

Child Support Enforcement and the Incidence of Single Motherhood*

Patricia K. Tong[†]

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Abstract

This paper examines how child support enforcement (CSE) reform created by the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 affects the incidence of single motherhood in the United States. Results demonstrate that the effect of CSE reform differs for women by educational attainment. CSE reform causes a 17.6 and 12 percent increase in the probability of being a single mother for women with less than a high school degree and female high school graduates, respectively. Rises in single motherhood come from an increase in non-marital births by women with less than a high school degree and increases in both non-marital births and marital dissolutions among female high school graduates. These results suggest that CSE has an impact on who decides to have children and the circumstances in which certain children are raised.

JEL Classification Codes: J12, J13, J18

Key Words: Child Support, Fertility, Marriage

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[†]Contact: Patricia K. Tong, University of California, San Diego, 9500 Gilman Drive, #0534, San Diego, CA 92093-0534, pktong@ucsd.edu, 1-858-752-1764.

1 Introduction

This study examines how child support enforcement (CSE) affects the incidence of single motherhood in the United States. I estimate the impact of CSE on subgroups of women by educational attainment to determine if certain segments of the female population are more or less likely to become single mothers. As a result, this paper provides implications on how recent CSE reform affects the types of households in which children are raised.

My study improves upon previous research by using variation in when states implement CSE reform to estimate the effect of CSE on the incidence of single motherhood. Studies investigating the effect of CSE on marriage use data on state level characteristics from the Office of Child Support Enforcement (OCSE) including child support collection rates, paternity establishment rates, and number of child support orders (Heim, 2003; Nixon, 1997). Garfinkel et al. (2003) use similar measures to determine that CSE decreases non-marital birth rates. While these measures provide valuable information on how well a state collects child support, using this data to estimate the impact of CSE on marriage and fertility may be subject to reverse causality if rates of fertility or marriage directly affect child support collection. For instance, states with a high fraction of never married mothers could have lower collection rates simply because these states have cases that require additional steps to collect child support. In particular, child support cases for never married custodial mothers require paternity establishment. In this paper, I explicitly demonstrate that using state level variation in the implementation of CSE to identify the impact of CSE on the likelihood of being a single mother is not subject to reverse causality.

Using March Current Population Survey (CPS) data for years 1992-2004, I estimate how CSE reform created by the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996 affects the probability of being a single mother for women age 20-45. I study the effects of these reforms on the incidence of single motherhood separately

for women with less than a high school degree, high school graduates, and women with some college education or more. A priori, it is unclear how CSE reform will affect the likelihood of being a single mother. If CSE increases the likelihood that fathers will have to provide financial support to their current or potential children, then improvements in CSE may prevent married fathers from filing for divorce or deter men from having out-of-wedlock children. In contrast, better CSE might provide women with a stronger safety net and cause them to be more likely to pursue a divorce or have non-marital births.

Results from this study demonstrate that CSE reform causes the incidence of single motherhood to increase for women with less than a high school degree and female high school graduates¹ and has no effect on women with some college education. Although previous research determines that pre-PRWORA CSE decreases the incidence of out-of-wedlock births (Huang, 2002; Garfinkel et al., 2003), I find that recent CSE reform increases the likelihood of being a never married single mother for women with 12 years of education or less and increases marital dissolutions of female high school graduates. These results show that CSE reform causes the likelihood of being raised in a single parent household to increase for children of low educated women, who are the most likely to be financially constrained.

The remainder of this paper will be organized as follows. Section 2 discusses previous literature, Section 3 gives background on CSE policy, Section 4 describes the data, Section 5 contains the empirical estimation and results, and Section 6 provides discussion.

2 Previous Literature

Previous literature provides conflicting results on the effect of CSE on divorce and non-marital birth rates. These studies generally use data prior to PRWORA and measure CSE using state level data on child support outcomes. Using state level child support outcomes

¹Female high school graduates include women with 12 years of education only and excludes women with some college attendance.

to proxy for CSE is problematic if marriage and fertility directly affect child support outcomes. Some studies provide evidence that improvements in CSE decrease the incidence of non-marital births (Huang, 2002; Garfinkel et al., 2003) and divorce (Nixon, 1997), suggesting that CSE decreases rates of single motherhood. Nixon (1997) finds a small negative effect from stronger CSE on the likelihood of currently being divorced conditional on being married five years prior and having at least one child under the age of 18. In contrast, Heim (2003) uses state level vital statistics data to determine that CSE does not have a statistically significant effect on divorce rates. Other studies find that CSE increases rates of single motherhood by decreasing remarriage rates of divorced women (Folk et al., 1992) and decreasing marriage among couples who have non-marital births (Carlson et al., 2005). In particular, Folk et al. (1992) determine that women who are more likely to receive child support payments and women who are more likely to receive large child support payments are less likely to remarry if they have not remarried within five years of a divorce. A study by Carlson et al. (2005) provides some evidence that CSE in the late 1990s deters couples who have non-marital births from marrying in the future.

My study improves upon previous research by using variation in when states implement CSE reform to estimate the effect of CSE on the incidence of single motherhood. By using variation in timing, I bypass problems of reverse causality. In addition, I contribute to the existing literature by estimating the effects of CSE separately for women by education, which allows me to determine whether subgroups of women are affected differently, and if so, what the implications may be for children growing up in these households.

3 Child Support Enforcement Policy

In 1974, federal and state CSE offices were created to collect child support on behalf of custodial parents on welfare. To receive welfare benefits, participants were required to comply

with CSE agencies. Although the federal Office of Child Support Enforcement (CSE) states their goal as securing the “well-being of children by assuring that assistance in obtaining support...is available to children,” federal intervention in child support collection originated as a way to make sure welfare recipients were not funded twice through welfare and child support. Child support collection functioned as a revenue generating process in which state governments retained child support collected on behalf of welfare participants. As a result, non-custodial fathers faced disincentives to pay child support to mothers on welfare because their payments went straight to the government. The 1984 CSE amendments extended services of CSE agencies to non-welfare participants. In recognition of the disincentives associated with child support payments in welfare cases, the Deficit Reduction Act of 1984 amended state laws to allow the first \$50 of monthly child support payments collected on behalf of welfare participants to go directly to the custodial parent. This \$50 is commonly referred to as the child support pass through.

The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996 created extensive reform in CSE by requiring states to improve paternity establishment rates, impose better technology to locate parents, streamline the imposition of penalties, and create new penalties. States were also granted the option to maintain or abolish their child support pass through policies. Non-compliance with PRWORA reform did not result in direct fines; however, states had financial incentives to comply since federal funding for state welfare programs is directly tied with state level child support performance.

I use Office of Child Support Enforcement State Plans to obtain data on when PRWORA CSE reforms were instituted in each state. While the provisions of PRWORA apply to each state, the dates in which these laws passed vary across states. To measure CSE reform, I construct a variable called Fraction of Laws Passed which equals the number of laws passed in a state divided by 11, the total number of possible laws.² Figure 1 depicts the number

²Although I have data on 16 CSE laws, these measures are calculated using a subset of 11 laws. Table 10

of states that have implemented each child support law by year, demonstrating that it is not possible to include variables for each individual law in the empirical analysis because of substantial overlap in when laws are passed within a state.

I demonstrate that Fraction of Laws Passed is not subject to reverse causality by collapsing pre-reform data for years 1994-1996 to the state level and using a multinomial logistic estimation to test whether pre-reform state level characteristics affect when states implement reform. Figure 1 depicts three main waves in which states institute reforms occurring in 1997, 1998, and 1999. I categorize states as 1997 movers, 1998 movers, and 1999 movers based on the year when a state passes the most laws. There are 8 1997 movers, 33 1998 movers, and 9 1999 movers. Figure 2 shows the average fraction of laws passed by mover status and year and illustrates that states generally pass a majority of laws, over 80%, when they move. Therefore, the main source of variation in Fraction of Laws Passed comes from when reforms are implemented, particularly when the majority of laws are passed. Results in Table 9 reveal that states with a higher fraction of women and lower fraction of Republicans in the state legislature are more likely to be a 1997 mover relative to a 1999 mover. In addition, states with a higher fraction of women in the state legislature are more likely to be a 1998 mover relative to a 1999 mover. Having a higher fraction of women in a state legislature could cause states to implement reform sooner because women might be more sympathetic to the single mother population as possible mothers themselves. In general, Democrats are more likely to support increases in expenditures on social welfare programs than Republicans, which explains why states with a higher fraction of Democrats in the state legislature may be quicker to implement new reforms. Pre-reform state level child support outcomes, as measured by the fraction of child support cases with collections, does not significantly affect when states pass CSE laws. Furthermore, pre-reform state level female demographic

contains detailed descriptions of these laws. These 11 laws are policies in which the majority, if not all, are passed when a state moves as depicted in Figure 2. The remaining 5 laws are passed sporadically across and within each state. Including these additional 5 laws in the estimation yields similar, but less precise results.

variables have a jointly insignificant effect on state mover status. Thus, the implementation of laws is not found to be significantly correlated with pre-reform child support outcomes or the composition of women, and there is no evidence suggesting that the variation in Fraction of Laws Passed comes from changes in fertility, marriage, or child support trends.

4 Data

I use annual March CPS data for years 1992-2004. The sample consists of women age 20-45. Because this study examines the effects of child support reform separately by years of education, I exclude teenagers from the sample because these women are unlikely to have had the opportunity to graduate high school or attend college. A woman is a single mother if she is currently unmarried and has a child young enough for the mother to be affected by child support reform. As discussed in Section 3, states generally began enacting child support reform in 1997. Women whose youngest child is aged 14 or older in 1992 would not be affected by CSE reform because their children will be older than 18 in 1997, causing them to be ineligible for child support. By a similar reasoning, a woman's youngest child must be under age 15 in 1993, 16 in 1994, 17 in 1995, and 18 in 1996 to have an age eligible child, where an age eligible child refers to having a child young enough for the mother to be affected by child support reform. Based on this definition, roughly 14% of women in the sample are single mothers, and the frequency of single motherhood decreases with years of education as reported in Table 1. The percentage of women with less than a high school degree who are single mothers is roughly 30%, over 2.5 times the percentage for women with some college education. Comparing demographic characteristics by educational attainment also demonstrates that lower educated women are more likely to be non-white, live in a city, and have an age eligible child.

Table 2 reports the fraction of women who are single mothers by pre (1992-1996) and

post (2000-2004) reform time periods. The post reform percentage of women who are single mothers is larger than the pre reform average. This appears to be a result of a rise in the fraction of never married single mothers. As expected, women with less than a high school degree are more likely to be never married single mothers than high educated women both pre and post reform. Divorce rates are roughly equal for women with less than a high school degree and female high school graduates after CSE reform occurs, but are still much higher than the divorce rate for women with some college education. In the next section, I use empirical methods to determine how much of these changes in marriage and fertility are attributed to CSE reform.

5 Empirical Estimation

To examine the effect of CSE on the incidence of single motherhood, I estimate the following probit model:

$$\Pr(\text{Single Mother})_{ist} = \Phi(XB) \quad (5.1)$$

where

$$XB = A_s + B_t + A_s t + \beta \text{Fraction of Laws Passed}_{st} + \Gamma X_{ist} + \Pi S_{st} + \epsilon_{ist} \quad (5.2)$$

X_{ist} is a vector of individual level time-varying characteristics including age, race, and city residence status for individual i in state s in year t . S_{st} is a vector of state level time-varying characteristics consisting of welfare reform measures, the maximum earned income tax credit for a mother with two children, the unemployment rate, average female hourly wage, and average male hourly wage. I include state fixed effects, A_s , to account for time-invariant state level characteristics and year fixed effects, B_t , to account for time-varying characteristics

shared across states. A_{st} are state fixed trends which account for state specific variables trending linearly during this time period. The dependent variable of interest is the Fraction of Laws Passed and its coefficient β measures the effect of instituting all of the CSE laws.

5.1 Results

Results in Table 3 demonstrate that Fraction of Laws Passed has a statistically significant and positive effect on the incidence of single motherhood for women with less than a high school degree and female high school graduates. In addition, CSE has no significant effect on rates of single motherhood for women with at least some college education. Passing all reform measures causes the likelihood of being a single mother to increase by 4.9 percentage points for women with less than a high school degree, which is a 17.6 percent increase from pre-PRWORA levels. For female high school graduates, instituting CSE reform causes the likelihood of being a single mother to increase by 2.1 percentage points, a 12 percent increase from pre-reform levels.

To better understand the magnitude of the effect of CSE reform on the incidence of single motherhood, I compare predicted probabilities of being a single mother to observed probabilities in Table 4. I calculate the predicted probability of being a single mother in the absence of CSE reform by setting Fraction of Laws Passed equal to zero. Without CSE reform, the likelihood of being a single mother is 3.6 percentage points lower than the observed value for women with less than a high school degree post reform. In the absence of CSE reform, the probability that a female high school graduate is a single mother is 1.3 percentage points lower than the observed probability post reform.

To determine the mechanism by which CSE affects single motherhood, I examine how CSE impacts fertility and marital status of low educated women. Unreported results show that CSE does not have a significant effect on the likelihood of having an age eligible child

for women with less than 12 years of education or women with 12 years of education.³ Because CSE has does not significantly affect fertility, I use a multinomial logistic model to estimate the impact of CSE on the likelihood of being married, divorced, and never married conditional on having an age eligible child.

The coefficient estimates reported in Table 5 are relative risk ratios with being married as the base outcome. The coefficient estimates for Fraction of Laws Passed are all greater than 1, meaning that CSE reform increases the relative risks of being divorced and never married relative to being married conditional on having an age eligible child. For women with less than a high school degree, CSE causes a statistically significant increase in the likelihood of being never married relative to being married. Specifically, the relative risk of being never married relative to being married increases by 1.43. To interpret the magnitude of this increase in never married single motherhood, I estimate the predicted probabilities of being married, divorced, and never married conditional on having children in Table 6. In the absence of CSE reform, the percentage of mothers with less than 12 years of education who are never married would be 3.7 percentage points lower or 14% less than the observed average.

Results show that CSE reform increases the relative risk of being divorced relative to being married by 1.19 for mothers with 12 years of education. Without CSE, the percentage of mothers with 12 years of education who are divorced would be 2.2 percentage points lower, or 14% lower than the observed percentage. These results demonstrate that CSE reform increases out-of-wedlock births for women with the least amount of education and promotes divorce among women with 12 years of education.

To further investigate whether CSE promotes non-marital births, I estimate the effect of CSE on the marital status of women who have children aged 3 or under.⁴ By estimating the

³Fraction of Laws Passed also has no significant effect on fertility of women with some college education.

⁴Fraction of Laws Passed does not affect the likelihood of having a child aged 3 or under for subgroups of women by years of education.

effect of CSE on marital status conditional on having young children, I isolate the effect of child support reform on marriage decisions of women with recent births. Results in Table 7 show that CSE does not significantly affect the marital status of mothers of young children who have less than 12 years of education. This result does not necessarily contradict previous estimates because the sample size of mothers with young children who also have less than 12 years of education may be too small to obtain precise estimates. In fact, comparing predicted probabilities with observed values in Table 8 reveals that the incidence of being never married and divorced conditional on having a child aged 0 to 3 would be lower without CSE reform, which supports the previous analysis on marital history.

Results also demonstrate that women with 12 years of education are more likely to be never married relative to being married conditional on having a young child. This means that CSE reform also increases out-of-wedlock births for women with 12 years of education. The relative risk of being a never married single mother is 1.53 times more likely than being a married mother for mothers with young children and 12 years of education. Without CSE reform, the percentage of female high school graduates with children aged 0 to 3 who are never married would be 4.6 percentage points or almost 20% lower than the observed percentage. Since CPS data is not a longitudinal dataset, I am unable to track women over time to determine who eventually marries and who remains unmarried after a non-marital birth. Even though I cannot make inferences on the flow of marriage rates, I determine that CSE reform increases the stock of never married single mothers.

5.2 Robustness Checks

To make sure that women do not select into different educational attainment groups, I estimate a multinomial logistic equation to determine whether CSE reform affects the likelihood of having less than 12 years of education, 12 years of education, or more than 12 years of

education. Fraction of Laws Passed does not have a significant effect on educational attainment of women, demonstrating that CSE reform does not cause women to select into different education groups.

To show that results discussed in Section 5.1 are not caused by secular changes in marriage or fertility trends, I estimate the effect of CSE reform on marriage and fertility for subgroups of women who are predicted to be unaffected by changes in child support policy. First, I estimate the effect of CSE reform on the marital status of childless women. Presumably, child support should not affect the likelihood of marriage or divorce for women who are ineligible to collect child support. Second, I estimate the effect of CSE reform on fertility of married women. Again, since married women are ineligible to collect child support, changes in CSE should not affect the decision to have a child for this group. Unreported results demonstrate that CSE does not affect marriage or fertility of women in these respective samples. Additional estimations using subgroups of women by educational attainment also yield statistically insignificant results. Therefore, I confirm that the main empirical results are not caused by overall changes in fertility or marriage trends.

6 Discussion

This study demonstrates that recent CSE reform increases the incidence of single motherhood for women with a high school degree or less. The magnitude of this effect is quite large, with CSE causing a 17.6% and 12% increase in the likelihood of being a single mother for women with less than 12 years of education and women with 12 years of education, respectively. Results indicate that the increase in the probability of single motherhood for women with less than a high school degree stems from a rise in never married single motherhood. The increase in the probability of single motherhood for female high school graduates comes from a promotion of marital separations among couples with age eligible children and an increase

in non-marital births.

These results imply that growth in the never married single mother population is coming from low educated women, who are the least likely to have adequate resources to support their families. In addition, CSE reform increases the likelihood of divorce for female high school graduates with age eligible children. Although the impact on child well-being depends on each family's circumstance before and after a divorce, studies typically find that single mother households are worse off financially after a marital dissolution (Bartfeld, 2000; Weiss and Willis, 1993; Weiss, 1984). Consequently, CSE reform could adversely affect children of low educated women by promoting the likelihood that they are raised and borne into single parent families. Furthermore, children of low educated women are increasingly likely to be raised in single parent households, implying that disparities in well-being between children with lower and higher educated mothers might continue to grow. Even though CSE reform may promote the likelihood of receiving child support, this study demonstrates that CSE can also promote growth in the single mother population.

7 References

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Number of States With Laws Passed By Year

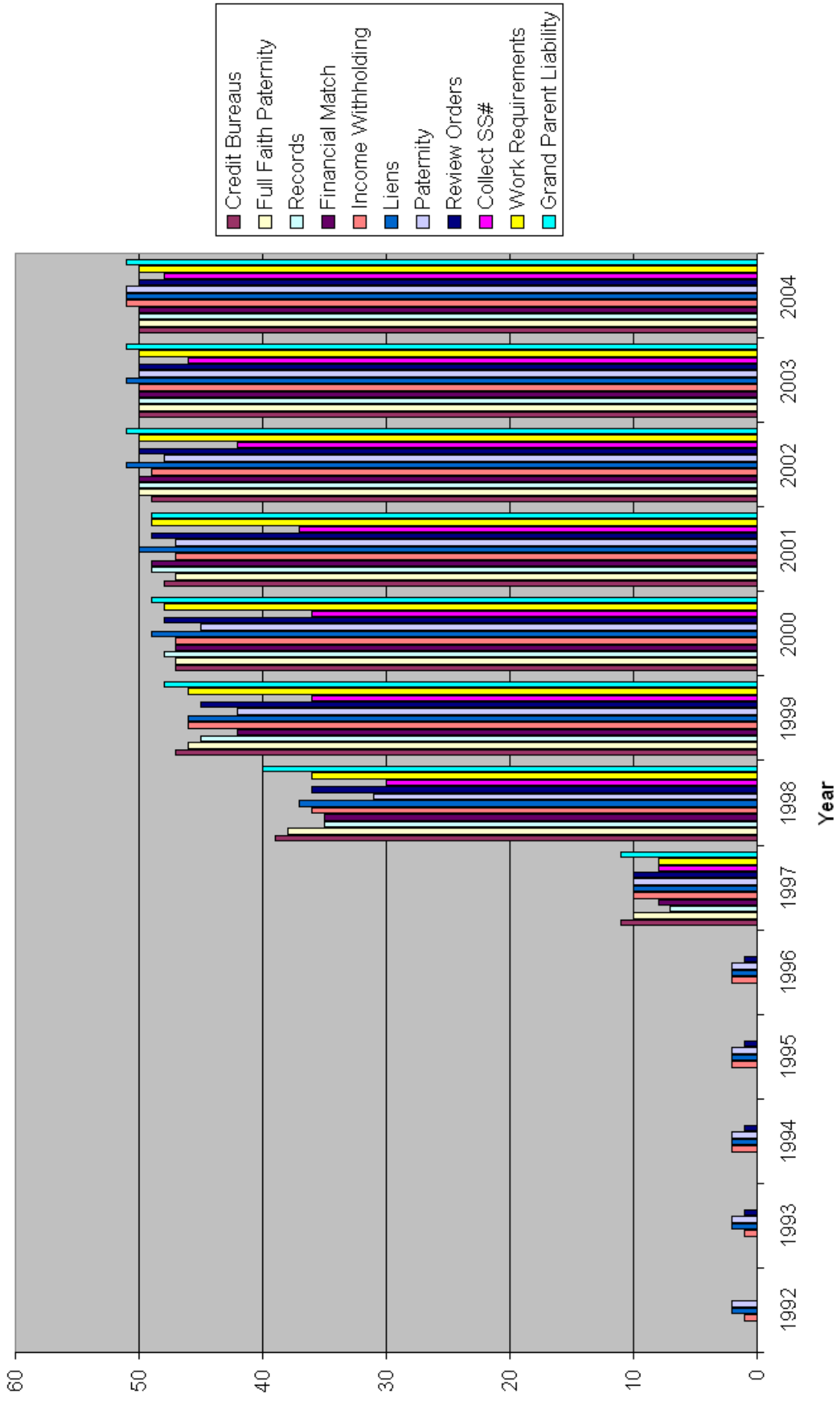


Figure 1: Number of states with laws passed by year

Average Fraction of Laws Passed

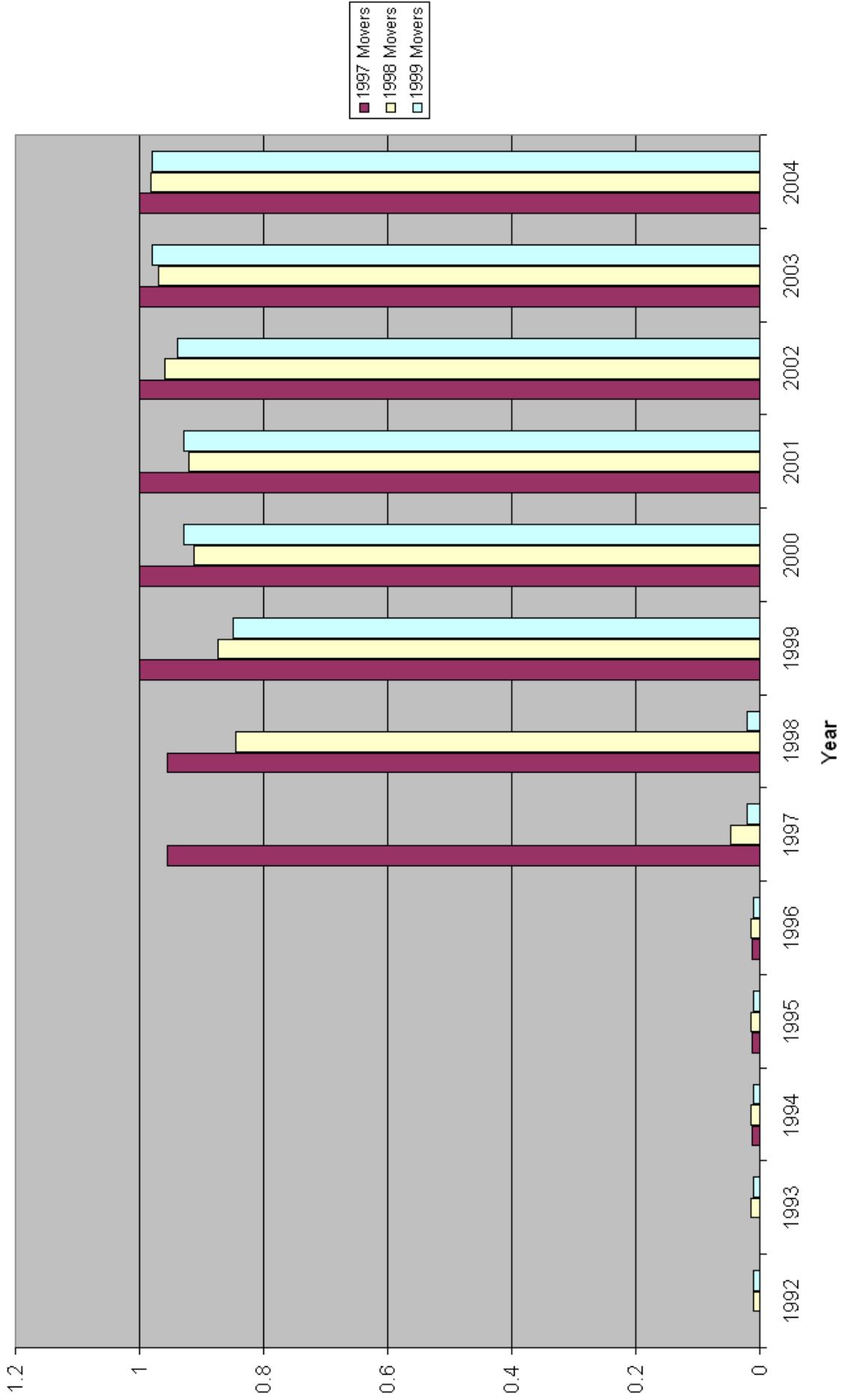


Figure 2: Average fraction of laws passed by mover group and year

8 Tables

Table 1: Summary statistics By Years of Education

Variable	All Women		<12 years		=12 years		>12 years	
	Mean	(Std. Dev.)	Mean	(Std. Dev.)	Mean	(Std. Dev.)	Mean	(Std. Dev.)
Age	33.158	(7.361)	32.469	(7.57)	33.232	(7.405)	32.765	(7.390)
Live in city	0.238	(0.426)	0.317	(0.465)	0.224	(0.417)	0.25	(0.433)
White	0.721	(0.448)	0.525	(0.499)	0.717	(0.45)	0.773	(0.419)
Hispanic	0.117	(0.321)	0.23	(0.421)	0.087	(0.282)	0.062	(0.241)
Black	0.117	(0.321)	0.21	(0.407)	0.167	(0.373)	0.122	(0.328)
Less than H.S.	0.086	(0.281)	1	(0)	0	(0)	0	(0)
High school graduate	0.337	(0.473)	0	(0)	1	(0)	0	(0)
Some college or more	0.577	(0.494)	0	(0)	0	(0)	1	(0)
Any Children	0.6	(0.49)	0.66	(0.474)	0.629	(0.483)	0.52	(0.5)
Married	0.586	(0.493)	0.484	(0.5)	0.586	(0.493)	0.567	(0.496)
Never married	0.275	(0.447)	0.315	(0.465)	0.251	(0.434)	0.315	(0.465)
Divorced or Separated	0.139	(0.346)	0.201	(0.401)	0.163	(0.369)	0.118	(0.323)
Single Mother	0.155	(0.362)	0.293	(0.455)	0.189	(0.391)	0.112	(0.316)
Observations	337270		29166		113664		194440	

Notes: Summary statistics calculated using March Current Population Survey data. Means are weighted by person weights.

Table 2: Pre Post Means by Years of Education

	1992-1996		2000-2004	
All				
Single Mother	0.144	(0.351)	0.158	(0.364)
Single Mother, Never Married	0.057	(0.233)	0.075	(0.264)
Single Mother, Divorced	0.087	(0.281)	0.082	(0.275)
Observations	130686		142840	
< 12 years				
Single Mother	0.278	(0.448)	0.293	(0.455)
Single Mother, Never Married	0.141	(0.348)	0.175	(0.38)
Single Mother, Divorced	0.137	(0.344)	0.118	(0.323)
Observations	13426		10567	
= 12 years				
Single Mother	0.171	(0.376)	0.206	(0.405)
Single Mother, Never Married	0.073	(0.259)	0.105	(0.307)
Single Mother, Divorced	0.098	(0.297)	0.101	(0.302)
Observations	46555		45448	
> 12 years				
Single Mother	0.103	(0.304)	0.116	(0.321)
Single Mother, Never Married	0.033	(0.177)	0.048	(0.213)
Single Mother, Divorced	0.07	(0.256)	0.069	(0.253)
Observations	70705		86825	

Notes: Summary statistics calculated using March Current Population Survey data. Means are weighted by person weights.

Table 3: Effect of Child Support Enforcement on Pr(Single Mother)

Variable	All	<12 years	=12 years	>12 years
Fraction of Laws Passed	0.0091* (0.0040)	0.0490* (0.0227)	0.0205** (0.0073)	-0.0013 (0.0044)
TANF Implemented (d)	-0.0015 (0.0046)	-0.0095 (0.0256)	-0.0050 (0.0095)	0.0015 (0.0042)
LN(Welfare benefit)	-0.0144 (0.0235)	-0.1102 (0.1119)	-0.0164 (0.0314)	0.0053 (0.0204)
TANF time limit exists (d)	-0.0026 (0.0033)	-0.0102 (0.0162)	-0.0049 (0.0063)	-0.0013 (0.0036)
Child Support Pass Through (d)	-0.0046 (0.0038)	-0.0130 (0.0234)	-0.0076 (0.0073)	-0.0023 (0.0044)
Maximum EITC (in 100s)	0.0004 (0.0010)	0.0043 (0.0028)	-0.0015 (0.0024)	0.0005 (0.0009)
State Unemployment Rate	0.0042** (0.0015)	-0.0045 (0.0057)	0.0069** (0.0026)	0.0035 (0.0021)
Avg Female Wage (in 100s)	-0.0036 (0.0025)	0.0999** (0.0273)	-0.0039 (0.0073)	-0.0116* (0.0053)
Avg Male Wage (in 100s)	-0.0322 (0.0184)	-0.0498 (0.0823)	-0.0173 (0.0350)	-0.0431** (0.0164)
Live in a central city (d)	0.0262** (0.0049)	0.0571** (0.0149)	0.0331** (0.0057)	0.0117** (0.0043)
Age	0.0317** (0.0008)	0.0437** (0.0039)	0.0323** (0.0019)	0.0271** (0.0012)
Age Squared	-0.0005** (0.0000)	-0.0008** (0.0001)	-0.0006** (0.0000)	-0.0004** (0.0000)
Hispanic (d)	0.0642** (0.0146)	0.0756** (0.0256)	0.0781** (0.0164)	0.0770** (0.0131)
Black (d)	0.2248** (0.0055)	0.2923** (0.0130)	0.2611** (0.0073)	0.2124** (0.0072)
Other Race (d)	0.0224 (0.0143)	0.0158 (0.0251)	0.0291 (0.0170)	0.0200 (0.0151)
Log Likelihood	-132282	-15950.78	-51221.03	-65649.06
Pseudo R-squared	0.089	0.087	0.067	0.055
N	337270	29166	113664	194440

Notes: Estimated using a logistic regression. Coefficient estimates reported as marginal effects. State clustered robust standard errors reported in parentheses. * significant at the 10% level, ** significant at the 5% level, and *** significant at the 1% level. (d) denotes a dummy variable. TANF stands for Temporary Assistance for Needy Families and EITC stands for Earned Income Tax Credit.

Table 4: Predicted Probabilities of Being a Single Mother

	1992-1996		2000-2004	
All				
Single Mother, Observed	0.144	(0.351)	0.158	(0.364)
Single Mother, Predicted	0.141	(0.106)	0.164	(0.113)
Single Mother, Without CSE	0.141	(0.106)	0.156	(0.104)
Observations	130686		142840	
< 12 years				
Single Mother, Observed	0.278	(0.448)	0.293	(0.455)
Single Mother, Predicted	0.273	(0.147)	0.30	(0.158)
Single Mother, Without CSE	0.273	(0.147)	0.257	(0.15)
Observations	13426		10567	
= 12 years				
Single Mother, Observed	0.171	(0.376)	0.206	(0.405)
Single Mother, Predicted	0.167	(0.102)	0.213	(0.116)
Single Mother, Without CSE	0.166	(0.102)	0.193	(0.11)
Observations	46555		45448	
> 12 years				
Single Mother, Observed	0.103	(0.304)	0.116	(0.321)
Single Mother, Predicted	0.101	(0.069)	0.123	(0.075)
Single Mother, Without CSE	0.102	(0.069)	0.124	(0.076)
Observations	70705		86825	

Notes: Predicted probabilities calculated using coefficient estimates from the logistic regression in Table 3. Predicted probabilities without CSE calculated setting Fraction of Laws Passed equal to zero. Means are weighted by person weights.

Table 5: Multinomial Logistic results on Marital Status Conditional on Having an Age Eligible Child

Variable	<12 years		=12 years	
	Divorced	Never Married	Divorced	Never Married
Fraction of Laws Passed	1.2583 (0.1847)	1.4292* (0.2321)	1.1897* (0.0881)	1.1390 (0.1362)
TANF Implemented	0.9482 (0.1549)	0.9111 (0.1394)	0.9006 (0.0805)	1.1170 (0.1316)
LN(Welfare benefit)	0.9968 (0.5249)	0.3014 (0.2609)	0.6466 (0.2174)	1.0462 (0.3397)
TANF time limit exists	0.8959 (0.1245)	0.9178 (0.0875)	0.8986 (0.0491)	1.0311 (0.0818)
Child Support Pass Through	0.8363 (0.1265)	1.1124 (0.1517)	0.8449* (0.0606)	1.0999 (0.0995)
Maximum EITC (in 100s)	1.0635* (0.0290)	1.0036 (0.0216)	0.9863 (0.0170)	0.9879 (0.0172)
State Unemployment Rate	0.9927 (0.0502)	1.0133 (0.0506)	1.0617 (0.0342)	1.0695 (0.0414)
Avg Female Wage (in 100s)	2.0788** (0.5128)	2.2642** (0.2544)	1.0397 (0.0742)	0.6809 (0.1803)
Avg Male Wage (in 100s)	0.7218 (0.3627)	1.5119 (1.0291)	1.0080 (0.2569)	0.7067 (0.3184)
Live in a central city	1.2770** (0.0924)	1.7961** (0.2141)	1.3703** (0.0542)	1.6404** (0.0873)
Age	1.1683** (0.0467)	0.7674** (0.0301)	1.0774** (0.0227)	0.6541** (0.0190)
Age Squared	0.9979** (0.0006)	1.0024** (0.0006)	0.9990** (0.0003)	1.0044** (0.0005)
Hispanic	0.9226 (0.1467)	1.6014** (0.2198)	1.2420* (0.1250)	2.2055** (0.2484)
Black	2.8223** (0.2405)	15.9804** (2.4319)	2.8001** (0.1562)	15.5669** (0.8640)
Other Race	0.7299* (0.1131)	1.6948** (0.3196)	0.9232 (0.1084)	2.5304** (0.4130)
Constant	0.0061 (0.0220)	9.03e+04 (5.46e+05)	0.7993 (1.7868)	359.3459* (842.9741)
Log Likelihood	-16121.91		-50733.81	
Pseudo R-squared	0.160		0.143	
N	19706		74062	

Notes: Estimated with being married as the base outcome. Coefficient estimates reported as relative risk ratios. State clustered robust standard errors reported in parentheses. * significant at the 10% level, ** significant at the 5% level, and *** significant at the 1% level. (d) denotes a dummy variable. TANF stands for Temporary Assistance for Needy Families and EITC stands for Earned Income Tax Credit.

Table 6: Predicted Probabilities of Being Married, Divorce, and Never Married Conditional on Having an Age Eligible Child

	Type	1992-1996		2000-2004	
< 12 years					
Married	Observed	0.574	(0.495)	0.549	(0.498)
Married	Predicted	0.579	(0.209)	0.556	(0.223)
Married	Without CSE	0.579	(0.209)	0.610	(0.224)
Divorced	Observed	0.210	(0.407)	0.181	(0.385)
Divorced	Predicted	0.206	(0.082)	0.175	(0.076)
Divorced	Without CSE	0.206	(0.082)	0.158	(0.069)
Never Married	Observed	0.217	(0.412)	0.270	(0.444)
Never Married	Predicted	0.216	(0.223)	0.269	(0.250)
Never Married	Without CSE	0.215	(0.222)	0.233	(0.240)
Observations		8830		7267	
= 12 years					
Married	Observed	0.720	(0.450)	0.676	(0.468)
Married	Predicted	0.725	(0.171)	0.679	(0.194)
Married	Without CSE	0.725	(0.171)	0.705	(0.193)
Divorced	Observed	0.161	(0.368)	0.160	(0.366)
Divorced	Predicted	0.158	(0.050)	0.156	(0.048)
Divorced	Without CSE	0.158	(0.050)	0.138	(0.044)
Never Married	Observed	0.120	(0.324)	0.165	(0.371)
Never Married	Predicted	0.118	(0.167)	0.165	(0.202)
Never Married	Without CSE	0.118	(0.167)	0.157	(0.197)
Observations		28503		31198	

Notes: Predicted probabilities calculated using coefficient estimates from the multinomial logistic regression in Table 5. Predicted probabilities without CSE calculated setting Fraction of Laws Passed equal to zero. Means are weighted by person weights.

Table 7: Multinomial Logistic results on Marital Status Conditional on Having Children Aged 0-3

Variable	<12 years		=12 years	
	Divorced	Never Married	Divorced	Never Married
Fraction of Laws Passed	1.6549 (0.4459)	1.5868 (0.4052)	1.0807 (0.1891)	1.5255* (0.2929)
TANF Implemented	0.8771 (0.2180)	0.9452 (0.1971)	0.8099 (0.1295)	1.2518 (0.2052)
LN(Welfare benefit)	0.2862 (0.3722)	0.1376 (0.1694)	0.2963** (0.1395)	0.5083 (0.2344)
TANF time limit exists	0.9476 (0.2338)	0.9448 (0.2188)	0.9171 (0.1471)	1.0225 (0.2037)
Child Support Pass Through	0.9494 (0.2115)	1.1050 (0.3011)	0.9674 (0.1694)	1.2336 (0.1629)
Maximum EITC (in 100s)	1.1263* (0.0587)	1.0073 (0.0344)	1.0011 (0.0346)	0.9768 (0.0176)
State Unemployment Rate	0.8806 (0.0809)	1.0758 (0.0679)	1.0769 (0.0737)	1.0475 (0.0559)
Avg Female Wage (in 100s)	1.0793 (0.9614)	1.8049* (0.5065)	1.2036 (0.2795)	0.7118 (0.1954)
Avg Male Wage (in 100s)	1.2715 (1.6777)	1.6117 (1.6263)	1.2690 (1.0348)	0.6382 (0.3233)
Live in a central city	1.1354 (0.1080)	1.5965** (0.1924)	1.2230** (0.0916)	1.6141** (0.0999)
Age	1.0214 (0.0792)	0.6824** (0.0261)	0.8647** (0.0372)	0.4969** (0.0240)
Age Squared	1.0000 (0.0013)	1.0044** (0.0006)	1.0022** (0.0007)	1.0090** (0.0008)
Hispanic	0.9910 (0.2226)	1.3960* (0.1993)	1.3025 (0.1930)	1.8163** (0.2092)
Black	3.8369** (0.5909)	17.3462** (3.4729)	3.0831** (0.2687)	13.4522** (0.9836)
Other Race	0.7767 (0.2292)	1.8758** (0.4424)	1.1164 (0.2041)	2.7792** (0.4383)
Constant	121.4319 (1095.1069)	7.01e+07* (5.85e+08)	1588.9606** (4479.1943)	2.48e+06** (8.29e+06)
Log Likelihood	-5896.226		-15691.53	
Pseudo R-squared	0.182		0.170	
N	7509		24486	

Notes: Estimated with being married as the base outcome. Coefficient estimates reported as relative risk ratios. State clustered robust standard errors reported in parentheses. * significant at the 10% level, ** significant at the 5% level, and *** significant at the 1% level. (d) denotes a dummy variable. TANF stands for Temporary Assistance for Needy Families and EITC stands for Earned Income Tax Credit.

Table 8: Predicted Probabilities of Being Married, Divorce, and Never Married Conditional on Having a Child Aged 0-3

	Type	1992-1996		2000-2004	
< 12 years					
Married	Observed	0.560	(0.497)	0.512	(0.500)
Married	Predicted	0.564	(0.237)	0.518	(0.257)
Married	Without CSE	0.565	(0.236)	0.599	(0.267)
Divorced	Observed	0.165	(0.371)	0.106	(0.308)
Divorced	Predicted	0.163	(0.083)	0.102	(0.062)
Divorced	Without CSE	0.162	(0.082)	0.076	(0.048)
Never Married	Observed	0.276	(0.447)	0.382	(0.486)
Never Married	Predicted	0.274	(0.245)	0.380	(0.272)
Never Married	Without CSE	0.273	(0.244)	0.325	(0.271)
Observations		3717		2536	
= 12 years					
Married	Observed	0.726	(0.446)	0.673	(0.469)
Married	Predicted	0.733	(0.198)	0.678	(0.229)
Married	Without CSE	0.733	(0.198)	0.722	(0.214)
Divorced	Observed	0.108	(0.310)	0.090	(0.286)
Divorced	Predicted	0.104	(0.038)	0.086	(0.030)
Divorced	Without CSE	0.104	(0.038)	0.087	(0.031)
Never Married	Observed	0.167	(0.373)	0.237	(0.425)
Never Married	Predicted	0.163	(0.193)	0.237	(0.234)
Never Married	Without CSE	0.162	(0.193)	0.191	(0.214)
Observations		10639		9463	

Notes: Predicted probabilities calculated using coefficient estimates from the multinomial logistic regression in Table 7. Predicted probabilities without CSE calculated setting Fraction of Laws Passed equal to zero. Means are weighted by person weights.

Table 9: Effect of State Pre-Reform Characteristics on State Mover Status

Variables	1997 Mover	1998 Mover
(1) % Women in State Legislature	0.360*** (0.123)	0.164* (0.086)
(2) % Republicans in State Legislature	-0.073** (0.035)	-0.009 (0.021)
(3) % Child Support Cases With Collections	-13.105 (17.225)	8.510 (6.867)
(4) % Women With a H.S. Degree or Less	52.580* (27.719)	4.124 (16.034)
(5) % Women Non-White	19.033** (8.480)	9.123 (6.495)
(6) % Women Who Are Single Mothers	-109.275* (57.582)	-10.229 (24.216)
(7) State Unemployment Rate	1.012 (0.710)	0.812 (0.639)
(8) State Female Hourly Wage	0.701 (0.986)	-0.906* (0.534)
(9) State Male Hourly Wage	-1.510** (0.737)	0.053 (0.185)
Constant	-7.476 (11.154)	-0.538 (8.605)
Log Likelihood	-31.05577	
Pseudo R-squared	0.310	
N	50	
Joint Chi-Squared Statistic and P-Value for (1) and (2)	10.82, 0.029	
Joint Chi-Squared Statistic and P-Value for (4), (5), and (6)	7.32, 0.293	
Joint Chi-Squared Statistic and P-Value for (7), (8), and (9)	9.48, 0.148	

Notes: Estimated using a multinomial logistic regression with 1999 mover as the base outcome. Raw coefficients are reported. State clustered, robust standard errors reported in parentheses. * significant at the 10% level, ** significant at the 5% level, and *** significant at the 1% level. Data for 1994-1996 collapsed into state cells.

Table 10: Description of PRWORA Laws

Laws	Description	Act
Credit Bureaus	States must make periodic reports to consumer reporting agencies, which include the names and amounts owed by non-custodial parents with overdue payments.	PRWORA (Section 367)
Full Faith Paternity	States must acknowledge paternity establishments occurring in other states on full faith and credit.	PRWORA (Section 331)
Records	IV-D agencies must have laws that ensure that State and Federal child support agencies have access to any records used by the State for locating individuals for motor vehicle and law enforcement purposes.	PRWORA (Section 325 D)
Financial Match	States must pass laws that define how financial institutions will supply account information of non-custodial parents with child support arrears to IV-D agencies so that liens may be imposed. Matches must occur on a quarterly basis.	PRWORA (Section 372)
Income Withholding	Automatic deductions are made from wages or income to pay past-due child support.	PRWORA (Section 314)
Liens	Liens automatically arise against real and personal property (including bank accounts) for the amount of child support overdue by a non-custodial parent.	PRWORA (Section 368)
Paternity	This law expands availability of voluntary paternity acknowledgment services, allows voluntary paternity to become legal through administrative processes when paternity is uncontested, and makes the state birth record agency the repository for all paternity records.	PRWORA (Sections 331-333)
Review Orders	States must review child support orders 1) every 3 years, 2) if requested by either parent and there is a significant change in circumstances, or 3) if requested by the state agency.	PRWORA (Section 351)
Collection Social Security #s	States are required to collect social security numbers of any individuals who apply to get a driver's license.	PRWORA (Section 317)
Work Requirements	This law only applies to cases in which a child receives TANF. The purpose of this law is to ensure that non-custodial parents with child support arrears either work or have a plan for payment which includes appropriate work activities as verified by the State.	PRWORA (Section 313)
Grand Parent Liability	States must create procedures to make parents of a minor non-custodial parent with a child receiving AFDC/TANF liable for paying child support.	PRWORA (Section 373)
*Title IV-D cases are cases in which the child support order is legally established through a government child support enforcement agency. Non Title IV-D cases are cases in which the child support order is established through a private lawyer or non Title IV-D agencies.		