

Opting-Out: An Exploration of Labor Force Participation of New Mothers

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This paper is released to inform interested parties of ongoing research and to encourage discussion of work in progress. Any views expressed on methodological issues are those of the authors and not necessarily those of the U.S. Census Bureau.

Introduction

The Media has highlighted the choice of some well educated, professional women to exit the labor force after having a baby (Belkin 2003; Wallis, 2004; Story 2005). This narrative describes a rising “revolution” of women who choose to leave their successful careers in favor of staying at home to take care of their children. Scholars argue this is a media myth: few women have the luxury of opting out. Rather, for those who do leave the labor force, many are driven primarily by lack of economic opportunities or workplace pressures. (Stone 2008; Bennetts 2007; Boushey 2005). Those pressures often include work environments incompatible or even hostile to the needs of parents with young children at home. Opting out, or merely reducing their levels of labor force participation, requires parents to forfeit future earnings. As such, it presents a major parenting penalty, paid mostly by women.

These parenting penalties may not be limited to women working in highly paid professional positions. Workers in low-paying occupations, or in occupations negatively affected by recent economic downturns, may find themselves unable to afford to work. Childcare costs for young children are high, living expenses are high, and when coupled with low-paying, or unsteady employment opportunities, workers may find it makes financial sense to leave or reduce their participation in the labor force. Such efforts to improve or mitigate short-term time and economic demands can result in long-term loss of earnings and benefits (Stone 2008; Bennetts 2007).

This research furthers the ‘opt-out’ discussion by investigating the prevalence of this phenomenon using the most recent nationally representative data available: the American Community Survey 3-year data file 2005-2007. We add a new dimension to the discussion by exploring whether opting-out is equally apparent across the occupational structure. We then explore the influences of both occupational characteristics and women's characteristics on women's decisions to work or not after having a birth.

Research objectives

This research has four main research objectives. Specifically,

1. Are women who have babies opting out of the labor force? Or are they phasing out by reducing their labor force participation?
2. Are women in some occupations more likely to opt out while in other occupations women continue to work, at least work part-time?
3. If women in some occupations are more likely to opt out, what characteristics might these occupations have in common?
4. Are there common characteristics among women who opt out or women who continue working after having a baby?

Data and Methods

This paper uses detailed data on occupation from the new 3-year American Community Survey (ACS) for the years 2005-2007. The 3-year file is a composite of three years of ACS – a nationally representative survey of 3 million household addresses each year. The survey collects measures similar to the 2000 decennial census long form including employment status, occupation, industry, class of worker, earnings in the last 12 months, detailed geography, and numerous demographic characteristics for all members of the household. This data source is rich in detail about labor force activities, with about 500 reported occupation classifications.

The primary universe for this analysis is women between the ages of 16 and 50, about 72 million women. The large sample size and rich demographic detail of the ACS allows for a more in-depth analysis than may be possible with other national surveys. This first release of the three-year-ACS file allows an opportunity to study in fine detail occupational differences and life choices for women.

We first examine the labor force participation rates of new mothers who had a child in the previous 12 months, comparing them to the labor force participation of women who had minor children living at home but did not have a child during the last year, and with women who had no children living at home (which includes those with adult children and those who were childless). From this we determine the prevalence of women opting out (not working), phasing out (working part time), or staying in (working full time).

To address our second research question, we compare estimates of women's labor force participation for these women, crossed by occupation, to see if there are occupations where women are more likely to remain employed after childbirth. We then compare representative occupations which afford such flexibility with those that do not, including characteristics of the occupation such as the percent female, median earnings, percent government worker, percent self employed, percent private industry, and percent higher education.

Finally we look at the characteristics of women in these representative occupations to see whether there are common attributes which influence women's likelihood to opt out or continue working after having a baby. We consider:

- women's human capital (educational attainment and time in labor force measured as age less years in school),
- financial resources (median earnings, her earnings as a percent of the total family earnings),
- child care resources (second adult in household),
- expense measures (number of other children in the household, monthly housing costs, housing costs as a percentage of earnings).

Key Variables and Measurement

A women's birth status is determined through the question "Has this person given birth to any children in the past 12 months?". Employment status is measured for the week preceding the interview. If the woman is not currently working, there is an indicator of whether the woman worked in the last year or last 5 years. Employment status includes employed, unemployed, and not in the labor force. Part time is defined as usually working less than 35 hours a week and/or less than 50 weeks in a year. Occupation is measured for the week prior to the survey and classified to one of 510 detailed occupations according to the Standard Occupation Classification system.

Since the ACS is not longitudinal and we have no indication of when women stopped working, women's actual earnings understates what non-working women may have earned during the year if they had worked throughout the year. To account for this potential measurement bias, we created a predicted, synthetic estimate of women's earnings within occupation, based on woman's age, educational attainment, and occupation.

Other key variables are potential work experience, defined as age, minus five, less the number of years of schooling; and monthly housing expenses, which includes gross rent or mortgage costs.

Results¹

Opting out of the labor force

We begin by first considering whether women who have babies are opting out of the labor force or are they phasing out by reducing their labor force participation? We consider employment differences for women based on reported fertility status in the previous 12 months and presence of children in household. We use three measures: employment status based on status one week prior to interview; part time status based on usual status when employed; and dropping out of the labor force based on respondent's work status one year prior. Employment status includes employed, unemployed, and not in the labor force. Part time is defined as usually working less than 35 hours a week and/or less than 50 weeks in a year.

For all three measures, women who had a birth in the previous 12 months differed from those who did not, with a lower percentage employed and higher percentages of part time and dropping out of the labor force. No large differences appear in employment status between women with children who were at least one year old and women who had no children in the household. Women who had a birth in previous 12 months were more

¹ The estimates in this report (which may be shown in text, figures, and tables) are based on responses from a sample of the population and may differ from actual values because of sampling variability or other factors. As a result, apparent differences between the estimates for two or more groups may not be statistically significant. All comparative statements have undergone statistical testing and are significant at the 90-percent confidence level unless otherwise noted.

likely to have experienced working less than the full year than women who had not had a birth, possibly due to use of unpaid maternity leave.

Employment Status of Women 16 to 50

Percent employed



Percent part time among employed

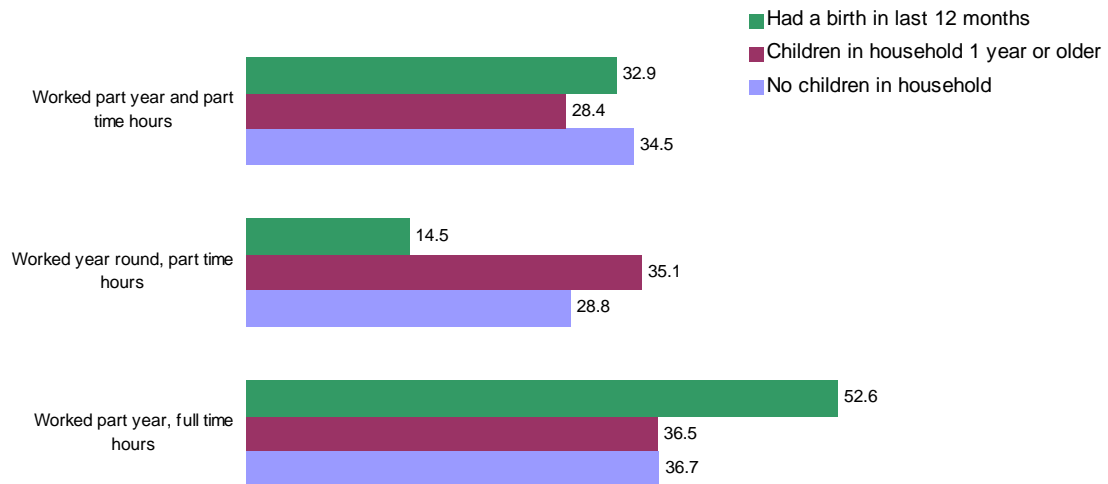


Estimated employment dropout rate*



*The number of women who were not employed this year but were employed the previous year divided by the current number of employed women.

Types of Part Time Employment

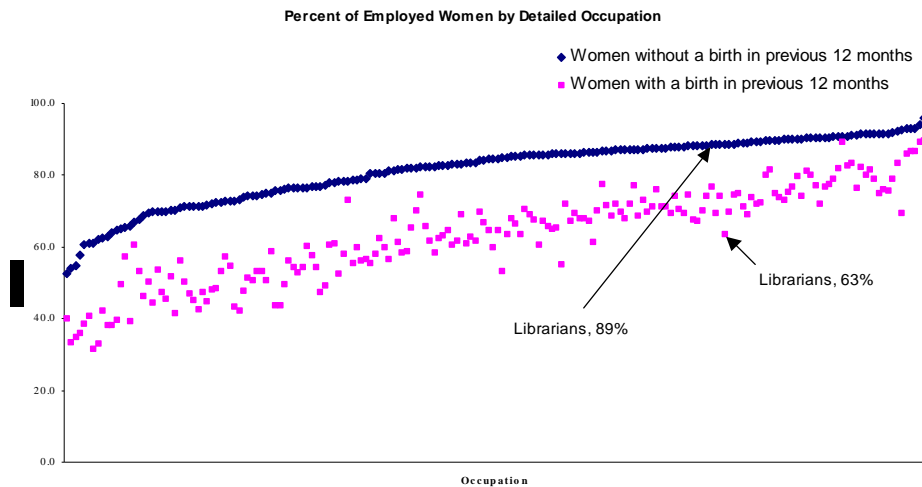


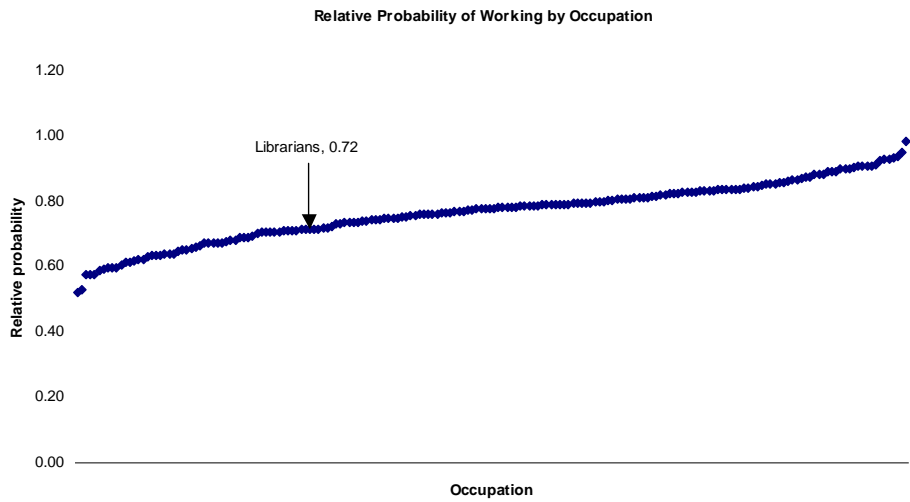
Opting out across occupations

We next consider whether women in some occupations were more likely to opt out or work part time than women in other occupations. For each occupation, we use the three aforementioned measures: the percent of women who participated in the labor force, the percent of women who worked part time, and the dropout rate of women who had been working in the previous year but had stopped.

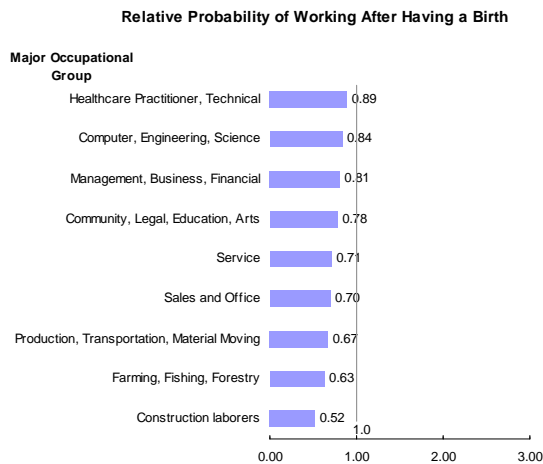
We used detailed occupations as the universe of analysis for this section of the paper. Eighty-five percent of women ages 16 to 50 had an occupation, meaning they had worked at some time in the previous 5 years. For those who had not worked, no occupation could be determined. We limited our scope to include only women working in occupations that had at least 100 unweighted sample cases of women who had a birth in the previous 12 months, resulting in a universe of 190 detailed occupations which covered 94 percent of all women with occupations in this age group. We grouped occupations into 9 major classifications for presentation.

We needed to account for variation in the percent working across occupations regardless of birth status. Thus, we standardized the difference in the percent working between women who had a baby in the previous 12 months to those who did not as a ratio of the two percents for each occupation, called the relative probability of working. As the relative probability approaches 1.0, the likelihood of women's employment behavior after having a baby is closest to the norm for women in the occupation. For example, 63 percent of librarians who had a birth in the previous 12 months worked compared with 89 percent who did not have a birth. The relative probability of a librarians working after having a birth is then $63 / 89$ or $.72$.

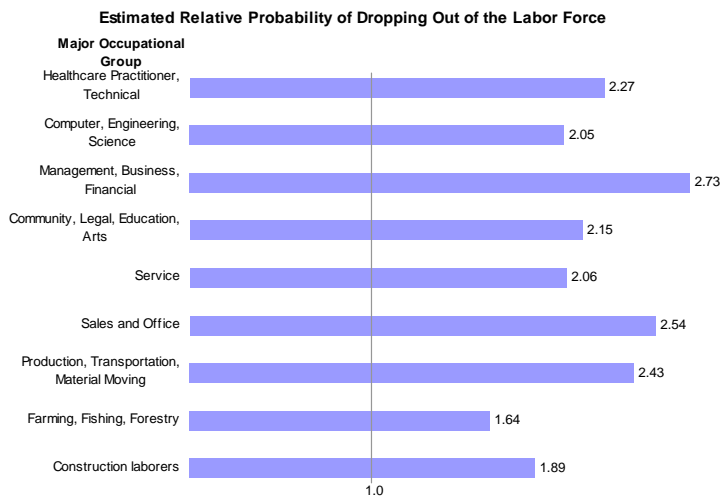
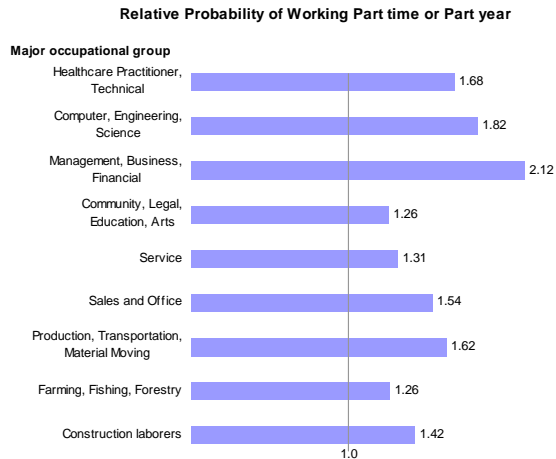




As expected, working after a birth varies by occupation: for example, healthcare practitioners and technicians were less likely than construction laborers to take time off without pay.² Management, business, and financial occupations had the highest rates of new mothers working part time or dropping out of the labor force.



² The relative probability of working after a birth for the occupational group of construction laborers was not statistically different from the occupational group of farming, fishing, and forestry.



Characteristics of Occupations

Next we explore what characteristics these occupations have in common where women are more likely to drop out or continue working after having a child. Using each of the 190 occupations, we consider the relative probability of working based on the following characteristics of the men and women 16 and older in each occupation:

- percent women
- percent having a baby in last 12 months
- median age of women
- percent in government, private industry, self employed
- educational attainment
- median earnings
- percent employed
- percent working part time

Educational attainment and median earnings within the occupation appear to be the only useful predictors of whether women choose to work after having a child or not.

While these factors co-vary, the higher R-square of model 4, which includes education and median earnings, over either model 5 or 6, which shows them separately, suggests that they also have independent effects. Working in government, which is suggested in literature as family friendly, adds little to the probability.

Estimated Relative Probability of Working after a Birth in Previous 12 Months

Variable	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	Parameter Estimate	Pr > t	Parameter Estimate	Pr > t	Parameter Estimate	Pr > t	Parameter Estimate	Pr > t	Parameter Estimate	Pr > t	Parameter Estimate	Pr > t
Intercept	0.6037	<.0001	0.7022	<.0001	0.7358	<.0001	0.7461	<.0001	0.8167	<.0001	0.6783	<.0001
Median earnings (in thousands)	0.0018	0.0002	0.0020	<.0001	0.0017	<.0001	0.0017	<.0001			0.0028	<.0001
Percent with less than high school	-0.0020	0.0013	-0.0025	<.0001	-0.0028	<.0001	-0.0030	<.0001	-0.0046	<.0001		
Percent working in government	0.0005	0.0378	0.0005	0.0471	0.0005	0.0443						
Percent female	0.0005	0.0631	0.0004	0.1006								
Percent employed	0.0014	0.2133										
Percent working part time	-0.0003	0.5798										
Percent bachelors degree or more	-0.0001	0.7606										
Median age of women	-0.0001	0.9052										
Percent had a birth	-0.0002	0.9605										
R-Square	0.5771		0.5756		0.5644		0.5547		0.4565		0.4301	
Adj R-Sq	0.5560		0.5640		0.5573		0.5500		0.4536		0.4271	

Characteristics of Women who had a birth in previous 12 months

Finally, we looked at the characteristics among women in these 190 occupations who opted out compared with women who continued to work after having a baby. Most women (59 percent) in our universe (those with an occupation) were employed after having a birth. We consider the likelihood of working or not based on the following characteristics of these women:

- Human capital (age, educational attainment, potential work experience)
- Financial resources (total household income, husband’s earnings, women’s synthetic earnings)
- Expenses (monthly housing expense, housing cost as a percentage of household income, number of children in household)
- Child care resources (marital status, number of adults in household)

Human capital: Women with more education are less likely to opt out of the labor force than those with less education. Similarly, older women are less likely to opt out of the labor force than their younger counterparts.

Financial resources: Women with a household income above \$100,000 are less likely to opt out than those with lower household incomes. Women at the highest income levels of \$200,000 or more are slightly more likely to opt out than those with incomes between \$100,000 and \$199,999, however, they are still less likely to opt out than those with household incomes below \$100,000.

Expense measures: Expense measures and financial resources do co-vary, however, they appear to have independent and opposite effects. Holding

household incomes constant, it appears that women with higher housing costs are more likely to opt out. In line with this result, women with more children are more likely to opt out.

Childcare resources: Marital status and financial resources co-vary. Holding household income constant, it appears that married women are more likely to opt out.

**Odds Ratios of the Probability of Working
for Women Who Had a Birth in Previous 12 Months
for All Occupations and Selected Occupation Groups**

Effect	All Occupations	Production, Transportation, Material Moving	Healthcare Practitioner and Technical
Human capital			
Less than high school graduate	0.667 *	0.738 *	1.082
<i>High school graduate</i> ¹	1.000	1.000	1.000
Some college	1.196 *	1.050 *	1.677 *
Bachelors degree or more	1.260 *	1.010	1.432 *
Advanced degree	1.720 *	1.248 *	1.923 *
Younger women (ages 16 to 27)	0.796 *	0.796 *	0.929 *
<i>Women (ages 28 to 39)</i> ¹	1.000	1.000	1.000
Older women (ages 40 to 50)	1.375 *	1.560 *	0.979
Financial resource			
Household income -- less than \$50,000	0.474 *	0.437 *	0.406 *
<i>Household income -- \$50,000 to \$99,999</i> ¹	1.000	1.000	1.000
Household income -- \$100,000 to \$199,999	1.231 *	1.189 *	1.457 *
Household income -- \$200,000 or more	1.032 *	0.717 *	0.872 *
Expense measures			
Monthly housing cost -- less than \$1,000	0.978 *	0.962 *	0.859 *
<i>Monthly housing cost -- \$1000 to \$1,999</i> ¹	1.000	1.000	1.000
Monthly housing cost -- \$2,000 to \$2,999	0.800 *	0.698 *	0.716 *
Monthly housing cost -- \$3000 or more	0.678 *	1.052	0.621 *
One child in household	1.240 *	1.218 *	1.213 *
<i>Two children in household</i> ¹	1.000	1.000	1.000
Three or more children in household	0.921 *	0.900 *	0.789 *
Childcare resources			
Married	0.753 *	0.874 *	0.746 *
<i>Not married</i> ¹	1.000	1.000	1.000
One adult in household	1.449 *	1.269 *	2.103 *
<i>Two adults in household</i> ¹	1.000	1.000	1.000
Three or more adults in household	0.812 *	0.828 *	0.826 *

¹ omitted category.

* significant at <.0001.

Conclusion

Most women in the United States work, even after having a child. While many take time off immediately after giving birth, the odds of working among women with older children at home is essentially the same as that of women with no children at home. However, some women do leave the labor force after childbirth.

The findings in this research suggest that the only occupational characteristics that impact a woman's decision to opt out of the labor force are education and earnings. Government, which literature offers as having a family-friendly environment, appears to have only a small impact on the decision to opt out. This suggests that women are not choosing occupations based on their expected family plans but rather, make their family plans in whatever occupation they have based on the financial resources at their disposal.

We hypothesize two groups of women opt out: the many whose earnings are so low they may not have the childcare resources to afford to work, and those few whose family resources are such that they can afford to forgo their personal earnings. Our findings do not support the media's suggestion that large numbers of professional women are opting out; quite the contrary, independent of the effects of earnings, women with more education stay in the work force after having a birth.

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