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UNDERSTANDING CHILD SUPPORT TRENDS: ECONOMIC, DEMOGRAPHIC, AND POLITICAL CONTRIBUTIONS

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Understanding Child Support Trends: Economic, Demographic, and Political Contributions Anne Case, I-Fen Lin, Sara McLanahan NBER Working Paper No. 8056 December 2000 JEL No. J1, H7

ABSTRACT

We use data from the Panel Study of Income Dynamics (PSID) to examine trends in child support payments over the past thirty years and to assess five different explanations for these trends: inflation, the shift to unilateral divorce, changes in marital status composition, changes in men's and women's earnings, and ineffective child support laws. We find that during the 1970s and early 1980s, three factors – high inflation, increase in non-marital childbearing, and shifts to unilateral divorce – exerted downward pressure on child support payments. Throughout this time period, child support policies were weak, and average real payments declined sharply. Our findings indicate that two child support policies – legislative guidelines for awards and universal wage withholding – are important for insuring child support payments. Finally, our analyses suggest that further gains in child support payments will rest with our ability to collect child support for children born to unwed parents. These children are the fastest growing group of children in the US, and they are the least likely to receive child support. To date, child support policies have been ineffective in assuring child support for never married mothers.

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Introduction

When parents live with their children, they automatically share their income with their child. When parents live apart from their children, income sharing is less certain, and non-resident parents often fail to provide for their child. *Court-ordered Child Support* is the mechanism through which society attempts to insure that non-resident parents share income with their children. The need for child support has increased dramatically during the past four decades. In the 1950s, most children lived with both their biological parents from birth to adulthood. Today over half of all children are expected to live apart from at least one biological parent, usually the father, before they research age 18 (Garfinkel, McLanahan, Meyer and Seltzer, 1998). A substantial number of children will never live with their fathers. Not only has the incidence of parent-absence increased, the causes have changed as well. In the 1950s, death was the major cause of parental loss; today divorce and non-marital childbearing are the major culprits. Thus Child Support has replaced Survivors Insurance as our chief policy instrument for protecting children against the loss of a parent's income.

In response to growing concern about changes in family structure, Congress began passing laws designed to increase the amount of child support paid to children with a non-resident parent. In 1975, Congress established the federal Office of Child Support Enforcement and created incentives for states to establish similar offices. In 1984, it passed a series of amendments requiring states to withhold child support obligations, in cases of delinquency, and to establish legislative guidelines for setting award levels. In 1988, policy makers went even further by making income-withholding automatic and by making guidelines presumptive. States were also required to establish paternity for all children born outside of marriage. Most recently, the Personal Responsibility and Work Opportunity Act (PRWORA) calls for additional child support enforcement mechanisms and requires states to increase their paternity establishment rates (Garfinkel, McLanahan and Meyer, 1998).

Despite this new legislation, the proportion of eligible children who receive a child support payment has not changed very much since the late 1970s. According to Sorensen and Halpern (1999), 30 percent of children received some child support income in 1976 as compared to 31 percent in 1997. To account for the apparent lack of progress, analysts have proposed several explanations, including high inflation, increases in women's economic independence, increases in non-marital childbearing, changes in divorce law, and ineffective policies. Each of these explanations seems plausible and each has some empirical evidence to back up its claim. Nevertheless, after twenty-five years of child support reform and after numerous empirical assessments, we still lack a clear understanding of the relative importance of these economic, demographic and political factors in accounting for changes in child support receipts.

In this study, we use data from the Panel Study of Income Dynamics (PSID) to examine trends in child support payments over the past thirty years and to assess five different explanations for these trends. No other study has examined payments over such a long period of time and no other study has examined all five explanations together. The next section of the paper reviews various arguments for why child support payments have been slow to improve. The third section describes the data and variables we use. The fourth section examines the effects of inflation, demography, earnings, and policies on child support payments. And the fifth section summarizes our results and draws conclusions.

Trends and Explanations

The most complete information on child support transfers comes from the CPS-Child Support

Supplement (CSS), which was introduced in 1979 and which has been repeated every other year since 1982. The supplement asks eligible mothers whether they have a child support award, how much they are owed, and how much they actually receive. Researchers have used these data to examine trends in the different components of child support payments – award rates, award levels, and payment rates – since 1978 (Robins, 1992, Beller and Graham 1993, Hanson et al. 1996).

According to this research, award rates and payments for new cases actually declined between 1978 and 1989 (Hanson et al 1996). The greatest declines in award rates occurred between 1981 and 1983 while the greatest declines in payments occurred between 1978 and 1981. Freeman and Waldfogel (1998) report a similar pattern for unmarried women, using a slightly longer time period (1978 to 1993), and Sorensen and Halpern (1999) report similar results for the proportion of children with *any* child support receipt, using data from the March CPS, 1976 to 1997.

Most of these studies also examine the effects of marital status changes on child support receipts. Not surprisingly, they show that never married mothers are less likely to have an award and less likely to receive child support than ever-married mothers. Marital status differences are due in part to the fact that the partners of never-married mothers have lower incomes than the partners of formerly-married mothers, and in part to the fact that never married mothers must establish paternity before they can obtain a child support award.

To account for the overall lack of progress in child support payments, researchers have identified five different arguments, including inflation, the shift to unilateral divorce, changes in marital status composition, changes in men's and women's earnings, and ineffective child support laws. Each of these arguments is describe below, along with the empirical evidence for each.

The Inflation Hypothesis

Inflation is one reason why child support payments may have declined during the past several decades. Inflation affects payments in two ways: by eroding the value of existing awards, and by holding down in real terms the amount of new awards. The first problem – money erosion – occurs because existing child support orders are rarely indexed to inflation. Thus, during periods of high inflation, the value of awards declines rapidly. The second problem – money illusion – may occur in times of inflation, if judges, lawyers, and parents are not fully cognizant of the cost of purchasing a bundle of goods in the year in which a child support award is set.

Graham (1995) has been a leading proponent of the inflation hypothesis. According to his analysis, inflation can account for about 90 percent of the decline in new awards between 1978 and 1985. Graham also proposes that *persistent money illusion*, defined as the failure to take full account of inflation over a period of time, is responsible for the decline although he does not test this hypothesis directly. In contrast, Robins (1992) finds that inflation accounts for only about 13% of the decline in *all* (both old and new) child support awards between 1978 and 1985. He also notes that although inflation was very high between 1978 and 1981, it was moderate before and after this period. Finally, Hanson and his colleagues (1996) find that the trend in the real value of new awards between 1979 and 1990 closely (negatively) mirrors the trend in inflation rates, which is consistent with the money illusion hypothesis, in which judges (and/or parents) fail to take account of inflation, resulting in large annual declines in the real value of new awards. They also note that the hypothesis is difficult to test because the CPI contains no cross-sectional variation and may be picking up a time trend.

The Unilateral Divorce Hypothesis

A second argument for the lack of improvement in child support awards and payments is the

change in divorce law. According to this argument, the switch to unilateral divorce (also referred to as "no-fault"), which occurred in most states during the 1970s, reduced women's bargaining power in divorce and therefore reduced their ability to obtain generous child support awards (Peters 1986). Under traditional family law, the partner who does not want the divorce has more power than the partner who wants the marriage to end because both parties must agree in order for the divorce to occur. Under unilateral divorce, this power no longer exists. If one assumes that women are less likely to want a divorce than men (because the economic costs of divorce are higher for women), it follows that the shift to unilateral divorce would have reduced women's bargaining power and therefore the value of their child support awards.

Several studies have examined the effects of divorce law on child support and alimony. Weitzman (1985) and Peters (1986) both find that alimony and child support are significantly lower in states with no-fault or unilateral divorce laws. In contrast, Jacobs (1989) finds that the effects of no-fault divorce are either modestly benign or neutral for women.¹

The Demographic Composition Hypothesis

A third reason for the lack of improvement in child support payments is the change in the marital status of the population of women eligible for child support. In 1976, the vast majority of single mothers (83 percent) were divorced or separated. By 1997, the proportion was just over half (54 percent) (Sorensen and Halpern 1999). The shift in marital status has made it more difficult to

¹Jacobs and Peters use different rules to classify states. Peters uses a two-category coding scheme – unilateral and mutual. If a state provides for both types of divorce and if there is a long waiting period for unilateral divorce, she classifies the state as mutual. Jacobs uses a three-category coding scheme – mutual only, unilateral only, and mixed (states that provide for both types of divorce). Weitzman focuses on California which switched from mutual-only in 1969 to unilateral only in 1970.

obtain a child support award, and it also has reduced the value of the average child support award. Before a child support order can be set, a never married mother must first establish paternity. Therefore, child support awards are less common among never-married mothers. In addition, the average unmarried father is less educated than the average divorced father, and therefore, his child support order is likely to be lower. Finally, the fathers of children born outside marriage have less incentive to pay child support since a large proportion of their children receive welfare and can keep only \$50 of child support per month.

Several studies have provided empirical support for the demographic composition hypothesis. Beller and Graham (1993) show that a never-married mother is less likely to have a child support award than is a formerly married mother, and the amount of her award is lower. According to their analysis, changes in marital status can explain a large portion of the decline in award rates (the proportion of single mothers with an award) between 1978 and 1985. Hanson and his colleagues (1996) also find that changes in the marital status of mothers eligible for child support can account for most of the decline in award amounts between 1978 and 1989.

The Women's Economic Independence Hypothesis

A fourth explanation for why child support payments have not shown much improvement is women's (mothers') economic independence. Women's earnings increased during the 1970s and 1980s, while on average men's earnings did not. According to the independence hypothesis (Robins 1992), judges responded to the relative improvement in women's economic position by lowering their expectations about the amount of child support non-resident fathers should be required to pay. Women's growing economic independence also may have made men feel less obligated to support their former partner and non-resident children and it may have made mothers more forgiving. The empirical evidence on the independence hypothesis suggests that child support awards and payments are affected by changes in men's and women's earnings. Estimates of the magnitude of this effect, however, are not robust to the data used or to the specification chosen. Using macrolevel data, Robins (1992) finds that the increase in female earnings can account for most of the decline in child support awards between 1978 and 1985. In contrast, Hanson et al. (1996) find much smaller effects, using micro-level data for the period 1978 to 1989. Graham (1995) also finds smaller effects in his analysis of new awards.

Government Failure – Ineffective Child Support Policies

A final reason for why child support payments have not improved is ineffective child support policies or government failure. According to this argument, states have been slow to pass or slow to implement child support policies, and thus the effects of the new legislation on child support payments have been minimal. Alternatively, child support policies may have been effective, but their effects are masked by factors such as inflation, shifts in marital status, changes in divorce law, and the closing of the gap in men and women's earnings.

Several researchers have examined the effects of child support policies on trends in payments and the different components of payments – award rates, award levels, and collection rates (Garfinkel and Robins 1994, Beller and Graham 1993). These studies provide some evidence that child support policies such as wage withholding, legislative guidelines, paternity establishment statutes, and tax intercepts *do* have positive effects on payments. However, the studies do not measure the size of the effects nor do they control for unobserved differences across states.

More recently, Sorensen and Halpern (1999) use fixed effects models to examine the effects of child support policies on the receipt of *any* payment. They find that six policies – immediate wage

withholding, presumptive guidelines, state income tax intercept, in-hospital paternity establishment, directory of new hires, and a \$50 pass-through – can account for 56 percent of the improvement in receipt rates among never married mothers and for 33 percent of the improvement among formerly married mothers. Freeman and Waldfogel (1998) take a somewhat different approach to estimating the effects of Child Support laws on payments. They argue that a particular law is not as important as the total number of laws on the books. They also note that child support laws are not effective unless they are actively implemented. To measure the legal environment, they construct an index of child support enforcement that is simply the number of laws a state has on the books. To measure implementation, they use state child support expenditures (per absent-father family). They find that states with the most laws and highest expenditures also have the highest rates of child support receipt.

Data and Methods

Our analysis is based on data from the Panel Study of Income Dynamics (PSID), a longitudinal study that started with approximately 5,000 U.S. households in 1968 and has followed individuals from these households and their children through the 1990s. Because the original focus of the study was income and poverty (for details of the study design, see Hill 1992), the 1968 sample included an over-sample of low-income households (called the SEO sample) as well as a national probability sample of households (called the SRC sample). The data are collected annually² and contain rich information on changes in economic and demographic behavior. In this study, we pool

²However, the PSID is conducted every other year starting from 1997 on.

female-headed households in which at least one child under age 19³ is present over the period 1968 and 1997. The sample we use in our analysis includes 3,149 female headed households and 19825 household-year observations. Among these observations, 73% are taken from the SEO sample and 27% are taken from the SRC sample.

The PSID has a number of advantages for studying child support trends. First, the survey contains information on the *amount* of child support received each year, dating back to the late 1960s. No other national survey provides annual information on child support payments over such a long period of time. The CPS asks whether households receive *any* child support, starting in 1968, but this survey does not ask about the *amount* of child support received until 1979. If we want to understand the effects of inflation, divorce laws, and shifts in female/male earnings on child support, we need data on the 1970s, when many of these changes occurred, and we also need data on the *amount* of child support received. Another attractive feature of the PSID is that these data contain a large number of low-income single mothers, which allows us to examine the effects of policies and other variables on this particular subgroup.

The PSID has several limitations as well. First, the survey questions do not distinguish between child support and alimony until the 1980s, and therefore our measure of child support includes both types of income for all years. Although ideally we would like to exclude alimony from our analysis, we do not view this limitation as serious for a couple of reasons. First, we know from

³The PSID individual-level file contains information about individual's year of birth and his or her age. We found a couple of individuals who have inconsistent birth years and whose birth year does not match with their age. When the inconsistency in birth years occurs, we take the mode of all observed birth years for that individual. If the information about birth year is missing, we use age reported in the first year we observe the individual to compute his or her year of birth.

other studies (and from our own analysis of the PSID, which began to distinguish between child support and alimony in 1977) that alimony is rare and thus the combined measure is primarily an indicator of child support. Second, the distinction between child support and alimony is somewhat arbitrary since in some states mothers may elect to receive "contractual alimony" as a way of minimizing income taxes and increasing support. Another limitation of the PSID data is that it does not provide information on whether the mother has a child support *award* and the amount of the award. Thus our measure of payments confounds the trend in award levels with the trend in collection rates (the proportion of awards that are paid). This limitation may lead us to underestimate the effects of some variables. For example, we would expect child support guidelines to affect the amount of the award but not collection rates, whereas we would expect immediate withholding to affect only collection rates.

Measures

The dependent variables in this analysis are (1) whether the mother received any child support (or alimony), and (2) the amount of child support (or alimony) received. The PSID provides the actual amount of payments except for the information collected in the years of 1968 and 1969. For these two years, we only know how many households received support in bracket amounts. In order to make these two years of information comparable to the information from the rest of the years, we use the mid-point in each bracket. Only about one quarter of the household-year observations received any child support; the other three-quarters received nothing. Information on these payments (reported in 1982 dollars) is provided in Table 1. In 1968, the average yearly payment was \$833 and in 1997, the average payment was \$934. (Note that the information in Table 1 is based on the combined SRC and SEO samples.) That the average yearly payment for all years taken together is substantially lower (\$657) than either the average payment in the first or last year of our sample is consistent with the decline and later rebound in child support that we will analyze at length in what follows.

Table 1 about here

The explanatory variables in our analysis include mothers' marital status, age, education, race, and number of minor children in the household. Among the 19,825 household-year observations, on average 70% of the mothers who are eligible for child support are formerly married. This percentage changed markedly between 1968, when just over 10 percent of our sample were never married mothers, and 1997, when 45% were never married. The average age of the mothers is 33.5, and the mean years of educational attainment is 12.1. On average, the total number of children in households is slightly more than two. There were more children in these child support eligible households in 1968 (just over 3 children per household), and fewer in 1997 (just under 2 children per household). Among these observations, 25% of the mothers are white (including Hispanics), 72% are blacks, and 3% belong to another race or ethnicity.⁴

The inflation rate and female-to-male earnings ratio are measured at the national level. To compute the inflation rate for year *t*, we first take the difference between the CPI in year *t* and the CPI in year t-1 and divide the difference by the CPI in year t-1. Inflation was higher in the middle of our 30 year period, which is reflected in the fact that average inflation in 1968 (4.3 percent) and in 1997 (2.3 percent) are lower than the overall average rate of 5.4 percent.

⁴In 1990, a new sample of Hispanic households was added to the survey. Since the focus of this paper is about the trends of child support payments over the past three decades, this new sample is excluded from the analysis.

The information on female and male earnings is taken from the March Current Population Surveys. We estimate the ratio of median female earnings to median male earnings using full time workers who are between the ages of 18 and 55. Women's wages gained relative to men's wages over this period. In 1968 women's full time earnings were 60% of men's; by 1997 women's full time earnings were over 75% of men's.

The data on unilateral divorce law and child support laws are measured at the state-year level. The child support laws⁵ used in this analysis include (1) genetic testing, (2) paternity establishment-18, (3) immediate withholding, (4) universal withholding, (5) numeric guidelines, (6) presumptive guidelines, and (7) state income tax intercept. Genetic testing indicates that information on fathers' genetic make-up may be used to establish paternity. Paternity establishment-18 indicates that paternity may be established any time until the child reaches age 18. Immediate withholding refers to withholding child support from the non-resident parent's earnings, when the child's mother is receiving welfare. Universal withholding refers to withholding in *all* child support cases, both welfare and non-welfare cases. Numeric guidelines indicates that the legislature has established guidelines for setting child support awards and presumptive guidelines indicates that judges are required to use numeric guidelines except for "good cause." The state income tax intercept indicates that the state can withhold a father's income tax refunds if he is delinquent in his child support payments. Each law indicator equals 0 for the years before the law was enacted and 1 for the year in which the law was passed and the years after the law was passed.

⁵The information on child support laws comes directly from state statutes and was compiled by James Scully.

Results

We begin by looking at the trends in child support payments in the PSID data from 1968 to 1997, before turning to regression analysis. Figure 1a reports the trends in payment rates – the proportion of single mothers with *any* payment – between 1968 and 1997 for the SRC and SEO samples. The SRC trend line shows an increase in the early 1970s, followed by a decline between 1973 and 1984. After 1984, payment rates increase sharply, level off and then rise again in the early 1990s.

Figures 1a and 1b about here

Figure 1b reports the trends in the average child support payment (in real dollars) for the two samples. The trends in this figure mirror those in Figure 1a. The average payment increases in the early 1970s, falls by nearly two-thirds between 1973 and 1984, and recovers sharply after 1984. The pattern for the SEO sample is quite similar, but shows an additional increase in payments in the 1990s. Based on Figures 1a and 1b, we conclude that the lack of improvement in child support payments during the last three decades is due to two offsetting trends – a decline during the 1970s and early 1980s, and a recovery from the mid 1980s to the mid 1990s. Thus a complete explanation of the changes in child support payments must account for both these trends.

Inflation

The first explanation that we examine is the inflation hypothesis. According to this argument, inflation could have reduced child support payments either directly, by eroding the value of the average payment (money erosion), or indirectly, by causing judges and parents to set new awards too low (money illusion.) Given the dramatic decline in the average child support

payment during the 1970s and early1980s, and given what we know about the rising cost of living during this period, inflation seems like an obvious candidate for explaining at least part of the trend in payments. And indeed, Figures 2a and 2b provide strong evidence that inflation was a big part of the story.

Figures 2a and 2b

Figure 2a reports annual inflation rates between 1968 and 1997, and Figure 2b reports the trend in the value of the dollar over the same period. Figure 2a shows two very different patterns. In the 1970s, inflation rates are high – above 6 percent nearly every year. In four years – 1973, 1978, 1979 and 1980 – rates are above 10 percent! In the 1980s and 1990s, inflation rates are low – below 6 percent during the 1980s and below 4 percent during the 1990s. By comparing Figure 2a with Figure 1b, we can see that high inflation rates coincide with falling child support payments.

Figure 2b shows the cumulative effects of inflation on the value of a dollar between 1968 and 1997. The parallel between this trend and the trend in child support payments during the 1970s is striking. The value of the dollar drops by two thirds between 1969 and 1984, which is identical to the decline in the value of the average child support payment during this period. Both figures suggest that inflation could account for practically all the decline in child support payments during the 1970s and early 1980s. While it is tempting to attribute changes in child support to inflation, at least one piece of evidence suggests that inflation is not the entire story. According to Figure 1a, the child support payment rate, which is not directly affected by inflation, also fell during the 1970s.

According to the money illusion argument, periods of high inflation reduce child support

payments because judges set (and mothers agree to) child support awards that do not take inflation into account. This may cause judges to set the same nominal awards, year after year. If declines in child support awards were due to money illusion, we would expect the nominal value of the average child support payment to be constant even though its real value is declining. This is exactly the pattern we observe in Figure 2c. During the 1970s and early 1980s, nominal child support payments are constant.

Figure 2c about here

A comprehensive test of the money illusion hypothesis would require an examination of the trend in new child support awards, rather than trends in actual payments. Our time series is determined by the amount of old as well as new awards and is also affected by the collection rate – the proportion of all awards that is actually paid. The trend line in Figure 2c provides only a partial reflection of what has been happening to new awards, as we see them only as part of all payments. However, if new awards were resulting in higher payments, we would expect to see our average nominal payments increasing over time in Figure 2c. At most, we can say that pattern is consistent with the argument that decision-makers were unaware of the fact that real child support payments were declining during the 1970s and early 1980s.

No Fault Divorce

A second explanation for why payments declined in the 1970s is the shift to unilateral divorce. As noted earlier, unilateral divorce is believed to favor men, because it makes divorce easier to obtain, and because women have more to lose from divorce than men. When divorce required the explicit consent of both parties—that is, prior to the adoption of unilateral divorce a women could bargain for a higher child support award in return for agreeing to a divorce. According to Figure 3, the proportion of states allowing unilateral divorce rose dramatically between 1968 and 1997. In 1970, 42 states adhered to traditional consent-based divorce; by 1992, only 17 states had such laws. Most of the decline had occurred by 1977, by which time all but 20 states had adopted unilateral divorce laws.

Figure 3 about here

While changes in divorce law coincide with the beginning of the decline in child support payments, divorce law cannot explain the reversal of the trend during the 1980s and 1990s. Moreover, our previous figures suggest that most of the decline in child support during the 1970s can be accounted for by inflation. Thus the question we must ask is whether changes in divorce law can account for any additional decline in child support payments and payment rates, after taking inflation into account. Since divorce laws are measured at the state level, we will be able to determine whether changes in divorce law within each state coincide with changes in payments and payment rates.

Martial Status Composition

A third explanation for the decline (or lack of improvement) in child support payments is the shift in marital status composition. According to this argument, never-married mothers are much less likely to receive child support than formerly married mothers, and the amount of child support they receive is on average lower. Since the proportion of never-married mothers relative to all single mothers has been increasing for the past three decades, we would expect to see a decline in overall child support payments, even if payments among formerly married mothers and never married mothers remained constant.

Figure 4a and 4b about here

Figure 4a reports the trends in the number of formerly married and never-married single mothers for the 30 year period, weighted to provide population estimates, and Figure 4b reports the proportion of single mother families that are headed by formerly married and never-married mothers during this same period. Both sets of numbers are based on the SRC sample only (in order to be nationally representative). Figure 4a shows that the absolute number of single mothers increased steadily throughout the 1970s, 1980s, and 1990s. Figure 4b shows that the proportion of mothers who were formerly married declined from about 85 percent in 1968 to about 70 percent in 1997. These trends are very similar to the trends reported in the CPS,⁶ although the proportion of formerly-married mothers is higher in the PSID than the CPS. The discrepancy is due to the fact that the PSID classifies women who cohabit as 'married' after one year. Thus, single mothers who are classified as never-married by the CPS are classified as 'formerly married' by the PSID.

The shift in the marital status composition of single mothers is a plausible argument for explaining some of the decline in child support payments during the 1970s. However, after 1984, the trends diverge and child support payments recover while the proportion of formerly married mothers continues to decline. This means that the shift in marital status composition was exerting downward pressure on child support payments during the 1980s and 1990s. Stated differently, the child support enforcement system had to work harder to achieve a constant payment level. Considered in this light, the increase in payments after 1984 is even more impressive than it originally appears to be.

⁶The CPS reports 72% of mothers as divorced or "married, spouse absent" in 1968, and 57% in 1997.

Men's and Women's Earnings

A fourth explanation for the lack of improvement in child support payments is the increase in women's economic independence. Women's earnings increased faster than men's earnings during the past three decades. In response, according to this argument, judges lowered the amount of child support non-resident fathers were ordered to pay, and mothers and fathers lowered their expectations about what fathers should pay. Declines in expectations led to a decline in child support payments.

Figure 5a reports the trends in male and female earnings between 1968 and 1997 for fulltime workers aged 18 to 55 and Figure 5b reports the trend in the ratio of the female-to-male earnings.

Figures 5a and 5b about here

According to Figure 5a, the real earnings of full-time male workers don't change very much between 1968, when they are about \$19,100, and 1997, when they are about \$18000. Male earnings fluctuated modestly throughout this period, with declines in male median wages recorded during two recessions (one in the early 1980s and one in the late 1980s). Female earnings, in contrast, more or less increased steadily throughout this period, with the median increasing from \$11,000 in 1968 to over \$13,800 in 1997. Figure 5b shows the trend in the ratio of female to male wages. In 1968, women working full time earned about 60 percent of what men earned; by 1997, this had increased to roughly 75 percent.

For the first half of the years under analysis, the trend in the ratio of female/male earnings would appear to support the argument that declines in men's relative economic position led judges to lower the amount of child support awards and may have led parents to lower their expectations about how much child support fathers should pay. However, if this were true, we would expect to see the decline in payments continue through the second half of the period under analysis, which is not the case. As shown in Figures 1b and 2c, there was a positive trend in both the real and the nominal value of child support payments in the second half of our period. The trend in the ratio of men's to women's earnings is similar to the trend in the marital status composition of the population of single mothers, insofar as it is roughly linear and thus cannot explain the rise in child support payments after 1984. As was true of marital status, the trend in relative earnings may have put downward pressure on child support payments since 1984. *Child Support Policies*

The final explanation for the lack of improvement in child support payments is ineffective child support policies.

Figures 6a, and 6b about here

Figures 6a and 6b show the fraction of all states that had in place eight different child support laws each year between 1968 and 1997. These figures make clear that there was a good deal of variation across states and across time in law changes, with some legislation largely enacted in 1970s, and other legislation not passed until the 1980s or even later. One of the earliest child support enforcement policies enacted by the states was the withholding of child support payments when a non-resident parent was delinquent in payment. The top right panel of Figure 6a shows that states had begun to withhold delinquent payments in 1971, and that by 1984 almost twothirds of all states were withholding delinquent payments. In contrast, immediate withholding and universal withholding began only in 1984, and it was only after 1988 that a majority of states had enacted legislation on immediate withholding. There was a relatively long diffusion of legislation covering genetic testing and paternity establishment to age 18. In the regression analysis that follows, we will attempt to identify the effect of each law, making use of the fact that states varied in the timing and sequencing of law changes.

We conduct a more rigorous test by examining all of these factors together. Table 2 presents the coefficients from models that regress child support payments on mother's characteristics (measured at the individual-year level), annual inflation rates (measured at the national-year level), the average annual ratio of female to male earnings (measured at the national-year level) and measures of divorce law and child support policies (measured at the state-year level). All of the models include indicators for mothers' age, age squared and age cubed, mother's race (indicators for white, black or other race) and a linear time trend. Columns 1 through 3 in Table 2 report estimates from models that do not include state indicators (fixed effects) and columns 4 through 6 report estimates from models that include state indicators. State fixed effects allow us to control for differences between states that are constant over time.

Looking first at mother's characteristics, we find that marital status, education, and number of children all have statistically significant effects on child support receipts, with or without controls for state fixed effects (columns 3 and 6). On average, mothers receive about \$130 dollars more annually in child support for each additional year of education. Because of assortative mating (the tendency for people to mate with people like themselves), mother's education is likely to be highly correlated with father's education, which means that the education coefficient in Table 2 is likely to be picking up the effect of father's education and income. Note that the effect of mother's education on child support payments is much larger for formerly married mothers than for never married mothers, which may be due to a closer relationship between fathers and children from households where the children's parents were once married. The number of minor children in the household is positively related to child support, which one would expect given that child support is awarded on a child-by-child basis.

The *martial status* coefficients are of particular interest in this analysis. According to Table 2, never-married mothers receive less child support than formerly married mothers, even after adjusting for other characteristics of the mother and even after taking account of differences across states (columns 6). Formerly married mothers receive \$200 more dollars of child support on average than do never married mothers, holding all else constant. This finding is consistent with the argument that the shift in the marital status composition of single mothers between 1968 and 1997 had a negative impact on child support receipts. Using the coefficients in Table 2 (column 6), and our estimates of the average change in marital status using the nationally representative SRC sample, we conclude that, if the marital status of single mothers had remained constant between 1968 and 1997, average child support receipts would have been roughly \$40 higher in 1997.⁷

Inflation is also a strong predictor of child support payments. A one percentage point increase in the inflation rate reduces annual real child support payments by \$16 on average. The effect of inflation is about twice as large for formerly married mothers as for never married mothers, which is probably due to the fact that a high proportion of never married mothers receive *no* child support. Inflation does not lower the value of payments for mothers who receive no child support. If inflation had remained at its initial rate (4.335 percent) through this 30 year period, we

⁷This is \$200 for each ever-married mother, multiplied by the change in the fraction of ever married mothers (which declined by 20 percentage points for our nationally representative SRC sample between 1968 and 1997).

would expect in 1997 that child support payments would be roughly \$500 higher, holding all else constant.⁸

The *female/male earnings ratio* has no significant effect on child support receipts, when we control for women's characteristics, inflation, and state child support laws.

State adoption of *unilateral divorce* legislation appears to have a large, negative, and significant effect on the child support received by ever-married woman (last row of Table 2), once we control for state fixed effects (column 5). We find no significant effect of unilateral divorce laws on the child support received by never-married women, consistent with the mechanism through which one might imagine unilateral divorce laws affecting child support. On average, once a state allows unilateral divorce, real child support payments are lower by \$350 for ever-married women.

Finally, Table 2 reports the coefficients for eight different child support laws. Results in Table 2 suggest that *genetic testing* has no significant effect on child support received by either never-married or ever-married women, once we control for state fixed effects. Laws that allow for *paternity establishment to age 18* do not affect child support receipts, a finding consistent with previous research, which indicates that contact between unwed fathers and their children declines dramatically over time, making it increasingly difficult to locate these men.

Universal withholding significantly increased child support receipts. For ever-married

⁸Of course, some of the change in child support legislation may have occurred as a response to the erosion of receipts by inflation, so it may be unlikely that all else could have been held constant. The \$500 figure above is calculated as follows. The cumulative rise in inflation from 1968 to 1997 was 162 percentage points. If inflation had remained at the 1968 rate, the cumulative rise would have been 130 percentage points. The difference (30 points) multiplied by \$16 per inflation point yields an estimate of \$512.

mothers, universal withholding is associated with an increase in child support payments of over \$300 annually, holding all else constant. The fact that withholding has a larger effect on formerly married mothers than on never married mothers is not surprising, since the former are much more likely to have a child support award. We would expect universal withholding to have a much larger effect than immediate withholding, since the later affects only mothers on welfare whereas the former affects all mothers. *Numeric guidelines* increase child support payments for evermarried women, by roughly \$230 annually. As was true for universal withholding, the guidelines coefficient is larger for formerly married mothers, and is somewhat larger when we control for state fixed effects. Presumptive guides do not increase child support payments, however, which suggests that the additional mandate for judges to follow the guidelines are not necessary. The fact that guidelines affect payments is consistent with the argument that most child support awards are set by parents who bargain "in the shadow of the law" (Mnookin and Kornhauser 1979).

State income tax return intercepts have no significant effect on child support receipts, for never-married or for ever-married mothers, holding all else constant. There are several states that have no state income tax, from which tax returns could be withheld. When we remove this variable from the analysis (in regressions run, but not reported in Table 2), the picture that emerges is much like that seen in column 6: inflation and unilateral divorce significantly reduce child support payments, while universal withholding and numeric guidelines significantly increase child support payments.

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Summary and Conclusions

The analysis presented above was designed to assess the effects of economic, demographic, and policy factors on trends in child support payments over the past 30 years. Ours is the first study to look all five factors together, and ours is the only study to examine trends over a 30-year period. The findings indicate that four of the five factors we examined are significantly related to child support payments: inflation, changes in divorce law, shifts in the marital status of single mothers, and child support policies. The only factor that is not related to child support payments is the change in women's earnings relative to men's.

Which factors have held down payments?

During the 1970s and early 1980s, three factors – high inflation, increase in non-marital childbearing, and shifts to unilateral divorce – exerted downward pressure on child support payments. Throughout this time period, child support policies were weak, and average real payments declined sharply. After 1984, things began to change. Inflation rates fell and remained much lower, the transformation to unilateral divorce law was completed, and states begin to pass and enforce stronger child support policies. Thus, although non-marital childbearing continued to exert downward pressure, child support payments begin to increase. This trend has continued throughout the 1990s.

What can be done to increase child support payments?

Child support is an important source of income for single mothers and, in the wake of welfare reform, it is likely to become even more important for low income mothers. Thus, child support policy is an important policy tool for increasing the economic security of single mothers and their children. Indeed, as we noted in the introduction, child support has replaced social insurance as the primary welfare policy for single mothers.

Our findings indicate that two child support policies – legislative guidelines for awards and universal wage withholding – are important for insuring child support payments. They also show that universal withholding – which targets all eligible children – is more effective than automatic withholding – which targets families on welfare. We also find that periods of high inflation have very negative effects on child support payments. Thus indexing guidelines and awards to changes in the cost of living would be a useful preventative strategy, in the event that high inflation reappears.

Finally, our analyses suggest that further gains in child support payments will rest with our ability to collect child support for children born to unwed parents. These children are the fastest growing group of children in the US, and they are the least likely to receive child support. Moreover, policies such as legislative guidelines and wage withholding do not appear to be as effective for never married mothers as they are for divorced mothers. In part the different is due to the fact that unmarried mothers must establish paternity prior to obtaining a child support award. Guidelines and wage withholding are ineffective in the absence of a paternity award. In part, the difference is due to the fact that never-married fathers have much less income, on average, than divorced fathers. And finally, still another part is due to the fact that child support policies often treat unwed parents as though they were divorced when, in fact, most of these parents are romantically involved and a substantial proportion are cohabiting (80% and 45% respectively at birth). This fact, which is not well understood by legislators and child support officials, has implications for how child support policies should be applied. For example, establishing paternity should be relatively simple if parents are approached at the time of the birth. Most of the fathers in these 'fragile families' want to establish paternity and most want to help raise their child, at least at the time their child is born (McLanahan et al., forthcoming). At the same time, treating unwed fathers as though they were non-resident fathers and imposing large child support obligations on these men can easily undermine family formation.

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	Sample average for 1968 only	Sample average for the period 1968-97	Sample average for 1997 only	
Alimony and Child Support (\$1982)	832.74	656.76	934.38	
Proportion Never Married Mothers	0.103	0.302	0.450	
Mother's age	35.65	33.47	34.53	
Proportion Black	0.756	0.717	0.711	
Proportion White	0.217	0.254	0.272	
Mother's Completed Educ	10.79	12.06	12.47	
Number of Children 0-5	0.719	0.541	0.495	
Number of Children 6-12	1.365	0.873	0.813	
Number of Children 13-18	0.973	0.701	0.630	
Proportion SEO Sample	0.816	0.732	0.603	
Female/Male Wage Ratio	0.580	0.656	0.767	
Inflation Rate (percent)	4.335	5.413	2.294	
Number of Observations	484	19825	736	

Table 1. Sample Means 1968-1997

Notes on Table 1. Years of education are missing for 4 observations in 1968, for 21 observations in 1997, and over all years for 129 observations. The female/male earnings ratio, calculated using March CPS, is the ratio of the median earnings of women working full-time relative to the median earnings of men working full-time in each year. This earnings ratio and the inflation rate reported in column 2 are average annual rates (not sample weighted).

Dependent variable: alimony and child support received (1982 Dollars)						
	Never married	Ever married	All mothers	Never married	Ever married	All mothers
Indicator: woman has never married			-208.25 (42.22)			-193.76 (46.41)
Years of completed education	38.31	142.90	128.37	43.43	148.04	133.08
	(16.64)	(18.79)	(15.74)	(15.43)	(18.43)	(15.74)
Number of children aged 0-5	62.25	-31.74	11.97	73.73	-24.02	15.89
	(24.30)	(34.10)	(22.00)	(22.85)	(35.13)	(23.27)
Number of children aged 6-12	29.60	93.55	82.06	31.95	101.95	87.08
	(22.65)	(32.31)	(24.53)	(20.58)	(32.98)	(24.78)
Number of children aged 13-	-20.14	83.02	70.26	-23.52	92.74	78.65
18	(31.21)	(29.97)	(25.62)	(29.55)	(29.88)	(25.32)
Indicator:	-24.13	-46.99	-94.94	16.25	-88.16	-118.93
SEO Status =1	(64.57)	(91.16)	(66.93)	(56.32)	(95.06)	(69.87)
Inflation rate	-9.28	-18.05	-15.60	-10.88	-19.60	-16.91
	(4.44)	(7.56)	(5.79)	(4.59)	(7.53)	(5.82)
Female/Male wage ratio (× 100)	1.14	-18.44	-10.40	6.05	-12.27	-5.25
	(6.39)	(17.40)	(11.31)	(6.26)	(17.71)	(11.33)
Indicator:	82.94	161.96	160.75	-18.83	-87.11	-74.05
genetic testing =1	(33.68)	(82.58)	(57.40)	(36.74)	(95.39)	(65.55)
Indicator: withholding for	-94.57	-26.96	-48.11	-21.25	-69.25	-54.14
delinquent payments	(33.93)	(78.69)	(58.92)	(37.82)	(100.05)	(67.26)
Indicator: immediate withholding enacted	105.42	339.32	261.20	18.96	162.08	110.14
	(52.99)	(146.96)	(89.90)	(49.40)	(126.30)	(77.90)
Indicator: universal withholding enacted	15.40	191.84	108.46	29.59	333.38	204.38
	(52.13)	(104.19)	(66.33)	(48.10)	(101.21)	(64.36)
Indicator: paternity established to age 18	29.04	-118.91	-76.45	20.37	45.57	38.29
	(34.76)	(73.61)	(54.15)	(37.21)	(83.11)	(59.57)
Indicator: state has numeric guidelines	35.30	199.91	141.98	26.79	234.08	171.84
	(52.68)	(110.68)	(72.98)	(51.33)	(114.86)	(76.68)
Indicator: state has presumptive guidelines	-44.90	-87.24	-68.11	9.21	-103.21	-66.11
	(59.06)	(168.96)	(104.60)	(59.15)	(154.55)	(95.47)
Indicator: income tax return intercepted	22.37	-24.83	-13.06	-11.17	-64.14	-49.05
	(35.71)	(75.28)	(52.85)	(43.54)	(86.37)	(58.33)
Indicator: state allows	-33.90	-62.16	-44.14	-38.92	-352.18	-331.51
unilateral divorce	(37.65)	(76.79)	(55.26)	(144.36)	(146.32)	(129.79)
State indicators?	No	No	No	Yes	Yes	Yes
Number of Obs	5410	11936	17346	5410	11936	17346

Table 2. Alimony and Child Support Received, PSID 1968-1997
Dependent variable: alimony and child support received (1982 Dollars

Notes to Table 2. All regressions include age, age squared and age cubed, indicators that the respondent is black, or white, and a linear time trend. Robust standard errors appear in parentheses, where correlation is allowed between unobservables for the same woman followed over time.

Figure 1a. Trends in Child Support Payment Rates, 1968 to 1997, for SEO and SRC Samples (Any Payment, Weighted)



Figure 1b. Trends in Child Support Payments, 1968 to 1997, for SEO and SRC Samples (Real Dollars, Weighted)



Figure 2a. Annual Inflation Rates, 1968 to 1997





Figure 2c. Trends in Child Support Payments, 1968 to 1997, for SEO and SRC Samples (Nominal Dollars, Weighted)



---- SEO ---- SRC



Figure 3. Proportion of States with Unilateral Divorce Laws



Figure 4a. Trends in Single Mother Families Headed by Never-Married and Formerly-Married Mothers, 1968 to 1997 (PSID-SRC Samples, Weighted)

---- Never-married ---- Formnerly-married



Figure 4b. Proportion of Single Mother Families Headed by Never-Married and Formerly-Married Mothers, 1968 to 1997 (PSID-SRC Samples, Weighted)



Figure 5a. Trends in Male and Female Median Wages, 1968 to 1997 (March CPS)

Figure 5b. Female to Male Earning Ratios, 1968 to 1997 (March CPS)





Figure 6a. Proportion of States with Child Support Enforcement Policies, 1968 to 1997



Figure 6b. Proportion of States with Child Support Enforcement Policies, 1968 to 1997