0	4,526

	IVS 1989–1994	IVS 1995–1999	IVS 2000–2004	IVS 2005–2009	IVS 2010–2014	IVS 2015–2020	Total
Chile	1,056	698	819	627	598	607	4,405
China	728	1,146	773	1,236	1,492	1,818	7,193
Taiwan	0	606	0	761	687	628	2,682
Croatia	0	1,501	0	839	0	723	3,063
Cyprus	0	0	0	1,184	634	611	2,429
Czech Republic	1,916	1,557	0	871	0	808	5,152
Denmark	660	615	0	765	0	1,435	3,475
Ecuador	0	0	0	0	798	796	1,594
Ethiopia	0	0	0	1,253	0	1,039	2,292
Estonia	664	1,196	0	733	762	515	3,870
Finland	449	662	645	1,163	0	407	3,326
France	605	982	0	1,307	0	842	3,736
Georgia	0	1,276	0	1,763	717	1,015	4,771
Germany	2,024	2,343	0	1,997	1,022	1,705	9,091
Ghana	0	0	0	1,166	1,214	0	2,380
Greece	0	897	0	748	0	592	2,237
Guatemala	0	0	797	0	0	858	1,655
Hong Kong	0	0	0	787	565	1,111	2,463
Hungary	568	938	0	1,445	0	743	3,694
Iceland	507	649	0	481	0	812	2,449
India	1,926	1,745	1,546	1,496	3,024	0	9,737
Indonesia	0	0	598	1,458	0	2,348	4,404
Iran	0	0	1,782	2,092	0	1,054	4,928
Iraq	0	0	1,805	2,130	901	909	5,745
Ireland	598	588	0	569	0	0	1,755
Italy	1,305	1,174	0	1,407	0	1,005	4,891
Japan	668	651	759	561	1,123	553	4,315
Kazakhstan	0	0	0	0	1,060	904	1,964
Jordan	0	0	923	905	825	771	3,424
South Korea	1,032	995	954	880	794	714	5,369
Kyrgyzstan	0	0	766	0	1,094	800	2,660
Lebanon	0	0	0	0	792	830	1,622
Latvia	653	1,293	0	806	0	0	2,752
Lithuania	585	1,230	0	803	0	679	3,297
Luxembourg	0	752	0	1,059	0	0	1,811
Malaysia	0	0	0	882	932	958	2,772
Malta	213	593	0	626	0	0	1,432
Mexico	1,145	1,118	1,100	1,093	1,486	1,082	7,024
Moldova	0	635	634	1,573	0	0	2,842
Montenegro	0	153	661	980	0	544	2,338
Morocco	0	0	1,014	928	924	0	2,866
Netherlands	663	632	0	1,194	774	997	4,260

	IVS 1989-1994	IVS 1995-1999	IVS 2000-2004	IVS 2005-2009	IVS 2010-2014	IVS 2015-2020	Total
New Zealand	0	683	491	0	381	317	1,872
Nigeria	888	1,709	1,753	0	1,448	1,046	6,844
Norway	793	727	0	1,193	0	597	3,310
Pakistan	0	609	1,663	0	1,017	1,726	5,015
Peru	0	921	1,134	1,092	821	950	4,918
Philippines	0	918	889	0	784	736	3,327
Poland	1,086	1,301	0	1,385	488	617	4,877
Portugal	704	495	0	697	0	0	1,896
Puerto Rico	0	716	394	0	0	516	1,626
Romania	661	1,434	0	1,688	758	1,392	5,933
Russian Federation	1,241	2,646	0	2,067	1,393	2,118	9,465
Rwanda	0	0	0	1,153	1,350	0	2,503
Serbia	0	748	697	1,692	0	1,450	4,587
Singapore	0	0	947	0	1,222	0	2,169
Slovakia	1,051	1,500	0	628	0	629	3,808
Vietnam	0	0	660	1,030	0	921	2,611
Slovenia	651	1,225	0	1,309	530	494	4,209
South Africa	1,821	2,092	2,030	1,938	2,657	0	10,538
Zimbabwe	0	0	739	0	1,197	852	2,788
Spain	2,520	1,351	691	1,519	680	617	7,378
Sweden	629	1,816	0	1,093	573	514	4,625
Switzerland	849	741	0	1,232	0	1,596	4,418
Thailand	0	0	0	984	767	893	2,644
Trinidad and Tobago	0	0	0	610	559	0	1,169
Tunisia	0	0	0	0	803	795	1,598
Turkey	747	1,409	3,605	2,713	1,194	1,788	11,456
Ukraine	0	2,365	0	1,402	786	0	4,553
Macedonia	0	730	715	943	0	678	3,066
Egypt	0	0	2,135	2,295	1,065	839	6,334
Great Britain	802	1,195	0	1,290	0	783	4,070
United States	2,100	1,645	0	659	1,078	1,677	7,159
Uruguay	0	531	0	524	577	0	1,632
Venezuela	0	898	904	0	0	0	1,802
Northern Ireland	187	511	0	234	0	0	932
Total	42,815	71,047	40,573	82,112	49,511	65,112	351,170

VII. Appendix B

This appendix presents estimates of the “workist” or “familist” shares of surveyed populations in all three international surveys used in this report: The Integrated Values Survey (IVS), The International Social Survey Programme (ISSP), and the Global Family and Gender Survey (GFGS). Because we adopt different operationalizations of the workism/familism concepts in each survey (*detailed in Appendix D*), the exact estimate of the workist or familist share of the population vary widely in each survey. Different question wordings and response options necessarily produce different shares of the population agreeing with specific options. However, we find that in periods and countries for which multiple surveys are available, estimates of the workist or familist share of the population are highly correlated across countries and sources.

Table A.2 describes how many waves of each survey are available for each country. Only one GFGS wave has been conducted, so no panel analysis is possible.

Table A.2: Data availability

	IVS	ISSP	GFGS		IVS	ISSP	GFGS
Albania	4	0	0	Estonia	5	0	0
Algeria	2	0	0	Ethiopia	2	0	0
Argentina	5	1	1	Finland	5	2	0
Armenia	4	0	0	France	4	2	1
Australia	4	3	1	Georgia	4	0	0
Austria	4	4	0	Germany	5	4	0
Azerbaijan	3	0	0	Ghana	2	0	0
Bangladesh	3	0	0	Great Britain	4	4	1
Belarus	6	0	0	Greece	3	0	0
Belgium	3	2	0	Guatemala	2	0	0
Bosnia and Herzegovina	4	0	0	Hong Kong	3	0	0
Brazil	5	1	0	Hungary	4	4	0
Bulgaria	4	3	0	Iceland	4	1	0
Canada	3	2	1	India	5	1	0
Chile	6	2	1	Indonesia	3	0	0
China	6	1	0	Iran	3	0	0
Colombia	0	0	1	Iraq	4	0	0
Croatia	3	1	0	Ireland	3	4	1
Cyprus	3	1	0	Israel	0	3	0
Czech Republic	4	3	0	Italy	4	2	0
Denmark	4	2	0	Japan	6	3	0
Ecuador	2	0	0	Jordan	4	0	0
Egypt	4	0	0	Kazakhstan	2	0	0

	IVS	ISSP	GFGS		IVS	ISSP	GFGS
Kyrgyzstan	3	0	0	Russian Federation	5	3	0
Latvia	3	2	0	Rwanda	2	0	0
Lebanon	2	0	0	Serbia	4	0	0
Lithuania	4	1	0	Singapore	2	0	0
Luxembourg	2	0	0	Switzerland	0	1	0
Macedonia	4	0	0	Slovakia	4	3	0
Malaysia	3	0	0	Slovenia	5	2	0
Malta	3	0	0	South Africa	5	1	0
Mexico	6	2	1	South Korea	6	1	0
Moldova	3	0	0	Spain	6	3	0
Montenegro	4	0	0	Sweden	5	2	0
Morocco	3	0	0	Switzerland	4	2	0
Netherlands	5	4	0	Taiwan	4	2	0
New Zealand	4	2	0	Thailand	3	0	0
Nigeria	5	0	0	Trinidad and Tobago	2	0	0
Northern Ireland	3	2	0	Tunisia	2	0	0
Norway	4	3	0	Turkey	6	1	0
Pakistan	4	0	0	Ukraine	3	0	0
Peru	5	0	1	United States	5	4	1
Philippines	4	3	0	Uruguay	3	0	0
Poland	5	3	0	Venezuela	2	1	0
Portugal	3	2	0	Vietnam	3	0	0
Puerto Rico	3	0	0	Zimbabwe	3	0	0
Romania	5	0	0				

We first compare GFGS estimates of workism and familism to the nearest available ISSP and IVS estimates for countries that had them (i.e., all GFGS countries except Colombia). As shown below, GFGS workist shares are linearly correlated with both IVS and ISSP-estimated workist shares.

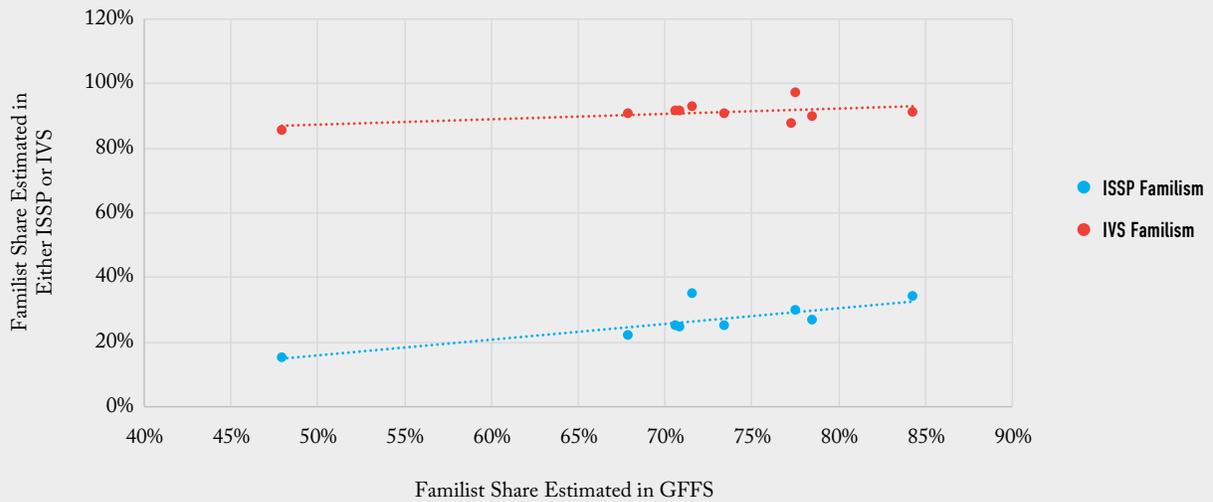
GFGS estimates of familism are somewhat less well-correlated with IVS estimates of familism but remain well-correlated with ISSP familist measures. Both the ISSP and GFGS familism measures directly refer to marriage, while the IVS question used does not refer to *marriage*, which may explain this weaker correlation. Furthermore, there are large differences in estimated familist shares. Nonetheless, the least-familist GFGS country, France, is also the least-familist ISSP and IVS country in this matched sample; whereas the most-familist GFGS country, the United States, is also the most-familist ISSP country and one of the more familist IVS countries.

Comparing IVS and ISSP rounds allows a larger number of countries to be compared across multiple waves. Here again, we find a relatively strong correlation, which becomes even stronger if the one major outlier, China, is dropped. [Figures A.1 and A.2](#) include China, which has very low IVS-measured familism relative to its ISSP-measured familism, possibly due to the influence of China's distinctive family policies.

Figure A. 1: ISSP, IVS, and GFFS Workism Shares Compared



Figure A. 2: ISSP, IVS, and GFFS Familism Shares Compared



Source: IFS analysis of source data described in appendix tables A.1 and A.2.

Figure A. 3: ISSP vs. IVS Workism by ISSP Wave

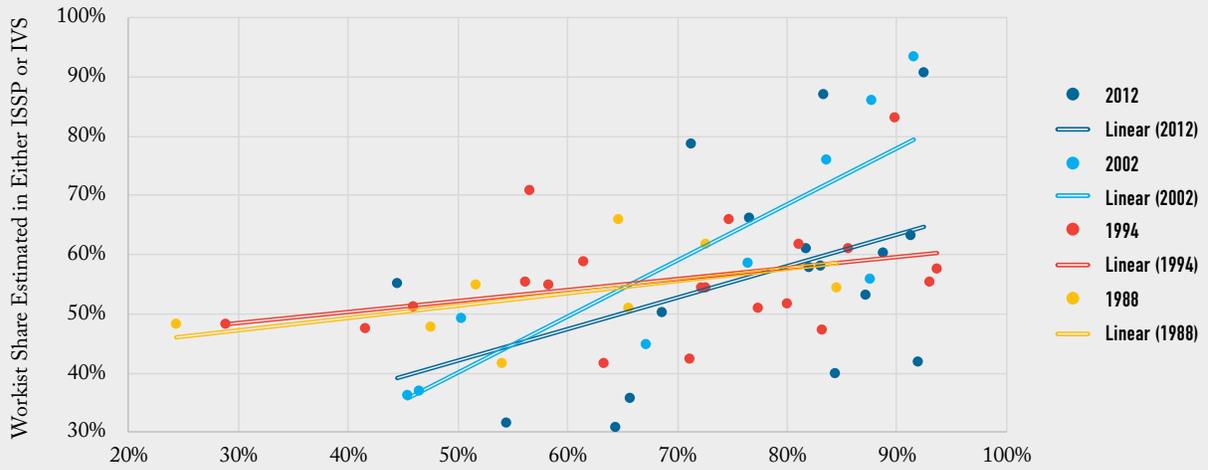
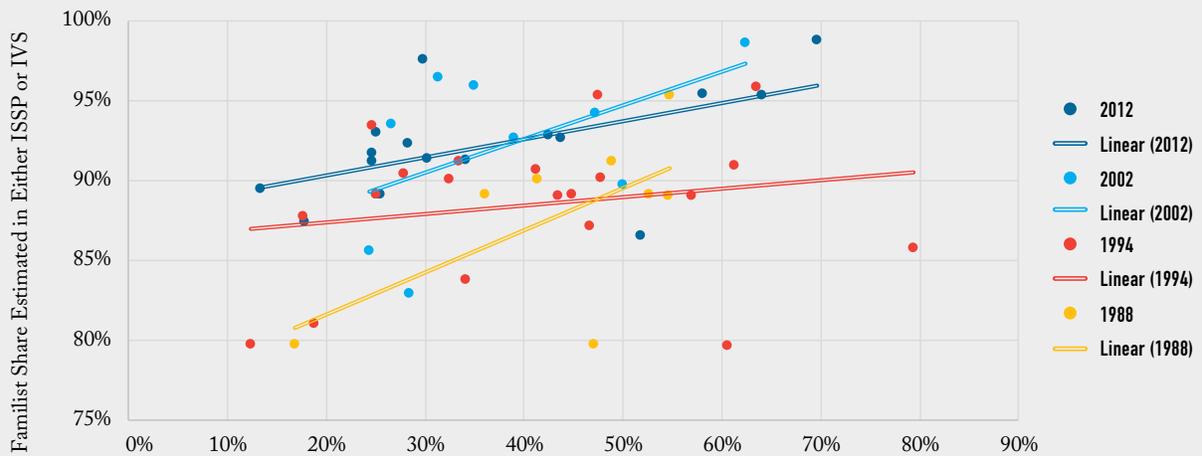


Figure A. 4: ISSP vs. IVS Familism by ISSP Wave



Source: IFS analysis of source data described in appendix tables A.1 and A.2.

That virtually all waves and measures of workism and familism correlate with each other supports our thesis that the various operationalizations we adopt are different ways of getting at a related underlying concept. [Tables A.1 and A.2](#) describe the source data for [figures A.1, A.2, A.3, and A.4](#).

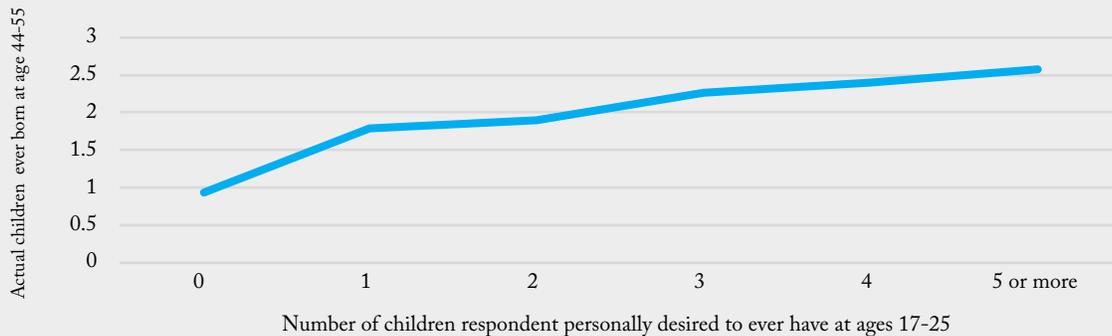
VIII. Appendix C

Using ISSP data requires substituting fertility preferences for actual fertility. Here we show that it is not consequential to the conclusion that more and fewer babies coincide. [Figure A.5](#) presents personal fertility desires of surveyed women ages 17 to 25 in 1982 in the National Longitudinal Survey of Youth (NLSY) 1979 cohort, versus their ultimate fertility outcomes at the end of their childbearing years. Fertility ideals surveyed in early adulthood are highly predictive of ultimate fertility outcomes.

However, the ISSP is a cross-sectional, not a longitudinal, survey. Luckily, data from the General Social Survey can be used to show that fertility ideals are strongly associated with cross sectional fertility as well. [Figure A.6](#) presents the average number of children women ever had in the General Social Survey from 1972 to 2018 versus the number of children those women said was ideal for a family to have. [Figure A.6](#) also presents the same value, controlling for the age of a woman.

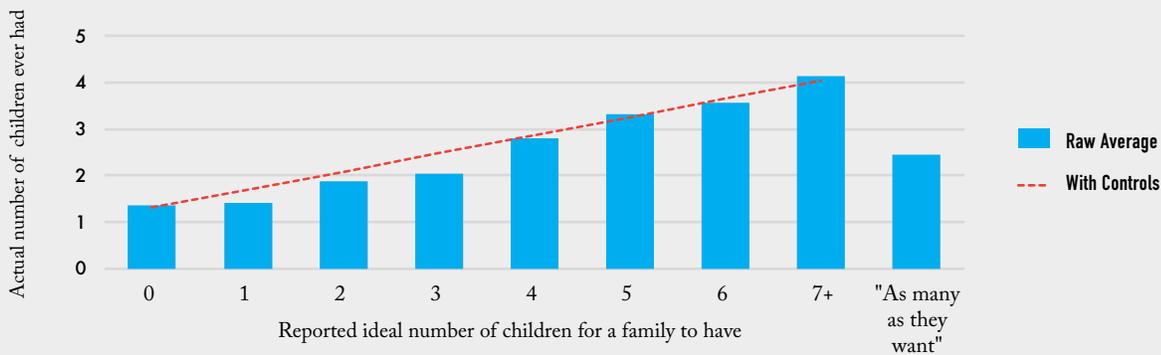
Thus, fertility ideals are highly predictive of actual individual fertility outcomes. Moreover, fertility ideals have other advantages over fertility outcomes: they are relatively stable across the life course compared to actual fertility, which necessarily rises. Male respondents often provide unreliable “actual fertility” answers for a variety of reasons (including multi-partner fertility and unacknowledged paternity); whereas in developed countries at least, males and females provide extremely similar responses about fertility ideals. Thus, by enabling the inclusion of younger women whose fertility outcomes are not yet able to be analyzed, along with the inclusion of male respondents, analyses based on fertility ideals can draw from a comparatively large sample. This supports our use of such an approach in the ISSP data.

Figure A. 5: Childbearing Desires Predict Ultimate Childbearing



Source: IFS analysis of national Longitudinal Survey of Youth, 1979 cohort. Crude mean of children ever born at last post-age-44 survey by states desires in earlier survey waves.

Figure A. 6: High Correspondence Between Ideal and Actual Fertility



Source: IFS analysis of General Social Survey, 1972–2018.

IX. Appendix D

Having introduced the concept of “workism” as the general level of importance and significance assigned to market work, and having demonstrated that it has a significant relationship to fertility in data from the Integrated Values Survey (IVS), we now assess whether the concept of workism can be meaningfully operationalized in other data.

Have we introduced a robust concept or an idiosyncratic finding? This section does not attempt to *replicate* the IVS-based analysis in other databases, but rather provides other examples of how the concept of workism can be operationalized in existing surveys. In order to validate the general applicability of the theory that “workist” attitudes reduce fertility independently of “gendered” attitudes, we turn to three separate surveys that tap workism with very different items.

Workism and Fertility Preferences in the International Social Survey Program

First, we assess the International Social Survey Program (ISSP) that used its family and changing gender roles module in 1988, 1994, 2002, and 2012. Each of these rounds besides 2002 also asked respondents about fertility *ideals*. Its lack of data on actual fertility might appear to make the ISSP useless for exploring the connection between workist attitudes and fertility, but we demonstrate in Appendix C that fertility ideals are highly correlated with fertility outcomes at the individual and national levels in both cross-sectional and longitudinal data. Thus, we are able to relate workism and familism to fertility using data from over 86,000 respondents in 45 countries.

We analyzed the association between workist attitudes on fertility ideals using a linear regression with dummy variables for year and country of survey, as well as respondent age, sex, marital status, and work status. In some specifications, we

also include controls for country attitudinal environments, as described below. Finally, we use answers to one survey question about work and one survey question about marriage to classify respondents as workist or familist.

Only one ISSP question asks about values related to work in a way that does not also tap attitudes regarding gendered division of labor: “To what extent do you agree or disagree with the statement: both the man and woman should contribute to the household income?” This question is not “pure” workism as it does not enable us to identify workism separately from partnership. However, it is preferable to statements like, “Being a housewife is as fulfilling as working for pay,” since there is no equivalent question asked of men. Some recent survey rounds do ask whether men working outside the home harms the family in a format similar to longstanding questions for women, but since these questions were not asked in earlier survey rounds, they cannot be used in our analysis. Respondents who strongly agree with the two-earner-household norm are considered to be the most “workist,” while respondents who strongly disagree are relatively non-workist. Because of the 5-point scale given to respondents from “strongly agree” to “strongly disagree,” our measure of workism ranges from 5 down to 1.

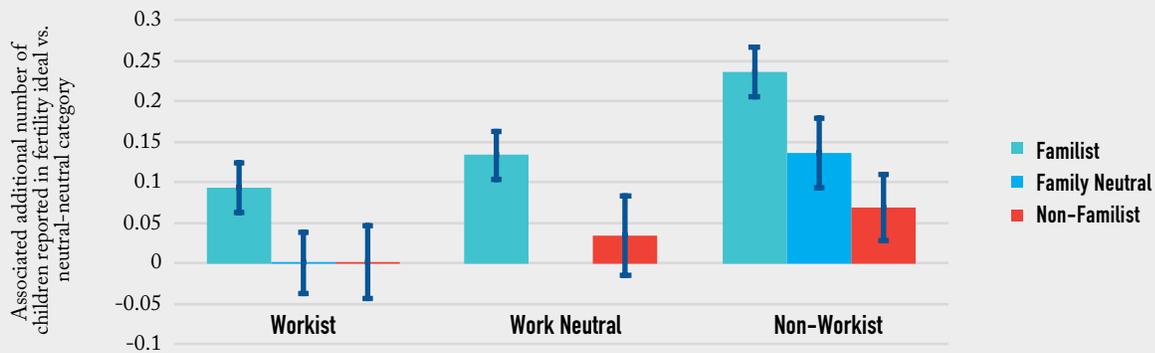
We also identified familism on a 5-point scale using the question, “To what extent do you agree or disagree with the statement: married people are generally happier than unmarried people.” Again, this question wording is imperfect as it could encapsulate judgments about the institution of marriage apart from importance of family. However, since in most societies married people are generally happier than unmarried people, and this fact is fairly widely known, individuals who *disagree* with the statement can be reliably presumed to have *unusually pessimistic* views of married life. We prefer this question about married life over questions about childbearing or childrearing as proxies for familism, since we do not want a measure that is directly related to our dependent variable. By focusing instead on a judgment of happiness and marriage, we may ameliorate the possibility of rationalization biases as respondents consciously fit child-related answers to their childbearing and rearing experiences (or reverse causation bias when they become more familistic because they have children).

These operationalizations of the concepts of workism and familism differ *considerably* from the definitions used in the IVS analysis. We see this as a feature, not a problem: we are demonstrating that multiple different survey questions can be used to get at the underlying concept of workism and familism, and that these approaches all lead to effectively the same conclusion.

We first use a specification identifying respondents as workist or not and familist or not. Individuals who neither agree nor disagree with a given statement are coded as “neutral.” [Figure A.7](#) provides an estimate of how much higher fertility ideals are for respondents who fall in each workism-familism grouping, versus respondents who are “neutral” on both axes, with controls for country, year, sex, work status, age, and marital status.

Fertility ideals are considerably higher among respondents with less workist attitudes (i.e., those who *disagree* or *strongly disagree* that both spouses ought to work outside the home; the set of bars at the right) and are also considerably higher among respondents with more familist attitudes (i.e., those who *agree* or *strongly agree* that married people are happier). Neither of these statements is directly related to childbearing, so there is no reason this had to be the case. For example,

Figure A. 7: Workism and Familism are Separately Associated with Family Ideals



Source: IFS analysis of data from ISSP 1988, 1994, and 2012 family modules. Controls for country, survey year, respondent sex, employment, age, and marital status.

individuals could both have high fertility ideals and believe both spouses should work for the purpose of providing for children. And yet, in practice, this is not what we observe.

Strikingly, the highest fertility ideals of all are among respondents who are non-workist *and* who are familistic. At a greater than 0.2 children per woman difference in ideals, this effect is both statistically and demographically significant. In the NLSY 79 cohort described in Appendix C, an additional 0.2 children more in fertility ideals at a young age translated into 0.03 to 0.1 more children ever born, an effect that is similar in its magnitude to various large and extremely costly pro-natal programs implemented by various governments. While this is a back-of-the-envelope calculation, it seems plausible: societies that consider it very important for all adults to work for their whole adult life and that are composed of adults skeptical that long-term unions are conducive to happiness will, of course, have fewer children.

In order to explore the robustness of these findings, we produced a different, but related model. Instead of workist/familist categories, we directly use the 5-point agree/disagree scales for the two questions of interest and assess how these questions relate to fertility ideals. In model 1, we duplicate the model used for [Figure A.7](#), but with the questionnaire 5-point responses coded numerically, such that a higher value indicates a more workist or less familist response. In model 2, we introduce variables for the share of respondents in that country and year who make workist/non-familist responses. [Table A.3](#) presents the results.

In both models, more workist and less familist individuals do have lower fertility ideals. Dummy variables also have the expected signs: more recent years are associated with lower fertility ideals, as are younger cohorts. Being currently married is associated with slightly higher fertility ideals, as is being female, while being employed is associated with slightly lower fertility ideals.

Table A.3: Results from ISSP Data

	Model 1	Model 2
Effect of More Workism	-0.036***	-0.035***
Effect of Less Familism	-0.039***	-0.039***
10% change in non-familist share of country		-0.032***
10% change in workist share of country		-0.007*
Year dummies	x	x
Country dummies	x	x
Age dummies	x	x
Marital status dummies	x	x
Female	0.0240**	0.0240**
Employed	-0.060***	-0.060***
Observations	89,409	89,409
R Squared	0.1722	0.1726

Source: IFS analysis of data from ISSP 1988, 1994, and 2012 family modules

Country-level workism also has the expected effect. Just as individuals who are more workist have lower fertility ideals, individuals who reside in more workist countries tend to have lower fertility ideals, regardless of their own workism. Lower country-level non-familism also predicts higher fertility ideals (model 2).

Using different definitions of variables in a different database of different countries than in the IVS study, we find that the concepts of workism and familism predict lower fertility preferences, which likely indicates lower fertility in the long run. The effect sizes we identify are similar to those we find in the IVS.

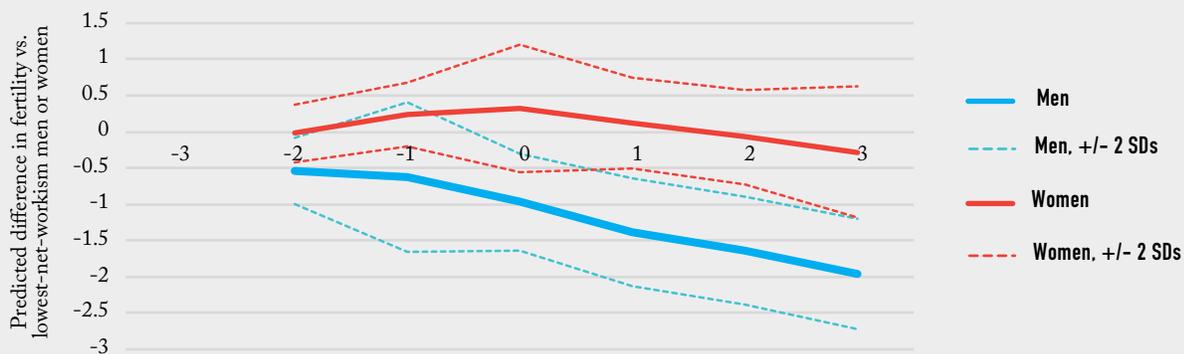
Workism and Fertility in the 2018 Global Family and Gender Survey

The 2018 Global Family and Gender Survey (GFGS) was conducted September 13-25, 2018, by Ipsos Public Affairs (formerly GfK) on behalf of The Wheatley Institution and the Institute for Family Studies. It was a global survey of 16,000 men and women ages 18 to 50 in 11 countries. The survey asked respondents to rate the importance they assigned to a variety of family-related topics, including having a good marriage, being a good parent, and work. The survey also asked respondents about their childbearing and plans for future childbearing. As a result, it can be used to assess how the importance individuals assign to work and family is associated with both fertility outcomes and fertility intentions. We treat the assessed importance of a “good marriage” as an indicator of familism. “Being a good parent” is,

of course, also familialistic; however, it may be highly endogenous to having children, as women may value being a good parent because they have (more) children. We treat the assessed importance of “work” as an indicator of workism.

We first examine fertility outcomes for individuals over age 40, who are likely near the completion of their reproduction. Figure A.8 shows that individuals who prioritize work more highly than family do tend to have fewer children. This effect is especially strong for men. Notably, while the effect for women is statistically insignificant, if net workism is re-coded as a continuous rather than factor variable, the coefficient on higher workism is significant and negative ($t=2.6$).

Figure A. 8: Effect of Net Workism on Completed Fertility By Sex, at Age 40 and Over, in GFGS

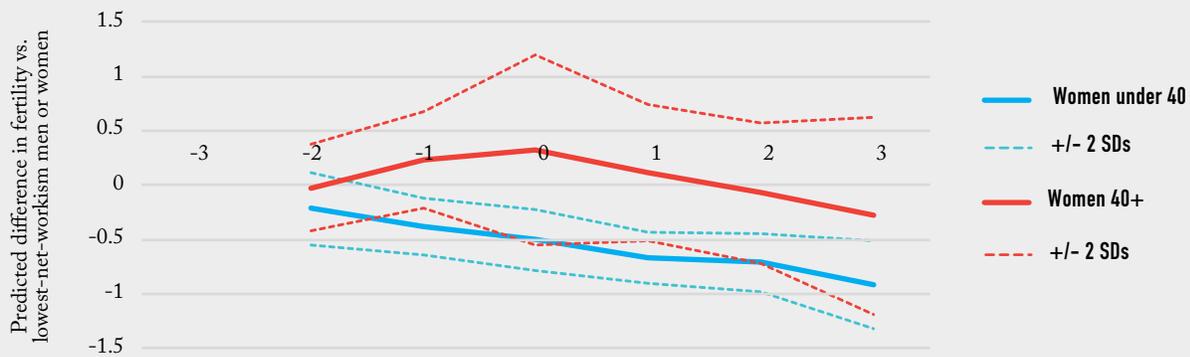


Source: IFS analysis of data from the 2018 Global Family and Gender Survey. With controls for country and educational attainment.

However, men’s reports of their fertility histories are sometimes unreliable; furthermore, male fertility is less constrained over age 40 than female fertility. Since the GFGS only included adults ages 18-50, this makes assessments of male fertility challenging. As such, we focus on women. While the effect of workism on fertility is relatively weak for women over 40, it is quite strong among women *under* 40, as shown in Figure A. 9.

For women under 40, higher workism is strongly associated with lower fertility. This could imply three things. First, it could imply that workism motivates fertility *postponement*, presumably, as women choose to advance their career first, but that highly work-motivated women often ultimately achieve their goals. Second, it could imply that the correlation between workism and fertility among older women is not a *post hoc* rationalization, as women do not seem to adjust their assessed importance of work and family in light of their fertility histories (in fact, workism becomes slightly *less* predictive of outcomes as women age, whereas a *post hoc* rationalization bias would cause the correlation to become *stronger*). Third, it is possible that the fertility environment has simply changed over the last two decades, and so women under 40 are facing a cultural and reproductive environment in which attitudes towards work matter more.

Figure A. 9: Effect of Net Workism on Completed Fertility by Age, in GFGS



Source: IFS analysis of data from the 2018 Global Family and Gender Survey. With controls for country and educational attainment.

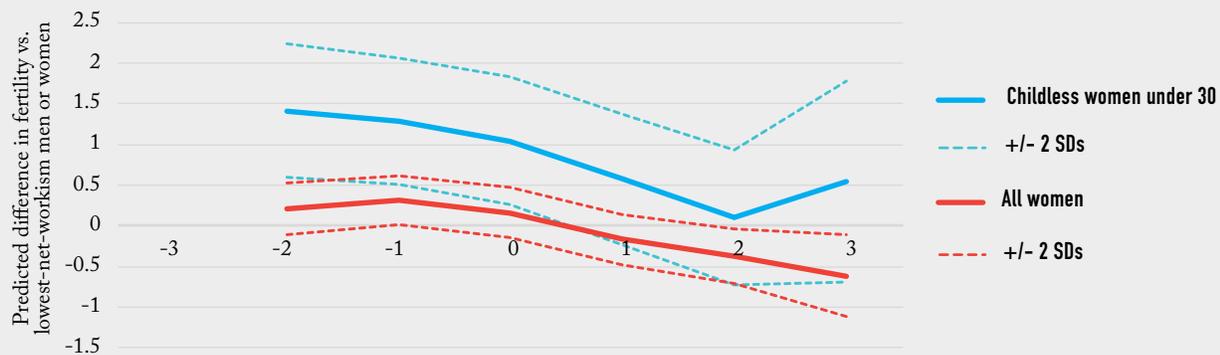
To sort out these explanations, we incorporate women’s childbearing plans. We add future planned fertility to prior fertility to identify the total family size women intend to achieve. We look both at all women together and specifically at childless women under age 30, that is, those who have not yet begun to have children, and so we are assessing purely the relationship between their intentions and their work attitudes. Since workism may influence the odds a woman under 30 is childless, the effects identified for childless women under 30 are likely a *lower bound* of the effect of workism.

Both for the sample of all women together, and, less significantly, for the sample of childless women under 30, we find that intended final fertility is associated with workist attitudes (Figure A.10). Women who place a greater emphasis on work than on having a good marriage have, and *intend* to have, considerably fewer children. This effect exists among women who have already begun their childbearing, and also among women who have not yet done so.

Workism, then, predicts completed childbearing at higher ages, and even more strongly predicts childbearing at a given age among younger women. It also predicts planned future childbearing and, thus, total intended childbearing. That it predicts both completed fertility at a higher age and planned fertility strongly suggests that women do not construct their attitudes on these measures in response to childbearing, but rather that workism is an important part of the story of low and increasingly delayed childbearing.

Notably, we use the GFGS question about the importance of *marriage*. However, if we use the importance of *being a good parent*, we find even larger effects. While some of this is certainly endogenous to past childbearing, we find that assigned importance of being a good parent is highly predictive of childbearing intentions, even among currently childless women. As such, our choice to use respondent views of the importance of marriage likely provides a *lower bound* for the relative importance of familism and workism.

Figure A. 10: Effect of Net Workism on Intended Completed Fertility by Age, in GFSG



Source: IFS analysis of data from the 2018 Global Family and Gender Survey. With controls for country and educational attainment.

Workism and Fertility in the Demographic Intelligence Family Survey

In 2020, in response to the COVID-19 pandemic, the consulting firm Demographic Intelligence conducted a survey of fertility preferences and attitudes, the D.I. Family Survey (DIFS).²⁶ The first wave was conducted in April 2020 (DIFS-1), and the second wave in September 2020 (DIFS-2), each with a representative sample of about 1,300 reproductive-age women. The second wave of the survey included a question array asking respondents to ordinally rank the importance of various elements of their life. Options included religious faith, having fun, meaningful friendships, care of animals, national pride, and other items; however, the two responses we are most interested in are “having a meaningful career” and “spending time with my family.”

These two indicators afford a compelling operationalization of the concepts of workism and familism. Workism assigns value to work not just based on the wages earned, but by situating work in a framework of meaning, purpose, and identity: it’s not just a job, it’s a *career*; it doesn’t just pay well, it is *meaningful* (respondents separately ranked the ability to “buy nice things” as well as “having a good standard of living,” disaggregating consumption desires from career-focus). The indicator for familism is not child- or marriage-specific, but it asks respondents to visualize family *generally*. Simultaneously, the DIFS survey includes an unparalleled range of questions about fertility preferences, identifying respondents’ personal fertility intentions, their personal fertility desires (using the standard question format from the Demographic and Health Survey), and their general fertility ideals (using the question format from the General Social Survey or ISSP). Additionally, DIFS-1 includes several questions about general values related to family and children, and DIFS-2 includes an even wider range of such values questions.

²⁶ Lyman Stone, a co-author of this report, is a partner at Demographic Intelligence and participated in the design and implementation of the survey.

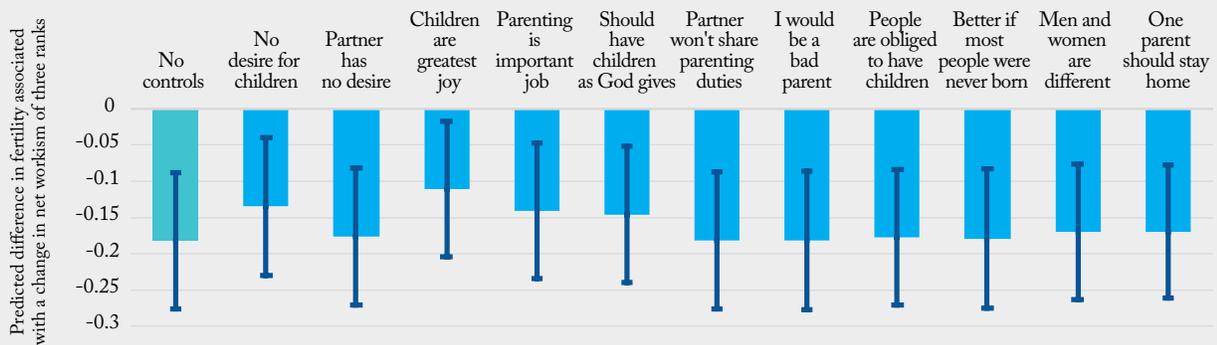
In the DIFS-2 dataset, we find that net workism is strongly associated with personal fertility desires, general fertility desires, fertility intentions, and actual childbearing. With no controls, we find that every indicator of fertility preferences and outcomes has the expected correlation with the difference between the importance of work and family: individuals who place a higher importance on work than family, in fact, desire fewer children for themselves, regard the optimal societal family size as lower, have lower actual plans for their own childbearing, and consequently have fewer children.

Figure A. 11: Association Between Workism and Fertility Preferences and Outcomes



Source: IFS analysis of data from October 2020 wave of the Demographic Intelligence Family Survey.

Figure A.12: Effect of Workism with Controls for Specific Value Statements



Source: IFS analysis of data from October 2020 wave of the Demographic Intelligence Family Survey. All models include controls for age, education, income, relationship status, sexual and gender identity, racial or ethnic identity, and each value statement identified individually.

This association is robust to numerous controls. [Figure A.12](#) shows the coefficient for personal fertility desires associated with a change in net workism of three ranks (so from -3 to 0, for example), with controls for age, education, income, relationship status, sexual and gender identity, racial or ethnic identity, and whether respondents agreed with each of the listed “value statements” individually.

As can be seen, the effect of workism, while sometimes attenuated by the inclusion of controls for specific values, remains significant in all cases. Moreover, net workism itself correlates with many of these values: highly workist individuals are more likely to say they or their partner does not desire children, to worry their partner won't share parenting duties, to feel they would be a bad parent, and to agree that “It would be better for most people if they had never been born.” On the other hand, more familist people are more likely to: say children are the greatest joy in life, parenting is important, people should have as many children as God gives, and that “men and women are fundamentally different” and “It's best for everyone if one parent stays home.” But while these are correlated, it is vital to emphasize that workism's effect is *separable from* these specific values, and indeed the magnitude of the effect is not greatly diminished by including these other value controls. Notably, many of the values we use as controls also independently predict fertility, consistent with prior literature showing that specific values related to family and children predict fertility behaviors.²⁷

²⁷ For example, Brauner-Otto, S. R. “Attitudes about Children and Fertility Limitation Behavior,” *Population Research and Policy Review* 32, no. 1 (2013): 1-24.

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