Child Penalties among Families in the U.S. Labor Market and Workfare State, 1974-2010

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Abstract

Children grow up to benefit society as citizens, workers, and tax payers, but parents contribute the time and money to raise them. Household time allocations for doing so have changed since the 1960s, yet remain gendered and have gendered effects on wages. The state offers some support, but the tax provisions and social transfers for families with children have also changed over time. Analysis of 1974, 1994, and 2010 LIS data with unconditional quantile regression reveals how the impact of children varies across partnered household earnings and after-tax-and-transfer income distributions and over time. In 1974, child earnings penalties were about three percent across the household earnings distribution, and only slightly reduced by taxes and transfers. In 2010, the state reversed the larger child earnings penalty for low-earning partnered households, but offered more financial relief to higher-earning families as well. We discuss implications of households’ diverging resources for raising children.

Keywords: household earnings inequality, parental earnings, unconditional quantile regression
Well-raised children contribute to the social fabric and future tax base for parents and nonparents alike, but parents assume the majority of costs. The primary investments in children include money and time (Folbre, 2008), which are not divided equally within households. Mothers’ employment and fathers’ time with children have both increased since the 1960s, but married fathers still work more paid hours than their partners and mothers still perform the lioness’s share of primary care (Bianchi, Robinson, & Milkie, 2006). Despite its need for future workers, the labor market theoretically extracts a cost for familial time investment (Acker, 1990; Becker, 1985). In turn, employed mothers incur net wage penalties (Budig & England, 2001), whereas fathers enjoy modest wage premiums (Lundberg & Rose, 2002).

We propose that the combined earnings penalties and premiums vis-à-vis childless households are a good measure of parents’ resources for raising children, as, in contrast to other measures, they reflect some of the time investment. This measure is particularly useful for comparing whether parental households are better off economically across the period during which mothers’ employment increased. The limited over-time evidence indicates that the average per-child motherhood wage penalty has not changed much across cohorts (Avellar & Smock, 2003; Gangle & Ziefle, 2009), whereas the average fatherhood premium may be dwindling (Lundberg & Rose, 2002).

In this paper we therefore use a novel regression technique to assess whether dual-earning families with children face growing earnings disadvantage over time vis-à-vis childless households. Specifically, we anticipate widening differences in combined parental earnings effects among households with children. Recent evidence reveals that low-earning men incur
fatherhood penalties rather than premiums (Cooke, 2014), and that motherhood penalties are larger among lower- than the highest-waged women (Budig & Hodges, 2014; Cooke, 2014). The correlation between spousal earnings became positive after the early 1980s (Schwartz, 2010), suggesting combined parental wage effects contribute to the diverging resources among families with children noted by McLanahan (2004).

We thus compare the impact of number of dependent children across the partnered household earnings distribution using the 1974, 1994, and 2010 waves of the LIS (LIS, 2015) data project. Quantile regression is ideal for such comparisons as slope parameters are allowed to vary across the distribution. But quantile regression differs in whether it estimates effects on the conditional or unconditional distribution (Killewald & Bearak, 2014). The quantile estimator developed by Koenker and Bassett (1978) provides estimates on the conditional distribution, as defined by the covariates included in the model. This is not problematic if regressing the outcome on a single independent variable, in our case number of children. But adding controls such as education or age that account for much earnings variation can change the pre-regression rank order of the dependent variable. The resulting estimates are effects for different quantiles in the earnings of the group defined by the covariates (Killewald & Bearak, 2014).

We instead opt for the newer regression of the recentered influence function (RIF) developed by Firpo and his colleagues (2009). With RIF regression, the pre-regression rank in the earnings distribution is preserved and then ordinary least squares (OLS) regression is used for estimation. Variable effects of interest consequently pertain to the unconditional earnings distribution and have the added advantage of being interpreted similar to any OLS coefficient (Firpo, Fortin, & Lemieux, 2009).

Parents, though, are not entirely alone in bearing the costs of raising children. The state offers some financial relief via dependent deductions for most parents, and further tax credits and
social transfers for lower-earning households. The specific policy packages have changed substantially since the 1970s as “workfare” replaced “welfare” (Handler, 2004; Moffitt, 2015). The harmonized and improved income, tax, and benefit measures in the LIS data allow us to also use RIF regressions to assess whether the changing tax and social transfer policies ease or reverse market penalties for children in disposable cash income. We limit analyses to partnered households where at least one partner is employed because they comprise the majority of families with dependent children (Bianchi, et al., 2006), but are an under-researched group in terms of policy outcomes (Brady, Baker, & Finnigan, 2013). In contrast, Blank (2015) highlights that the impact of welfare-to-workfare policies on single parent and/or workless households is one of the most well-researched policy changes in history.

Our innovative analytical approach reveals that all partnered households incur gross earnings penalties for each additional child, but these market penalties increased more among low-earning households over time. In 2010, taxes and transfers reduced the economic disparities between partnered households with and without children, and somewhat reduced the divergence in resources among families with children across the distribution.

**Children and parental earnings**

Raising children entails practical decisions about how much time parents spend physically and emotionally caring for them, versus time spent in employment to cover their additional costs of food, housing, health, leisure, and the like. Becker (1981) claimed the ideal way for partnered households to meet their economic and care demands is for one partner to specialize in paid work and the other in family unpaid work, with the latter person dependent on the breadwinner for economic support. These allocations are not gender-neutral; both Becker’s economic model and cultural norms promote women’s responsibility for the domestic sphere and men’s responsibility
as family breadwinners. One reflection of this norm is that men who ultimately marry already earn significantly more in the years prior to marriage than men who never marry and continue to do so for almost a decade afterwards (Dougherty, 2006).\textsuperscript{1} Fatherhood predicts a further five to seven percent wage premium (Killewald, 2013; Lundberg & Rose, 2000, 2002).

Others alternatively suggest that men’s family wage premiums reflect employer discrimination that reinforces relative (dis)advantage at the intersection of group memberships (Glauber, 2008; Hodges & Budig, 2010). Yet our interest is not in accounting for parental premiums or penalties, but assessing what they indicate in terms of the resources available to raise the next generation. Thus men’s family premiums may be a cornerstone of gender economic inequalities, but also provide households with additional money for supporting dependents.

Based on men’s average hourly wage and annual work hours in Lundberg and Rose (2002: 253), however, a married father-of-one’s estimated annual premium works out to be $5,795 in 2010 dollars. The poverty threshold for two dependents that year was $6,236.\textsuperscript{2} Not surprisingly, then, less than 60 percent of couples relied solely on the father’s income even in the 1960s heyday of the male breadwinner ideal (Bianchi, et al., 2006: 41). By 2000, more than 60 percent of couples with children younger than 18 were dual-earner couples (Bianchi, et al., 2006).

Mothers’ employment reduces her available unpaid time and introduces a new monetary cost for child care to replace some of this time. As wives’ employment hours increased, their housework hours decreased significantly and husbands’ housework hours increased somewhat (Bianchi, et al., 2006). Parents’ time with their children did not suffer, however; both mothers’

\textsuperscript{1} This is also true of women who marry, albeit to a lesser extent and with faster attenuation of wage premiums after partnering (Dougherty, 2006).

\textsuperscript{2} https://www.census.gov/hhes/www/poverty/data/threshld/
and fathers’ child care time increased in the latter half of the 20th Century regardless of mothers’ employment (Bianchi, et al., 2006).

A theorized tradeoff exists, though, between unpaid family work and wages. Becker (1985) argued that wives’ time in housework and child care undermines employment “effort” and productivity. Likewise, Acker (1990) claimed that organizational logics expect ideal workers to be disembodied persons with no competing familial obligations. Whatever the causal mechanisms, motherhood predicts a four to five percent wage penalty net of employment interruptions, part-time work, family-friendly occupations, and stable, unobserved characteristics (Avellar & Smock, 2003; Budig & England, 2001). The average percentage penalty has not decreased for younger cohorts of mothers, despite their substantial increase in accrued full-time and part-time experience (Avellar & Smock, 2003). In fact, Gangl and Ziefle (2009) could explain less of the motherhood penalty for the cohort of women born 1960 to 1964 as compared with the cohort born in the prior five-year period.

Still, the combined employment efforts of mothers and fathers would result in additional household resources for raising a child if the dollar value of the fatherhood premium is greater than the dollar value of the motherhood penalty. Given the gender wage gap, the similar average fatherhood premiums and motherhood penalties would combine to predict an absolute earnings surplus for a partnered household. After 30 years of relative constancy, however, the gender wage gap began to narrow in the 1980s (Blau & Kahn, 2006). This means a larger percentage fatherhood premium is increasingly needed to compensate for the consistently-sized motherhood penalty as gender differences in wages shrink. Instead, Lundberg and Rose (2002: 258) found that the net fatherhood premiums for one or two children among the cohort of men born after 1950 were about half the magnitude of those for the cohort born prior to 1950. We therefore
anticipate that the combined parental earnings penalty for families with children as compared with childless households has increased since the 1970s.

*Differences among women and men*

Parenthood does not affect the wages of all women and men equally, however. A new vein of research using semi-parametric approaches finds that parental premiums and penalties vary across the wage distribution net of characteristics such as education, ethnicity, and occupation. Cooke (2014) found that fatherhood predicted a two percent penalty among men in the bottom quartile of the U.S. earnings distribution, and a significant two and five percent premium only among men in the 75th and 90th quantiles, respectively. Motherhood effects differ among women as well. The pattern among women is less linear than for men, but mothers at the very top of the wage distribution incur no significant penalty (Budig & Hodges, 2014; Cooke, 2014) or a slight premium (Killewald & Bearak, 2014).

As these studies used either cohort (i.e., Budig & Hodges, 2014) or recent cross-sectional data (Cooke, 2014), we do not know whether the variation in parental premiums and penalties is historical, or emerged as earnings inequalities increased. Between 1973 and 2009, real wages fell among men at the 20th percentile, stagnated at the median, but soared at the upper percentiles of the wage distribution (Kalleberg, 2011: 106). Among women, the initial increase in inequality in the top half of the wage distribution was much smaller than for men and narrowed further during the 1990s (Blau & Kahn, 2006). Inequality across the bottom half of women’s wage distribution also accelerated more quickly than men’s during the 1980s, and fell less among women than men across the 1990s (Blau & Kahn, 2006). Thus competitive market forces magnified women’s and men’s relative advantage across the wage distribution, which may be reflected as well in diverging parental earnings effects.
In addition, if there is a positive correlation between spouses’ earnings, these patterns indicate that more recent cohorts of lower-earning partnered households may suffer larger combined market penalties for each additional child. Up until 1982, the correlation in spousal earnings was slight but negative when including wives with no earnings, and less than 0.10 among dual-earner couples (Schwartz, 2010). After 1982, the correlation became positive for all couples, but has increased fastest among wives with middle- and high-earning husbands because of the faster growth in these wives’ labor force participation (Schwartz, 2010).

The trends in individual and household earnings inequalities lead us to conjecture that differences among households in parental earnings effects increased after the 1970s. We avoid the term “hypothesis,” as we are not testing a theory, but are instead assessing trends in a new way. Yet the supposition is consistent with McLanahan’s (2004) “diverging destinies” argument, wherein changes since the 1960s widen the disparities in economic resources available to children. McLanahan focused on the growing inequality predicted by demographic shifts in family formation, fertility, along with women’s employment, but the changing labor market accounts for most of the divergence among households (Schwartz, 2010). One goal of the state’s tax and transfer system is to redistribute income more equitably among households, in part to reduce the incidence of child poverty and the risks it entails for children’s outcomes (Blank, 2015). The mix of these policies also changed since the 1970s, as outlined next.

**Changing state support for families with children**

U.S. expenditures on family benefits in cash, services, or tax measures as a percentage of GDP are half the OECD country average (OECD, 2011: 42). Instead, the expectation is that individuals ensure their own well-being via employment or other family members such as a male breadwinner. From the 1935 introduction of Aid to Dependent Children (ADC, later AFDC), the
first “welfare” program to support families with deceased, absent, or disabled fathers, concerns were raised about potential employment disincentives of such state assistance (Handler, 2004). The subsequent expansion of means-tested social assistance as part of the 1960s to 1970s War on Poverty heightened these concerns (Handler, 2004; Moffitt, 2015). In response, the 1996 successor to AFDC, Temporary Assistance for Needy Families (TANF), introduced limits to welfare receipt and demanded that recipients begin employment within two years. Spending on AFDC/TANF fell sharply in the ensuing decade (Moffitt, 2015), and the term “workfare” replaced “welfare” to highlight the expectation of and supports for employment (Handler, 2004).

Twenty-one years earlier, however, the Earned Income Tax Credit (EITC) had been enacted by Congress to encourage employment among families with children at risk of receiving social assistance (Green Book, 1998; Hotz & Schulz, 2003). EITC is a refundable credit, such that families get cash back from the government if the credit is larger than their tax liability. In addition to EITC, a sliding Child Care Tax Credit was introduced in 1977 to offset the cost of private child care among employed low- and middle-income households.

The real value of the EITC fell until 1986, but a series of changes after that time led to it arguably becoming the largest single U.S. anti-poverty program (Hotz & Schulz, 2003). The 1990 budget negotiations included a phased-in expansion of EITC for low-earning taxpayers with two or more children. The 1993 budget bill included a more aggressive expansion of the EITC, whereas much smaller earned income credits were extended to low-earning households without children in 1994 (Green Book, 1998). A more universal Child Tax Credit was introduced in 1997 to augment the declining real value of dependent exemptions, with its generosity subsequently increased and extended to more families.

The most recent set of changes came in the wake of the 2008 economic crisis, under the American Recovery and Reinvestment Act of 2009. The maximum credit amount increased
slightly, a new and more generous schedule was introduced for families with three or more children, and the married couple schedule was amended to reduce the second-earner penalty (Nichols & Rothstein, 2015). These initially temporary changes were subsequently extended to 2017 (Nichols & Rothstein, 2015).

Hence the state’s support for families with children since the 1970s increasingly comes via the tax system. A related change across the period is that although disadvantaged single-parent families still receive the largest total amount of financial support, the largest increase in support has been away from single-parent to married families with children (Moffitt, 2015). Support for married families has also shifted from the most disadvantaged to those with incomes just below or just above the official poverty line (Moffitt, 2015).

These policy changes and evidence suggest we should find significant improvement in the after-tax-and-transfer effects of children across the period for lower-earning households. Unique to our analysis is the assessment of the net impact of the changes on higher-earning households as well. This provides a fuller picture of the relative net economic resources between families with and without children, as well as the divergence in resources among families with children.

**Method**

*Data and sample*

The LIS data project (2015) is the largest series of cross-sectional harmonized microdata on labor market outcomes collected from multiple countries over several decades. The source of the U.S. data is the Current Population Survey—the March supplement for the 2000 survey and earlier, and the Annual Social and Economic Supplement for subsequent waves. The advantage of LIS over the CPS is that LIS contains significantly improved income, tax, and cash transfer measures, along with associated aggregates.
From LIS we select the 1974, 1994, and 2010 waves to trace pre- and post-tax-and-transfer effects of dependent children on household income. More waves of data are available, but we parsimoniously opt for three to mark key policy periods. The historical 1974 wave captures effects during a time of stable earnings inequality, expansion of AFDC, but before the introduction of the EITC. The 1994 data capture the end of the initial sharp increase in earnings inequalities across the wage distribution, and the 1990 tax changes that phased out deductions and increased taxes for the highest earners, along with initial expansion of the EITC to more lower-earning households. The 2010 wave captures effects of TANF affecting low-earning households, along with the more recent expansion of EITC and child care credits to more and larger families.

From each wave, we select only heads or spouses to eliminate multi-family households, and also exclude the disabled as the degree to which this affects their employment cannot be distinguished. We restrict heads and spouses’ ages to 25 to 45 to focus on effects among the prime years of first families and labor market participation. Self-employed are excluded, as part of their earnings may derive from assets and can include business losses. We cannot distinguish between marriage and cohabitation in the first wave, but models run for all partnered households in 1994 and 2010 versus just married ones do not yield significantly different effects (results available from author on request). To be consistent across years, all partnered households are included, but we use the terms husbands and wives for brevity.

Variables
The first dependent variable is household gross annual labor market earnings, in 2010 US$ as of 31 January of the survey year. Annual labor market earnings are used, as earnings rather than hourly wages are the basis for taxation and means-tested benefits. The second dependent variable
is after-tax-and-transfer income (ATTI), which is total household monetary income minus income taxes and social security contributions, plus monetary means-tested family-related transfers. The natural log is taken of each, so that effects of number of children younger than 18 can be interpreted as predicted percentage changes in household earnings and after-tax-and-transfer income.

The number of children younger than 18 in the household is the key independent variable. Whether residential children are biological, adopted, or stepchildren can only be ascertained in the last wave, but distinguishing the relationship is not critical for these analyses. Parents normally claim deductions for either biological or adoptive children residing in the household, and stepchildren usually reside with the parent who might claim them for tax purposes.

Control variables include measures that capture husbands’ and wives’ potential human capital and labor supply. Each partner’s age and its square divided by 100 are included as proxies of potential work experience (Mincer, 1974). Two indicator variables denote when the wife and/or the husband have a bachelor’s degree or higher, against a referent of less education. As experience interacts with education to predict earnings (Heckman, Lochner, & Todd, 2003), we include further interaction terms between each partners’ university indicator and age, and between university and age-squared. Across the distribution in all years, husbands are more likely to be employed than wives, and their wages correlate most strongly with total household earnings. We therefore follow Petersen (1989) and control for men’s labor supply using the log of their usual weekly work hours. We capture wives’ employment status with an indicator variable coded 1 if she reports usually working more than zero hours per week, and zero otherwise.

Analytical technique
The predicted effects of a continuous independent variable at different quantiles of the distributions can be estimated on a transformed dependent variable, the recentered influence function (RIF). Firpo and his colleagues (2009) define this as:

$$RIF(Y; q_\tau, F_Y) = q_\tau + (t - 1\{Y \leq q_\tau\}) \int f_Y(q_\tau)$$

The RIF is computed by estimating the sample quantile $q_\tau$, along with the density $f_Y(q_\tau)$ at that point $q_\tau$, and forming a dummy variable $1\{Y \leq q_\tau\}$ to indicate whether the value of the outcome variable is below $q_\tau$, the quantile of interest. In the second step, an OLS regression is run on this new dependent variable, estimating the effect of the independent variable at the specified quantile of the pre-regression, unconditional distribution (Firpo et al. 2009).

The resulting Unconditional Quantile Regression (UQR) statistic is interpreted similarly to standard OLS statistics: as the marginal effect of a small location shift in the independent variable of the $\tau^{th}$ percentile band of the unconditional distribution of dependent variable controlling for effects of the other covariates (Firpo, et al., 2009). The key difference is that RIF regression does not provide estimates of individual household effects, but instead average estimated effects for the group of households within the indicated percentile band/quantile of the unconditional distributions.

We use the `rifreg` command in STATA\(^3\) to estimate the effects of number of children younger than 18 at the 10\(^{th}\), 30\(^{th}\), 50\(^{th}\), 70\(^{th}\), and 90\(^{th}\) quantiles of the natural logs of the household labor market earnings, and after-tax-and-transfer income distributions. Although we are not estimating the pre- and post-tax and transfer situation of a given household, the correlation

\(^3\)The necessary STATA ado files are available at [http://faculty.arts.ubc.ca/nfortin/datahead.html](http://faculty.arts.ubc.ca/nfortin/datahead.html), accessed 5 June 2015.
between deciles of the two distributions is better than 0.95 in all years. We are therefore confident that effects reflect the average pre- and post-tax-and-transfer effects for the same relative groups of partnered households in the unconditional earnings distribution.

What we cannot do is partition the child earnings effect for each parent at each household quantile. It is also not informative to run separate RIF regressions across partnered women’s and men’s wage distributions, because the correlations among husbands’ and wives’ wage deciles and the two partnered household deciles are much lower. A further issue when estimating wives’ wages in any type of regression is the need to control for their likelihood of employment to avoid selection bias (Heckman, 1979). This is especially critical across the time period here, when that likelihood changed significantly. Unfortunately, the LIS data contain no instrumental variables for doing so. It is also difficult to apportion household taxes and benefits to individuals within the household. In any event, our interest is in the combined gross and net effects at the household level, not accounting for each partner’s parental wage effects, which are already well-researched.

Results

Table 1 presents weighted descriptive statistics. The top row under each year indicates the percentage of partnered households at each percentile band of the household earnings distribution (differentiating cohabiting and married in 1994 and 2010 for information). This highlights some of the divergence in family noted by McLanahan (2004). The likelihood of being partnered increases as household earnings increase in all periods, but this likelihood is much lower in 1994 and 2010 across the bottom half of the earnings distribution. The incidence of cohabitation increases slightly between 1994 and 2010, with this more precarious form of partnership more prevalent among low- than high-earning households.

[Table 1 about here]
The remaining descriptive statistics pertain to partnered households only. As anticipated given the documented trends in hourly wage inequality, real earnings in the 10th and 30th quantiles of the household earnings distribution fell across the period, whereas those in the middle of the distribution stagnated. This is despite the increase over the decades in the percentage of husbands and wives with a university degree in these households. In contrast, real earnings of households in the 90th quantile increase in each wave. In turn, the ratio of earnings between households in the 90th and 10th quantiles of the distribution (90/10) nearly doubled across the period, from 4.45 in 1974, to 8.09 in 2010.

The flagging fortunes of families in the bottom decile in part reflect their persistent reliance on a male breadwinner; less than 40 percent of wives are employed even in 2010. In other quantiles, wives’ employment increased by 28 to 37 percentage points between 1974 and 1994, but held fairly steady afterwards. The increase over time in the average working hours of wives who are employed is more modest but also differs across the distribution. T-tests confirm that wives in higher-earning households work significantly more hours on average than those in low-earning households in all three waves, with their increase in employment hours between 1974 and 2010 also statistically significant.

The tax and cash transfer system reverses the market inequalities of the poorest partnered households with increasing generosity over time. The 90/10 ratio in after-tax-and-transfer income is 3.40 in 2010, only slightly greater than the 3.10 in 1974. Despite the increasing generosity of the state, the average number of children decreases between 1974 and 2010 by a similar magnitude in all households. In all years, the lowest-earning households on average have slightly more children, with the difference between the highest- and lowest-earning households statistically significant.
Effect of children on household earnings and after-tax-and-transfer income

Table 2 displays the UQR estimates of the impact of children on the log of household gross labor earnings (Labor), and after-tax-and-transfer income (ATTI) in the 10th, 30th, 50th, 70th, and 90th quantiles of each distribution. Full results of the models are available on request. These effects are vis-à-vis childless partnered households in the indicated quantile.

In 1974, each additional child predicts a statistically significant three to four percent earnings in each quantile of the household earnings distribution. The percentage market impact of children was therefore similar across U.S. families before the rise in earnings inequality, a similarity in effects confirmed with z-scores. Taxes and transfers reduce the predicted child penalty among households in the bottom half of the distribution to just one percent, but the penalty is not statistically significant. Similarly-sized penalties remain statistically significant for households in the 70th and 90th quantiles. In all, the effects of 1974 taxes and transfers reflect the means-testing of state benefits by improving the economic situation of only lower-earning households with children. But taxes and transfers did not provide any family with additional economic resources for raising a child.

In the sluggish economic recovery of 1994, child earnings penalties are greater for all partnered households, but the incremental increase is smaller in higher earnings quantiles. In contrast, the per child earnings penalty doubled for the bottom decile, to eight percent. The increase as compared with 1974 in the 30th and 50th quantiles is two percentage points, and just one percentage point in the 70th and 90th quantiles. Taxes and transfers eliminate the sizeable penalty in the 10th quantile, and reduce it to a statistically significant two percentage points across the rest of the household distribution. The pattern of redistribution among households is therefore similar to 1974, but the majority of families in 1994 face significant child penalties even after taxes and transfers.
The 2010 scenario is different in two ways. First, although households in the bottom decile continue to incur an eight percent earnings penalty per child, the 2010 taxes and transfers yield a seven percent premium per child in net income as compared with low-income childless couples. Similarly, the five percent earnings penalty per child in the 30th quantile converts to a three percent per child premium after taxes and transfers. These effects are consistent with Moffitt’s (2015) assertion that state support increased for partnered families with children just below and just above the poverty line.

The second difference in 2010, though, is that higher-earning households with children are also better off than they were in 1974 and 1994, because of the market and the state. The 2010 child earnings penalty is smaller at the 50th and 70th quantiles than in 1994, and 2010 taxes and transfers result in two percent child premiums in net income for these families. The relative impact of taxes and transfers on the child earnings penalty among the top decile did not change from the earlier time period, but the earnings penalty itself is smaller. In all, the state in 2010 not only supported moderately low income households as noted by Moffitt (2015), but the majority of partnered households with children.

**Discussion and conclusions**

What do these percentage effects mean for family coffers, and divergence therein among families? Figure 1 contrasts the (inflation-adjusted) dollar values of the predicted per-child effect in earnings (red bars) versus post-tax-and-transfer income (gray bars) in the three years. The length of the red bars highlights the persistent child earnings penalty that parents face, one that is always larger in absolute terms for high-earning families. Yet the dollar differences across the household distribution are smaller in 2010 than in 1974 or 1994, mainly because of the
decreasing value of the penalty among the highest-earning households. Taxes and transfers in turn eliminate the 2010 penalty for the highest-earning households, although their dollar impact was greater in 1994. 1994 taxes and transfer reduced the predicted $4,696 earnings penalty per child in the 90th quantile by $2,854, as compared with the $2,647 reduction in 2010.

[Figure 1 about here]

So it is more the market than the state improving the financial position of the highest-earning households with children. Based on the existing evidence, this improved market position undoubtedly reflects the larger fatherhood premiums high-wage men enjoy, coupled with their partners’ smaller (if any) motherhood penalties (i.e., Cooke, 2014; Killewald & Bearak, 2014). The challenge for future family scholarship is to come up with a better theory to account for this advantage, particularly among women. Neither Acker (1990) nor Becker (1985) is up to the task, because we also know that the most advantaged mothers devote more time to child care than less-advantaged ones (Bianchi, et al. 2006).

In contrast, the state plays an increasing role in enhancing the net economic position of partnered households with children in the 10th and 50th quantiles as compared with their childless counterparts. The dollar value of the after-tax-and-transfer penalty for these households was lower in 1994 than 1974. In 2010, taxes and transfers yield a further $1,250 premium per child for families in the 50th quantile, and a $2,183 per child premium for families in the bottom decile.

These figures suggest the U.S. state in 2010 narrowed the divergence in economic resources among families with children that the market increasingly predicts. The dollar amounts may be modest, especially as compared with Scandinavian countries that offer extensive financial and service supports such as public child care for families with children (Folbre, 2008). But the effects reflect an even more profound ideological move away from means-tested state benefits than suggested by Moffitt (2015), to offer greater support to all families with children.
Yet are the child premiums at lower household earnings quantiles sufficient to alter the diverging destinies of the children? A mountain of research on child poverty indicates that adults who were poor as children complete less schooling, earn less in the labor market, work fewer hours per year, and are more likely to report poor overall health (Duncan, Magnuson, & Votruba-Drzal, 2014: 102). Experimental and quasi-experimental studies suggest that an increase of $3,000 in household annual income predicts significant improvements in children’s educational achievement and attainment in poor, but not more affluent households (Duncan, et al., 2014). The $2,183 per child premium in after-tax-and-transfer income we find for households in the 10th quantile is a step in the right direction. It will take years, however, to assess whether this premium in 2010 in turn predicts better child outcomes in the future. But hopefully the premium will not evaporate when the 2009 EITC extensions expire in 2017.

Another significant market change spreading across the United States that affects the income of households in the bottom decile is the adoption of a much-improved minimum wage. What our analyses highlight, however, is that children predict a penalty as compared with low-earning childless households. Consequently, while raising the U.S. wage floor is a welcome change, it will not ensure that low-earning families with children will be better-off relative to households without children. Given the importance of children to our country’s future social and economic well-being, the state should continue to expand its commitment to families with children.
References


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Table 1  Weighted descriptive statistics by earnings quantile and year, partnered U.S. households of adults age 25 to 45 (2010US$)

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<td></td>
<td>(8,932)</td>
<td>(2,670)</td>
<td>(2,407)</td>
<td>(2,551)</td>
<td>(5,473)</td>
</tr>
<tr>
<td>After tax/transfer income&lt;sup&gt;a&lt;/sup&gt;</td>
<td>28,470</td>
<td>47,216</td>
<td>57,952</td>
<td>70,889</td>
<td>88,268</td>
</tr>
<tr>
<td></td>
<td>(12,177)</td>
<td>(7,125)</td>
<td>(6,922)</td>
<td>(16,028)</td>
<td>(7,713)</td>
</tr>
<tr>
<td>Husband university degree&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.08</td>
<td>.13</td>
<td>.19</td>
<td>.26</td>
<td>.37</td>
</tr>
<tr>
<td>Wife university degree&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.06</td>
<td>.09</td>
<td>.13</td>
<td>.13</td>
<td>.26</td>
</tr>
<tr>
<td>Husband average weekly work hours&lt;sup&gt;a&lt;/sup&gt;</td>
<td>28.2</td>
<td>38.6</td>
<td>40.1</td>
<td>41.5</td>
<td>42.3</td>
</tr>
<tr>
<td></td>
<td>(21.6)</td>
<td>(15.5)</td>
<td>(14.1)</td>
<td>(14.6)</td>
<td>(14.3)</td>
</tr>
<tr>
<td>Wife employed&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.25</td>
<td>.39</td>
<td>.39</td>
<td>.52</td>
<td>.55</td>
</tr>
<tr>
<td>Wife average weekly work hours (if not 0)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>31.4</td>
<td>30.8</td>
<td>31.0</td>
<td>33.0</td>
<td>35.5</td>
</tr>
<tr>
<td></td>
<td>(14.5)</td>
<td>(12.3)</td>
<td>(12.3)</td>
<td>(11.6)</td>
<td>(11.2)</td>
</tr>
<tr>
<td><strong>1994</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>.32</td>
<td>.52</td>
<td>.70</td>
<td>.83</td>
<td>.89</td>
</tr>
<tr>
<td>Cohabitng</td>
<td>.02</td>
<td>.02</td>
<td>.02</td>
<td>.02</td>
<td>.02</td>
</tr>
<tr>
<td>No. of children&lt;sup&gt;a&lt;/sup&gt;</td>
<td>2.0</td>
<td>1.8</td>
<td>1.6</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>(1.4)</td>
<td>(1.2)</td>
<td>(1.1)</td>
<td>(1.1)</td>
<td>(1.1)</td>
</tr>
<tr>
<td></td>
<td>2010 Married</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Household labor</td>
<td>16,364</td>
<td>44,973</td>
<td>66,787</td>
<td>92,050</td>
<td>132,358</td>
</tr>
<tr>
<td>market earnings&lt;sup&gt;a&lt;/sup&gt;</td>
<td>(6,364)</td>
<td>(3,495)</td>
<td>(3,280)</td>
<td>(3,839)</td>
<td>(9,937)</td>
</tr>
<tr>
<td>After tax/transfer income&lt;sup&gt;a&lt;/sup&gt;</td>
<td>31,180</td>
<td>48,107</td>
<td>62,515</td>
<td>80,850</td>
<td>105,944</td>
</tr>
<tr>
<td></td>
<td>(12,000)</td>
<td>(9,403)</td>
<td>(8,896)</td>
<td>(9,276)</td>
<td>(11,660)</td>
</tr>
<tr>
<td>Husband university degree&lt;sup&gt;+a&lt;/sup&gt;</td>
<td>.10</td>
<td>.19</td>
<td>.27</td>
<td>.38</td>
<td>.57</td>
</tr>
<tr>
<td>Wife university degree&lt;sup&gt;+a&lt;/sup&gt;</td>
<td>.11</td>
<td>.22</td>
<td>.31</td>
<td>.47</td>
<td>.60</td>
</tr>
<tr>
<td>Husband average weekly</td>
<td>38.6</td>
<td>42.3</td>
<td>42.8</td>
<td>43.9</td>
<td>44.5</td>
</tr>
</tbody>
</table>

<sup>a</sup> Standard errors are in parentheses.
<p>| | | | | | |</p>
<table>
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</tr>
</thead>
<tbody>
<tr>
<td>work hours(^a)</td>
<td>(9.5)</td>
<td>(8.8)</td>
<td>(8.8)</td>
<td>(9.2)</td>
<td>(9.1)</td>
</tr>
<tr>
<td>Wife employed(^a)</td>
<td>.36</td>
<td>.60</td>
<td>.74</td>
<td>.82</td>
<td>.81</td>
</tr>
<tr>
<td>Wife average weekly</td>
<td>32.1</td>
<td>34.8</td>
<td>36.5</td>
<td>37.3</td>
<td>37.9</td>
</tr>
<tr>
<td>work hours (if not 0)(^a)</td>
<td>(10.6)</td>
<td>(10.0)</td>
<td>(9.9)</td>
<td>(10.0)</td>
<td>(9.3)</td>
</tr>
</tbody>
</table>

a. Percentage of partnered households based on earnings distributions of all households with positive earnings; remaining descriptive statistics based on partnered household earnings distributions.
Table 2  Unconditional quantile regression estimates of effect of number of children on partnered U.S. households’ labor earnings and after-tax-and-transfers income (ATTI)

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>4,991</td>
<td>4,991</td>
<td>23,519</td>
<td>23,519</td>
<td>23,350</td>
<td>23,350</td>
</tr>
<tr>
<td>10th q</td>
<td>-0.04**</td>
<td>-0.01</td>
<td>-0.08***</td>
<td>0.00</td>
<td>-0.08***</td>
<td>0.07***</td>
</tr>
<tr>
<td></td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.00)</td>
</tr>
<tr>
<td>30th q</td>
<td>-0.03***</td>
<td>-0.01</td>
<td>-0.05***</td>
<td>-0.02***</td>
<td>-0.05***</td>
<td>0.03***</td>
</tr>
<tr>
<td></td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.00)</td>
<td>(.01)</td>
<td>(.00)</td>
</tr>
<tr>
<td>50th q</td>
<td>-0.03***</td>
<td>-0.00</td>
<td>-0.05***</td>
<td>-0.02***</td>
<td>-0.03***</td>
<td>0.02***</td>
</tr>
<tr>
<td></td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.00)</td>
<td>(.00)</td>
<td>(.00)</td>
</tr>
<tr>
<td>70th q</td>
<td>-0.03***</td>
<td>-0.01**</td>
<td>-0.04***</td>
<td>-0.02***</td>
<td>-0.02***</td>
<td>0.02***</td>
</tr>
<tr>
<td></td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.00)</td>
<td>(.00)</td>
<td>(.00)</td>
</tr>
<tr>
<td>90th q</td>
<td>-0.03***</td>
<td>-0.02**</td>
<td>-0.04***</td>
<td>-0.02***</td>
<td>-0.02***</td>
<td>-0.00</td>
</tr>
<tr>
<td></td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.00)</td>
</tr>
</tbody>
</table>

* p < 0.05  ** p<0.01  *** p<0.001

Head and opposite-sex partner aged 25 to 45. Controls include each partner’s age, age-squared, whether they have a university degree or more, interactions between age and university degree, and age-squared and university degree, log of the man’s usual weekly work hours, and whether the wife is employed.
Figure 1  Predicted dollar impact of number of children on labor market earnings versus after-tax-and-transfer income at selected quantiles U.S. partnered household distributions (2010US$ equivalent)

Source: Market and ATTI calculated using average quantile gross earnings and after-tax-and-transfer income from Table 1 and associated coefficients for number of children younger than 18 from Table 2.