Socioeconomic Variation in Fertility Postponement during Economic Recession

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Abstract
Although aggregate fertility declines during periods of economic recession, it is unclear how individual fertility decisions are affected. Economic downturns are not experienced equally across social strata, and there is variation in both fertility decision-making processes and actual fertility behaviors by education. 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 in a past year (and least likely to report feeling financially strained). This suggests that the fertility decisions of highly educated individuals are not directly affected by the recession in the same manner as those with less education; education is positively associated with planned increases in child-related expenditures but negatively associated with believing financial considerations are important in fertility decisions.

DRAFT: DO NOT CITE WITHOUT PERMISSION

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http://www.pewsocialtrends.org/category/datasets/

Economic recessions have the potential to dramatically affect family formation in developed countries. When the economy is in turmoil, it may be difficult to achieve the cultural prerequisites for marriage and childbearing, such as stable employment and residential independence (Kefalas et al 2011), as well as meet the financial demands of raising a family. In response, young adults may delay forming unions, especially marriage, and both those with children and without children may postpone (further) childbearing until they feel economically stable. Fertility is likely to be particularly affected by economic recessions, as childbearing and childrearing entails a major long-term expense.

However, although the overall association between fertility and poor aggregate economic conditions tends to be negative, empirical evidence presents a fairly mixed picture (Sobotka et al 2011). The association between economic recession and family behavior varies across economic indicators (e.g., GDP, unemployment rates, consumer confidence) and across countries, often reflecting the extent of the recession as well as institutional and governmental responses and policies, such as unemployment benefits (Sobotka et al 2011). Further, 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. Another reason for variation in the findings is that the perception of economic instability may be more salient than objective measures in individual fertility decisions, as there is a subjective component to financial strain (Voydanoff 1984). The subjective nature of financial strain takes into consideration awareness of aggregate economic instability, personal economic circumstances and resources, and a subjective evaluation of one's desired standard of living (Gauthier and Furstenberg 2010). There is also variation in pessimism and optimism by political affiliation across aggregate levels (such as states) and individual characteristics – a "red/blue" divide, so to

speak, that is mirrored in fertility behaviors (Morgan, Cumberworth, and Wimer 2011). One might reasonably expect that the response would also be strongest in those who have yet to have children; the cost of the transition to parenthood is higher than the cost of having an additional child due to economies of scale (Rindfuss and Brauner-Otto 2010), and social values regarding appropriate child spacing may encourage higher-parity births even in periods of economic uncertainty. And certainly, it is worth noting that not everyone is equally affected by economic downturns; they affect certain groups – unskilled workers and less educated individuals, certain industries and regions, and so on – much more strongly or in different ways. Another cause of mixed findings may be due to the time period of analysis; there is usually a lag between fertility and economic recessions on the order of one to two and a half years (Sobotka et al 2011).

The current research takes a different approach to studying fertility under conditions of economic uncertainty. Rather than using aggregate indicators of fertility and economic recession, I use two unique datasets collected during the economic recession in the United States to examine how perceptions of the economic recession have impacted individual fertility plans and intentions. Focusing on plans and intentions rather than actual fertility allows for the investigation of the immediate impact on how individuals think about childbearing during economic instability without having to wait for fertility behaviors to occur (or not occur) in the following years.

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, with those aged 18-29 – in the prime career- and family-building stages – feeling especially hard hit (Pew 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 have high personal requirements to fulfill prior to becoming parents, including finishing their education, securing a well-paying job as part of long-term career path, and finding a suitable life partner, and they tend to believe that parenthood should be entered into as a deliberate decision whereas lower-income individuals view parenthood in a much different manner with much different requirements (Edin and Kefalas 2005; Smock and Greenland 2010). The demands on parents have grown as well (Hays 1996; Alstott 2004), but it seems that middle-class parents feel this pressure more acutely (Bachrach, Smock, and Hoelter 2011). At the same time, higher education 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 recent the 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; women 40 and over, however, experienced an increase in their fertility rate, though the absolute fertility levels remain low (Sutton, Hamilton, and Mathews 2011). A recent report by the Pew Research Center links the decline in fertility to the economic recession (Livingston 2011). The analyses linked state-level economic decline with state-level fertility decline, finding that states that were hardest hit experienced the largest declines in fertility; the report also found that Hispanics' fertility rate fell more than other race-ethnic groups, and Hispanics were hardest hit by the economic downturn. 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; the increase in fertility among women 40 and older most likely reflects delayed childbearing, as older women simply cannot postpone any further, lest their delayed fertility become foregone fertility. 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; the ideal family size in the United States has largely remained around 2-3 children (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). Individual's fertility intentions early in the life course, though, often fail to match up with 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 on 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. 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 series of postponements, 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 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). It is not clear, then, how common postponement is, how conscious people are of postponing fertility, who decides to postpone, and for what reasons. I argue that if postponement decisions are made, they likely vary by socioeconomic status. It cannot be assumed that fertility declines and fertility postponement during a recession are entirely due *to* the recession, since economic downturns are not experienced uniformly across social strata. Moreover, different social strata consider different aspects in, and feel differently prepared for, union and family decisions (Bachrach, Smock and Hoelter 2011; Lareau 2003; Newman 2009; Nelson 2010); even the direct, measurable costs of childrearing vary by social class (Lino 2011).

On the one hand, it is clear that the economic recession 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 advantaged 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 might suggest that disadvantaged groups on the whole do not weigh economic factors heavily in childbearing decisions, but instead, research suggests that higher rates of unintended pregnancies and births (Edin and Kefalas 2005; Edin et al 2007; Finer and Zolna 2011; Musick, England, Edgington, and Kangas 2009) largely explain these differences. 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.

On the other hand, there is evidence that the better-educated – those with college degrees or higher – and whites 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 occurs as a series of postponements, as

inflexibility in social institutions (education, employment, housing markets, and so) make childbearing at any given point an endeavor with high opportunity costs (Rindfuss and Brauner-Otto 2008). In addition to high opportunity costs (lost wages, diminished career prospects, etc), the direct costs 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. 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, I use two 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 and collected using the USA Pilot Survey, an online survey carried out by Knowledge Networks. Knowledge Networks 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. An oversample is conducted among a stratum of telephone exchanges that have high concentrations of African American and Hispanic

households. There are over 400 published and presented academic papers using Knowledge Networks data in the past 10 years, including papers published in top-tier social science journals such as *American Political Science Review, Social Forces,* 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% response rate. This response rate is well above other web-based surveys published in other academic journals, which Cook, Heath and Thompson (2000) reported had a mean average response rate of 39.6%. 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). 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, 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. Unlike the Familial Response dataset, the goal of this survey was primarily to collect fertility information. However, the timing of the data collection and the inclusion of measures on reasons why individuals do (or do not) have children as well as some direct questions regarding fertility plans during the financial crisis make this a survey a nice complement to the Familial Response survey. 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 data collection oversampled young adults aged 18-29, and the sample size is

1,003. The analytical sample focuses on men and women aged 18-49 with valid responses to the key fertility variables (described below) for a sample size of 422; 550 cases of individuals 50 or older were excluded.

The Pew Fertility data collection began with a total of 13,496 landline numbers and 4,000 cellular numbers selected at random; only 4,639 of the landline numbers were working residential numbers, and only 2,411of the cellular numbers were working personal numbers. Of the working numbers, there was about a 75% contact rate. 30% of the landline contacted numbers and 26% of the cellular contacted numbers agreed to participation (the cooperation rate), but of those that did not refuse, language barriers and the restriction to adults 18 and over further reduced the sample to 848 eligible landlines and 271 eligible cellular numbers. Of this group, the completion rate was 90%. Thus, the overall response rate for the landline sample was 19% and for the cellular sample was 18.6%. Clearly, this is a very low final response rate. However, sample weights created by The Pew Research Center make the sample nationally representative. The Pew Research Center used a two-stage weighting procedure. 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 (ASEC), the Census 2000, and the July-December 2007 National Health Interview Survey to create population parameters then used to create final weights. As with the Familial Response sample, descriptive statistics presented in the paper 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).

The overall analytical approach is twofold. First, using both surveys, I explore the prevalence and predictors of fertility postponement. Second, again using both surveys, I analyze

variation in specific child-related expenses and the importance of finances for raising children. In doing so, I hope to be able to draw conclusions about the underlying mechanisms of fertility postponement – whether postponement during the recession is driven by economic concerns about raising children or whether postponement is driven by other factors, with attention to variation by socioeconomic status.

Familial Response Survey – Variables, Methodology, and Results

The key variable in the Familial Response data for the first set of analyses concerns delaying childbearing. For a number of items, respondents were asked "In the past 12 months, has your family done any of the following…?" and were given a set of behaviors. This analysis focuses on the item regarding childbearing: "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 is self-selected, 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 191 respondents for a sample size of 831. 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 are included to reflect family-building stages. An affirmative answer, of course, does mean that respondents had planned to have children in the past year but postponed doing so. 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. It is also important to note that the question does not ask respondents *why* they had planned to have a child but postponed it. 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.

There are a few key independent variables which are likely to affect perceptions of economic well-being. Sociodemographic characteristics include age, categorized as 18-24, 25-29 (omitted), 30-34, 35-39, and 40-49 (40-44 and 45-49 categories were collapsed because none of the 120 45-49 year olds reported affirmatively to the dependent variable, but sample size would have been sharply reduced by excluding them). 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. Parity is measured as one child, two children, or three or more children (omitted); recall that all participants have children. Age of children in the household is a series of dichotomous and non-mutually exclusive categories: infants (age 1 or younger), preschool age children (ages 2-5), schoolage 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. 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. I also explored a subjective measure of well-being, 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. The results here thus use income.

There are also three indicators measuring financial strain. 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 analyses not shown, I included various measures of employment, but surprisingly, these were not significant and are not included here. In the first set of analyses, the analytical plan is present the baseline model containing sociodemographic, economic, and family characteristics. Model 2 adds the direct measures regarding the effect of the economic recession on time and money spent with children to the baseline model, and Model 3 adds the general indicator of financial strain to Model 1. Model 4 includes the both direct measures regarding children and the overall financial strain measure.

To examine socioeconomic variation in child-related expenses, 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. 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.

Bivariate Results

Table 1 displays the distribution of the covariates in the sample and the proportion within each indicator who reported postponing childbearing in the past 12 months; this discussion will focus on those who reported fertility postponement. 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. Fertility postponement was highest in the youngest age groups and declined with age. Three times as many women reported fertility postponement (9.6%) as men (3.3%). Non-Hispanic blacks (13.1%), Hispanics (15.4%), and those in the "other" category (9.6%) reported much more postponement than non-Hispanic whites (3.7%). Never-married and cohabiting individuals, 17.0% and 10.3% respectively, reported higher levels of postponement than divorced/separated/ widowed and married individuals, 2.1% and 6.1% respectively. There are also differences by parity and children's age, with more parents with only one child reporting postponement than those with more children, and more of those with infants and especially preschool-age children reporting postponement than those without infants and preschoolers.

< Table 1 here >

Given expectations that the economic downturn hits certain groups more hardly than others, we would expect that postponement might differ by education and income. There are large differences by education level in the proportion who reporting postponing childbearing in the past year. 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. Postponement by income level was highest for the lowest earning group, those making less than $10,000 a year, at nearly 20%, then declined to less than 10% for other income levels. Postponement was least common among those making $40,000-$49,000 a year, at 4.1%, with those at higher levels ranging from 5.3%-7.0%.

The direct indicators of the impact of the recession also appear to impact fertility postponement. One-third of the respondents reported that the current financial climate quite or extremely affected the amount of money they spent on their children; 11% of this group reported postponing fertility in the past year compared to only 5% of those who did not feel as if the economy had affected their child-related expenditures. About 15% of the respondents reported that the current financial climate quite or extremely affected the time they spent with their children, and 11% of this group reported fertility postponement compared to only 7% those who do not think the economy affected time spent with children. Although only a minority of the sample reported the economy had affect time and money spent on children, overall financial strain was high, with nearly two-thirds reported they had difficulty "getting by" on their family's

income. Five times as many of those with difficulty (9.9%) reported fertility postponement compared to those who did not have difficulty (1.9%).

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 associations, so I turn to multivariate models. Table 2 shows four models. 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. As shown in Model 1, few socioeconomic, demographic, or family variables are related to fertility postponement in the past year. Non-Hispanic blacks (OR=3.8) and Hispanics (OR=4.1) are significantly more likely than whites to have decided to have a child but then postponed actual childbearing in the past year. Compared to those without teenagers in the household, those with teens are about 75% less likely to have postponed fertility; this probably means that they were not planning on having children rather than having planned children and did not postpone them. The only other significant variables are the education variables. Those with post-high school education are significantly and substantially more likely to have postponed childbearing 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 is not

associated with postponement. Together, this suggests that postponement was not necessarily due to economic strains but for other reasons.

< Table 2 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. There is little change in the magnitude of the race-ethnic difference or the role of having a teenager in the household. 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; again, there is little change in the race/ethnicity or teenager covariates. 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, with the magnitude of fertility postponement even higher than in Model 2, at odds ratios of 8.7 and 15.4, respectively. This further supports the notion that fertility postponement among this group 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.

If financial strain and precariousness are not directly driving fertility postponement among those with higher levels of education, what is? It may be that their current investments in their children are high and they foresee difficulty making additional investments in new children at the moment, instead planning to increase investments in their current children. To examine this possibility, Table 3 displays two models. 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 1 in Table 2.

< Table 3 here >

What can be seen in Table 3 is that relatively little predicts planned child-related expenditures over the next year. Those with school age children are less likely to plan to increase expenditures relative to those without younger or older children (recall that all respondents have children). 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 just misses significance (p=.066), suggesting that this group is also planning on spending more money on more expenses. In analyses not shown, cultural activities and school 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 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 educational expenses.

Together, these two analyses suggest that those with higher levels of education are likely to reconsider and reevaluate their fertility plans 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. One reason may be that they plan greater investment in their current children, an idea which is supported by the preceding analysis. The above analyses was 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. These analyses also show that short-term postponement of planned fertility is rare; still, it may be the case that more general reconsideration of fertility plans, over a longer and less defined time period, may still be occurring and may be economically related. To analyze this possibility, I turn to the Pew Fertility Survey.

Pew Fertility Survey – Variables, Methodology, and Results

The next set of analyses looks at both the direct impact of the economic recession on fertility plans as well as plans for future children, along with an examination of the role of finances in making childbearing decisions. The first analysis using the Pew Fertility Survey will focus on two sets of questions regarding future plans for childbearing. The first indicator is a direct response regarding fertility plans as affected by the economy. Respondents were directly 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. Women aged 18-49 and men aged 18-59 who already had children (including those with only stepchildren) were asked, "Do you think you will have more children?" Response categories were yes/no, but 18 respondents volunteered the answer "maybe," which is grouped into the "yes" category. Women aged 18-49 and men aged 18-59 who did not have children were asked, "Do you think you will have children in the future, or not?" Again, response categories were yes/no, but 13 respondents volunteered a response of "hope so" or "it depends." These two questions were combined, and those who volunteered an ambiguous answer (answered "maybe" among those with children and "hope so/depends" among those without children) were combined into the yes category to create a dichotomous measure. The first indicator directly measures economic influences on fertility decisions, but in some ways this is a more ambiguous measure than used in the NCFMR Financial Instability data, as it does not specify past or future plans nor does it specify a time period. The second indicator is a more general indicator of future fertility expectations, which may allow a better exploration of simply who is planning children for the future regardless of economic influences. This does not measure postponement per se, but it does provide an idea of who is still considering future fertility. There are two models for both dichotomous indicators

(economy has affected plans to have children and plan to have children in the future). Model 1 contains a very similar set of socioeconomic, demographic, and family variables as those used in the NCFMR Familial Response analyses (discussed below), and Model 2 adds in the measure of financial strain (the recession has caused family stress).

Finally, I examine an indicator of how the role of finances affects childbearing decisions. Men and women without children were asked "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?" Men and women who already had children but were planning not to have additional children were asked "Was the financial cost of raising children very important, somewhat important, not too important, or not at all important in deciding to limit the number of children you have?" Men and women who already had children and had not ruled out having additional children were asked "Was having the financial resources to raise a child very important, somewhat important, not too important, or not at all important in your decision to have your first child?" Finally, men and women without children but who want to have children in the future were asked "Will having the financial resources to raise a child be very important, somewhat important, not too important, or not at all important in your decision to have your first child?" 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. This measure is analyzed using logistic regression, with the same set of covariates as Model 1 in the above analysis.

Compared to the NCFMR Financial Instability data, there are fewer sociodemographic characteristics available for inclusion in the Pew Fertility Survey, and some of them are defined

slightly differently. Sociodemographic characteristics include age, categorized as 18-24, 25-29 (omitted), 30-34, 35-39, 40-44, and 45-49. 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. 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. Education is categorized as less than high school, high school/GED, technical/vocational training, some college/Associate's degree (combined together in the original question wording), Bachelor's degree, and graduate/professional degree. 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. Respondents were also 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?" As with the Financial Instability data, measures of employment status were not significant and thus not included in the analysis. 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 Stata; logical imputation was used for the other missing variables based on responses to other questions.

Bivariate Results

Table 4 displays the weighted descriptive for the Pew Fertility Survey along with the bivariate associations between the covariates and the two dependent variables regarding the

economy's effect on fertility plans and future childbearing plans. This discussion will focus on those who reported the economy affected their plans to have children and those who plan to have children in the future. Just over a fifth of the sample reported that the economy has affected their plans have children. Although the Pew data include both those with and without children, further restricting the sample to those who have children (comparable to the sample for the Familial Response data) does not substantially change the results. The proportion of those who reported changing their plans to have children is substantially higher than in the Familial Response survey (7%), which likely has to do with question wording. The question in the Familial Response survey is more specific with regards to timing (prior 12 months) and behavior; the Familiar Response survey specified postponement, whereas the idea of "affected" may include not just timing changes but quantum changes, where individuals may downwardly revise their desired family size. Individuals might also respond affirmatively if other aspects of their life (such as their careers, their education level, their housing situation) has been altered as a result of the economy, thus affecting their overall or general plans regarding when to start a family, when to have another child, or how many children they want to have. 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. 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 4 here>

Looking at the bivariate associations between the socioeconomic, demographic, and family variables, there is far more variation in future fertility plans than in economic fertility impact. However, we do see that there is a more obvious, and expected, link between social disadvantage and an economic fertility impact. More non-Hispanic blacks and "others" report that the economy has affected fertility plans, as do cohabitors. Changes in fertility plans for economic reasons are also higher among individuals who have less than a high school degree or only a high school degree; this is almost the opposite of what was seen in the Familial Response Survey. Changes in fertility plans were also highest for those making less than $10,000 a year, and generally lowest for those at the highest income levels. As expected, a far greater proportion of those who reported that the recession has caused family stress reported an economic impact on their fertility plans than those who did not report family stress, by about a three-to-one ratio

Turning to future plans, most variation is what would be expected. For instance, age is inversely related to expecting to have children in the future, more never-married and childless individuals still plan to have children in the future, as do those with larger ideal family sizes. Interestingly, more men than women expect to have children in the future. There is also some variation by education and income. 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. The lowest earners (making less than $10,000 a year) and the highest earners (those making $75,000 a year or more, especially those making $150,000 a year or more) have the lowest proportion of those expecting to have children in the future. Future fertility plans do not appear to vary by the experience of family stress during the recession.

Multivariate Results

As it appears there is variation across the covariates in association with both dependent variables, and not necessarily is the same manner, Table 5 shows the results from multivariate models for each of the two dependent 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. Compared to people making an income of $50,000-75,000/year, those making $100,000-149,999 are three fourths as likely to report the economy has affected their fertility plans. 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 than 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.

< Table 5 here >

The second set of models predict plans to have children in the future. The results are substantively similar across Models 3 and 4, as subjective economic wellbeing during the recession is unrelated to future fertility plans. As with the bivariate associations, the results are largely as expected – age is inversely related to the likelihood of planning children in the future, and those with two or more children are less likely to plan to have children. An ideal family size

of 3 or more strongly predicts future plans; those who want a large family are over 4 times as likely to plan to have more children than those whose ideal family size is 2 or fewer. 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; this is true even when restricting the analysis to those who already have children (not shown).

The fertility plans of highly educated individuals are not negatively affected by the economy, and they are strongly likely to plan to have children in the future. Together, this again points to the idea that fertility plans among more advantaged individuals are influenced by non-economic factors. This is further underscored by the analysis presented in Table 6, which shows the logistic regression of whether or not finances are very/somewhat important for having children. 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. These individuals thus expect to have children in the future, but they are not holding off until they can financially afford children. Rather, other factors are influencing their decisions.

< Table 6 here >

Discussion

This research examined the issue of whether, and how, fertility 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 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. 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 finances directly in making fertility decisions, yet this group tends to invest heavily in their children (Lareau 2003). Thus, their fertility decisions – and postponements – are driven by other factors. This is not to say that the middle and upper-middle classes are not feeling pinched in the current economy, but this may be reflected in a different way. The expected standard of living for college graduates tends to be high – they often prefer to live in suburban/urban areas with both more jobs and a more expensive housing market, 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 expenses 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 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 (Guttmacher 2009a, 2009b).

Limitations

This paper is limited by several factors. One, the representativeness of the samples is unclear. Certainly, there are low response rates, especially for the Pew Fertility Survey. The use of different sampling techniques and frames may affect comparability across the surveys as well. Two, the surveys have different fertility questions. The Familial Response Survey asks a more specific question about fertility postponement, but the reasons for postponement are not identified, and negative answers to the question include two different groups (those who planned to have a child and did so as well as those who did not plan to have a child). The Pew Fertility Survey asks 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 for other reasons. From the results, these measures seem to tap into different dimensions of fertility plans and behaviors. There are also differences across surveys in the inclusion and measurement of socioeconomic, demographic, and family variables. Third, the smaller sample size in the Pew Fertility Survey may obscure statistical significance; for this reason, I was unable to restrict the sample to those who already had children to make it more comparable to the Familial Response Survey. Fourth, a more general limitation is that both surveys are cross-sectional – 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 since the beginning of the Great Recession. This appears to be driven by two trends – some changes in overall fertility plans among less-educated individuals and short-term fertility postponement among highly educated individuals. 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. Lower 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 is 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.

In the short-term, lower fertility during a recession seems to reflect continued postponement of the highly educated, combined with some postponement among those most affected – the 50-60% of Americans who are financially strained by the recession. The long-term implications are unclear and largely depend how much of 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. 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 an 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.

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Table 1. Sample Descriptives and Bivariate Assocation 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%	
N	831	

Table 2. 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 3. 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 R^2			0.026		
N	831		831		

†p≤.06 *p≤.05 **p≤.01 ***p≤.001

Table 4. 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%	88.9%
25-29	14.6%	23.8%	61.3%
30-34	13.8%	22.5%	48.2%
35-39	15.9%	23.4%	32.8%
40-44	15.7%	15.9%	12.1%
45-49	17.7%	16.5%	3.4%
Gender			
Female	46.1%	22.4%	32.4%
Male	53.9%	21.6%	52.6%
Race/ethnicity			
Non-Hispanic white	65.6%	19.0%	40.6%
Non-Hispanic black	10.8%	30.4%	34.7%
Hispanic	14.0%	22.5%	52.8%
Other	9.6%	32.4%	57.1%
Marital status			
Never married	34.9%	22.2%	76.8%
Divorced/separated/widowed	9.3%	27.5%	8.6%
Cohabiting	7.2%	41.4%	42.7%
Married	48.2%	18.0%	26.0%
Parity			
No children	40.8%	23.7%	77.8%
One child	13.4%	22.1%	42.0%
Two children	22.2%	19.9%	15.0%
Three or more children	23.7%	21.0%	10.9%
Ideal Family Size			
2 children or fewer	60.0%	22.1%	36.6%
3 children or more	40.0%	21.8%	53.2%
Education			
Less than high school	11.5%	35.0%	52.6%
High school/GED	28.3%	26.6%	39.2%
Some college/AA degree	27.0%	17.2%	46.2%
Technical/vocational degree	4.2%	17.7%	41.3%
BA degree	18.6%	16.7%	37.2%
Graduate/professional degree	10.4%	18.3%	48.0%
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%		
N		422	

Table 5. 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 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