Mothers' and Fathers' Labor Supply and Adult Children

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Abstract

During the early years of a child's life, typical households display a division of labor where fathers are more likely to specialize in market work, and mothers are more likely to retreat either temporarily, partially, or permanently, from market labor in favor of childcare and other forms of household production. In this paper, I examine how parent's labor supply responds to major events in the children's adulthood. Specifically, I consider an adult child's enrollment in school, their purchase of a home, their marriage, and their own childbearing. Consistent with a continuation of this specialization, I find that mothers' labor supply decreases after their adult children have children of their own, but not fathers', and that this result is entirely explained by labor supply decreases in mothers' without a degree in my sample.

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1 Introduction

Parents are financially and otherwise involved in their children's lives, providing support for their children into adulthood (Fagereng et. al. 2023) and incurring expenses to support their children. This prompts two questions. First, in addition to financial support, how do parents continue to provide other kinds of support, such as transfers of time and effort? Second, as many of these expenses may not be perfectly anticipated, do they shift the financial plans of supporting parents for earning, saving, and consumption? Partial answers to both of these questions may manifest in the labor supply of parents. For this reason, I examine the labor supply response of parents to developments observed in the lives of their adult children.

Prior works in this area have narrowly addressed the labor supply of women becoming grandmothers. Studying the labor supply of grandmothers, Frimmel et. al. (2022) find that the birth of a first grandchild substantially reduces grandmothers' labor supply, with small additional effects for subsequent grandchildren. They also find that this effect is larger when the grandmother lives nearby to her grandchildren, and when childcare is more valuable to the mother. Anstreicher and Venator (2022) find that grandmothers' assistance with childcare is so valuable that daughters move closer to their mothers before having children. As a result, these mothers suffer a smaller "motherhood penalty" in their earnings.

In this paper, I expand this literature in two ways. First, I consider a variety of other major developments in a child's life (beyond having children). Second, on the hypothesis that highly educated women have a greater opportunity cost of forgoing wage labor to care for grandchildren, I examine heterogeneities by education level of the grandmother. To this end, I gather data on mothers and their spouses from the National Longitudinal Survey of Youth 1979 (NLSY79) and match them to data on their children from the NLSY79 Child Supplement (NLSY79-YA). This results in a panel dataset with rich and detailed information on the financial, educational, and family lives of mothers and their children. Matching prior work, I find that mothers are less likely to be employed after their children marry, and even less likely to work after their children become parents. I find similar associations with larger

magnitude on the probability of a mother working full time. I find no significant correlation with fathers working after their children become parents. New to the literature, I find that fathers work less after their children secure a mortgage (by just over 40 hours per year). Comparing results on mother's employment for women with and without a bachelors degree or equivalent education, I find much stronger employment reductions among less educated women, suggesting that grandmothers' labor market exit is strongly tied to the opportunity cost of exit.

2 Background

The participation of grandmothers in the rearing of children is well studied, including the effects on the labor supply of the grandmother (Frimmel et. al. 2022), the labor supply of the parents and the relationship between generations (Presser 1989), and in recent work even the geographic mobility of parents, who are pulled toward grandmothers (Anstreicher and Venator 2022).

Using data from the PSID, Rupert and Zanella (2017) place the grandmother in the more complete household, with the grandfather. They find that grandchildren significantly decrease a grandmother's probability of employment and her working hours, but they find no effect on the grandfather. Gary Becker's (1985) paper on the division of labor within the family gives us one theory for why we might expect this result, and for how we might expect the elder fathers to allocate their support for their adult children. In this model, domain specific skill accumulation creates incentives for couples to form around and leverage complementary skill sets, especially around market labor and home production. If, earlier in the life course, mothers have mostly specialized in home production, and suffered a motherhood penalty to their wages (Hill 1979, Anderson et.al. 2002), but gained skill in home production, then later in the life course, when grandchildren are born to a couple, that couple may retain comparative advantages in home production in the grandmother and market labor in

the grandfather.

What can a grandmother's skill in home production accomplish to benefit her children? Direct provision of household tasks and childcare, time for which is facilitated by retreat from the labor market. What, then, can a grandfather provide? Financial transfers, but these may not cluster in a large transfer around birth events. Instead, we may expect large transfers to cluster around very costly purchases such as higher education and an initial deposit on a mortgage.

3 Data

I use the matched panel data linking NLSY79 mothers to their children. I record details on the family and economic life of the mother, including both fixed and time variant characteristics of these mothers. I connect this mother to a similar selection of time variant and invariant characteristics of each of her children. Because my data follows the mother, and links children through their mothers, I do not necessarily observe children's fathers. Rather, I observe the mother's spouse (when reported). I will sometimes use the term "father" to refer to the mother's spouse for the sake of brevity, but in every case I am only describing a report the mother gave about her spouse.

Initially, the data contains 4,943 mothers of 11,551 children, in biannual surveys from 1994 through 2020. After removing observations of children under 18, and of children with birth dates after 2000, I retain 3,512 mothers and 7,328 children.

I then aggregate the child characteristics at the mother-year level. In this process, for each mother-year observation, I generate new variables computed as the summation, mean, minimum, and maximum of the observed values of all her children. For a woman with only one adult child, these values would be identical to those of her only adult child. This allows me to represent information about the condition of a mother's children on a single variable for each condition. In my preferred specification, I use the mean across children.

Table 1: Summary of Mother Characteristics

Variable Name	Mean	St.Dev.	Min	Max	Obs
Employed	.6795	.4667	0	1	17,174
Full Time	.5890	.4920	0	1	17,174
Spouse's Work	1139.50	1187.78	0	6240	17,174
Married	.4765	.4995	0	1	17,174
Disabled	.1257	.3315	0	1	17,174
Number of Kids	2.61	1.21	1	11	15,635
Bachelors Degree	.1995	.3997	0	1	17,174

Notes: The mean of spouse's hours worked is an annual figure and includes zeros from unmarried women. The married indicator does not include women separated from their spouse.

Table 2: Summary of Mean Child Characteristics

Variable Name	Mean	St.Dev.	Min	Max	Obs
Enrolled in School	.4029	.3456	0	1	17,174
Has a Mortgage	.1980	.3470	0	1	17,174
Married	.2106	.3466	0	1	17,174
Parent	.4231	.3869	0	1	17,174
Married Parent	.1532	.3045	0	1	17,174
Female Parent	.2414	.3113	1	1	17,174

Notes: Means are calculated as the average across children of a mother in a single survey year.

After dropping observations without complete surveys on my variables of interest, I retain 17,174 observations. Summary statistics describing mothers are presented in table 1, and the effect of age and survey completeness conditions I employ in selecting my sample are presented in table 3. My sample is dramatically smaller after implementing these restrictions, but the characteristics of this subsample are extremely similar to those of the larger sample.

In order to offer an initial descriptive characterization of the relationships in the data, I employ the regression given below:

Table 3: Effect of Sample Selection Conditions on Selected Mother Characteristics

Selection	Unconditional	Adult Child	Completeness
Observations	69,188	42,738	17,174
Employed	69.14%	66.67%	67.95%
Full Time	58.43%	57.67%	58.89%
Spouse Hrs Annual	1330.25	1129.61	1139.50
Number of Children	2.47	2.51	2.61
Bachelors Degree	20.13%	15.79%	19.95%

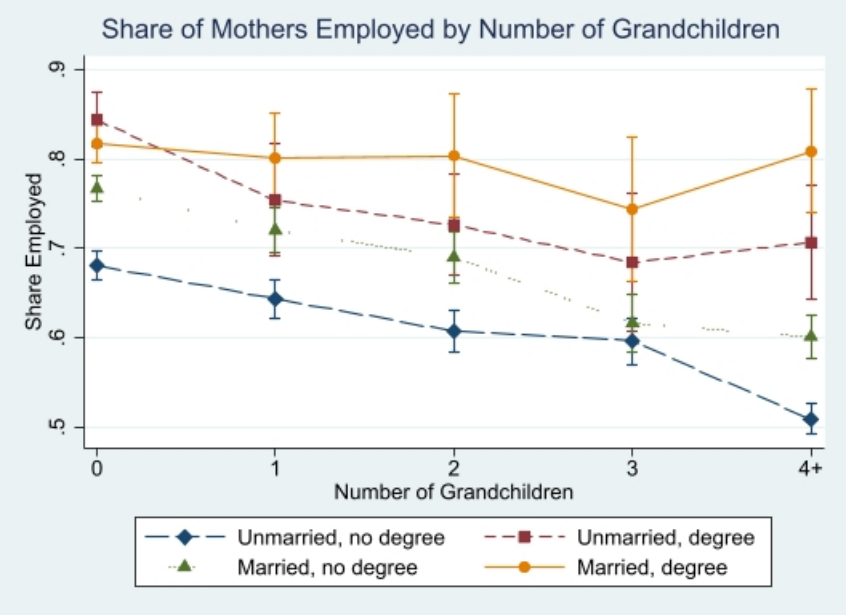
Notes: Values presented are conditional means. Conditions accumulate moving rightward across columns, such that Column 3 presents means conditional on both a child being born after 1998 and being over 18 in the observation year.

$$y_{mt} = X_{mt} + \epsilon_{mt} \tag{1}$$

Where y_{mt} is the indicator for mother's employment in year t. X_{mt} is the vector of twenty dummy variables resulting from the interaction of two marital statuses (married versus not) with two mother's education statuses (bachelors degree versus not), and five dummies for the number of grandchildren. Results from this regression are presented in figure 1.

I find that, for all women but "Married women with degrees", employment declines with the number of grandchildren. I also find that employment rates are highest for the "Married with degrees" group, and that employment is lower for unmarried women, and much lower for women without degrees. This finding is consistent with women exiting the labor force after the birth of grandchildren, and the hypothesis that this effect is diminished for women with degrees who have a higher opportunity cost of labor market exit. In the following sections, I will investigate these hypotheses more rigorously.

Figure 1: ANOVA Regression Results



Notes: Presented are coefficients and standard errors for ANOVA regression on interacted dummies of child's school enrollment, marital status, and binned age.

4 Methods

I use linear regressions with individual (mother) fixed effects to estimate the relationship between changes in the condition of adult children and the labor supply of their mother and father. There is one major and immediate obstacle to implementing such a model in my data: differential fertility. In my sample, the number of children born to a mother ranges from 1 to 11. If I want to express a characteristic of the children on the right-hand side of an equation, I need a method that will work for mothers with a variety of different numbers of children. I choose to aggregate across observed adult children, specifically adopting the mean in my preferred specification. The main disadvantage of this aggregation is that it imposes an equal weight on shocks to all children of a mother, and an inverse linear downweighting of shocks to adult children with adult siblings.

In my preferred specification, I estimate the following equations:

$$y_{mt} = \alpha_m + \gamma V_{mt} + \beta X_{mt} + \epsilon_{mt} \tag{2}$$

$$X_{mt} = \frac{1}{C} \sum_{1}^{C} X_{ct} \tag{3}$$

Where y_{mt} is the parent's labor supply in year t. α_m is a time-invariant mother fixed effect. V_{mt} is the vector of mother's time-variant characteristics. X_{mt} is the across-child mean of time variant child characteristics for the mother's C adult children.

Since the labor supply measures of use for the mother are indicators for employment and for full time employment, this could present an issue of intelligibility (predicted probabilities outside [0,1]). Fortunately, my models are very well behaved and fitted values from these models remain well within the [0,1] bounds of intelligibility. A summary of these across-child means are presented in table 2.

5 Results

Table 4 reports results from four specifications. In the first column, I do not include a control for the mother's reported disability, while in the second I do. In column 3, I use the mean number of children who are married parents, to test for differences in the employment relationship with grandchildren born to married or unmarried parents. This test is motivated by the possibility of special need or attention given (or denied) to grandchildren born outside marital relationships, which may be stigmatized or otherwise more precarious. In column 4, I instead employ an interaction for daughters who become parents, to investigate differential reaction to grandchildren born to sons versus daughters. This is motivated by the possibility that grandchildren will be more attached, in a variety of ways, to their mothers, such that the response to care for grandchildren and a daughter may be different from caring for grandchildren and a daughter-in-law.

Table 4 presents results on mother's employment. First, I find that women work less as they age, and when they describe themselves as disabled. Changes in the mother's marital status have a weak and insignificant negative correlation on her employment. I find that the coefficient of children's enrollment status and whether they have a mortgage are not significantly related to their mother's employment. In most of my specifications, I find that mothers are slightly less likely to work after their children marry. I find a much larger negative correlation with children becoming parents. This decrease, which ranges from 4.7 to 7.3 percentage points, would suggest a decrease in employment of about 10%, a magnitude very much like that found in Frimmel et.al. (2022). In column 3 I find that the positive employment association of the married-parent interaction is less than the negative employment correlation of marriage and is statistically insignificant. In column 4 I find an additional negative correlation between employment and children born to daughters rather than sons, but this coefficient is also not statistically significant.

In Table 5, I present results on mother's full time employment, defined as having a typical work week of more than 30 hours per week. Correlations with mother characteristics are

Table 4: Results with Mean Child Characteristics on Mother's Employment

	(1)	(2)	(3)	(4)
Mother Characteristics				
Disabled		-0.417***	-0.417***	-0.417***
		(0.0154)	(0.0154)	(0.0154)
Age	-0.0122***	-0.00480***	-0.00472***	-0.00483***
	(0.000897)	(0.000807)	(0.000809)	(0.000808)
Married	-0.0170	-0.0199	-0.0198	-0.0199
	(0.0167)	(0.0152)	(0.0152)	(0.0152)
Child Characteristics				
Enrolled in School	-0.00539	0.00201	0.00132	0.00160
	(0.00940)	(0.00863)	(0.00862)	(0.00866)
Has a Mortgage	0.0119	0.00477	0.00458	0.00462
	(0.0110)	(0.0102)	(0.0102)	(0.0102)
Married	-0.0159	-0.0237**	-0.0398**	-0.0238**
	(0.0125)	(0.0116)	(0.0167)	(0.0116)
Parent	-0.0599***	-0.0660***	-0.0733***	-0.0470**
	(0.0175)	(0.0161)	(0.0172)	(0.0223)
Married Parent			0.0250	
			(0.0192)	
Female Parent				-0.0368
				(0.0310)
Constant	1.337***	1.017***	1.016***	1.019***
	(0.0451)	(0.0405)	(0.0405)	(0.0407)
Observations	17174	17174	17174	17174
R^2	0.0432	0.155	0.155	0.155

Notes: Presented are results from regressions with a mother fixed effect and robust standard errors. The lefthand side variable is a binary indicator for the mother being employed, unconditional of whether she desires employment.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5: Results with Mean Child Characteristics on Mother's Full Time Employment

	(1)	(2)	(3)	(4)
Mother Characteristics				
Disabled		-0.338***	-0.338***	-0.338***
		(0.0144)	(0.0144)	(0.0144)
Age	-0.0108***	-0.00481***	-0.00471***	-0.00481***
	(0.000917)	(0.000863)	(0.000865)	(0.000863)
Married	-0.0134	-0.0157	-0.0156	-0.0157
	(0.0173)	(0.0164)	(0.0164)	(0.0164)
Child Characteristics				
Enrolled in School	-0.0107	-0.00469	-0.00552	-0.00461
	(0.00996)	(0.00946)	(0.00947)	(0.00947)
Has a Mortgage	0.00656	0.000754	0.000530	0.000783
	(0.0114)	(0.0110)	(0.0110)	(0.0110)
Married	-0.0196	-0.0258**	-0.0452***	-0.0258**
	(0.0122)	(0.0117)	(0.0170)	(0.0117)
Parent	-0.0772***	-0.0822***	-0.0909***	-0.0860***
	(0.0185)	(0.0177)	(0.0188)	(0.0251)
Married Parent			0.0300	
			(0.0197)	
Female Parent				0.00729
				(0.0347)
Constant	1.185***	0.926***	0.924***	0.926***
	(0.0461)	(0.0433)	(0.0433)	(0.0434)
Observations	17174	17174	17174	17174
R^2	0.0347	0.100	0.100	0.100

Notes: Presented are results from regressions with a mother fixed effect and robust standard errors. The lefthand side variable is a binary indicator for the mother being employed with full time hours, unconditional of whether she desires employment.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6: Results with Mean Child Characteristics on Father's Annual Working Hours

	(1)	(2)	(3)	(4)
Mother Characteristics				
Disabled		7.039	7.141	7.297
		(19.54)	(19.53)	(19.58)
Age	-12.74***	-12.86***	-12.98***	-12.89***
	(1.461)	(1.491)	(1.492)	(1.492)
Married	1684.6***	1684.6***	1684.5***	1684.6***
	(37.97)	(37.96)	(37.95)	(37.94)
Child Characteristics				
Enrolled in School	-2.166	-2.291	-1.328	-2.809
	(15.76)	(15.76)	(15.84)	(15.82)
Has a Mortgage	-43.76**	-43.64**	-43.38**	-43.82**
	(19.06)	(19.06)	(19.04)	(19.07)
Married	29.10	29.23	51.91*	29.01
	(18.93)	(18.94)	(31.04)	(18.95)
Parent	-39.95	-39.84	-29.66	-16.04
	(28.61)	(28.61)	(30.27)	(40.71)
Married Parent			-35.08	
			(35.13)	
Female Parent				-46.07
				(56.13)
Constant	1005.3***	1010.7***	1012.7***	1013.4***
	(77.58)	(78.80)	(78.74)	(79.01)
Observations	17174	17174	17174	17174
R^2	0.346	0.346	0.346	0.346

Notes: Presented are results from regressions with a mother fixed effect and robust standard errors. The lefthand side variable is the reported number of hours worked by the mother's spouse in the survey year.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

extremely similar to results on employment, as are results for the child's college enrollment, home-ownership, and marital status. However, I find moderately larger correlations from children becoming parents, 8.22% points in column 2. On the base rate of full-time employment of 58.9%, this coefficient suggests a 13.9% decrease in full time employment. Since this point estimate is larger than the coefficient for employment overall, the result suggests that some women reduce their working hours rather than exit the labor market entirely after the birth of a grandchild. In column 3, I find a similar insignificant positive relationship in the married parent interaction, and in column 4 I find a very small and statistically insignificant positive correlation with the female parent interaction.

Table 6 reports the results from regressions on the Father's Annual Working Hours. I observe that husbands work about 13 hours per week less with each additional year of their wife's age (which is strongly correlated with their own age). I also find that married women report higher working hours for their husbands than unmarried women. In the data, I observe reports of the spouse's positive working hours for many women whose marital status is reported as separated, divorced, widowed, and even women who report never being married. This results from the inclusion of women in the survey pool for this question in survey rounds adjacent to their marital status changing. As a result, after a woman divorces the labor supply she reports for her spouse drops to zero. I find no association of adult children's school enrollment on the father's labor supply. I find insignificant or marginally significant coefficients for a child's marriage (positive) and the birth of grandchildren (negative). However, I find a significant negative association with the father's labor supply from their child taking out a mortgage. This contrasts starkly with the results I observe in the mother's labor supply, where the child's mortgage is insignificant but their marriage and childbearing is significant.

5.1 Support for Daughters Returning To Work With Children

An important motivator in other papers for the study of grandmother's labor supply retreat after the birth of grandchildren is her provision of childcare to facilitate the new mother returning to work. Presser (1989) found childcare provided by grandmothers to be an important facilitator of return to work in a sample of single mothers. Anstreicher and Venator (2022) found that the value of childcare provided by grandmothers was so significant as to drive relocation of expectant mothers and reduce geographic mobility for families with children.

In this section I examine how mothers' labor supply is related to the work status of daughters with children, in order to examine whether these grandmothers are exiting the labor market to facilitate a return to work for their daughters after they become mothers. I use a "female working parent" interaction, which should be negative if grandmothers reduce work *more* for daughters who return to the work than for those who do not.

The main obstacle I face to implement this in my data, is that the child survey contains many incomplete observations in the description of the child's labor supply. The most complete report of the child's labor supply is the report of a child's earning from work. I use this to produce an indicator for whether the child was working for pay. Nonetheless, I lose many observations relative to the previous sample to implement this. Table 7 presents summary statistics for the parent's labor supply variables and select child characteristics before and after this subsampling. The means in this subsample are very similar to the general sample mean, though the total sample size declines by about 43%.

Table 7: Additional Sample Selection for Incomplete Child Labor Supply

Selection	Base Sample	Labor Supply
Observations	17,174	9,790
Employed	67.95%	69.78%
Full Time	58.89%	60.83%
Spouse Hrs Annual	1139.50	1180.59
% Children Enrolled	40.30%	39.53%
% Children Parents	42.31%	40.95%

Notes: Values presented are conditional means. Column 1 presents the same means conditional on initial selection. Column 2 presents means conditional on observing the child's income in that sample year.

Table 8 presents results in this subsample next to comparable results from the original sample presented in column (2) of table 4, testing the association with mother's employment. Point estimates of results are largely similar between the original sample and the subsample, though the parent coefficient decreases enough to be insignificant. Including the working indicator and interactions, I find a positive association between the child's labor supply and the mother's, but no significant interactions either for grandchildren born to daughters, or to working daughters. Table 9 presents a similar analysis, with full-time work as the dependent variable, and yields similar results: no significant additional decrease in mother's labor supply when her daughter is a working mother.

Table 8: Results with Working Mother Children on Mother's Employment

	Main Sample	Subsample	
	(1)	(2)	(3)
Mother Characteristics			
Disabled	-0.417***	-0.339***	-0.342***
	(0.0154)	(0.0209)	(0.0210)
Married	-0.0199	-0.0144	-0.0155
	(0.0152)	(0.0223)	(0.0223)
Age	-0.00483***	-0.00784***	-0.00826***
	(0.000808)	(0.00128)	(0.00130)
Child Characteristics			
Enrolled in School	0.00160	0.000595	0.00356
	(0.00866)	(0.0120)	(0.0120)
Has a Mortgage	0.00462	0.0275*	0.0270*
	(0.0102)	(0.0150)	(0.0151)
Married	-0.0238**	-0.0332*	-0.0304
	(0.0116)	(0.0191)	(0.0191)
Parent	-0.0470**	-0.0291	-0.0163
	(0.0223)	(0.0307)	(0.0395)
Working			0.0576***
			(0.0188)
Female Parent	-0.0368	-0.0496	-0.0464
	(0.0310)	(0.0425)	(0.0512)
Working Parent			-0.0172
			(0.0272)
Working Female			-0.0241
			(0.0192)
Female Working Parent			0.00501
			(0.0325)
Constant	1.019***	1.132***	1.112***
	(0.0407)	(0.0615)	(0.0616)
Observations	17174	9790	9790
R^2	0.155	0.0952	0.0966

Notes: Presented are results from regressions with a mother fixed effect and robust standard errors. The lefthand side variable is a binary indicator for the mother being employed, unconditional of whether she desires employment.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

5.2 Heterogeneity

In the initial exploration of the data presented in figure 1, I found that married women with college degrees did not appear to have lower employment rates when they had more grandchildren. We might expect this a priori because grandmothers with college degrees will

Table 9: Results with Working Mother Children on Mother's Full Time Employment

	Main Sample	Subsample	
	(1)	(2)	(3)
Mother Characteristics			
Disabled	-0.338***	-0.271***	-0.274***
	(0.0144)	(0.0187)	(0.0188)
Married	-0.0157	-0.00951	-0.0106
	(0.0164)	(0.0238)	(0.0238)
Age	-0.00481***	-0.00778***	-0.00824***
	(0.000863)	(0.00140)	(0.00142)
Child Characteristics			
Enrolled in School	-0.00461	-0.0153	-0.0129
	(0.00947)	(0.0130)	(0.0131)
Has a Mortgage	0.000783	0.0216	0.0215
	(0.0110)	(0.0166)	(0.0166)
Married	-0.0258**	-0.0280	-0.0247
	(0.0117)	(0.0186)	(0.0186)
Parent	-0.0860***	-0.0552*	-0.0291
	(0.0251)	(0.0335)	(0.0434)
Working			0.0502**
			(0.0199)
Female Parent	0.00729	-0.0221	-0.0232
	(0.0347)	(0.0462)	(0.0569)
Working Parent			-0.0291
			(0.0290)
Working Female			-0.00746
			(0.0225)
Female Working Parent			0.00429
			(0.0365)
Constant	0.926***	1.042***	1.023***
	(0.0434)	(0.0671)	(0.0671)
Observations	17174	9790	9790
R^2	0.100	0.0596	0.0606

Notes: Presented are results from regressions with a mother fixed effect and robust standard errors. The lefthand side variable is a binary indicator for the mother being employed with full time hours, unconditional of whether she desires employment. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

tend to have more pleasant, better paying jobs, and so have a higher opportunity cost to exiting employment for grandchildren.

I investigate this relationship by running my analysis from the main results section on subsets of my data. In one subset, I include all women who never have education equivalent to a 4-year degree. In the other, I include all women who do. I divide women into these groups based on their observed education level in my last observation year, 2020, so that women do not change groups mid sample. The vast majority of women in my sample have less than a 4 year degree (the mode is a high school diploma and nothing more), so the sample of less educated women is much larger.

Results from this analysis are presented in Table 10. The first three columns report results among less-educated women, where I find that the coefficients for a child's marriage and their becoming a parent are larger than in the pooled sample. Comparing table 4 column 1 (-0.0599) to table 10 column 1, coefficients on employment are about 25% larger (-0.0755). The second three columns report results from more educated women. These results are all statistically insignificant.In addition, the point estimates for the correlation of a child's marriage and parenthood are much smaller in this sample (more than 50% less, and a sign change in column 6).

I repeat this analysis, taking the father's labor supply as my lefthand side variable, in table 11. A priori, we might expect differences to be less pronounced here, because subsamples are separated based on the mother's (not the father's). Though the coefficients for the child's mortgage are not statistically significant, the point estimates for the correlation of father's labor supply are twice as large in the more educated sample. Particularly interestingly, while there appeared to be no or only a small relationship with child's marriage in the pooled sample, I find a strong positive relationship with marriage for husbands of less educated women, and an opposite (negative), large, (and marginally significant) relationship in the highly educated sample. Correlations with grandchildren (and grandchildren's circumstances) also appear to vary dramatically between groups, though all these results are

Table 10: Results in Mothers without vs with a Bachelors Degree or higher

	Mothers without degrees			Mothers with degrees		
	(1)	(2)	(3)	(4)	(5)	(6)
Child Characteristics						
Married	-0.0274**	-0.0488**	-0.0276**	-0.00798	-0.0106	-0.00718
	(0.0130)	(0.0194)	(0.0130)	(0.0253)	(0.0326)	(0.0253)
Parent	-0.0755***	-0.0837***	-0.0623**	-0.0169	-0.0193	0.0402
	(0.0180)	(0.0190)	(0.0244)	(0.0354)	(0.0406)	(0.0527)
Married Parent		0.0314			0.00559	
		(0.0217)			(0.0433)	
Female Parent			-0.0256			-0.108
			(0.0344)			(0.0694)
Constant	1.006***	1.005***	1.007***	1.076***	1.075***	1.085***
	(0.0440)	(0.0440)	(0.0442)	(0.101)	(0.102)	(0.101)
Observations	13747	13747	13747	3427	3427	3427
R^2	0.163	0.163	0.163	0.124	0.124	0.126

Notes: Presented are results from regressions with a mother fixed effect and robust standard errors. The lefthand side variable is a binary indicator for the mother being employed, unconditional of whether she desires employment. Columns 1, 2, and 3 are run in the subsample of data where mothers do not have a 4 year degree. Columns 4, 5, and 6 present results from the subsample where mothers do have a 4 year degree. Mother characteristics, along with child's enrollment and mortgage coefficients are suppressed.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

either insignificant or marginally significant.

6 Conclusion

In this paper, I investigate the labor supply responses of mothers and their spouses to major events in the lives of their adult children. Like prior papers, I find that mothers decrease their labor supply after their children marry, and do so more substantially after their children have children. I find that this labor supply reduction come from both a decrease in overall employment and an additional shift from full time work to part time work. Expanding on this prior work, I found limited evidence that the circumstances of birth mediate this relationship. Specifically, I find an insignificant coefficient for birth to daughters, and of birth in versus out of wedlock, on the grandmother's labor supply response. I also found that grandmother's labor supply reduction was *not* a function of whether their daughters

Table 11: Results in Spouses of Mothers without vs with a Bachelors Degree or higher

	Mothers without degrees			Mothers with degrees		
	(1)	(2)	(3)	(4)	(5)	(6)
Child Characteristics						
Has a Mortgage	-35.31*	-34.80*	-35.46*	-72.61	-74.97	-71.82
	(20.67)	(20.62)	(20.70)	(49.74)	(50.09)	(49.82)
Married	55.12***	112.1***	54.94***	-88.20*	-122.2**	-87.17*
	(20.76)	(37.11)	(20.78)	(45.77)	(52.35)	(45.64)
Parent	-53.48*	-31.58	-41.48	29.31	-2.503	102.7
	(32.07)	(33.65)	(45.73)	(62.59)	(69.72)	(87.12)
Married Parent		-83.54**			72.55	
		(41.43)			(64.92)	
Female Parent			-23.28			-139.5
			(62.96)			(117.4)
Constant	973.1***	975.0***	974.5***	1152.6***	1134.0***	1164.0***
	(85.31)	(85.23)	(85.48)	(195.6)	(196.6)	(196.8)
Observations	13747	13747	13747	3427	3427	3427
R^2	0.355	0.355	0.355	0.312	0.312	0.312

Notes: Presented are results from regressions with a mother fixed effect and robust standard errors. The lefthand side variable is a binary indicator for the mother being employed, unconditional of whether she desires employment. Columns 1, 2, and 3 are run in the subsample of data where mothers do not have a 4 year degree. Columns 4, 5, and 6 present results from the subsample where mothers do have a 4 year degree. Mother characteristics, along with child's enrollment coefficients are suppressed.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

who had babies returned to work. I found, instead, that the labor supply reduction was a function of the opportunity cost of work, reflected in the mother's level of education.

These findings may be especially useful for illuminating policy discussions about the consequences of an aging population and of delayed childbearing. Increasing the age of first birth to mothers also increases the age of grandparents. Delayed childbearing by children extends the length of the career of mother by delaying the age at which she would consider leaving the labor market after the birth of her grandchildren, and shortens the time between when those grandchildren are born, and when she reaches retirement age. By creating a longer contiguous period in middle age for these women to reattach to the labor market, women who delay childbearing for reasons related to their own education and labor market attachment may also increase the labor market attachment (and the value of education) for their mothers. This shift may result in more gainful careers for both generations of these women. Thus, even without any changes in the allocation of parenting or grandparenting work, these changes would reduce the value of domain specialization within marriages (by reducing the ratio of spouses wages).

7 Appendix Tables

7.1 Tables without Child Aggregation

In these tables, I consider the possibility that aggregation of shocks in multiple children is the source of a false positive in my findings. In order to entirely do away with aggregation, in these tables I use a subsample from my data with mothers of only one child. This causes a substantial decrease in my sample size, increasing the probability of false negatives, since the vast majority of my mothers are mothers of multiple children. Additionally, if mothers of only one child are systematically different from mothers of multiple children in their labor supply responses, I may have different findings. The tables below present results from my sample and next to results from this, much smaller subsample.

Table 2A.1: Results with Mean Child Characteristics on Mother's Employment

	Full Sample	Subset
Mother Characteristics		
Disabled	-0.417***	-0.432***
	(0.0154)	(0.0425)
Age	-0.00480***	-0.00703***
	(0.000807)	(0.00233)
Married	-0.0199	-0.0177
	(0.0152)	(0.0430)
Child Characteristics		
Enrolled in School	0.00201	0.0142
	(0.00863)	(0.0186)
Has a Mortgage	0.00477	-0.0155
	(0.0102)	(0.0236)
Married	-0.0237**	-0.0639**
	(0.0116)	(0.0302)
Parent	-0.0660***	-0.0123
	(0.0161)	(0.0297)
Constant	1.017***	1.146***
	(0.0405)	(0.116)
Observations	17174	2265
R^2	0.155	0.178

Notes: Presented are results from regressions with a mother fixed effect and robust standard errors. The lefthand side variable is a binary indicator for the mother being employed, unconditional of whether she desires employment.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2A.2: Results with Mean Child Characteristics on Mother's Full Time Employment

	Full Sample	Subset
Mother Characteristics		
Disabled	-0.338***	-0.341***
	(0.0144)	(0.0399)
Married	-0.0157	0.0207
	(0.0164)	(0.0476)
Age	-0.00481***	-0.00510**
	(0.000863)	(0.00248)
Child Characteristics		
Enrolled in School	-0.00469	0.00719
	(0.00946)	(0.0185)
Has a Mortgage	0.000754	-0.00855
	(0.0110)	(0.0265)
Married	-0.0258**	-0.0839***
	(0.0117)	(0.0302)
Parent	-0.0822***	-0.0438
	(0.0177)	(0.0354)
Constant	0.926***	0.963***
	(0.0433)	(0.123)
Observations	17174	2265
R^2	0.100	0.112

Notes: Presented are results from regressions with a mother fixed effect and robust standard errors. The lefthand side variable is a binary indicator for the mother being employed with full time hours, unconditional of whether she desires employment.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2A.3: Results with Mean Child Characteristics on Father's Annual Working Hours

	Full Sample	Subset
Mother Characteristics		
Disabled	7.039	8.556
	(19.54)	(53.13)
Married	1684.6***	1546.8***
	(37.96)	(114.9)
Age	-12.86***	-9.394**
	(1.491)	(3.643)
Child Characteristics		
Enrolled in School	-2.291	16.04
	(15.76)	(30.79)
Has a Mortgage	-43.64**	13.51
	(19.06)	(43.61)
Married	29.23	75.92*
	(18.94)	(45.17)
Parent	-39.84	-117.7**
	(28.61)	(50.31)
Constant	1010.7***	816.9***
	(78.80)	(199.3)
Observations	17174	2265
R^2	0.346	0.324

Notes: Presented are results from regressions with a mother fixed effect and robust standard errors. The lefthand side variable is the reported number of hours worked by the mother's spouse in the survey year
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

7.2 Tables Aggregating Child Characteristics by Summation

The most obvious alternative method of aggregating characteristics of across children in a child year to taking the mean is to take the sum.

$$y_{mt} = \alpha_m + \gamma V_{mt} + \beta X_{mt} + \epsilon_{mt}$$

$$X_{mt} = \sum_{1}^{C} X_{ct}$$

Where y_{mt} is the parent's labor supply in year t. $_m$ is a time-invariant mother fixed effect. V_{mt} is the vector of mother's time-variant characteristics. X_{mt} is the across-child sum of time variant child characteristics for the mother's C adult children.

Table 2A.4: Results with Summed Child Characteristics on Mother's Employment

	(1)	(2)	(3)	(4)
Mother Characteristics				
Disabled		-0.417***	-0.417***	-0.417***
		(0.0154)	(0.0154)	(0.0154)
Age	-0.0129***	-0.00560***	-0.00552***	-0.00560***
	(0.000954)	(0.000863)	(0.000872)	(0.000863)
Married	-0.0173	-0.0203	-0.0203	-0.0204
	(0.0167)	(0.0152)	(0.0152)	(0.0152)
Child Characteristics				
Enrolled in School	0.00235	0.00479	0.00486	0.00472
	(0.00429)	(0.00393)	(0.00394)	(0.00394)
Has a Mortgage	0.00748	0.00357	0.00344	0.00356
	(0.00690)	(0.00639)	(0.00640)	(0.00639)
Married	-0.00474	-0.0100	-0.0149	-0.0100
	(0.00739)	(0.00684)	(0.0103)	(0.00684)
Parent	-0.0105	-0.0130*	-0.0146*	-0.00625
	(0.00840)	(0.00770)	(0.00824)	(0.0106)
Married Parent			0.00755	
			(0.0123)	
Female Parent				-0.0128
				(0.0156)
Constant	1.354***	1.038***	1.036***	1.040***
	(0.0457)	(0.0412)	(0.0414)	(0.0413)
Observations	17174	17174	17174	17174
R^2	0.0420	0.154	0.154	0.154

Notes: Presented are results from regressions with a mother fixed effect and robust standard errors. The lefthand side variable is a binary indicator for the mother being employed, unconditional of whether she desires employment.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 4 reports results from four specifications. In the first column, I do not include a control for the mother's reported disability, while in the second I do. In column 3, I use the mean number of children who are married parents, to test for differences in the employment relationship with grandchildren born to married or unmarried parents. This test is motivated by the possibility of special need or attention given (or denied) to grandchildren born outside marital relationships, which may be stigmatized or otherwise more precarious. In column 4, I instead employ an interaction for daughters who become parents, to investigate differential reaction to grandchildren born to sons versus daughters. This is motivated by the possibility that grandchildren will be more attached, in a variety of ways, to their mothers, such that the response to care for grandchildren and a daughter may be different from caring for grandchildren and a daughter-in-law.

Table 4 presents results on mother's employment. First, I find that women work less as they age, and when they describe themselves as disabled. Changes in the mother's marital status have a weak and insignificant negative correlation on her employment. I find that the coefficient of children's enrollment status and whether they have a mortgage are not significantly related to their mother's employment. In most of my specifications, I find that mothers are slightly less likely to work after their children marry. I find a much larger negative correlation with children becoming parents. This decrease, which ranges from 4.7 to 7.3 percentage points, would suggest a decrease in employment of about 10%, a magnitude very much like that found in Frimmel et.al. (2022). In column 3 I find that the positive employment association of the married-parent interaction is less than the negative employment correlation of marriage and is statistically insignificant. In column 4 I find an additional negative correlation between employment and children born to daughters rather than sons, but this coefficient is also not statistically significant.

In Table 5, I present results on mother's full time employment, defined as having a typical work week of more than 30 hours per week. Correlations with mother characteristics are extremely similar to results on employment, as are results for the child's college enrollment,

Table 2A.5: Results with Summed Child Characteristics on Mother's Full Time Employment

	(1)	(2)	(3)	(4)
Mother Characteristics				
Disabled		-0.337***	-0.337***	-0.337***
		(0.0144)	(0.0144)	(0.0144)
Age	-0.0117***	-0.00581***	-0.00571***	-0.00581***
	(0.000989)	(0.000931)	(0.000941)	(0.000930)
Married	-0.0136	-0.0160	-0.0159	-0.0160
	(0.0173)	(0.0164)	(0.0164)	(0.0164)
Child Characteristics				
Enrolled in School	0.00454	0.00651	0.00661	0.00650
	(0.00446)	(0.00425)	(0.00426)	(0.00425)
Has a Mortgage	0.00701	0.00384	0.00367	0.00384
	(0.00712)	(0.00684)	(0.00685)	(0.00684)
Married	-0.00146	-0.00573	-0.0119	-0.00573
	(0.00724)	(0.00697)	(0.0105)	(0.00697)
Parent	-0.0166*	-0.0186**	-0.0205**	-0.0175
	(0.00862)	(0.00815)	(0.00868)	(0.0115)
Married Parent			0.00953	
			(0.0124)	
Female Parent				-0.00202
				(0.0167)
Constant	1.205***	0.949***	0.946***	0.950***
	(0.0474)	(0.0445)	(0.0447)	(0.0445)
Observations	17174	17174	17174	17174
R^2	0.0330	0.0983	0.0984	0.0983

Notes: Presented are results from regressions with a mother fixed effect and robust standard errors. The lefthand side variable is a binary indicator for the mother being employed, unconditional of whether she desires employment.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2A.6: Results with Summed Child Characteristics on Father's Annual Working Hours

	(1)	(2)	(3)	(4)
Mother Characteristics				
Disabled		8.422	8.455	8.473
		(19.51)	(19.51)	(19.52)
Age	-13.80***	-13.95***	-14.19***	-13.95***
	(1.612)	(1.639)	(1.650)	(1.639)
Married	1684.2***	1684.3***	1684.2***	1684.2***
	(37.92)	(37.92)	(37.92)	(37.92)
Child Characteristics				
Enrolled in School	5.205	5.155	4.914	5.114
	(7.019)	(7.025)	(7.012)	(7.037)
Has a Mortgage	-14.74	-14.66	-14.24	-14.66
	(11.39)	(11.39)	(11.40)	(11.38)
Married	27.68**	27.79**	43.25**	27.77**
	(11.69)	(11.69)	(17.88)	(11.69)
Parent	-6.144	-6.094	-1.236	-2.108
	(12.75)	(12.75)	(13.48)	(18.80)
Married Parent			-23.96	
			(21.00)	
Female Parent				-7.508
				(25.82)
Constant	1035.2***	1041.5***	1049.5***	1042.2***
	(81.24)	(82.43)	(82.56)	(82.54)
Observations	17174	17174	17174	17174
R^2	0.346	0.346	0.346	0.346

Notes: Presented are results from regressions with a mother fixed effect and robust standard errors. The lefthand side variable is a binary indicator for the mother being employed, unconditional of whether she desires employment.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

home-ownership, and marital status. However, I find moderately larger correlations from children becoming parents, 8.22% points in column 2. On the base rate of full-time employment of 58.9%, this coefficient suggests a 13.9% decrease in full time employment. Since this point estimate is larger than the coefficient for employment overall, the result suggests that some women reduce their working hours rather than exit the labor market entirely after the birth of a grandchild. In column 3, I find a similar insignificant positive relationship in the married parent interaction, and in column 4 I find a very small and statistically insignificant positive correlation with the female parent interaction.

Table 6 reports the results from regressions on the Father's Annual Working Hours. I observe that husbands work about 13 hours per week less with each additional year of their wife's age (which is strongly correlated with their own age). I also find that married women report higher working hours for their husbands than unmarried women. In the data, I observe reports of the spouse's positive working hours for many women whose marital status is reported as separated, divorced, widowed, and even women who report never being married. This results from the inclusion of women in the survey pool for this question in survey rounds adjacent to their marital status changing. As a result, after a woman divorces the labor supply she reports for her spouse drops to zero. I find no association of adult children's school enrollment on the father's labor supply. I find insignificant or marginally significant coefficients for a child's marriage (positive) and the birth of grandchildren (negative). However, I find a significant negative association with the father's labor supply from their child taking out a mortgage. This contrasts starkly with the results I observe in the mother's labor supply, where the child's mortgage is insignificant but their marriage and childbearing is significant.

8 References

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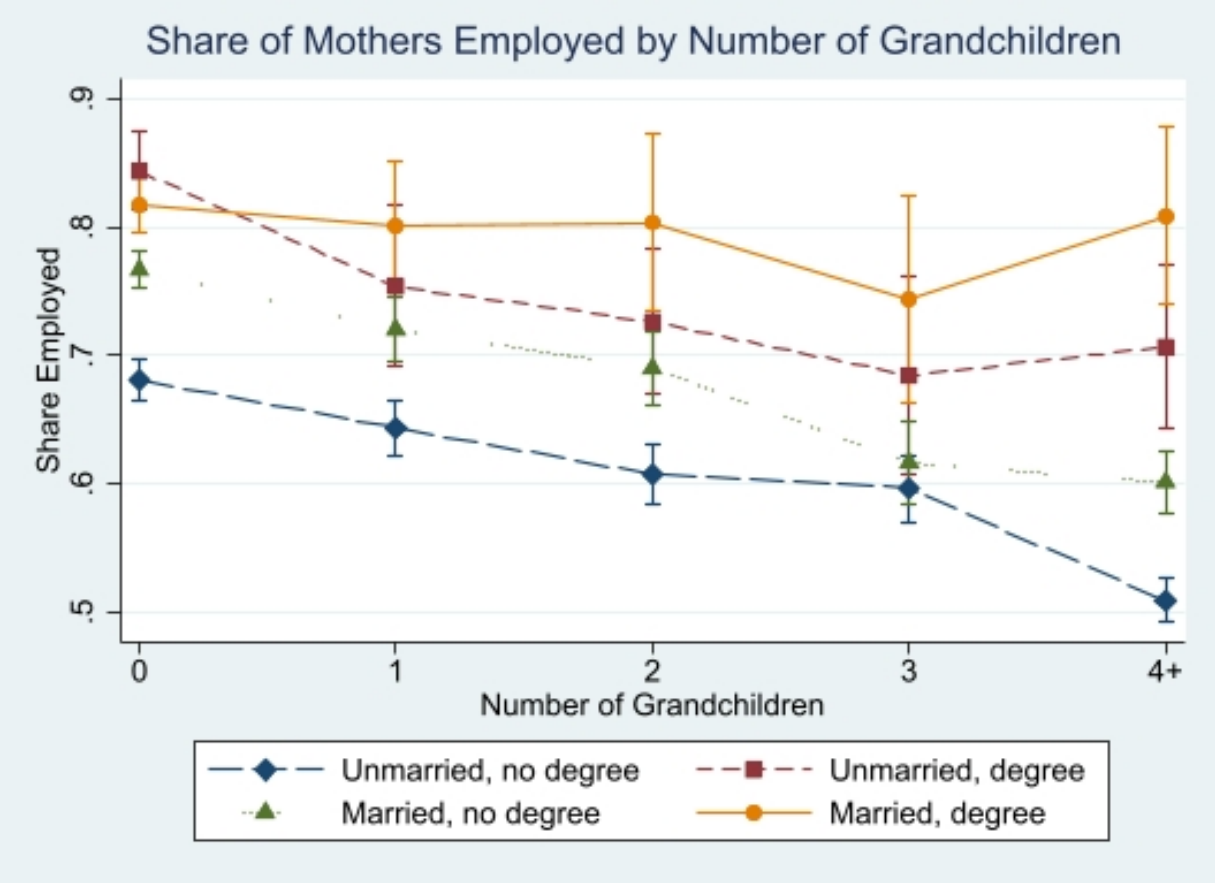
9 Just The Figures

Figure 2A.1: ANOVA Regression Results



Notes: Presented are coefficients and standard errors for ANOVA regression on interacted dummies of child's school enrollment, marital status, and binned age.

10 Just The Tables

Table 2A.7: Summary of Mother Characteristics

Variable Name	Mean	St.Dev.	Min	Max	Obs
Employed	.6795	.4667	0	1	17,174
Full Time	.5890	.4920	0	1	17,174
Spouse's Work	1139.50	1187.78	0	6240	17,174
Married	.4765	.4995	0	1	17,174
Disabled	.1257	.3315	0	1	17,174
Number of Kids	2.61	1.21	1	11	15,635
Bachelors Degree	.1995	.3997	0	1	17,174

Notes: The mean of spouse's hours worked is an annual figure and includes zeros from unmarried women. The married indicator does not include women separated from their spouse.

Table 2A.8: Summary of Mean Child Characteristics

Variable Name	Mean	St.Dev.	Min	Max	Obs
Enrolled in School	.4029	.3456	0	1	17,174
Has a Mortgage	.1980	.3470	0	1	17,174
Married	.2106	.3466	0	1	17,174
Parent	.4231	.3869	0	1	17,174
Married Parent	.1532	.3045	0	1	17,174
Female Parent	.2414	.3113	1	1	17,174

Notes: Means are calculated as the average across children of a mother in a single survey year.

Table 2A.9: Effect of Sample Selection Conditions on Selected Mother Characteristics

Selection	Unconditional	Adult Child	Completeness
Observations	69,188	42,738	17,174
Employed	69.14%	66.67%	67.95%
Full Time	58.43%	57.67%	58.89%
Spouse Hrs Annual	1330.25	1129.61	1139.50
Number of Children	2.47	2.51	2.61
Bachelors Degree	20.13%	15.79%	19.95%

Notes: Values presented are conditional means. Conditions accumulate moving rightward across columns, such that Column 3 presents means conditional on both a child being born after 1998 and being over 18 in the observation year.

Table 2A.10: Results with Mean Child Characteristics on Mother's Employment

	(1)	(2)	(3)	(4)
Mother Characteristics				
Disabled		-0.417***	-0.417***	-0.417***
		(0.0154)	(0.0154)	(0.0154)
Age	-0.0122***	-0.00480***	-0.00472***	-0.00483***
	(0.000897)	(0.000807)	(0.000809)	(0.000808)
Married	-0.0170	-0.0199	-0.0198	-0.0199
	(0.0167)	(0.0152)	(0.0152)	(0.0152)
Child Characteristics				
Enrolled in School	-0.00539	0.00201	0.00132	0.00160
	(0.00940)	(0.00863)	(0.00862)	(0.00866)
Has a Mortgage	0.0119	0.00477	0.00458	0.00462
	(0.0110)	(0.0102)	(0.0102)	(0.0102)
Married	-0.0159	-0.0237**	-0.0398**	-0.0238**
	(0.0125)	(0.0116)	(0.0167)	(0.0116)
Parent	-0.0599***	-0.0660***	-0.0733***	-0.0470**
	(0.0175)	(0.0161)	(0.0172)	(0.0223)
Married Parent			0.0250	
			(0.0192)	
Female Parent				-0.0368
				(0.0310)
Constant	1.337***	1.017***	1.016***	1.019***
	(0.0451)	(0.0405)	(0.0405)	(0.0407)
Observations	17174	17174	17174	17174
R^2	0.0432	0.155	0.155	0.155

Notes: Presented are results from regressions with a mother fixed effect and robust standard errors. The lefthand side variable is a binary indicator for the mother being employed, unconditional of whether she desires employment.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2A.11: Results with Mean Child Characteristics on Mother's Full Time Employment

	(1)	(2)	(3)	(4)
Mother Characteristics				
Disabled		-0.338***	-0.338***	-0.338***
		(0.0144)	(0.0144)	(0.0144)
Age	-0.0108***	-0.00481***	-0.00471***	-0.00481***
	(0.000917)	(0.000863)	(0.000865)	(0.000863)
Married	-0.0134	-0.0157	-0.0156	-0.0157
	(0.0173)	(0.0164)	(0.0164)	(0.0164)
Child Characteristics				
Enrolled in School	-0.0107	-0.00469	-0.00552	-0.00461
	(0.00996)	(0.00946)	(0.00947)	(0.00947)
Has a Mortgage	0.00656	0.000754	0.000530	0.000783
	(0.0114)	(0.0110)	(0.0110)	(0.0110)
Married	-0.0196	-0.0258**	-0.0452***	-0.0258**
	(0.0122)	(0.0117)	(0.0170)	(0.0117)
Parent	-0.0772***	-0.0822***	-0.0909***	-0.0860***
	(0.0185)	(0.0177)	(0.0188)	(0.0251)
Married Parent			0.0300	
			(0.0197)	
Female Parent				0.00729
				(0.0347)
Constant	1.185***	0.926***	0.924***	0.926***
	(0.0461)	(0.0433)	(0.0433)	(0.0434)
Observations	17174	17174	17174	17174
R^2	0.0347	0.100	0.100	0.100

Notes: Presented are results from regressions with a mother fixed effect and robust standard errors. The lefthand side variable is a binary indicator for the mother being employed with full time hours, unconditional of whether she desires employment.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2A.12: Results with Mean Child Characteristics on Father's Annual Working Hours

	(1)	(2)	(3)	(4)
Mother Characteristics				
Disabled		7.039	7.141	7.297
		(19.54)	(19.53)	(19.58)
Age	-12.74***	-12.86***	-12.98***	-12.89***
	(1.461)	(1.491)	(1.492)	(1.492)
Married	1684.6***	1684.6***	1684.5***	1684.6***
	(37.97)	(37.96)	(37.95)	(37.94)
Child Characteristics				
Enrolled in School	-2.166	-2.291	-1.328	-2.809
	(15.76)	(15.76)	(15.84)	(15.82)
Has a Mortgage	-43.76**	-43.64**	-43.38**	-43.82**
	(19.06)	(19.06)	(19.04)	(19.07)
Married	29.10	29.23	51.91*	29.01
	(18.93)	(18.94)	(31.04)	(18.95)
Parent	-39.95	-39.84	-29.66	-16.04
	(28.61)	(28.61)	(30.27)	(40.71)
Married Parent			-35.08	
			(35.13)	
Female Parent				-46.07
				(56.13)
Constant	1005.3***	1010.7***	1012.7***	1013.4***
	(77.58)	(78.80)	(78.74)	(79.01)
Observations	17174	17174	17174	17174
R^2	0.346	0.346	0.346	0.346

Notes: Presented are results from regressions with a mother fixed effect and robust standard errors. The lefthand side variable is the reported number of hours worked by the mother's spouse in the survey year.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2A.13: Additional Sample Selection for Incomplete Child Labor Supply

Selection	Base Sample	Labor Supply
Observations	17,174	9,790
Employed	67.95%	69.78%
Full Time	58.89%	60.83%
Spouse Hrs Annual	1139.50	1180.59
% Children Enrolled	40.30%	39.53%
% Children Parents	42.31%	40.95%

Notes: Values presented are conditional means. Column 1 presents the same means conditional on initial selection. Column 2 presents means conditional on observing the child's income in that sample year.

Table 2A.14: Results with Working Mother Children on Mother's Employment

	Main Sample	Subsample	
	(1)	(2)	(3)
Mother Characteristics			
Disabled	-0.417***	-0.339***	-0.342***
	(0.0154)	(0.0209)	(0.0210)
Married	-0.0199	-0.0144	-0.0155
	(0.0152)	(0.0223)	(0.0223)
Age	-0.00483***	-0.00784***	-0.00826***
	(0.000808)	(0.00128)	(0.00130)
Child Characteristics			
Enrolled in School	0.00160	0.000595	0.00356
	(0.00866)	(0.0120)	(0.0120)
Has a Mortgage	0.00462	0.0275*	0.0270*
	(0.0102)	(0.0150)	(0.0151)
Married	-0.0238**	-0.0332*	-0.0304
	(0.0116)	(0.0191)	(0.0191)
Parent	-0.0470**	-0.0291	-0.0163
	(0.0223)	(0.0307)	(0.0395)
Working			0.0576***
			(0.0188)
Female Parent	-0.0368	-0.0496	-0.0464
	(0.0310)	(0.0425)	(0.0512)
Working Parent			-0.0172
			(0.0272)
Working Female			-0.0241
			(0.0192)
Female Working Parent			0.00501
			(0.0325)
Constant	1.019***	1.132***	1.112***
	(0.0407)	(0.0615)	(0.0616)
Observations	17174	9790	9790
R^2	0.155	0.0952	0.0966

Notes: Presented are results from regressions with a mother fixed effect and robust standard errors. The lefthand side variable is a binary indicator for the mother being employed, unconditional of whether she desires employment.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2A.15: Results with Working Mother Children on Mother's Full Time Employment

	Main Sample	Subsample	
	(1)	(2)	(3)
Mother Characteristics			
Disabled	-0.338***	-0.271***	-0.274***
	(0.0144)	(0.0187)	(0.0188)
Married	-0.0157	-0.00951	-0.0106
	(0.0164)	(0.0238)	(0.0238)
Age	-0.00481***	-0.00778***	-0.00824***
	(0.000863)	(0.00140)	(0.00142)
Child Characteristics			
Enrolled in School	-0.00461	-0.0153	-0.0129
	(0.00947)	(0.0130)	(0.0131)
Has a Mortgage	0.000783	0.0216	0.0215
	(0.0110)	(0.0166)	(0.0166)
Married	-0.0258**	-0.0280	-0.0247
	(0.0117)	(0.0186)	(0.0186)
Parent	-0.0860***	-0.0552*	-0.0291
	(0.0251)	(0.0335)	(0.0434)
Working			0.0502**
			(0.0199)
Female Parent	0.00729	-0.0221	-0.0232
	(0.0347)	(0.0462)	(0.0569)
Working Parent			-0.0291
			(0.0290)
Working Female			-0.00746
			(0.0225)
Female Working Parent			0.00429
			(0.0365)
Constant	0.926***	1.042***	1.023***
	(0.0434)	(0.0671)	(0.0671)
Observations	17174	9790	9790
R^2	0.100	0.0596	0.0606

Notes: Presented are results from regressions with a mother fixed effect and robust standard errors. The lefthand side variable is a binary indicator for the mother being employed with full time hours, unconditional of whether she desires employment. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2A.16: Results in Mothers without vs with a Bachelors Degree or higher

	Mothers without degrees			Mothers with degrees		
	(1)	(2)	(3)	(4)	(5)	(6)
Child Characteristics						
Married	-0.0274**	-0.0488**	-0.0276**	-0.00798	-0.0106	-0.00718
	(0.0130)	(0.0194)	(0.0130)	(0.0253)	(0.0326)	(0.0253)
Parent	-0.0755***	-0.0837***	-0.0623**	-0.0169	-0.0193	0.0402
	(0.0180)	(0.0190)	(0.0244)	(0.0354)	(0.0406)	(0.0527)
Married Parent		0.0314			0.00559	
		(0.0217)			(0.0433)	
Female Parent			-0.0256			-0.108
			(0.0344)			(0.0694)
Constant	1.006***	1.005***	1.007***	1.076***	1.075***	1.085***
	(0.0440)	(0.0440)	(0.0442)	(0.101)	(0.102)	(0.101)
Observations	13747	13747	13747	3427	3427	3427
R^2	0.163	0.163	0.163	0.124	0.124	0.126

Notes: Presented are results from regressions with a mother fixed effect and robust standard errors. The lefthand side variable is a binary indicator for the mother being employed, unconditional of whether she desires employment. Columns 1, 2, and 3 are run in the subsample of data where mothers do not have a 4 year degree. Columns 4, 5, and 6 present results from the subsample where mothers do have a 4 year degree. Mother characteristics, along with child's enrollment and mortgage coefficients are suppressed.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2A.17: Results in Spouses of Mothers without vs with a Bachelors Degree or higher

	Mothers without degrees			Mothers with degrees		
	(1)	(2)	(3)	(4)	(5)	(6)
Child Characteristics						
Has a Mortgage	-35.31*	-34.80*	-35.46*	-72.61	-74.97	-71.82
	(20.67)	(20.62)	(20.70)	(49.74)	(50.09)	(49.82)
Married	55.12***	112.1***	54.94***	-88.20*	-122.2**	-87.17*
	(20.76)	(37.11)	(20.78)	(45.77)	(52.35)	(45.64)
Parent	-53.48*	-31.58	-41.48	29.31	-2.503	102.7
	(32.07)	(33.65)	(45.73)	(62.59)	(69.72)	(87.12)
Married Parent		-83.54**			72.55	
		(41.43)			(64.92)	
Female Parent			-23.28			-139.5
			(62.96)			(117.4)
Constant	973.1***	975.0***	974.5***	1152.6***	1134.0***	1164.0***
	(85.31)	(85.23)	(85.48)	(195.6)	(196.6)	(196.8)
Observations	13747	13747	13747	3427	3427	3427
R^2	0.355	0.355	0.355	0.312	0.312	0.312

Notes: Presented are results from regressions with a mother fixed effect and robust standard errors. The lefthand side variable is a binary indicator for the mother being employed, unconditional of whether she desires employment. Columns 1, 2, and 3 are run in the subsample of data where mothers do not have a 4 year degree. Columns 4, 5, and 6 present results from the subsample where mothers do have a 4 year degree. Mother characteristics, along with child's enrollment coefficients are suppressed.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$