Appendix

Supplemental material for the paper "Child Skill Accumulation in One- and Two-Parent Families"

Not intended for publication – to be made available online

Contents

Part I

Data Source Descriptions

The primary data source for this study is the ECLS-B. I also use the ATUS for imputing time levels per activity performed by parents in the ECLS-B. In this appendix, both data sets are described. For the ECLS-B, I provide an extended description of the survey structure and relevant variables. I also compare the estimation sample to the raw sample. In particular, I discuss how families who use free child care (and are therefore excluded from the estimation sample) would most likely affect the results if included. I conclude that this would magnify, not mitigate, the difference across family structures.

A The Early Childhood Education Longitudinal Study, Birth Cohort

The ECLS-B follows a nationally representative sample of families raising a child who was 9 months old in 2001. It was designed and collected by the United States Department of Education. Using birth-certificate data from the National Center for Health Statistics, over 14,000 births were selected within Primary Sampling Units. Children of mothers younger than 15 were excluded from the sampling frame. There are 5 waves: wave 1 is the 9-month old data collection round, wave 2 occurs at 2 years, wave 3 at 4 years, and waves 4 and 5 at kindergarten entry. If the focal child was not in kindergarten when wave 4 was collected, the surveyors went back and collected data the next year when they were enrolled. In addition, if a child repeated kindergarten, their scores were also collected in wave 5 in addition to wave 4. Each wave contains several instruments; these are different self-administered questionnaires (SAQs) for different people in the child's life, in addition to the child-level data. Table 10 summarizes these instruments in each wave of the survey.

Table 10: The Structure of the ECLS-B

Instrument	Wave 1	Wave 2	Wave 3	Wave 4+5
1.	Parent Interview	Parent Interview + SAQ	Parent SAQ	Parent SAQ
2.	Resident Father	Resident Father SAQ	Resident Father SAQ	ECEP Interview[1]
3.	Nonresident Father	Nonresident Father SAQ	Preschool Center Director SAQ	Teacher
4.		Child Care Provider	Preschool ECEP SAQ[1]	WECEP Interview [2]
5.		Center Director		

[1] Early Care and Education Provider
[2] Wrap-around Care Early Care and Education Provider

A.1 Direct Assesments of Child Skill

For each wave of the survey, an age-appropriate assessment of the child's skill is administered (for a detailed overview, see the explanatory slides found at NCES (2020)). In waves 1 and 2, when the child is 9 months and 2 years old, respectively, the Bayley Short Form, Research edition (BSF-R) cognitive direct assessment

was administered. This assessment is constructed using a subset of questions from a standard assessment for children from this age group, the Bayley Scales for Infant Development, 2nd Edition (BSID-II). The BSID-II, which was reviewed in detail by Nellis and Gridley (1994), is considered an excellent tool for assessing children 42 months of age and younger. The BSF-R in turn is designed to collect the same information as the BSID-II, but with fewer questions, making it easier to administer and score. This was necessary because, unlike the BSID-II, the BSF-R was administered by interviewers who were not experts in child psychology for the purpose the ECLS-B. Next, the results of the BSF-R were mapped into the metric of the BSID-II. There are mental and motor scores assigned to children who completed the test in each wave. These scores have different ranges: for mental, the range is 0-178, and for motor the range is 0-111.

The BSF-R is organized as follows. The child is administered a series of questions, where their performance determines the total set of questions they are ultimately asked. The questions begin with a basal set, where the questions are grouped by the skill they are meant to measure, where the skills are those children in the age group are expected to demonstrate. If the child performs poorly, they continue to a basal set of questions. If they perform well, they are administered a ceiling set of questions. The mental knowledge and skill of the child are reported in the mental score, which is reported as a scale score, a t-score, and a probability score. The scale score can be compared across waves or within a cross-section, but the t-score is better suited to comparing across groups within a cross-section. The probability score measure the probability the child has acquired the skills measured by the test. For the correlations of child skill with family attributes, and the regressions using child skill, I use the mental scale score.

Next, I will describe in more detail how mental skills are conceptualized for children in the BSF-R (age 2 and under in the ECLS-B). The skills measured by the mental scale score are arranged in ascending order of development:

1. Explores objects (i.e. reaching for and holding objects, manipulating them, and banging them)
2. Explores purposefully
3. Jabbers expressively
4. Early problem solving
5. Names objects
6. Receptive vocabulary
7. Expressive vocabulary
8. Listening/comprehension
9. Matching/discrimination

Because there was existing single measure of skill that be used continually to assess child skill during the first five years of life, a change to a new assessment was necessary for the preschool and kindergarten collections. In addition, no existing assessment was age-appropriate for the third and fourth wave of the ECLS-B

while also being straightforward to administer. Therefore, a new cognitive assessment was developed especially for the ECLS-B, the cognitive battery. The content of this battery included a reading assessment and a mathematics assessment. For the preschool (wave 3) round there was a color knowledge assessment as well, to test for children's knowledge of basic colors. The reading assessment "Examines children's letter recognition, letter sound knowledge, recognition of simple words, phonological awareness, receptive and expressive vocabulary knowledge, and knowledge of print conventions", while the mathematics assessment "Examines children's number sense, counting, operations (e.g., addition, subtraction, multiplication, division), geometry, pattern understanding, and measurement".

These assessments were administered in a way structured to the child's ability, so that children who did not demonstrate sufficient english language skill were not administered the literacy portion (for example). That means that not all of the questions in the assessment were asked of each child. The types of scores are provided for the reading assessment: theta scores and overall scale scores. The theta score is normal distributed and ranges from -2 to 2; it estimates the child's scole if they had been administered all of the assessment. The scale score estimates the number of items the child would have gotten correct on the entire assessment. Both score are appropriate for analysis of children's rank within a cross-section and changes across time. The mathematics assesment is structured similarly to the reading assessment and also reports the theta score and the scale score. I used the scale score for the reading and mathematics assessment and take the average across the two assessments to construct a single score for the child.

A.2 Parental Time and Child Care Time

In each wave of the survey, the primary care provider (usually the mother) and the resident father fill out detailed questionnaires on the activities they do with their kids and at what frequency (once a week, twice a week, once a month, etc.). In addition, they report age, educational attainment, income, hours worked, the number of hours the child spent in non-parental care, what type of care that was (relative, non-relative, center-based), and the cost of that care.

I define "quality time" as the total amount of time spent (1) reading to the child, or (2) playing outside with the child. To map from frequencies of activities to levels of quality time supplied by parents, I impute amount of time per activity using data from the ATUS. The imputation uses common characteristics observed across both samples: gender, marital status (married/cohabiting or single), labor force status, and educational attainment. Here educational attainment is defined as being either having less than a college degree, or having a college degree or more. For hourly wages, I use time spent working and income to compute the pre-tax levels, and then Table 2 of McGrattan and Prescott (2017) to correct for labor income taxes. For hourly prices of non-parental care, I use total cost of child care and total hours in child care for the primary source of non-parental care reported by the primary caregiver of the survey child subject.

In the following section I report sample summary statistics for the raw ECLS-B sample, before I impose restrictions on it for the estimation sample. The population moments I use in the internal calibration for the fraction of parents who are single mothers comes from this sample. The fraction in the sample that also reports variables necessary for estimation is larger than these population moments. Notice that the fraction

below 185% of the poverty line in the pooled sample is quite high, at 50%. This drop to 40% by the time the child is age 4. Averages here include observations for which the response is 0. This explains why the average age of the father is now lower than the mother's.

A.3 Summary Statistics of the ECLS-B

A.3.1 Sumstats Raw ECLS-B Sample

Table 11: ECLS-B Data Moments (Waves 1-3, Unweighted)

	count	mean	p10	p50	p90	sd	min	max
				Levels				
Hours Ed. Time: Mother	32050	5.83	0.00	3.84	18.91	6.51	0.00	22.76
Hours CC (Primary)	32050	15.00	0.00	6.00	40.00	17.99	0.00	120.00
Hours CC (Combined)	31200	17.07	0.00	8.00	45.00	19.87	0.00	144.00
Total Cost CC (Primary)	32050	1.12	0.00	0.00	3.75	2.85	0.00	99.50
Total Cost CC (Combined)	17550	2.08	0.00	1.11	5.00	3.58	0.00	99.50
After-Tax Wages: Mother	28250	11.21	4.60	8.89	18.55	17.65	0.00	1063.80
$\frac{p_n}{w_m}$	28250	76.95	0.00	0.00	0.35	8703.86	0.00	1345064.75
$\frac{HoursCC(Primary)}{HoursEd.Time:Mothers}$	17100	0.45	0.02	0.16	1.08	0.99	0.00	22.76
Family Income	29450	56407	10000	37500	150000	558423	1	300000
Family Income: After Tax	29450	53753	20359	41413	117460	38769	11763	223092
Age: Primary Caregiver W1	29350	30.21	21.00	30.00	39.00	6.92	15.00	82.00
Age: First Child (Mother)	28400	23.85	17.00	23.00	32.00	6.04	10.00	50.00
				Rates				
B.A. Mother	32050	0.33						
Below 100% Poverty Line	32050	0.23						
Below 185% Poverty Line	32050	0.44						
Single Mother	32050	0.17						
Obs_rounded	32050							

Source: U.S. Department of Education, National Center for Education Statistics,
Early Childhood Longitudinal Study, Birth Cohort (ECLS-B),
Longitudinal 9- Month-Kindergarten 2007 Restricted-Use Data File.
All sample counts have been rounded to the nearest 50 in accordance with NCES requirements.

In Table 11, the unweighted summary statistics for a pooled sample of waves 1-3 are presented. Over these three waves, mothers on average spend 6 hours of their time per week investing in their children. The mean of this variable is higher than the median, which is about 3.8 hours per week. The mean is more sensitive to outliers —in this case, the high-value outliers are driving the higher value for the mean. Most families don't spend large numbers of hours per week investing parental time in their children. Meanwhile, the total hours spent in the primary source of child care are on average 15, which is much higher than the median of 6 hours per week. This reflects the fact that in the raw sample some families report that their child spend 120 hours per week in child care. Such observations are of interest because they represent the other corner of

the investment decision: not zero investment, but rather investment at a binding time constraint of the child. This table demonstrates that very few families are at this constraint in the equilibrium of the United States in 2001, which generated the data documented in the ECLS-B.

If, instead of restricting to the primary source of child care, I looked at the hours spent in any form of non-parental care, the average moves up to 17 and the median to 8. The maximum value for this category is 144 hours per week, which requires spending more than 20 hours a day in non-parental child care. In the estimation sample I only use observations for families that use less than 100 hours total of their child's time in parental investment activities or non-parental child care. This is because the estimation equations I use are only valid if the time constraint of the child is slack.

Moving on the the next category of variables, the price per unit of the time inputs into investment is documented in rows 5-7 of this table. The price for the primary source of child care is lower than for all child care combined. The latter variable is the average across all sources of child care - it is higher because some families use small amounts of expensive child care. So, even if the hours in child care don't increase much moving from primary to total sources of child care, the price does jump. The median price per hour of child care is 0. This is because many families use no child care and many also use child care that is completely free. My estimation assumptions effectively assume that child care which is free is not an input into investment.

The ratio of the price of child care to the mother's wage is high on average. The moment reported here uses observations with very small values of the denominator, which are excluded in the estimation sample. Moving on to income, before-tax income is on average $\$56,000$.[32] Once I implement the method I use to correct for taxes, using McGrattan and Prescott (2017), the redistributive nature of the tax system that I assume is evident from the fact that, while the mean decreases, the median increases and so does the minimum income in the sample. When I report the correlation of child skill and family income over time during the calibration section of the model parameterization section in the main body of this paper, I am using after-tax income.

Finally, the last section of the levels statistics for the ECLS-B shows statistics on the age of the primary caregive at the time of the interview, and on the mother's age when her first child was born. If the primary caregiver is the biological mother, as I impose in my estimation sample, then comparing these two rows would give some intuition for whether the child in the ECLS-B sample is the mother's first child. Here, however, they can be different people.

The second part of Table 11 deals with rates in the raw sample. The rate of BA attainment for the primary caregiver is about 1 in 3. The poverty rate is about 1 in 4, and the unweighted rate of single motherhood is about 17%.

[32] This is between the mean and median family income for families with children under 18 in current dollars for the years 2001-2004, as reported by the United States Census Bureau in Table F-9 here: census.gov/data/tables/time-series/demo/income-poverty/historical-income-families.html

A.3.2 Sumstats Raw ECLS-B Sample, Weighted

Table 12: ECLS-B Data Moments (Waves 1-3, Weighted)

	Levels							
	count	mean	p10	p50	p90	sd	min	max
Hours Ed. Time: Mother	29450	6.52	1.10	3.84	20.01	6.58	0.00	22.76
Hours CC (Primary)	29450	16.04	0.00	9.00	40.00	17.77	0.00	120.00
Hours CC (Combined)	29450	17.71	0.00	10.00	45.00	19.50	0.00	144.00
Total Cost CC (Primary)	29450	1.27	0.00	0.00	4.00	2.92	0.00	99.50
Total Cost CC (Combined)	17500	2.16	0.00	1.25	5.14	3.51	0.00	99.50
After-Tax Wages: Mother	28200	10.92	4.56	8.60	18.21	16.53	0.00	1063.80
$\frac{p_n}{w_m}$	28200	144.23	0.00	0.00	0.37	12790.67	0.00	1345064.75
$\frac{HoursCC(Primary)}{HoursEd.Time:Mothers}$	17050	0.47	0.03	0.17	1.13	0.96	0.00	22.76
Family Income	29450	55624	10500	37500	150000	54483	1	300000
Family Income: After Tax	29450	53233	20736	41413	117460	37820	11763	223092
Age: Primary Caregiver W1	29300	30.01	22.00	30.00	39.00	6.72	15.00	82.00
Age: First Child (Mother)	26200	23.73	17.00	23.00	32.00	5.82	10.00	50.00
	Rates							
B.A. Mother	29450	0.25						
Below 100% Poverty Line	29450	0.24						
Below 185% Poverty Line	29450	0.47						
Single Mother	29450	0.19						
Obs_rounded	29450							

Source: U.S. Department of Education, National Center for Education Statistics,
Early Childhood Longitudinal Study, Birth Cohort (ECLS-B),
Longitudinal 9- Month-Kindergarten 2007 Restricted-Use Data File.
All sample counts have been rounded to the nearest 50 in accordance with NCES requirements.

In Table 12, the weighted summary statistics for a pooled sample of waves 1-3 are presented. I use cross-section survey weights for each observation and report pooled moments in this table. Most of the statistics are very similar after weighting; only slight changes to means are noticeable. One exception is the rate of single motherhood, which is 19% in the weighted sample (versus 17% in the unweighted sample). In the model calibration section, I use the marriage rate of the weighted total sample as a target, although I use the time investment levels of the estimation sample for targets as well.

Effect of sample cleaning on composition of child care type used in the sample

In the process of sample cleaning, the composition of child care sources shifts. In Table 13 I report the raw sample distribution for primary source of child care over child care type. By comparing this table with Table 16 and Table 15, I can describe how the estimation sample differs from the population in terms of the type of child care the family uses as their primary source. In particular, when children are very young many families report not using any non-parental care (wave 1), and in addition some sources of child care often do

cost anything (like care from relatives). These points are illustrated by comparing Table 15 with Table 13.

Table 13: Primary Source of Child Care by Wave: Raw Sample

	(1) Wave 1 pct	(2) Wave 2 pct	(3) Wave 3 pct
NOT ASCERTAINED	0.19	0.13	0.22
NO NONPARENTAL CARE	50.04	50.55	18.54
RELATIVE CARE IN CHILDS HOME	12.61	8.60	5.39
RELATIVE CARE IN ANOTHER HOME	12.52	9.96	6.39
RELATIVE CARE, LOCATION VARIES	1.51	0.95	0.77
NONRELATIVE CARE IN CHILDS HOME	4.00	3.11	1.64
NONRELATIVE CARE IN ANOTHER HOME	10.38	11.02	5.47
NONRELATIVE CARE, LOCATION VARIES	0.12	0.23	0.18
CENTER-BASED PROGRAM	7.86	14.95	46.34
EQUAL TIME IN MULTIPLE ARRANGEMENTS	0.79	0.49	1.99
HEAD START PROGRAM			13.06
Total	100.00	100.00	100.00
Obs_rounded	10700	9850	8950

Source: U.S. Department of Education, National Center for Education Statistics,
Early Childhood Longitudinal Study, Birth Cohort (ECLS-B),
Longitudinal 9- Month-Kindergarten 2007 Restricted-Use Data File.
All sample counts have been rounded to the nearest 50 in accordance with NCES requirements.

In Table 14, I report similar moments from the ECLS-B on type of child care used in the raw sample, by family structure. For each family structure, the observations are pooled across waves 1 through 3. In this table, it is evident that single mothers use more non-parental relative care than couples do. Since relative care may be paid for less often, one concern with the estimation approach in this paper is that I am dropping information on an input into investment in a way which disproportionately affects single mothers, because they are more likely to use free child care (for example, care from relatives). In the discussion based on this Table, I address the general concern about free child care services and the sample restrictions I impose on the ECLS-B data with respect to those observations. Recall that in the estimation sample, I exclude observations that pay less than 1 cent per hour for their primary source of child care.

Consider the estimation result that one- and two-parent families use different technologies. This result is driven by the relative quantities of mother time and child care time being very different across family structures, despite facing similar relative prices. It is possible that free child care is used by single mothers in a way that, if I could observe relative "prices" for these observations, would make single mothers look more like couples on average. Then including this source, if we could observe its "price", would change the result that the technologies are statistically different.

In order for including these observations to change the main result, families whose primary source of non-parental child care is free would have to select a ratio of quantities very different from the estimation sample

given a similar ratio of prices, or choose a ratio of quantities very similar from the estimation sample for a very different ratio of prices. Here, think of the ratio of prices as using the marginal utility of leisure of the child care provider in place of a price, as described in Blau and Currie (2006).

I can check that the median ratio of quantities is similar for mothers who use free child care: for single mothers in this group, the median ratio of quantities is 0.08, and for cohabiting mothers it is 0.26. Compare this with the estimation sample counterpart medians of 0.07 and 0.23, respectively: they are quite close.[33]

If I could observe the relative prices of inputs for families that use free child care, these observations would bring the parameters estimated for one- and two-parent families closer together if the ratio of prices was much lower for one-parent families than for two-parent families. Consider the denominator of this ratio, the mother's wage, which I do observe for both one- and two-parent families using free child care. The median wage for single mothers using free child care is 8 dollars per hour, and for cohabiting mothers it is 16. This is very similar to the estimation sample values of 7.9 and 16.1, respectively. With a lower denominator for the price ratio, a lower ratio for one-parent families would require that the marginal utility of leisure for the provider of free child care (the numerator) be much lower in the one-parent group than the two-parent group. This seems unlikely: for concave utility, it would require that providers of free child care for one-parent families enjoy higher levels of leisure than those of two-parent families. One-parent families demand more child care than two-parent families (33 hours per week vs. 26) in the group using free child care, and if this free care is provided by a relative, that relative is probably more likely to be poor. They are unlikely to be able to finance much higher levels of leisure.

[33] I compare medians because relaxing the cutoffs on input prices introduces outliers, which misleadingly affect the mean. The intuition based on means in the estimation sample, outlined in the introduction and estimation section, is also true if one compares medians across family structures in the estimation sample.

Table 14: Primary Source of Child Care by Family Type: Raw Sample (Weighted)

	(1) Single Mothers pct	(2) MC Mothers pct	(3) MC Fathers pct
NOT ASCERTAINED	0.23	0.13	0.13
NO NONPARENTAL CARE	30.70	43.87	43.87
RELATIVE CARE IN CHILDS HOME	15.65	7.44	7.44
RELATIVE CARE IN ANOTHER HOME	12.29	9.25	9.25
RELATIVE CARE, LOCATION VARIES	1.08	1.07	1.07
NONRELATIVE CARE IN CHILDS HOME	1.51	3.46	3.46
NONRELATIVE CARE IN ANOTHER HOME	8.97	9.18	9.18
NONRELATIVE CARE, LOCATION VARIES	0.25	0.15	0.15
CENTER-BASED PROGRAM	21.40	21.72	21.72
EQUAL TIME IN MULTIPLE ARRANGEMENTS	1.57	0.90	0.90
HEAD START PROGRAM	6.34	2.82	2.82
Total	100.00	100.00	100.00

Source: U.S. Department of Education, National Center for Education Statistics,
Early Childhood Longitudinal Study, Birth Cohort (ECLS-B),
Longitudinal 9- Month-Kindergarten 2007 Restricted-Use Data File.

In Table 15, only families reporting a source of non-parental child care who also report paying at least 1 cent per hour for it (and several other criteria imposed on the estimation sample) are shown. Center based programs are especially overrepresented relative to the raw sample, especially in the first wave. So is non-relative care in another home. Care from relatives, meanwhile, is used by a smaller percentage of the population in the estimation sample, relative to the raw sample.

Table 15: Primary Source of Child Care: Estimation Sample

	(1) Wave 1 pct	(2) Wave 2 pct	(3) Wave 3 pct
RELATIVE CARE IN CHILDS HOME	4.10	5.35	2.51
RELATIVE CARE IN ANOTHER HOME	11.05	7.74	4.33
RELATIVE CARE, LOCATION VARIES	0.34	0.23	0.11
NONRELATIVE CARE IN CHILDS HOME	11.85	9.34	5.58
NONRELATIVE CARE IN ANOTHER HOME	43.17	39.52	21.64
NONRELATIVE CARE, LOCATION VARIES	0.68		0.34
CENTER-BASED PROGRAM	28.82	37.81	63.67
HEAD START PROGRAM			1.82
Total	100.00	100.00	100.00
Obs_rounded	900	900	900

Source: U.S. Department of Education, National Center for Education Statistics,
Early Childhood Longitudinal Study, Birth Cohort (ECLS-B),
Longitudinal 9- Month-Kindergarten 2007 Restricted-Use Data File.

In Table 16, the use of different primary child care sources over family types is tabulated for the estimation sample. Comparing these distributions across family types within the estimation sample, single mothers differ from other family type primarily in lower use of nonrelative care in childs home and in their higher use of head start programs. The latter point is not surprising: head start is means tested, and single mothers in the United States are overrepresented among the poor. Another point that is apparent is that, although I do not require the married/cohabiting mothers to have a resident father who completes a resident father survey, the distribution for the two groups (resident mothers and resident fathers) is nevertheless very similar.

Table 16: Primary Source of Child Care: Estimation Sample

	(1) Single Mothers pct	(2) MC Mothers pct	(3) MC Fathers pct
RELATIVE CARE IN CHILDS HOME	6.45	3.75	3.90
RELATIVE CARE IN ANOTHER HOME	7.53	8.06	7.01
RELATIVE CARE, LOCATION VARIES	1.08	0.14	0.20
NONRELATIVE CARE IN CHILDS HOME	1.61	9.38	9.61
NONRELATIVE CARE IN ANOTHER HOME	33.87	34.51	35.54
NONRELATIVE CARE, LOCATION VARIES		0.28	0.50
CENTER-BASED PROGRAM	46.77	43.54	42.64
HEAD START PROGRAM	2.69	0.35	0.60
Total	100.00	100.00	100.00
Obs_rounded	200	1450	1000

Source: U.S. Department of Education, National Center for Education Statistics,
Early Childhood Longitudinal Study, Birth Cohort (ECLS-B),
Longitudinal 9- Month-Kindergarten 2007 Restricted-Use Data File.

B Summary Statistics for Imputation Sample in American Time Use Survey

The time per activity for each demographic bin, as computed in the ATUS, is reported in Tables 17 and 18. The number of observations per bins is also reported in Table 19.

Table 17: ATUS Imputation Sample (Unweighted)

	count	mean	p10	p50	p90	sd	min	max
Edited: sex	8395	1.69	1.00	2.00	2.00	0.46	1.00	2.00
Edited: age	8395	34.26	27.00	34.00	41.00	5.76	15.00	54.00
Number of own children < 18 years of age	8395	2.12	1.00	2.00	3.00	1.03	1.00	10.00
time_cc_play_hrs	4616	1.82	0.50	1.50	3.92	1.44	0.08	10.30
time_cc_reading_hrs	6729	0.49	0.17	0.42	1.00	0.36	0.03	4.50
indicator_gtHS	8395	0.83	0.00	1.00	1.00	0.38	0.00	1.00
indicator_gteBA	8395	0.60	0.00	1.00	1.00	0.49	0.00	1.00
indicator_couple	8395	0.93	1.00	1.00	1.00	0.25	0.00	1.00
income	3562	123795.94	22500.00	87500.00	383150.00	121383.93	2500.00	383150.00
Observations	8395							

These moments are from the pooled 2003-2016 ATUS sample. Moments are weighted with ATUS final weights.

For parents aged 15-55, living with own child aged 3 or less

Table 18: ATUS Imputation Sample (Weighted)

	count	mean	p10	p50	p90	sd	min	max
Edited: sex	8395	1.67	1.00	2.00	2.00	0.47	1.00	2.00
time_cc_reading_hrs	6729	0.48	0.17	0.42	1.00	0.35	0.03	4.50
time_cc_reading_hrs	6729	0.48	0.17	0.42	1.00	0.35	0.03	4.50
time_cc_play_hrs	4616	1.72	0.50	1.25	3.75	1.45	0.08	10.30
indicator_gtHS	8395	0.76	0.00	1.00	1.00	0.42	0.00	1.00
indicator_gteBA	8395	0.53	0.00	1.00	1.00	0.50	0.00	1.00
indicator_couple	8395	0.92	1.00	1.00	1.00	0.27	0.00	1.00
income	3562	120722.31	22500.00	87500.00	383150.00	121987.69	2500.00	383150.00
Observations	8395							

These moments are from the pooled 2003-2016 ATUS sample. Moments are weighted with ATUS final weights.

For parents aged 15-55, living with own child aged 3 or less

Table 19: ATUS Time per Activity Averages by Demographic Bins

Bin	Couple	Gender	gt HS	Reading Hrs	Ed Hrs	Talk. Hrs	Play Hrs	CC Hrs	N Reading	N Ed	N Talk.	N Play	N CC
1	0	1	0	0.793	0.801	0.745	4.222	4.115	7	21	15	11	21
2	0	1	0	.	0.477	0.477	.	3.229	0	4	4	0	4
3	0	1	1	0.519	0.434	0.271	0.566	1.600	12	17	7	4	17
4	0	1	1	0.500	0.500	.	4	5	1	1	0	1	1
5	0	2	0	0.746	0.745	0.672	1.322	2.926	85	147	74	62	147
6	0	2	0	0.387	0.453	0.491	2.353	3.300	39	75	40	37	75
7	0	2	1	0.416	0.592	0.780	1.287	2.766	185	245	76	109	245
8	0	2	1	0.664	0.721	0.651	1.766	4.303	45	69	34	36	69
9	1	1	0	0.503	0.560	0.557	1.622	2.104	232	367	157	133	367
10	1	1	0	0.310	0.471	0.690	1.617	5.031	10	18	8	8	18
11	1	1	1	0.454	0.474	0.415	1.508	2.256	1745	2101	482	1117	2101
12	1	1	1	0.585	0.656	0.685	1.574	3.638	71	77	14	63	77
13	1	2	0	0.474	0.569	0.596	1.562	2.904	239	390	182	153	390
14	1	2	0	0.494	0.608	0.582	1.743	4.210	302	447	212	269	447
15	1	2	1	0.451	0.528	0.550	1.680	3.324	2397	2814	704	1597	2814
16	1	2	1	0.549	0.634	0.533	2.101	4.554	1359	1602	500	1016	1602

Part II

Empirical Motivation for Model Specification

The purpose of this appendix is to document empirical motivation for my decisions on model specification. Depending on the assumption, I either provide my own empirical results or cite studies in the literature whose empirical results I rely on. I also discuss, when possible, the effect the assumption might have on my results if I changed it.

C Fertility and Direction-of-Transfer Assumptions

The way fertility is defined in this model can be separated into two categories: the extensive margin and the intensive margin. I assume that all families have children (the extensive margin), and I assume that families have 2 children each (the intensive margin). In addition, I assume that parents are altruistic and make transfers to children; I do not allow for children to be altruistic and make transfers to their parents. In this section, I offer supporting evidence for each of these three assumptions.

For the first point, I focus on the general inconclusiveness of the literature on the subject. In addition, even for studies which find an effect, it is important to keep in mind the low responsiveness measured along this margin in response to various policies (not just child care subsidies).

For the second point, I provide summary statistics from the ECLS-B which show similar average number of children across one- and two-parent families. For both family structures, the average is about 2 children each.

For the third point, I discuss the competing motivations for having children in the economics literature, to put my decision to model altruistic parents into a broader context.

Assumption that Fertility is Exogenous

There is a sizeable literature on how policy affects fertility decisions. This literature has not reached a definitive conclusion: results tend to be country-specific, and for those that do find an effect, the magnitude is small. One important margin of response to these policies seems to be the timing of birth over the mother's life, rather than the total number of births (total lifetime fertility). For surveys of the literature on this topic, see Gauthier (2007).[34]

Obviously, the fact that fertility is exogenous in the model developed within this paper makes it unresponsive to child care subsidies. If, instead, fertility had a strong response to the policies analyzed here, it is possible that the results could be dampened.[35] Underlying concerns about this source of invalidation is the classic

[34] An interdisciplinary review of studies on the determinants of fertility is provided in Balbo, Billari, and Mills (2013).

[35] Given the magnitudes of fertility elasticities found in empirical analyses reviewed in Gauthier (2007), it is unlikely that the sign of the effect of child care subsidies on child skill or welfare would change sign.

quality-quantity tradeoff that underlies the decision to have more children in many economic models of fertility.

In my model, quality of children (their skill level) is the margin by which families respond to the child care subsidy, rather than quantity. I invoke a lack of clear evidence for quantity responsiveness to these policies as part of my motivation for modelling it in this way. By contrast, there is sizeable evidence documenting a responsiveness of child skill (quality) to child care subsidies —especially for poor and one-parent families, the majority of evidence points to a positive response (see the citations in the introduction for relevant studies on this last point).

Assumption of 2 Children Per Family

I make the assumption about number of children in order to achieve replacement rates for the population. I claim that this is not strongly counterfactual: in fact, it is broadly in lign with the moments I compute in the ECLS-B.

In particular, in the ECLS-B one- and two-parent families have similar, but not identical, distributions of children living with them at the time of data collection. In Table 20, I report statistics on the distribution for number of children for single mothers and married or cohabiting couples. The means are very close: 2 for single mothers, and 1.8 for couples. The medians of these distributions, however, are not close: the median number of children being raised by couples in the ECLS-B is 1, and for single mothers it is 2.

Table 20: Number of Children (Wave 1, Weighted)

	mean	p10	p50	p90	sd	min	max
Single Mothers	2.03	1.00	2.00	3.00	1.11	1.00	9.00
Number of Single Mothers	8300						
Couples	1.81	1.00	1.00	3.00	1.09	1.00	10.00
Number of Couples	2100						

Data source: Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), Longitudinal 9- Month-Kindergarten 2007 Restricted-Use Data File. Sample size rounded to nearest 50 per NCES requirements.

I could also achieve a stable population across generations by allocating the same total number of children asymmetrically across family structures, for example. I do not consider the heterogeneity in number of children that I see in the data sufficient to justify this, but it would interesting to see how such an extension affects the results. Given my assumption about non-rivalness of family investments, and the fact that single mothers tend to have slightly more children in the data, I anticipate that the welfare gains from a child care subsidy would be even higher, because more children would be raised by single mothers and thus benefit the most from such a policy.

Assumption that Parents Make Altruistic Transfers to Children

Related to model assumptions about fertility, assume that fertility is incorporated somehow into one's framework. Even then, whether quality or quantity of children responds to a child care subsidy is likely to depend on how children affect one's value function: are parents altruistic, so that better child outcomes make them happier, or are children altrusitic, so that better child outcomes result in higher transfers to parents (thus making parents happier).

One example of a policy which does appear to have a strong empirical relationship with fertility is social security benefits, as documented and analyzed by Boldrin, De Nardi, and Jones (2015). In that study, the authors evaluate the two competing models of how children affect one's value function described above: one with altruistic parents who make transfers to children (Barro and Becker (1989)), and one with altruistic children who make transfers to parents one the children are adults. Only the latter specification is able to match the negative correlation in the data between socially security programs and fertility. In the latter model, social security replaces children, and fertility declines accordingly.

I assume that parents make transfers to children: that is, in my specification investments in children are motivated by parental altruism. This is the assumption in many other papers in the macroeconomics literature analyzing early childhood investments made by families, including Lee and Seshadri (2019) and Daruich (2020). Boldrin, De Nardi, and Jones (2015) do not try to examine early childhood investments, so they do not evaluate whether future transfers from altruistic children to parents are sufficient to explain the investments in children which we see in the data. For an example of a framework in which both parents and children make transfers to each other, see Boar (2020). In that study, the two-way transfer environment results in a strategic interaction between generations in the same dynasty which is not trivial to solve.

D Assumption of One-Shot Marriage Market

In the general equilibrium framework presented in the main text of this paper, families are formed on a one-shot marriage market. In addition, in the estimation of the skill investment technologies I impose that valid observations must have the same family structure for the first three waves of the survey. I claim that both the modelling assumption and the estimation restriction are good approximations of the data and represent the majority of families parenting young children in the ECLS-B. In Table 21, I present transition matrices for family structure across waves of the ECLS-B. This table shows that family structure is extremely persistent, especially marriage, when children are very young. The categories for marital status are Married, Never Married, and Separated/Divorced/Widowed, abbreviated as Sep./Div./Wid..

In Panel A, I report the probability that a family which is married, never married, or previously married in wave 1 is in any of those statuses in wave 3. The states of being married or never married are extremely persistent: 93% of married couples remain married until their child is 4 years old, and 80% of single mothers remain single mothers for the same period. A more volatile category is being previously married, which means that you are divorced or separated in wave 1. For that category, 31% have become married by the time their child is 4 years old. Despite this, for each of the marital status categories, the portion that persists

in that category through wave 3 is by far the majority.

In Panel B, I report the same statistics as Panel A, except that they refer to the transition probabilities from wave 1 to wave 2. Panel C reports these statistics for the transition from wave 2 to wave 3. In both Panel B and Panel C, the pattern is very similar to Panel A. There is by far more churn for those previously married, and very high persistence for other marital statuses.

Table 21 tells a consistent story: for the duration of early childhood (before age 5) family structure is extremely persistent.

Table 21: Mother's Marital Status Over Time in the ECLS-B

Panel A: Wave 3 (rows) vs. Wave 1 (columns)

	Married	Never Married	Sep./Div./Wid.
Married	0.93	0.17	0.31
Never Married	0	0.80	0
Sep./Div./Wid.	0.07	0.03	0.69

Panel B: Wave 2 (rows) vs. Wave 1 (columns)

	Married	Never Married	Sep./Div./Wid.
Married	0.98	0.07	0.15
Never Married	0	0.92	0.01
Sep./Div./Wid.	0.02	0.01	0.84

Panel C: Wave 3 (rows) vs. Wave 2 (columns)

	Married	Never Married	Sep./Div./Wid.
Married	0.95	0.11	0.18
Never Married	0	0.87	0
Sep./Div./Wid.	0.05	0.01	0.82

Source: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), Longitudinal 9- Month-Kindergarten 2007 Restricted-Use Data File.

E Assumptions on Child Skill and Gender

In Tables 22 and 23, I report regression analyses I use to motivate two modelling assumptions: parents do not target investments by child gender, and initial skill endowments (at 9 months) affect skill outcomes later in life (at 4 years of age).

Investment is not targeted by child gender

Table 22 reports four models, each with a time input choice as the dependent variable. The first two are for married couples, the second two for single mothers. Time investments are predicted by attributes of the parents (hourly wages and educational attainment) and attributes of the child (current skill). Child gender is not a statistically significant predictor of parental time inputs, according to Table 22 . There is some

evidence in other studies that parenting behavior and treatment effects of the program vary by the gender of the child (see Garcia, Heckman, and Ziff (2017), Kottelenberg and Lehrer (2014)), but I do not see parenting investment decisions depending on gender in my empirical analysis.

Table 22: Time Investments by Child Gender

	Married Couples		Single Mothers	
	(1)	(2)	(3)	(4)
	Tot. Parental Time	N Time	N Time	Total Time
Child is Female	-0.0845	-0.216	-1.156	0.0434
	(0.212)	(0.782)	(0.850)	(0.499)
Child Test Score [0,1]	8.528***	8.281***	1.023	9.945***
	(0.598)	(2.219)	(2.477)	(1.389)
B.A.: Father	2.104***	-0.895		
	(0.250)	(0.904)		
B.A.: Mother	1.850***	2.745**	1.578	3.484***
	(0.247)	(0.881)	(1.473)	(0.556)
Hourly Wage: Father	0.0105	-0.0248*		
	(0.00588)	(0.0118)		
Hourly Wage: Mother	0.00922*	-0.0146	-0.0638**	-0.0122
	(0.00369)	(0.0131)	(0.0244)	(0.0107)
Constant	-2.921***	10.59***	29.68***	18.85***
	(0.824)	(3.134)	(3.443)	(1.905)
R^2	.13	1.1e-02	5.0e-03	1.7e-02
Obs.				

Standard errors in parentheses. N stands for non-parental child care.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Sample sizes rounded to nearest 50, following NCES requirements.

Measures of initial skill are informative

Table 23 reports three models: for married couples, for single mothers, and for the pooled sample. The dependent variable in all three models is the final skill of the child at age 4. Explanatory variables include the initial skill of the child, gender of the child, indicators for parental educational attainment (BA or higher), and parental hourly wages. Initial test scores are statistically significant predictors for final test scores, and so are parental attributes related to their skill. This motivates including heterogeneity in initial skill endowments in the model, and supports the assumption concept of child skill evolving endogenously in response to parental decisions, which in turn depend on their individual attributes (measured indirectly here with wages and education).

Table 23: Predicting Final Skill with Initial Skill + Parental Attributes

	(1) Married Couples	(2) Single Mothers	(3) All
Initial Test Score (9 Mo.): Stdzd	0.138***	0.139***	0.130***
	(0.0389)	(0.0350)	(0.0373)
Hourly Wage: Mother	0.0565	0.217***	0.123**
	(0.0359)	(0.0500)	(0.0383)
Hourly Wage: Father	0.0971**		
	(0.0312)		
Child is Female	0.108	0.135	0.0941
	(0.0619)	(0.0738)	(0.0636)
B.A.: Mother	0.291***	0.662***	0.546***
	(0.0744)	(0.113)	(0.0651)
B.A.: Father	0.441***		
	(0.0788)		
Constant	0.851***	0.654***	1.005***
	(0.183)	(0.160)	(0.180)
R^2	0.1695	0.1273	0.1237
Observations	2900	1400	2900

Initial skill has predictive power. Units: standard deviations, except for indicators

$^{*}\ p < 0.05$, $^{**}\ p < 0.01$, $^{***}\ p < 0.001$

Sample sizes rounded to nearest 50, following NCES requirements.

Correlation of Initial Child Skill and Final Child Skill with Family Income

Table 24 reports a slightly different version of the same qualitative points made with Tables 22 and 23. The dependent variables in the two models are initial skill and final skill, with both family structures pooled. Initial income at 9 months has no predictive power for the initial skill score. At age 4, however, final skill can be predicted with income (both at age 9 months and 4 years) and the initial test score. The calibration target moments used in the expanded model framework use correlation coefficients, but the regression reported here makes the same qualitative point.

Table 24: Correlations of Skill and Family Income

	(1) Test Score W1	(2) Test Score W3
Family Income W1	0.000114	0.000651*
	(0.000103)	(0.000254)
Flag: Present in model 2 sample	-0.00677	
	(0.00754)	
Family Income W3		0.000693***
		(0.000204)
Test Score W1 (SD)		0.141**
		(0.0482)
Constant	1.453***	1.004***
	(0.00733)	(0.0705)
R^2	.003	.125
Observations	1300	1500

Income in thousands of dollars. Test scores in standard deviation units.

Standard errors in parentheses.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Sample sizes rounded to nearest 50, following NCES requirements.

F Assumptions About Investment Inputs: Child Care Spending vs. Total Spending in the PSID CDS

In the literature on estimating skill accumulation technologies during early childhood, it is common practice to include money spent on goods as one of the components of investment (examples include Lee and Seshadri (2019), Daruich (2020) and Abbott (2020)). By contrast, my specification includes time spent in child care instead of money spent on the child. In this section, I use tabulations from the 2001 PSID and 2002 PSID CDS to show how child care expenses contribute to total expenditures on the child. To do this, I construct four different measures of total expenditures on the child (Definitions 1 to 4 in the tables below, with each definition specified in the table footnote). Next, I find the fraction of each measure of total expenditures that comes from spending on child care. I report these fractions in Tables 25 to 28. My conclusion from this exercise is that child care represents the main component (or at least, a large component) of the expenditures on children in the PSID. In that sense, using time in non-parental child care as an input, and including expenditures on child care in the budget constraint of parents, can be viewed as focusing on the main component of expenditures on children and being specific about how it contributes to child skill accumulation. More specifically, I have money spent on the child in the form of child care affect child skill accumulation through changing how the child uses her time.

Table 25: Definition 1

	mean	sd	count
Ages [0,3]	0.67	0.29	84
Ages [0,5]	0.68	0.28	146
Ages [0,7]	0.71	0.26	223
Ages [0,9]	0.70	0.27	260
Ages [0,11]	0.70	0.27	275

Notes: Table 25 presents averages by age group for the fraction of total expenditure on children spent on child care. Definition 1 of total expenditures on children includes child care, money spent on toys, and money spent on school supplies

Table 26: Definition 2

	mean	sd	count
Ages [0,3]	0.55	0.28	84
Ages [0,5]	0.58	0.28	146
Ages [0,7]	0.61	0.26	223
Ages [0,9]	0.60	0.27	260
Ages [0,11]	0.60	0.27	275

Notes: Table 26 presents averages by age group for the fraction of total expenditure on children spent on child care. Definition 2 of total expenditures on children includes child care, money spent on toys, and money spent on school supplies.

Table 27: Definition 3

	mean	sd	count
Ages [0,3]	0.49	0.27	83
Ages [0,5]	0.52	0.27	144
Ages [0,7]	0.55	0.26	220
Ages [0,9]	0.53	0.26	256
Ages [0,11]	0.53	0.26	271

Notes: Table 27 presents averages by age group for the fraction of total expenditure on children spent on child care. Definition 3 of total expenditures on children includes child care, money spent on toys, money spent on school supplies, money spent on vacations, and money spent on clothes.

Table 28: Definition 4

	mean	sd	count
Ages [0,3]	0.42	0.24	71
Ages [0,5]	0.43	0.24	126
Ages [0,7]	0.46	0.24	194
Ages [0,9]	0.44	0.23	229
Ages [0,11]	0.43	0.23	243

Notes: Table 28 presents averages by age group for the fraction of total expenditure on children spent on child care. Definition 3 of total expenditures on children includes child care, money spent on toys, money spent on school supplies, money spent on vacations, money spent on clothes, and money spent on food.

G Assumptions About Time Inputs From Single Fathers

Empirically, single fathers usually don't raise children under five alone unless the mother has died; instead, they play a visiting role. In the ECLS-B there is a separate questionnaire for non-resident fathers, which is completed if the resident parent allows the survey-giver to contact the non-resident father, and the father agrees to participate. Besides concerns about eggregious measurement error in the single father sample, as well as severe selection bias, there is also the problem of different variables being reported for the single father survey than on the resident parent questionnaire (in regards to activities done with children). Even if the single father sample were representative and the reporting accurate given the questionnaire single fathers receive, the available variables only allow an approximation of what is reported for resident parents.

The ECLS-B provides a non-resident father questionnaire (NRQ) in the first two waves of the survey. In this section, I document six points about the sample of non-resident fathers that complete this survey as well as attributes of single mothers in the data. Sample counts for these tabulations reflect response rates for the questions of interest; here, I am not restricting by whether I also observe variables necessary for the skill accumulation technology estimation. In the statistics presented below, I use survey weights for the primary caregiver sample in wave 2. The main purpose of this section is to establish that relatiely few single fathers complete the survey, that those who do are not representative of the sample of single fathers, and that when they do complete the survey their answers and the answer's of their child's mother do not coincide (where comparable). In addition, Table 30 makes an additional point about the marital status composition of single mothers: most were never married. This coincides with the timing and nature of the marriage market in my model.

Selection in the Single Father Sample, Nature of Relationship with Child's Mother by Response Status of SF The first three points are made in Tables 29 and 30. First, Table 29 shows that the response rate of non-resident fathers in each wave is about 1 in 3. Second, Table 30 shows that the marital status of the corresponding single mother is about the same for the group of families with a completed NRQ and without a completed NRQ. Third, Table 30 also shows that most single mothers were never married (about 70% and 65% in the first and second wave of the survey, respectively). Since I do not model divorce, the composition of marital status in single mothers is important to check.

Table 29: Response Rate NR Questionnaire

	(1) Wave 1	(2) Wave 2
Yes	0.300	0.309
No: Refusal	0.292	0.179
No: Not Permission	0.194	0.270
No: Ineligible, Lack of Contact	0.184	0.179
No: no NR	0.0290	0.0596
No: P not Biomother	0.000628	0.00303
Total	1	1
Obs.	2000	2000

Table 29 displays response rates of non-resident fathers to the non-resident father survey in the ECLS-B. Slightly less than one-third of non-resident fathers respond. Sample sizes rounded to nearest 50, following NCES requirements.

Table 30: Marital Status Composition of Mothers with NR fathers, by Questionnaire Response status

	Wave 1		Wave 2	
	(1) Completed NRQ	(2) No NRQ	(3) Completed NRQ	(4) No NRQ
Not Reported	0	0.00369	0	0.000118
Married	0.0640	0.0520	0.0921	0.0980
Separated	0.107	0.119	0.105	0.0939
Divorced	0.0909	0.0929	0.111	0.140
Widowed	0.00320	0.0142	0.00195	0.0169
Never Married	0.734	0.717	0.691	0.647
Not Biomother or Adoptive Parent	0	0.000897	0	0.00439
Total	1	1	1	1
Obs.	650	1350	650	1400

Table 30 displays the marital status composition of families where the biological parents are not cohabiting (single-parent families). The compositions are broken down by response status for the non-resident father questionnaire. Sample sizes rounded to nearest 50, following NCES requirements.

Single Father Visitation Frequency by NFQ Response Status, Influence of Single Father by NFQ Response Status SF vs. SM opinion The next three points are made in Tables 31-35. For point four, Table

31 tabulates the days since the non-resident father last saw the child. Fathers who complete the NRQ have seen the child on average 1.5 days more recently than fathers who do not. Fifth, in Table 31 I tabulate responses to the question "In a typical week, does [the child's] father spend a lot, some, very little, or no time taking care of [the child]?", for families without a completed NRQ's (first column) and for those with an NRQ (second column). Fathers who completed the NRQ are almost 3 times more likely to be parenting with a resident primary caregiver who responds "A lot" to this question (35% compared to 12%). Relatedly, Table 33 shows that fathers who complete the NRQ are almost twice as likely to have seen their child in the last month than fathers who did not complete the NRQ (90% versus 46%). Sixth, in Tables 34 and 35 I tabulate the wave 2 responses to the question "When it comes to making major decisions, please tell me if [child's] father has no influence, some influence, or a great deal of incluence on such matters as child care?", separately for mothers (Table 34) in families without an NRQ (column 1) and those with an NRQ (column 2) and fathers (Table 35) who completed the NRQ. Fathers who completed the NRQ think they have a lot of influence; mothers with children whose fathers completed the NRQ say they have less influence than the fathers claim, although they report more influence more than do mothers in families without a completed NRQ.

Table 31: Wave 1: Number of Days since NRF last saw child

	(1) No NRQ	(2) Completed NRQ
No. Days	3.860	2.353
Obs.	1300	650

Table 31 displays the average number of days since a non-resident father saw his child in the first wave of the survey, by response status to the non-resident father questionnaire. Sample sizes rounded to nearest 50, following NCES requirements.

Table 32: Wave 2: Frequency NRF last provides child care

	(1) No Completed NRQ	(2) Completed NRQ
Not Applicable	0.541	0.104
A lot	0.121	0.350
Some	0.117	0.280
Very little	0.0912	0.146
No time	0.130	0.120
Total	1	1
Obs.	1350	650

Table 32 displays the response to the question: "In a typical week, does [the child's] father spend a lot, some, very little, or no time taking care of [the child]?", for families without a completed NRQ's (first column) and for those with an NRQ (second column). Sample sizes rounded to nearest 50, following NCES requirements.

Table 33: Wave 2: Number of Days since NRF last saw child

	(1) No NRQ	(2) Completed NRQ
Don't Know	0.01	0
Refused	0.01	0
Not Applicable	0.06	0
Less than 1 month	0.459	0.896
More than 1 month, less than 1 yr	0.238	0.0718
More than 1 yr	0.0975	0.0198
No contact since birth/separation	0.133	0.0118
Total	1	1
Obs.	1350	650

Table 33 compares the amount of time since non-resident fathers last saw their child, by response status to the non-resident father questionnaire. Sample sizes rounded to nearest 50, following NCES requirements.

Table 34: Wave 2: Mother's Opinion of Father's Influence on CC

	(1) No NRQ	(2) Completed NRQ
Not Applicable	0.373	0.0207
No Influence	0.341	0.395
Some Influence	0.138	0.260
A Great Deal of Influence	0.148	0.324
Total	1	1
Obs.	1400	650

Table 34 tabulates mother's responses to the question: "When it comes to making major decisions, please tell me if [child's] father has no influence, some influence, or a great deal of incluence on such matters as child care?", by response status for the non-resident father questionnaire. Sample sizes rounded to nearest 50, following NCES requirements.

Table 35: Wave 2: NRQ Father's Opinion of Father's Influence on CC

	Frequency
Not Ascertained	0.0318
No Influence	0.146
Some Influence	0.328
A Great Deal of Influence	0.494
Total	1
Obs.	650

Table 35 tabulates the response of father's who completed the non-resident father questionnaire to the question "When it comes to making major decisions, please tell me if you have has no influence, some influence, or a great deal of incluence on such matters as child care?". Sample sizes rounded to nearest 50, following NCES requirements.