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**SOCIOECONOMIC VARIATION IN REPORTS OF FERTILITY BEHAVIOR
DURING THE U.S. ECONOMIC RECESSION**

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Abstract

Using two cross-sectional U.S. surveys taken during 2009, I examine individual fertility plans during the economic recession. While those who experienced direct financial strain were most likely to report that the economy affected their fertility plans, the highly educated were most likely to have actually postponed a birth (and least likely to report feeling financially strained). The highly educated are more likely to plan to have children in the future, so it appears that the fertility decisions of highly educated individuals are less directly affected by the recession in the same manner as those with less education.

Economic recessions have the potential to dramatically impact family behaviors in developed countries. Fertility is likely to be particularly affected by economic recessions, as childbearing and childrearing entails a major long-term expense. In general, the overall association between fertility and poor aggregate economic conditions tends to be negative, although empirical evidence presents a fairly mixed picture, often dependent on the indicators measured, the country/government context, and the specific time period analyzed (Sobotka et al 2011). However, there has been little investigation of individual-level behaviors during economic downturns. Aggregate fertility changes may result from a number of varied behaviors at the individual level, and research has generally inferred economic influences on individual fertility behavior from aggregate fertility shifts. The current research takes a different approach to studying fertility under conditions of economic uncertainty to fill in the gap about individual behaviors during recessions. Rather than using aggregate fertility and economic indicators, I use two unique datasets collected during the economic recession in the United States to examine how perceptions of the downturn have impacted individual fertility plans and intentions. These datasets have different but complementary fertility measures that directly asked individuals about postponement, economic influences on fertility, and future fertility plans as well inquired about the role of finances in child-related expense.

I also take the research on fertility and economic instability a step further by considering socioeconomic differentials in the affordability and opportunity costs of children. Although lower-skilled and less-educated individuals are more directly and severely affected by economic changes due to their more precarious position in the labor market, there is mounting evidence that the middle-class is feeling the strain as well (Council of Economic Advisors 2011). Middle-class Americans say it is increasingly difficult to maintain their standard of living and report

having to adjust their lifestyles to accommodate economic downturns (Pew Research Center 2008). Moreover, in relation to having children, there are clear social class differences in defining when adults are “ready” to have children, what children need, and what parents should provide (Lareau 2003). Middle-class individuals (usually measured by higher levels of education) have high personal and social requirements to fulfill prior to becoming parents and have high expectations of what parenting entails, whereas those with lower levels of education tend to view parenthood in a much different manner with much different requirements (Alstott 2004; Bachrach, Smock, and Hoelter 2011; Edin and Kefalas 2005; Hays 1996; Smock and Greenland 2010). At the same time, higher education also increases the costs of children by raising the value of other competing behaviors, such as career investment, travel, and the like, which may also be rewarding. As such, middle-class individuals may be more likely to report delaying childbearing than lower-income individuals if they perceive the threshold for becoming a parent is harder to achieve and/or they perceive both the direct costs and the opportunity costs of childrearing to be higher.

Fertility in the United States during the recent recession

Fertility rates fell more rapidly from 2007 through 2009 than in any other two-year period in the last 30 years (Sutton, Hamilton, and Mathews 2011). By 2009, the last year for which full data is available, the Total Fertility Rate (TFR) in the United States was 2.007, down 4% from 2008 (Martin et al 2011); provisional data suggest continued decline through at least June 2010 (Sutton, Hamilton, and Mathews 2011). The decline in fertility occurred across all race-ethnic groups and most age groups. In fact, some of the largest decreases in fertility occurred among women in their peak childbearing years (ages 20-29), which correspond with prime career-building years. Analyses have linked state-level economic decline with state-level fertility

decline, finding that states that were hardest hit experienced the largest declines in fertility; Hispanics' fertility rate fell more than other race-ethnic groups, and Hispanics were hardest hit by the economic downturn (Livingston 2011). As noted by Livingston (2011), however, fertility declines at a particular time among individual women usually do not represent a decision not to have any children at all. Instead, this pattern implies that many women are postponing childbearing until some future date. A pattern of postponement, however, produces short-term aggregate declines in fertility that may or may not be recouped in the long run (Morgan and Taylor 2006).

Fertility plans and postponement

Most Americans plan to have children, and the ideal family size in the United States has largely remained around 2-3 children, spaced 2-3 years apart (Hagewan and Morgan 2005). There is a long history of examining fertility intentions in the demographic literature, and as Hagewan and Morgan (2005) note, fertility intentions “take on a *central* role in understanding fertility trends” (italics in original text). An individual’s fertility intentions early in the life course, though, often fail to match up with their behavior over the long run, and mismatches at the individual-level affect aggregate fertility rates (Quesnel-Vallée and Morgan 2003; Morgan and Rackin 2010). These mismatches are themselves often the focus of investigation (Iacovou and Tavares 2011), particularly in studies of childlessness and later entry into motherhood (e.g., Hertz 2006; Kelly 2009). What emerges from this literature is that while individuals often have ideas early in the life course about their desired family sizes and timing (especially when forced to answer such questions on a survey) (Hayford 2009), they are not strongly wed to their early expectations, though those with high ideal family sizes generally tend to have more children than those with low family sizes. Instead, actual fertility behaviors are made as a series of decisions

(Udry 1983), considering current circumstances and expected future circumstances, real and perceived costs and benefits of childbearing/rearing, and competing obligations (St. Pierre and Dariotis 2005). Short-term postponements, and a series of postponements, among large groups of individuals can result in aggregate timing changes, which can then lower period fertility rates and, potentially, cohort completed fertility (Rindfuss and Brauner-Otto 2010).

Although fertility postponement is commonly accepted as a demographic truism to explain low or declining fertility patterns in developed countries, there has been little actual empirical evidence; postponement is usually inferred from data showing that childless women plan to have children in the future (Hayford 2009) or based on small, non-representative qualitative studies (Kelly 2009). Low fertility can also occur, of course, through smaller desired family sizes (for instance, only wanting to have one child) or growing preferences for childlessness, though Hagewan and Morgan's 2005 work suggests this is not occurring in the U.S. Still, there is little direct evidence regarding fertility postponement. Rarely is postponement directly measured; the typical forms of data are vital statistics or retrospective fertility reports in surveys. It is not clear, then, how common postponement is, how conscious people are of postponing fertility, who decides to postpone, and for what reasons. This research addresses that gap by using data that directly asks men and women about fertility postponement – asking them if they had decided to have a child but changed their mind. Prior research has also been unable to directly link fertility behaviors and the recession; again, the reasoning behind fertility changes during a recession is inferred. This research also addresses this shortcoming by using data that directly asks individuals if their fertility behaviors were affected by the recession. Thus, this paper presents a unique insight into fertility behaviors during a period of economic turmoil.

Further, this work examines the notion that fertility declines and fertility postponement vary by socioeconomic status, since economic downturns are not experienced uniformly across social

strata. As noted earlier, different social strata consider different aspects in, and feel differently prepared for, union and family formation (Bachrach, Smock and Hoelter 2011; Lareau 2003; Nelson 2010; Newman 2009). Socioeconomic status may influence fertility behaviors in one of two ways. First, it is clear that the economic recession has had the largest negative impact on the least advantaged members of society. Although the “middle-class squeeze” exists (Scott and Pressman 2011), those with a high school education or less have been hit particularly hard. Housing values and foreclosures, unemployment and underemployment, and stagnating or declining wages are more common for these groups than more educated groups (DeNavas-Walt, Proctor, and Smith 2011). The expenses incurred by having (additional) children may represent a major strain on household finances. To the extent that this group is experiencing high levels of financial strain, then we would expect those with low education levels to be more likely to postpone childbearing. At the same time, though, the overall pattern is that men and women with lower levels of education and income are more likely to have children, to have them earlier, and to have more children than those with more education and higher incomes during all time periods (Martinez, Daniels, and Chandra 2012). This could be interpreted as evidence that disadvantaged groups on the whole do not weigh economic factors heavily in childbearing decisions; however, research suggests that higher rates of unintended pregnancies and births largely explain these differences (Edin and Kefalas 2005; Edin et al 2007; Finer and Zolna 2011; Musick, England, Edgington, and Kangas 2009). Still, the fertility impact of the economy on the disadvantaged might be weaker than expected if unintended fertility remains high, perhaps only evident among those most harshly affected by the recession.

Second, there is evidence that the better-educated – those with college degrees or higher – are more likely to delay childbearing under normal circumstances (Ellwood and Jencks 2004; Sobotka 2010). There is little evidence that well-educated individuals have smaller desired family sizes, but downward revision of fertility goals over the life course occurs more often among those with college

degrees or more (Hayford 2009) along with greater “unachieved” intentions (Quesnel-Vallée and Morgan 2003), resulting in lower completed parities. In large part, lower fertility (and childlessness) among the better-educated is hypothesized to occur as a series of postponements, as inflexibility in social institutions (education, employment, housing markets, and so on) make childbearing at any given point an endeavor with high opportunity costs (Rindfuss and Brauner-Otto 2008). In addition to high opportunity costs for highly educated men and women (lost wages, diminished career prospects, etc.), the direct costs of raising are higher as well (Lino 2011), though these high costs – in the form of quality childcare, school expenses, enrollment in extracurricular activities as well as quality housing in a stable and safe neighborhood with good schools – are not considered extreme but rather simply part of being a middle-class parent (Lareau 2003). It may be that well-educated individuals are less concerned about the financial cost of raising children even though the costs are higher, in part because they do not anticipate difficulty in meeting these costs, but also because investment in one’s children is a normalized behavior. In any case, we might see that education is positively associated with delayed fertility at any given point, regardless of the larger economic climate; that is, they may be less likely to delay for economic reasons but more likely to postpone fertility overall, planning to have children in the future.

Data

To analyze fertility postponement across socioeconomic status during a period of economic recession in the United States, I use two unique and timely datasets. The first source of data is the Familial Response to Financial Instability/How the Family Responds to Economic Pressure: A Comparative Study, 2009 (referred to as the “Familial Response” data for brevity), a cross-sectional survey. The data contain a number of indicators directly related to the financial crisis in the United States in 2009. This dataset was supported by the National Center for Family and Marriage Research as part of an overall project on family behavior during recession (see

Gaulthier and Furstenberg 2010 for a report using this data) and collected via online survey carried out by Knowledge Networks (KN), a research firm with a strong record of generating high-quality academic data. KN selects households based on random digit dialing and address-based sampling to obtain a nationally representative sample of households, providing households with access to the Internet and hardware if necessary, and households who agree to participate become part of an ongoing panel referred to as the KnowledgePanel®. An oversample is conducted among a stratum of telephone exchanges that have high concentrations of African American and Hispanic households. Individuals complete an initial demographic profile that subsequently determines their eligibility for future surveys; KnowledgePanel® members are recruited by email for specific studies based on their demographic characteristics. Surveys take about 10-15 minutes to complete, and members typically complete one survey a week. There are numerous academic projects using KN data, including the 2009 National Survey of Sexual Health and Behavior (to which an entire volume of the Journal of Sexual Medicine was dedicated (Herbenick et al 2010)) and the New Family Structures Study (featured prominently in recent discussions of same-sex marriage and parenting (Regnerus 2012a; Regnerus 2012b, Saletan 2012)). To date, there are over 400 working and published academic papers using Knowledge Networks data, including papers published in top-tier social science journals such as *American Political Science Review*, *Social Forces*, *Social Science Research*, and the *Journal of Marriage and Family*.

The Familial Response dataset recruited adults with at least one child under 18 residing in the household during August 2009. The total sample size is 1,169 adults aged 18-64, reflecting a

63% cooperation rate (out of the 1,855 adults contacted) (Dennis and McCready 2009).¹

Descriptive statistics use panel demographic post-stratification weights; multivariate analyses do not (as these weights include factors that are used as covariates, such as age, race, education, and so on). However, analyses were run with weights as well, and the results were largely similar, with one main exception. The coefficients were generally larger in the weighted analyses, suggesting that the unweighted analysis is actually more conservative. In the analysis, the sample is restricted to adults aged 18-49 (those in the childbearing years) with a valid response on the key dependent variable, fertility postponement over the past year (excluding 191 cases), for a final analytical sample of 831.

The second source of data is a cross-sectional fertility survey sponsored by the Pew Research Center for Social and Demographic Trends (referred to as the “Pew Fertility Survey” henceforth) and carried out by Princeton Survey Research International in April 2009. This survey conducted telephone interviews with a nationally representative sample of respondents aged 18 and older in the United States using landline and cellular random digit dialing. The Pew Fertility data collection is based on 4,639 working landline numbers and 2,411 personal cellular numbers, with 75% contact rate. Among contacted numbers, 30% of the landline numbers and 26% of the cellular numbers agreed to participation (the cooperation rate), and 90% completed the interview. The Pew Research Center used a two-stage weighting procedure to make the sample nationally representative. The first stage adjusted for the dual-frame (landline and cellular) sample, and the second stage used a special analysis of the Census Bureau’s 2008 Annual Social and Economic Supplement, the Census 2000, and the July-December 2007 National Health Interview Survey to create population parameters then used to create final

¹ The household recruitment rate was 21.2% and the profile completion rate was 57.8%, yielding a cumulative response rate of 7.7%. Although this is certainly a low rate, Knowledge Networks recruits a more representative sample than other web-based panels derived from non-probability samples (Chang and Krosnick, 2009).

weights. As with the Familial Response sample, descriptive statistics presented in the paper use weights; multivariate analyses do not. Again, analyses were also run with weights, but the results were virtually identical. The data collection oversampled young adults aged 18-29, and the sample size is 1,003 of individuals aged 18 and older. The analytical sample focuses on men and women aged 18-49 (n=453) with valid responses to the key fertility variables discussed below (excluding 31 cases) for a sample size of 422.

The overall analytical approach is twofold. First, using both surveys, I explore the prevalence and predictors of fertility postponement, fertility behavior, and future fertility plans. Second, again using both surveys, I analyze variation in specific child-related expenses and the importance of finances for raising children. The latter analysis allows for a focus on the underlying mechanisms of fertility postponement – whether postponement during the recession is driven by economic concerns about raising children, with attention to variation by socioeconomic status.

Dependent variables for analyses of fertility postponement, behaviors, and plans

The key dependent variable in the Familial Response data for the first set of analyses concerns fertility postponement. Respondents were asked “In the past 12 months, has your family done any of the following...?” and were given a set of behaviors, including “we were planning on having a child, but decided to postpone it.” Respondents could reply yes, no, or not applicable; unfortunately, the not applicable category was not presented as an option but recorded if respondents volunteered such a response, so it is not clear under what circumstances respondents deemed the question inapplicable. Only respondents who answered “yes” or “no” are included in the analysis (excluding the 191 “not applicable” responses). An affirmative answer means that respondents had planned to have children in the past year but postponed doing

so. It is important to note that there are two possible reasons for a negative response – respondents could have planned to have children and actually did so (no postponement), or respondents had no plans to have children and thus did not postpone childbearing. There is no way of discerning between these underlying reasons; however, controls for marital status, parity, and age of children (discussed below) are included to reflect family-building stages.

The first analysis using the Pew Fertility Survey will focus on two sets of questions regarding plans for childbearing. The first indicator is a direct question regarding fertility plans and the economy. Respondents were asked “Has the present state of the U.S. economy affected your own plans about whether to have a child or whether to have more children, or not?” with responses of yes/no. The next set of questions is a measure of fertility expectations for the future. Those with children were asked, “Do you think you will have more children?” and childless respondents were asked, “Do you think you will have children in the future, or not?” Response categories were yes/no, but 31 respondents volunteered the answer “maybe,” “hope so,” or “it depends;” these were combined into the “yes” category to create a dichotomous measure. The first indicator directly measures economic influences on fertility decisions, but in this is a more ambiguous fertility measure than used in the Familial Response data, as it does not specify past or future plans, timing or quantum, or a time period. The second measure is a more general indicator of future fertility expectations, which allows a better exploration of simply who is planning children for the future regardless of economic influences.

Dependent variables for analyses of financial considerations and childbearing/rearing

To examine socioeconomic variation in child-related expenses in the Familial Response data, I examine whether respondents anticipated spending *more* money on their children in the future. Respondents were asked a series of questions: “In the coming 12 months, are you planning on

spending the same, more, or less on...educational savings plans, children's out-of-school physical activities, children's out-of-school cultural activities, children's out-of-school care, and children's school/education expenses?" I explored a number of ways of analyzing these responses. I first dichotomized these measures to create measures of those who plan to spend *more* in the future on each measure. Then, I created an indicator of whether the respondent planned to spend more in the future on at least one of the expenses. I then summed across these measures to create a continuous count variable, ranging from 0-5, indicating how many ways they expected to spend *more* on their children in the coming year.

Finally, I examine an indicator of how the role of finances affects childbearing decisions using the Pew Fertility Survey. Respondents were asked a variation of "Would you rate the financial cost of raising children as very important, somewhat important, not too important, or not at all important in making your own decisions regarding children?" depending on whether they already had children or not. The responses for the various groups were synthesized together to create one variable regarding the importance of the financial costs in childbearing decisions. This measure was then dichotomized to create a variable indicating finances are very/somewhat important or not.

Covariates

There are slight differences in the sociodemographic characteristics and covariates across surveys, but efforts were made to maximize comparability.² Age is categorized as 18-24, 25-29 (omitted), 30-34, 35-39, 40-44, and 45-49 (the latter age groups were combined into 40-49 in the Familial Response study due to small sample size and minimal variation in the dependent

² For the Familial Response data, basic demographic information was not collected during the survey but rather is pulled from the Knowledge Networks standard profile collected upon enrollment; this is particularly beneficial for the current study in that income was not necessarily collected during the recession (when income levels may have dropped).

variables to produce more stable estimates). Gender, race/ethnicity (non-Hispanic white, non-Hispanic black, Hispanic, and other), and marital status (never married, cohabiting (both never married and previously married), separated/divorced/widowed, and married) are also included. In the Pew Fertility Study, there are no measures of parity or children's age other than a simple dichotomous measure of whether there are children under 18 living in the household; however, there is a measure of ideal family size, operationalized here as having an ideal family size of 3 or more children. Parity in the Familial Response study (recall that it only included parents) is measured as one child, two children, or three or more children, and age of children in the household is included to proxy family-building stage, measured as a series of dichotomous and non-mutually exclusive categories: infants (age 1 or younger), preschool age children (ages 2-5), school-age children (ages 6-12), and teenage children (ages 13-17). Education is categorized as less than high school, high school degree/GED, some college but no degree, Associate's degree, Bachelor's degree, and graduate/professional degree; some college/Associate's degree is combined in the original question wording of the Pew Fertility Study but an additional category of vocational/technical training is included. Household income is also included: less than \$10,000/year, \$10,000-19,999/year, \$20,000-29,999/year, \$30,000-39,999/year, \$40,000-49,999/year, \$50,000-74,999/year (omitted), \$75,000-99,999/year, \$100,000-149,999/year, and \$150,000 or more/year.³ In the Pew Fertility Study, there were some missing values in the dataset for income (n=50), race (n=3), marital status (n=1) and has children under 18 (n=1). Multiple imputation was used to fill in the missing values for income using the MI procedures in

³ I also explored a subjective measure of household economic status in the Familial Response study, where respondents reported the situation of their current household on a scale of 1 (extremely poor) to 10 (extremely rich); although only weakly correlated with actual income ($\rho=.5346$), the results were substantively similar in that, like income, subjective household economic status was not significantly related to the dependent variable in the final model. Employment status is not included here due to comparability issues across surveys; however, preliminary analyses with the different employment measures for each survey were insignificant.

Stata; logical imputation was used for the other missing variables based on responses to other questions.

The analyses also include measures of financial strain during the recession. In the Familial Instability data, there are three indicators. The first two directly indicate child-related financial pressures: “How much does the current financial climate influence how much money you spend on your children?” and “How much does the current financial climate influence how much time you spend with your children?”, both answered on a scale of 1 (not at all) to 5 (extremely). Both measures are dichotomized into quite/extremely affected or not. The third indicates overall financial strain: “How well do you currently get by with your family’s income?” answered on a scale of 1 (with great difficulty) to 4 (very easily). This indicator is also dichotomized, to reflect difficulty or not. In the Pew Fertility study, respondents were asked a direct question measure of subjective family wellbeing during the economic crisis: “Would you say the recession has caused stress in your family, or not?” This measure is also dichotomized, to reflect the presence of stress or not.

Methodological approach

In the first set of analyses examining fertility postponement in the Familial Response data, the analytical plan is to present the baseline model containing sociodemographic, economic, and family characteristics, then subsequently add in the indicators of direct child-related pressures and overall financial strain. The analyses use logistic regression, producing the odds of an affirmative answer relative to a negative answer – comparing the likelihood of having postponed childbearing to both the likelihood of not having postponed childbearing because respondents did not plan on having a child *and* not having postponed childbearing because they actually went forward with plans to have a child. Thus, the results provide a conservative test of fertility

postponement. For the Pew Fertility Study analyses examining fertility behavior during the recession (economy has affected plans to have children) and future fertility plans (plan to have children in the future), there are two models for both dichotomous indicators, analyzed with logistic regression, first presenting a baseline model and then adding in the measure of financial strain.

To analyze economic influences on childbearing/rearing in the Familial Response data, the analysis uses logistic regression to predict any planned increases in child-related expenditures and uses OLS regression to predict the number of expected increases in child-related expenditures, using the same set of baseline predictors as used in the previous analyses as well as the overall indicator of financial strain. In the Pew Fertility study, the importance of children is analyzed using logistic regression, where the dependent variable is defined as finances are very/somewhat important for childbearing decisions, using the same baseline predictors and the indicator of recession causing family stress.

Results

Bivariate Results

Tables 1 and 2 display the distribution of the covariates in the sample and the proportion within each indicator for the Familial Response and Pew Fertility Study, respectively; in the interest of space, this discussion will focus on the bivariate relationship between education and fertility postponement and behaviors and between education and the role of finances for childbearing/rearing decisions. Overall, about 7% of the sample reported that they had planned to have a child but decided to postpone childbearing during the past 12 months (Table 1). Just over a fifth of the sample reported that the economy had affected their plans have children, with far more variation in future fertility plans than in economic fertility impact (Table 2). The proportion of

those who reported changing their plans to have children is substantially higher than in the indicator of postponement in the past year. At the same time, many people still plan to have children – 43% reported that they plan to have a child or additional children in the future. And of those who reported that the economy affected their plans to have children, about half reported that they still plan to have children in the future, and only 19% of those who do not plan to have children in the future reported that the economy affected their plans; most people (about three-fourths) who plan to have children in the future did not report an economic influence on their fertility plans (Table 2). These descriptive and bivariate characteristics suggest that although the economy plays a role in people’s fertility decisions, other concerns and factors play a larger role.

< Table 1 here >

< Table 2 here >

Given expectations that the economic downturn hits certain groups more hardly than others, we would expect that postponement might differ by education. There are large differences by education level in the proportion reporting postponing childbearing in the past year (Table 1). Those with the least education – high school dropouts – are particularly likely to have postponed childbearing, with 12.6% reporting fertility postponement in the past year. Those with a high school degree – the modal category – rarely reported postponement, at only 1%. Postponement is again high among those who had some college but no degree (11.7%), while about 7% of those with an Associate’s or Bachelor’s degree reported some postponement. Over 10% of those with a graduate or professional degree also reported postponement.

According to the Pew Fertility Study, changes in fertility plans specifically attributed to economic reasons are inversely related to education, with lower levels of education having a higher proportion of changing their fertility plans due to the recession (Table 2); this is

somewhat contrary to what was seen in the Familial Response Survey. Turning to future plans, those with less than a high school degree are the most likely group to plan to have children in the future, followed by those with graduate/professional degrees and those with some college/AA degree. It is also worth noting that the direct indicators of the impact of the recession as well as financial strain also appear to be related to fertility postponement and changing fertility plans during the recession but not with future fertility plans.

Multivariate Results

Although there appears to be variation by socioeconomic, demographic, and family characteristics in fertility postponement at the bivariate level, any associations may largely be due to inter-variable correlation, so I turn to multivariate models. Table 3 shows four models analyzing fertility postponement in the Familial Response survey. Model 1 includes only socioeconomic, demographic, and family variables, Model 2 adds the two indicators regarding the economic recession impact on time and money spent with children to Model 1, Model 3 adds the overall indicator of financial strain to Model 1, and Model 4 includes all indicators. This discussion will mainly focus on education in the interest of brevity. In Model 1, those with post-high school education are significantly and substantially more likely to have postponed childbearing in the past year than those with only a high school degree. Individuals with some college and with an Associate's degree are 6 times and 5.5 times, respectively, as likely to have postponed fertility in the past year, and those with a four-year college degree are about 7 times as likely to have postponed fertility. Fertility postponement was most likely, however, among those with a graduate or professional degree, who are 13 times as likely to have postponed. Income was not associated with postponement.

< Table 3 here >

Models 2-4 add in direct measures of the impact of the economy. In Model 2, individuals who felt that their involvement with and support of their children have been negatively affected are significantly more likely to have postponed additional children in the past year. Having spent less money on children doubles the odds of postponement, and having spent less time with children is associated with a 150% increase in the likelihood of postponement. Interestingly, the presence of child-related indicators actually increases the magnitude of the education variables – those with post-high school education are even more likely to have postponed childbearing in the past year. Model 3 includes the overall measure of financial strain; not surprisingly, overall financial strain, reflected by reported difficulty in “getting by” over the past year, sharply increases the likelihood of postponing childbearing, with an odds ratio of 7.3. But again, the education variables remain highly significant. The highest levels of education – college and graduate/professional degrees – are most strongly affected by including the measure of financial strain, with the magnitude of fertility postponement even higher than in Model 2, with odds ratios of 8.7 and 15.4, respectively. This suggests that fertility postponement among highly educated individuals is not related to the direct experience of financial strain and economic uncertainty per se. Finally, Model 4 adds both sets of measures regarding the negative influence of the recession. When controlling for difficulty in “getting by” over the past year, neither of the more direct measures of the impact on investments and time spent with children are significant. The education variables increase in magnitude, though, and the increase is incrementally larger as the level of education level increases, such that those with a graduate or professional degree are 17.5 times as likely to have postponed fertility in the past year once the experience of overall and child-related financial strains are accounted for. This analysis did not, however, directly measuring fertility postponement due to the recession, as it included those who may have not

been planning to have children at all and did not inquire as to the reasoning behind postponement. To explore more direct recession-related fertility behaviors, I turn to the Pew Fertility Survey.

< Table 4 here >

Table 4 shows the results from multivariate models for each of the two dependent variables in the Pew Fertility Survey; this discussion will again focus on the education variables. Model 1 has socioeconomic, demographic, and family variables, and Model 2 adds in the subjective experience of the recession. Looking first at whether the economy has affected plans to have children, relatively little is statistically significant in either Models 1 or 2. Those with some college or an Associate's degree and those with a Bachelor's degree are about half as likely to report an economic impact on their fertility plans as those who had only a high school degree. The inclusion of the subjective measure of family stress improves model fit; those who reported that the recession had caused their family stress are 5 times as likely as those who did not report stress to have reported that their own plans about having children were affected by the economic recession. The few significant covariates from Model 1 are changed slightly in Model 2 – having a four-year college degree is no longer significant, although those with some college or a two-year college degree become even less likely to report an impact of the economy on fertility plans.

The second set of models predict plans to have children in the future. The results are substantively similar across Models 3 and 4, as financial strain during the recession is unrelated to future fertility plans. What is perhaps most interesting, though, is that those with a graduate or professional degree are over three and a half times as likely to plan to have children in the future relative to those with only a high school degree in a multivariate setting. Although the Pew data

include both those with and without children, further restricting the sample to those who have children, (n=272, comparable to the sample for the Familial Response data) does not substantially change the results, not shown. Even among those who already have children, education is unrelated to changes in fertility plans due to the economy but positively associated with planning to have children in the future.

Together, these two analyses suggest that those with higher levels of education are likely to reconsider and reevaluate their fertility plans, postponing fertility and planning to have children in the future, but not for economic reasons per se. In analyses not shown, higher levels of education are associated with a decreased likelihood of having financial strain. Thus, other reasons are likely behind the postponement. If financial strain and precariousness are not directly driving fertility postponement among those with higher levels of education, what is? It may be that they consider finances to be particularly important for having and raising children, and their current investments in their children are high, leading to concerns over making additional investments in new children at the moment, instead planning to increase investments in their current children. To examine this possibility, Table 5 displays two models analyzing the Familial Response data. Model 1 examines the likelihood that individuals plan to increase their spending in the next year on child-related expenditures, using logistic regression with a dependent variable of any planned increase or not. Model 2 examines the number of planned increased expenditures, ranging from 0-5, using OLS regression. Expenditures include education savings, physical activities, cultural activities, child care, or school-related expenses. The covariates in both models are identical to those in Model 3 in Table 2.

< Table 5 here >

What can be seen in Table 5 is that relatively little predicts planned child-related expenditures over the next year. However, as in the models predicting fertility postponement, higher levels of education are salient. Those with an Associate's Degree or higher are significantly more likely than those with only a high school degree to plan to spend more money on at least one aspect of child-related expenses, from 80% to 95% more likely. Higher education, at the four-year college level or more is also significant in Model 2, predicting the number of planned expenses. Those with a four-year degree are planning on spending more money on more aspects than those with only a high school degree. Having a graduate/professional degree is marginally significant ($p=.07$), suggesting that this group is also planning on spending more money on more expenses. In analyses not shown, cultural activities and school-related expenses are the most common expected increased expenditures; those with a BA are 1.4 times as likely to plan to increase spending on cultural activities and 1.9 times as likely to plan to increase spending on school-related expenses as those with only a high school degree, and those with a graduate/professional degree are 2.3 times as likely to plan to increase spending on school-related expenses.

Table 6 shows the logistic regression of whether or not finances are very/somewhat important for having children in the Pew Fertility Survey. What can be seen here is that although those who are feeling economically stressed by the recession are more likely to think finances are important for raising children (as are those at the very highest income level), those with a college degree or higher are less likely to agree with this viewpoint. Thus, better-educated men and women seem to be postponing childbearing until the future, but it does not appear that they are doing so over concerns about the costs of raising children, especially since the prior analysis suggests they are planning to increase spending on their children in the future.

< Table 6 here >

Discussion

This research examined the issue of whether, and how, fertility behaviors and plans are adjusted during a period of economic uncertainty. Although there is evidence at the aggregate level that fertility rates decline during economic downturns, there has been little direct investigation of how fertility decisions are made at the individual level. About 20% of American men and women aged 18-49 report that the economy has affected their general fertility plans, but only 7% reported actually postponing childbearing in the last year. The most disadvantaged are most likely to report that their fertility plans were affected by the economy, but in general, the more advantaged individuals (as reflected by education level) are most likely to have actually postponed childbearing in the past year and to plan to have children in the future.

It is not clear whether better-educated individuals postponed childbearing more during the recent recession than in other time periods, though it seems that this is likely happening to some extent. However, given the high opportunity costs of fertility and the prolongation of adulthood, this group simply may be more likely to push fertility to the future during any period, regardless of the overall economy or the costs of children. It does not appear that highly-educated men and women consider their immediate financial situation (or aggregate economic conditions) directly in making fertility decisions, yet this group tends to invest heavily in their children (Lareau 2003). Thus, their fertility decisions – and postponements – appear to be driven by other factors. This is not to say that the middle and upper-middle classes are unaffected by the economic downturn, but this may be reflected in a different way. Concerns over being able to afford college, for instance, or needing to buy a bigger house as the family grows certainly exist. In general, the expected standard of living for college graduates tends to be high – they

often prefer to live in suburban/urban areas with more jobs but also more expensive housing markets, they prefer more expensive center-based childcare, and they often have high student loans debts. In some ways, though, these costs are normalized as part of the middle-class lifestyle. Their family decisions may be affected by their overall higher costs of living (as well as higher opportunity costs and competing options), but these costs are less sensitive to economic fluctuation.

Conversely, those with lower levels of education (high school degrees or less) are more strongly feeling the strain brought on by the recession, and this seems to have affected their overall long-term fertility plans (but not their short-term decisions). However, the subgroup most directly affected by the economy, who are feeling a major strain and experiencing difficulty in making ends meet, have also postponed plans to have a child in the past year. Less-educated individuals consider the role of finances more strongly in childbearing decisions, reflecting their more tenuous economic situations and greater difficulty in meeting the basic needs of their children as well as other household expenses. At the same time, other research has demonstrated that education is associated with fertility planning; less-educated individuals have higher rates of unintended childbearing (Finer and Zolna 2011) and are less likely to believe that fertility should be planned (Edin et al 2007). Less educated women tend to “overachieve” their fertility goals (Morgan and Rackin 2010), largely due to unplanned fertility; that is, they have more children than they planned. This suggests that even if less-educated individuals revise their fertility preferences in terms of timing and quantum, actual fertility rates may not drop as much as would be expected. Future research is needed to explore whether, and how, individuals attempt to minimize the risk of unintended fertility during economic downturns, especially as funding for family planning has taken a hit as well (The Guttmacher Institute 2009a, 2009b).

A strength of this research is the different but complementary nature of the fertility questions across datasets. On the one hand, the question in the Familial Response survey is more specific with regards to timing (prior 12 months) and behavior, by specifying “postponement,” but did not actually identify reasons for postponement. On the other hand, the Pew Fertility Survey asks more specifically about economic influences on fertility plans but the actual fertility behaviors and time period are not specified; further, the survey does not inquire about changes in fertility plans resulting from other reasons. The fact that a greater proportion of highly educated individuals postponed childbearing, yet the financial impact of the recession on fertility plans is greater among those with lower education shows that economic strains are but one possible reason for postponing childbearing. Other reasons may include opportunity costs related to education and employment, relationship changes, or simply changing one’s mind about childbearing timing and preferences. Individuals might also respond affirmatively to having their fertility behaviors “affected” by the recession if other aspects of their life (such as their careers, their education level, their housing situation, and so on) have been altered as a result of the economy, thus affecting their general plans regarding when to start a family, when to have another child, or how many children they want to have. The cognitive interpretation of “affected” may include not just timing changes but quantum changes, where individuals may downwardly revise their desired family size. From the results, these measures seem to tap into different dimensions of fertility plans and behaviors.

Limitations

This paper is limited by several factors. One, the representativeness of the samples is unclear. The use of different sampling techniques and frames may affect comparability across the surveys as well. Two, there are also slight differences across surveys in the inclusion and measurement

of socioeconomic, demographic, and family variables. This precluded using more subjective and nuanced indicators of financial well-being. For instance, income is, of course, highly related to employment status, but there was limited employment information in the Pew Fertility Study, so it was not possible to include employment status in both sets of analyses. Third, the smaller sample size in the Pew Fertility Survey may obscure statistical significance. Finally, a more general limitation is that both surveys are cross-sectional snapshots – it is not clear whether the levels of fertility postponement or changes in fertility plans are different than in earlier time periods for which the economy was stronger.

Conclusion

Fertility rates have, indeed, fallen in the United States since the beginning of the Great Recession. This appears to be driven by two trends – continued postponement of the highly educated, combined with some postponement among those most affected. These two groups are likely responding to a different set of conditions and influences, and thus the likelihood of fertility rebounding to earlier levels is unclear. Fertility among those with a high school degree or less will likely increase as the economy improves; higher unintended fertility among this group may also serve to keep fertility rates from falling very low. Among those with a college degree or higher, though, the future is less clear. Both the direct and indirect costs of having a child among the middle classes are only likely to increase, and a short-term postponement at one point may be followed by a series of other short-term postponements, resulting in lower fertility for this group overall.

The long-term implications are these changes in fertility behaviors is unclear and largely depend how much postponed fertility is recouped at older ages as well as how long the recession's impact lasts. If delays in fertility are made up at slightly older ages, completed

cohort fertility should remain on par with earlier cohorts; this may well be the case given that the highest ages groups have actually seen fertility increases in recent years while other groups have seen declines (Sutton, Hamilton, and Mathews 2011). If delays in fertility are not recouped, then completed cohort fertility will be lower. Period fertility will remain low as long as there are timing delays; if delayed fertility among those in their childbearing years rebounds and new cohorts enter their childbearing years with on-time fertility, we may see a temporary increase in period measures such as the TFR in future years above the levels seen prior to the recession. However, if the timing delays are not recouped, rises in period fertility will be smaller; this is especially likely to be the case if the economic influences on fertility are not restricted just to timing changes but overall quantum as well.

REFERENCES

- Alstott, Anne E. 2004. No Exit: What Parents Owe Their Children and What Society Owes Parents. New York: Oxford University Press.
- Bachrach, Christine A., Pamela Smock, and Lynette Hoelter. 2011. "Social Class and the Timing and Context of Childbearing." Pp 87-110 in Johnson-Hanks et al Understanding Family Change and Variation. New York: Springer Science+Business Media.
- Chang, Linchiat and Jon A. Krosnick. 2009. National surveys via RDD telephone interviewing versus the Internet: comparing sample representativeness and response quality. *Public Opinion Quarterly* 73, 641-678.
- Council of Economic Advisors. 2011. Economic Report of the President, Transmitted to the Congress February 2011. Washington, DC: United States Government Printing Office.
- DeNavas-Walt, Carmen, Bernadette D. Proctor, and Jessica C. Smith. 2011. "Income, Poverty, and Health Insurance Coverage in the United States: 2010." Current Population Reports P60-239. U.S. Census Bureau.
- Dennis, Michael and Williams McCready. 2009. *Sample Field Report: Familial Response to Financial Instability*. Menlo Park, CA: Knowledge Networks.
- Edin, Kathryn and Maria J. Kefalas. 2005. Promises I Can Keep: Why Poor Women Put Motherhood Before Marriage. Berkeley, CA: University of California Press.
- Edin, Kathryn, Paula England, Emily Fitzgibbons Shafer, and Joanna Reed. 2007. "Forming Fragile Families: Was the Baby Planned, Unplanned, or In Between?" In P. England and K. Edin, (Eds). *Unmarried Couples with Children*. New York: Russell Sage Foundation.
- Ellwood, D., and C. Jencks. 2004. "The Uneven Spread of Single-Parent Families: What Do We Know? Where Do We Look for Answers?" Chapter 1 in K. Neckerman, (Ed.), *Social Inequality*. New York: Russell Sage.
- Finer, Lawrence B. and Mia R. Zolna. 2011. "Unintended Pregnancy in the United States: Incidence and Disparities, 2006." *Contraception* 84: 478-485.
- Gaulthier, Anne H. and Frank F. Furstenberg. 2010. "The Experience of Financial Strain among Families with Children in the United States." Working Paper Series WP-10-17. National Center for Family and Marriage Research. Bowling Green State University.
- The Guttmacher Institute. 2009a. "A Real-Time Look at the Impact of the Recession on Women's Family Planning and Pregnancy Decisions." New York: The Guttmacher Institute.
- The Guttmacher Institute. 2009b. "A Real-Time Look at the Impact of the Recession on Publicly Funded Family Planning Centers." New York: The Guttmacher Institute.
- Hagewen, K. J. and S. P. Morgan. 2005. "Intended and ideal family size in the U.S., 1970-2002." *Population Development Review* 31: 507-527.
- Hayford, Sarah R. 2009. "The Evolution of Fertility Expectations over the Life Course." *Demography* 46: 765-783.
- Hays, Sharon. 1996. The Cultural Contradictions of Motherhood. New Haven, CT: Yale University Press.
- Herbenick, Debby, Michael Reece, Vanessa Schick, Stephanie A. Sanders, Brian Dodge, and J. Dennis Fortenberry. 2010. "Sexual Behavior in the United States: Results from a National Probability Sample of Men and Women ages 14–94." *Journal of Sexual Medicine* 7 (Suppl. 5): 255–265.

- Hertz, Rosanna. 2006. Single by Chance, Mothers by Choice: How Women Are Choosing Parenthood without Marriage and Creating the New American Family. New York: Oxford University Press.
- Iacovou, Maria and Lara Patricio Tavares. 2011. "Yearning, Learning, and Conceding: Reasons Men and Women Change Their Childbearing Intentions." *Population and Development Review* 37: 89-123.
- Kefalas, Maria J., Frank F. Furstenberg, Patrick J. Carr, and Laura Napolitano. 2011. "Marriage is More Than Being Together: The Meaning of Marriage for Young Adults." *Journal of Family Issues* 32: 845-875.
- Kelly, M. 2009. "Women's Voluntary Childlessness: A Radical Rejection of Motherhood?" *Women's Studies Quarterly* 37: 157-172.
- Lareau, Annette. 2003. Unequal Childhoods: Class, Race, and Family Life. Berkeley, CA: University of California Press.
- Lino, Mark. 2011. "Expenditures on Children by Families, 2010." Miscellaneous Publication No. 1528-2010. U.S. Department of Agriculture, Center for Nutrition Policy and Promotion.
- Livingston, Gretchen. 2011. "In a Down Economy, Fewer Births." New York: Pew Research Center.
- Martin, Joyce A., Brady E. Hamilton, Stephanie J. Ventura et al. 2011. "Births: Final Data for 2009." National vital statistics reports; vol 60 no 1. Hyattsville, MD: National Center for Health Statistics. 2011.
- Martinez, Gladys, K. Daniels, and Anjani Chandra. 2012. "Fertility of men and women aged 15-44 years in the United States: National Survey of Family Growth, 2006-2010." National Health Statistics Reports No. 51. Hyattsville, MD: National Center for Health Statistics.
- Morgan, S. Philip and Heather Rackin. 2010. "The Correspondence between Fertility Intentions and Behavior in the United States." *Population and Development Review* 36: 91-118.
- Morgan, S. Philip and Miles G. Taylor. 2006. "Low Fertility at the Turn of the 21st Century." *American Sociological Review* 32: 375-399.
- Musick, Kelly, Paula England, Sarah Edgington, and Nicole Kangas. 2009. "Education Differences in Intended and Unintended Fertility." *Social Forces* 88: 543-572.
- Nelson, M. K. 2010. Parenting Out of Control: Anxious Parents in Uncertain Times. New York: New York University Press.
- Newman, Lareen. 2009. "Do Socioeconomic Differences in Family Size Reflect Cultural Differences in Confidence and Social Support for Parenting? *Population Research and Policy Review* 28: 661-691.
- Pew Research Center. 2008. "Inside the Middle Class: Bad Times Hit the Good Life." New York: Pew Research Center.
- Quesnel-Vallee, Amelie and S. Philip Morgan. 2003. "Missing the Target? Correspondence of Fertility Intentions and Behavior in the U.S." *Population Research and Policy Review* 22: 497-525.
- Regnerus, Mark. 2012a. "How Different are the Adult Children of Parents who have Same-Sex Relationships? Findings from the New Family Structures Study." *Social Science Research* 41: 752-770.
- Regnerus, Mark. 2012b. "Queers as Folk: Does It Really Make No Difference if Your Parents are Gay or Straight?" Slate.com, published 6/11/12.
http://www.slate.com/articles/double_x/doublex/2012/06/gay_parents_are_they_really_no_different_.html (accessed 6/12/12)

- Rindfuss, Ronald R. and Sarah R. Brauner-Otto. 2008. "Institutions and the Transition to Adulthood: Implications for Fertility Tempo in Low-Fertility Settings." *Vienna Yearbook of Population Research* 2008: 57-87.
- Saletan, William. 2012. "Back in the Gay: Does a New Study Indict Gay Parenthood or Make a Case for Gay Marriage." *Slate.com*, published 6/11/12.
http://www.slate.com/articles/health_and_science/human_nature/2012/06/new_family_structures_study_is_gay_parenthood_bad_or_is_gay_marriage_good_.html (accessed 6/12/12).
- Scott, Robert H. and Steven Pressman. 2011. "A Double Squeeze on the Middle Class." *Journal of Economic Issues* 45: 333-342.
- Smock, P. J. and F. R. Greenland. 2010. "Diversity in pathways to parenthood in the U.S.: Patterns, implications, and emerging research directions." *Journal of Marriage and Family* 72 (3):576-593.
- Sobotka, Tomas. 2010. "Shifting Parenthood to Advanced Reproductive Ages: Trends, Causes, and Consequences." Pp. 129-154 in J. C. Tremmel (Ed.) A Young Generation Under Pressure. Berlin: Springer-Verlag.
- Sobotka, Tomas, Vegard Skirbekk, and Dimiter Philipov. 2011. "Economic Recession and Fertility in the Developed World." *Population and Development Review* 37: 267-2011.
- St. Pierre, T. and Jacinda K. Dariotis. 2005. "Understanding Low Fertility: The Impact of Life-Course Competition on Fertility Behavior in Developed Nations" Pp. 235-250 in Alan Booth & Ann C. Crouter (Eds.) *The New Population Problem: Why Families in Developed Countries are Shrinking and What It Means*. Mahwah, NJ: LEA.
- Sutton, Paul D., Brady E. Hamilton, and T. J. Mathews. 2011. "Recent Decline in Births in the United States, 2007–2009." NCHS data brief, no 60. Hyattsville, MD: National Center for Health Statistics. 2011.
- Udry, J. Richard. 1983. "Do Couples Make Fertility Plans One Birth at a Time?" *Demography* 20: 117-128.

Table 1. Sample Descriptives and Bivariate Association with Fertility Postponement in the Familial Response to Financial Instability/How the Family Responds to Economic Pressure: A Comparative Study, 2009 Survey (weighted percentages, sample size is unweighted)

		Sample Distribution	Percentage who delayed childbearing
Age			
	18-24	2.5%	20.7%
	25-29	17.8%	9.4%
	30-34	17.7%	8.5%
	35-39	26.1%	7.0%
	40-44	23.4%	2.8%
	45-49	12.5%	0.0%
Gender			
	Male	42.1%	3.3%
	Female	57.9%	9.6%
Race/ethnicity			
	Non-Hispanic white	66.1%	3.7%
	Non-Hispanic black	8.6%	13.1%
	Hispanic	16.9%	15.4%
	Other	8.4%	9.6%
Marital status			
	Never married	6.2%	17.0%
	Divorced/separated/widowed	7.0%	2.1%
	Cohabiting	11.1%	10.3%
	Married	75.7%	6.1%
Parity			
	One child	26.5%	9.5%
	Two children	24.7%	4.7%
	Three or more children	48.8%	6.7%
Has infant(s) in house			
	Yes	21.4%	7.6%
	No	78.6%	6.8%
Has preschool-age child(ren) in house			
	Yes	42.5%	11.4%
	No	57.5%	3.7%
Has schoolage child(ren) in house			
	Yes	54.7%	6.1%
	No	45.3%	8.0%
Has teenage child(ren) in house			
	Yes	33.7%	4.0%
	No	66.3%	8.5%
Education			

	Less than high school	5.0%	12.6%
	High school/GED	30.6%	1.0%
	Some college - no degree	20.4%	11.7%
	AA degree	9.9%	7.7%
	BA degree	22.5%	7.3%
	Graduate/professional degree	11.7%	10.6%
Income (yearly)			
	Less than \$10,000	1.7%	19.7%
	\$10,000-19,999	6.3%	10.4%
	\$20,000-29,999	7.5%	9.2%
	\$30,000-39,999	8.7%	7.2%
	\$40,000-49,999	8.6%	4.1%
	\$50,000-74,999	24.6%	6.2%
	\$75,000-\$99,999	19.3%	7.0%
	\$100,000-149,999	16.7%	6.6%
	\$150,000 or more	6.6%	5.3%
Current financial climate quite/extremely affects money spent on children			
	Yes	33.4%	11.2%
	No	66.5%	4.9%
Current financial climate quite/extremely affects time spent with children			
	Yes	14.3%	11.1%
	No	85.7%	6.3%
Difficult to "get by" on family income			
	Yes	63.1%	9.9%
	No	36.9%	1.9%
Number of child-related expenses expected to increase in the next 12 months			
	0	67.1%	
	1	19.0%	
	2	7.9%	
	3	3.6%	
	4	1.9%	
	5	0.4%	
Planned on having a child but decided to postpone in the past 12 months		7.0%	

Table 2. Sample Descriptives and Bivariate Association with Economic Effect on Fertility Plans and Future Fertility Plans in the Pew Fertility Survey (weighted percentages, sample size is unweighted)

	Sample Distribution	Economy has affected plans to have a child/more children	Plan to have (more) children in the future
Age			
	18-24	22.4%	28.1%
	25-29	14.6%	23.8%
	30-34	13.8%	22.5%
	35-39	15.9%	23.4%
	40-44	15.7%	15.9%
	45-49	17.7%	16.5%
Gender			
	Female	46.1%	22.4%
	Male	53.9%	21.6%
Race/ethnicity			
	Non-Hispanic white	65.6%	19.0%
	Non-Hispanic black	10.8%	30.4%
	Hispanic	14.0%	22.5%
	Other	9.6%	32.4%
Marital status			
	Never married	34.9%	22.2%
	Divorced/separated/widowed	9.3%	27.5%
	Cohabiting	7.2%	41.4%
	Married	48.2%	18.0%
Parity			
	No children	40.8%	23.7%
	One child	13.4%	22.1%
	Two children	22.2%	19.9%
	Three or more children	23.7%	21.0%
Ideal Family Size			
	2 children or fewer	60.0%	22.1%
	3 children or more	40.0%	21.8%
Education			
	Less than high school	11.5%	35.0%
	High school/GED	28.3%	26.6%
	Some college/AA degree	27.0%	17.2%
	Technical/vocational degree	4.2%	17.7%
	BA degree	18.6%	16.7%
	Graduate/professional degree	10.4%	18.3%
Income (yearly)			

Less than \$10,000	9.2%	42.4%	28.3%
\$10,000-19,999	8.4%	22.7%	51.0%
\$20,000-29,999	12.7%	26.3%	61.3%
\$30,000-39,999	13.3%	12.7%	56.8%
\$40,000-49,999	7.6%	26.0%	42.3%
\$50,000-74,999	17.1%	25.3%	40.5%
\$75,000-\$99,999	14.9%	20.8%	36.0%
\$100,000-149,999	11.8%	7.5%	34.6%
\$150,000 or more	5.8%	16.3%	29.8%
Recession has caused family stress			
Yes	52.0%	31.7%	41.0%
No	48.1%	11.5%	45.7%
Economy has affected plans to have a child/more children			
Yes	22.0%		51.9%
No	78.0%		40.8%
Plans to have (more) children in the future			
Yes	43.3%	26.3%	
No	56.8%	18.6%	
Finances are very/somewhat important for raising a child			
Yes	59.4%		
No	40.6%		

Table 3. Odds Ratios of Fertility Postponement in the Familial Response to Financial Instability/How the Family Responds to Economic Pressure: A Comparative Study, 2009 Survey

	Model 1	Model 2	Model 3	Model 4
Age				
18-24	1.387	2.084	2.129	2.690
25-29	--	--	--	--
30-34	0.891	0.924	0.907	0.940
35-39	0.770	0.807	0.743	0.774
40-49	0.375	0.349	0.345	0.326
Female	1.278	1.194	1.221	1.203
Race/ethnicity				
Non-Hispanic white	--	--	--	--
Non-Hispanic black	3.815 **	3.790 *	3.559 *	3.510 *
Hispanic	4.138 ***	3.892 **	4.019 **	3.908 **
Other	1.395	1.307	1.441	1.330
Marital status				
Never married	1.699	1.501	1.420	1.307
Divorced/separated/widowed	0.204	0.132	0.159	0.114
Cohabiting	1.704	1.604	1.422	1.359
Married	--	--	--	--
Parity				
One child	1.720	1.490	1.438	1.265
Two children	0.594	0.531	0.429	0.390
Three or more children	--	--	--	--
Has infant(s) in house	0.591	0.540	0.489	0.452
Has preschool-age child(ren) in house	1.339	1.266	1.120	1.066
Has schoolage child(ren) in house	0.973	0.886	0.704	0.697
Has teenage child(ren) in house	0.273 *	0.275 *	0.240 *	0.245 *
Education				
Less than high school	2.766	2.443	2.388	2.269
High school/GED	--	--	--	--
Some college - no degree	6.112 *	7.621 *	6.191 *	7.631 *
AA degree	5.545 †	6.992 *	6.154 *	7.503 *
BA degree	6.903 *	8.217 *	8.719 *	9.885 **
Graduate/professional degree	13.115 **	14.621 **	15.431 **	17.476 ***
Income (yearly)				
Less than \$10,000	6.470	6.330	4.956	5.305
\$10,000-19,999	1.444	1.428	1.157	1.188
\$20,000-29,999	1.757	1.858	1.422	1.556
\$30,000-39,999	1.626	0.993	1.041	0.941
\$40,000-49,999	0.922	0.826	0.745	0.718
\$50,000-74,999	--	--	--	--

\$75,000-\$99,999	0.479	0.532	0.556	0.614
\$100,000-149,999	0.811	0.930	1.181	1.271
\$150,000 or more	0.404	0.442	0.886	0.970
Current financial climate quite/extremely affects money spent on children	2.130	*		1.915
Current financial climate quite/extremely affects time spent with children	2.539	†		1.770
Difficult to "get by" on family income			7.335 ***	6.197 ***
Constant	0.010 ***	0.007 ***	0.003	0.003 ***
-2 log likelihood	278.308	267.861	259.795	253.782
N	831	831	831	831

†p≤.06 *p≤.05 **p≤.01 ***p≤.001

Table 4. Odds Ratios for Economic Effect on Fertility Plans and Future Fertility Plans in the Pew Fertility Survey

	Economy has affected plans to have a child/more children		Plan to have (more) children in the future		
	Model 1	Model 2	Model 3	Model 4	
Age					
18-24	1.70	1.57	2.91	2.82	
25-29	--	--	--	--	
30-34	1.38	1.21	0.88	0.87	
35-39	1.27	0.84	0.26 *	0.24 **	
40-44	0.73	0.50	0.11 ***	0.95 ***	
45-49	0.52	0.34	0.01 ***	0.13 ***	
Female	1.12	0.99	0.40 *	0.38 *	
Race/ethnicity					
Non-Hispanic white	--	--	--	--	
Non-Hispanic black	1.24	1.86	0.82	0.90	
Hispanic	0.99	1.28	0.57	0.60	
Other	1.67	1.75	1.72	1.71	
Marital status					
Never married	0.82	0.69	1.96	1.98	
Divorced/separated/widowed	1.25	1.41	0.47	0.50	
Cohabiting	1.75	1.64	0.66	0.67	
Married	--	--	--	--	
Parity					
No children	--	--	--	--	
One child	1.28	1.44	0.40	0.43	
Two children	1.17	1.23	0.10 ***	0.10 ***	
Three or more children	1.08	1.03	0.04 ***	0.04 ***	
Ideal family size is 3 or more	0.90	1.00	4.66 ***	4.87 ***	
Education					
Less than high school	1.08	1.47	2.55	2.80	
High school/GED	--	--	--	--	
Some college/AA degree	0.41 *	0.36 **	1.05	1.02	
Technical/vocational degree	0.56	0.70	0.68	0.72	
BA degree	0.45 *	0.51	0.94	1.00	
Graduate/professional degree	0.60	0.67	3.69 *	3.69 *	
Income (yearly)					
Less than \$10,000	1.53	1.18	0.29	0.26	
\$10,000-19,999	0.62	0.58	1.42	1.37	
\$20,000-29,999	0.64	0.49	3.22	2.79	
\$30,000-39,999	0.45	0.39	1.93	1.90	
\$40,000-49,999	0.87	1.04	2.86	3.16	
\$50,000-74,999	--	--	--	--	

\$75,000-\$99,999	0.73	0.64	0.86	0.82
\$100,000-149,999	0.27 *	0.29 †	2.69	2.96
\$150,000 or more	0.48	0.40	0.78	0.77
Recession has caused family stress		5.15 ***		1.65
Constant	0.48	0.22 *	2.95	2.37
-2 log likelihood	394.405	362.543	248.559	246.531
N	422	422	422	422

†p≤.06 *p≤.05 **p≤.01 ***p≤.001

Table 5. Odds Ratios of Planned Spending Increases and OLS Regression of Number of Planned Expenses in the Familial Response to Financial Instability/How the Family Responds to Economic Pressure: A Comparative Study, 2009 Survey

	Any planned increases	Number of expenses planning to increase spending		
		Odds Ratio	β	se
Age				
18-24	0.78	-0.22	0.31	
25-29	--	--		
30-34	0.93	-0.06	0.13	
35-39	1.31	-0.02	0.13	
40-49	0.73	-0.14	0.13	
Female	0.93	-0.03	0.07	
Race/ethnicity				
Non-Hispanic white	--	--		
Non-Hispanic black	1.21	0.21	0.14	
Hispanic	1.32	0.08	0.11	
Other	1.59	0.40	0.14	
Marital status				
Never married	0.91	-0.05	0.17	
Divorced/separated/widowed	0.98	0.07	0.01	
Cohabiting	1.07	0.21	0.13	
Married	--	--		
Parity				
One child	0.51	-0.14	0.16	
Two children	0.64	-0.05	0.12	
Three or more children	--	--		
Has infant(s) in house	0.66	-0.07	0.10	
Has preschool-age child(ren) in house	1.19	0.16	0.09	
Has schoolage child(ren) in house	0.34	**	-0.19	0.15
Has teenage child(ren) in house	0.79		-0.02	0.10
Education				
Less than high school	1.20	0.01	0.19	
High school/GED	--	--		
Some college - no degree	1.23	0.07	0.10	
AA degree	1.79	*	0.16	0.12
BA degree	1.94	**	0.26	0.11 *
Graduate/professional degree	1.86	*	0.23	0.12
Income (yearly)				
Less than \$10,000	1.57	0.24	0.27	
\$10,000-19,999	1.11	0.11	0.19	

\$20,000-29,999	1.27	0.25	0.16
\$30,000-39,999	1.55	0.18	0.14
\$40,000-49,999	1.86 *	0.40	0.13
\$50,000-74,999	--	--	
\$75,000-\$99,999	1.29	0.17	0.10
\$100,000-149,999	1.05	0.08	0.11
\$150,000 or more	1.02	0.13	0.15
Difficult to "get by" on family income	0.82	-0.07	0.08
Constant	0.85	0.04	0.24 †
-2 log likelihood	990.207		
Adjusted R²		0.026	
N	831	831	

†p≤.06 *p≤.05 **p≤.01 ***p≤.001

Table 6. Odds Ratios for the Importance of Finances for Raising Children in the Pew Fertility Survey

Age			
	18-24	2.91	*
	25-29	--	
	30-34	0.48	
	35-39	0.85	
	40-44	0.52	*
	45-49	0.38	
Female		0.95	
Race/ethnicity			
	Non-Hispanic white	--	
	Non-Hispanic black	1.93	
	Hispanic	1.09	
	Other	1.67	
Marital status			
	Never married	0.59	
	Divorced/separated/widowed	1.17	
	Cohabiting	1.46	
	Married	--	
Parity			
	No children	--	
	One child	0.49	
	Two children	0.82	
	Three or more children	0.43	*
Ideal family size is 3 or more		1.29	
Education			
	Less than high school	0.77	
	High school/GED	--	
	Some college/AA degree	0.54	
	Technical/vocational degree	0.92	
	BA degree	0.50	*
	Graduate/professional degree	0.34	**
Income (yearly)			
	Less than \$10,000	0.51	
	\$10,000-19,999	0.81	
	\$20,000-29,999	0.95	
	\$30,000-39,999	0.95	
	\$40,000-49,999	1.81	
	\$50,000-74,999	--	
	\$75,000-\$99,999	1.34	
	\$100,000-149,999	1.52	

	\$150,000 or more	3.54	*
Recession has caused family stress		1.70	*
Constant		2.55	
-2 log likelihood		501.696	
N		422	

†p≤.06 *p≤.05 **p≤.01 ***p≤.001