Child-Custody Reform and Marriage-Specific Investment in Children

Nunley, John M. and Seals, Alan

University of Wisconsin—La Crosse, Oklahoma City University

1 May 2009

CHILD-CUSTODY REFORM AND MARRIAGE-SPECIFIC INVESTMENT IN CHILDREN

John M. Nunley[♦]
Middle Tennessee State University

Alan Seals[♣]
Oklahoma City University

Research on child custody primarily focuses on the well-being of children following divorce. We extend this literature by examining how the prospect of joint child custody affects marriage-specific investment in children's private-school education. Variation in the timing of joint-custody reforms across states proxies for the prospect of joint child custody and provides a natural experiment framework with which to examine marriage-specific investment in children. The probability of children's private school attendance declines by 13 percent in states that adopt joint-custody laws. The effects of joint-custody reform are larger in states that have property-division laws that consistently favor one parent over the other. The results are largely robust for subsamples partitioned by socioeconomic status.

Key words: child-custody laws, household bargaining, marriage-specific investment, private school attendance, property-division laws

JEL Categories: D13, J12, K36

[♦] John M. Nunley, Department of Economics and Finance, Jennings A. Jones College of Business, Middle Tennessee State University, Murfreesboro, TN 37132, phone: 615-898-2365, fax: 615-898-5596, email: jmnunley@mtsu.edu, url: www.mtsu.edu/~jmnunley.

[♣] Alan Seals, Department of Economics, Meinders School of Business, Oklahoma City University, Oklahoma City, OK 73106, phone: 405-208-5473, email: aseals@okcu.edu.

*** Authors and acknowledgements are listed in alphabetical order. We thank Brandeanna Allen, Charles Baum, Sarah Bergemann, Jacob Dearmon, E. Anthon Eff, Greg Givens, Duane Graddy, Adam Hogan, Steve Howard, Christopher Klein, Travis Minor, Pam Morris, Mark Owens, Adam Rennhoff, Betsey Stevenson, Rachel Wilson, and Joachim Zietz for their assistance and helpful comments.

I. INTRODUCTION

During the first half of the 20th century, courts in the U.S. typically favored mothers in child-custody cases (Jacob 1988, Ch. 8; Brinig and Buckley 1998a). In the 1960s, states began to remove the explicit preference for mothers so that a parent's gender was no longer the basis for child-custody awards. Even after the move away from maternal preference, most courts continued to award sole custody to mothers (Cancian and Meyer 1998). However, several states made explicit provisions in their laws favoring joint custody or revealed their preference indirectly by ruling in favor of joint custody during the 1970s and 1980s (Brinig and Buckley 1998a). Citing the best interests of children as the impetus for legislative change, the majority of states followed with legal provisions for joint custody by the mid-1980s (Brinig and Buckley 1998a; Cancian and Meyer 1998). Although child-custody reform became a nation-wide phenomenon, the debate over joint custody's costs and benefits was carried out by a relatively small group of politically active supporters with little empirical evidence to support their claims (Jacob 1988, Ch. 8).

The joint-custody literature primarily focuses on the well-being of children following divorce. We extend this literature by investigating whether joint-child-custody laws affect within-marriage investment in children. We use variation in the timing of joint-custody reforms across states, with data from the 1980 and 1990 U.S. Population Censuses, to identify the effect of child-custody laws on married couples' investment in children.[1] Married couples with children who live in states that change their laws to favor joint custody between 1980 and 1990 constitute the treatment group in a natural experiment, while those who live in states that had either instituted joint-custody reform before 1980 or that did not institute joint-custody reform before 1990 represent the comparison group.

[1] We use Brinig and Buckley's (1998a) coding for the child-custody laws. See TABLE 1.

The dependent variable is children's private school attendance—a verifiable marriage-specific investment in child quality.[2] Although most children in the U.S. attend public school and private school represents only one of the many investments parents can make in child quality, private school has attractive features as a proxy for overall parental investment. Because the financial costs of private school warrant long-run planning by parents, any observed differences in private school attendance resulting from joint-custody reform could be extrapolated to other forms of child investment.

Analyzing the effects of child-custody reform on marital investment in children provides an opportunity to study the bargaining behavior of spouses. If we assume the return on child investment is non-rival within marriage but rival outside of marriage, a change in custody regime transfers a portion of the expected return from one parent to another by altering the time spent with children outside of marriage. The neutrality of an individual family member's non-earned investment returns, with respect to intra-household distribution of resources, is a key aspect of the neoclassical model of the family (Becker 1991). Hence, a unitary model of household behavior would predict no change in child investment following joint custody enactment. However, if child-custody reform alters the distribution of the marital surplus after divorce occurs, cooperative bargaining models of family behavior predict changes in married couples' investment in children.[3]

There is ample empirical evidence that changes in family laws and government programs that provide transfers to one spouse shape the bargaining process over the course of marriage (e.g., Lundberg et al. 1997; Gray 1998; Chiappori et al. 2002; Genadek et al. 2007; Stevenson 2007,

[2] Cáceres-Depliano (2006) and Conley and Glauber (2006) also use children's private school attendance and grade retention as proxies for parental investment in child quality. Unfortunately, our data set does not allow us to examine the impact of joint-custody laws on children's grade retention.

[3] See Manser and Brown (1980), McElroy and Horney (1981), and Rasul (2006). See Bergstrom (1996) and Lundberg and Pollak (1996) for review of various family models.

2008; Gitter and Barham 2008; Ward-Batts 2008). States that change the default custodial allocation from maternal preference to shared custody decrease (increase) the expected post-divorce time mothers (fathers) spend with their children. Brinig and Allen (2000) find that women are more likely to file for divorce based on the expectation of sole child custody, an indication that joint-custody reform could raise the costs of divorce for mothers. As a result, joint-custody reform could place mothers in an inferior bargaining position.

The empirical literature on intrahousehold resource allocation documents a higher rate of investment in or spending on children when mothers have greater bargaining power in the household (e.g., see Thomas 1990; Lundberg et al. 1997; Phipps and Burton 1998; Maitra 2003; Ward-Batts 2008). If the reform shifts bargaining power away from mothers, who value child quality more on average, child investment may decline. By contrast, the reform could provide additional incentive for fathers to invest in children because they stand to reap a greater portion of the post-divorce benefits from child investment through increased visitation rights.

Considering property-division laws in conjunction with joint-custody reform may provide a clearer picture of household bargaining. Gray (1998) suggests the effects of unilateral divorce laws on marital bargaining are conditional on the underlying property-division laws in place across states, with husbands and wives having greater bargaining power in common-law and community-property states, respectively. The bargaining position of spouses is less clear in equitable-division states, as courts are expected to divide marital property evenly between spouses. We examine marital investment in children and other assets as an outcome of spousal bargaining by allowing child-custody reform to have asymmetric effects across three mutually exclusive property-division regimes: common law, community property, and equitable division.[4]

[4] Gray (1998), Genadek et al. (2007), and Stevenson (2007, 2008) estimate the effects of divorce-law reforms in conjunction with the underlying property-division laws on labor-market outcomes.

We also examine the effects of joint-custody reform on marital investment in children for subsamples partitioned by mothers' education, a measure of socioeconomic status (SES). Partitioning the sample by SES may be important for several reasons. First, SES is likely to play a role in the decision for married couples to send their children to private school. Second, the literature reports a positive correlation between joint-custody arrangements of divorced parents and SES (Seltzer 1991). Third, married couples with varying SES have different divorce propensities (Weiss and Willis 1997). Fourth, partitioning by mothers' education provides a way to study power relations between spouses, as the gain in bargaining power for fathers following joint-custody reform could be mitigated by mothers' education. Fifth, joint-custody reform could increase the bargaining power of women in the high-SES group. In the event of divorce, these women could (continue to) pursue professional careers, as fathers take a greater role in child care following divorce.

While joint-custody laws were enacted to improve the well-being of children whose parents divorce, we find negative, unintended consequences for children of intact households. The probability of children's private school attendance declines by 13 percent in states that adopt joint-custody laws. The negative effects of joint-custody reform on children's private school attendance are larger in states that have property-division laws that consistently favor one parent over the other, an indication that parents may bargain over investment in children and other marital assets. The results are largely robust for subsamples partitioned by SES. However, children in the lowest-SES group are more adversely affected by joint-custody reform than those from higher-SES backgrounds.

II. THEORETICAL FRAMEWORK

A. Legal Background

The authority of family-court judges to exercise wider discretion and institute joint-custody arrangements is a relatively recent legal innovation. Although child welfare was cited as the primary basis for child-custody reform, the passage of joint custody went against the widely held view among psychologists that sole custody was optimal (Goldstein et al. 1984). However, challenges to the sole-custody standard were issued at this time on the basis that it was an impulsion for post-marital conflict and therefore contrary to the best interests of the child (Stack 1976). As a result, when most states began enacting joint-custody legislation, there was no consensus on the optimal custodial arrangement (Jacob 1988, Ch. 8).

There were many underlying causes of child-custody reform. Women's increasing labor-force participation and the more prominent role of men in child rearing were both key demographic changes that helped facilitate joint-custody reform (Jacob 1988, Ch. 8). The preponderance of "dead-beat" parents (primarily fathers), who were in arrears of child-support payments, also generated political incentives to alter child-custody laws (Jacob 1988, Ch. 8).[5] Contrary to other family-law reforms, expert opinion was relatively absent and personal experiences were more often cited in the legislative discourse on joint custody (Jacob 1988, Ch. 8). Because it was difficult to show the negative consequences for children and the potential gains came at a low cost to the public, joint-custody reform was discussed by a small group of proponents and passed legislatures in relative obscurity (Jacob 1988, Ch. 8).

A joint-custody provision relegates courts to handle only those custody disputes which cannot be settled privately (Buehler and Gerard 1995). In the event that child custody must be

[5] Since welfare payments were a federal issue, by 1984, this political activity also included a U.S. Congress mandate that funds would be withheld from paychecks and federal tax returns to pay delinquent child support (Jacob 1988, pp. 132). By simply granting greater custodial rights, joint custody could also have been a low-cost (for the state) incentive for noncustodial parents to pay child support. In fact, Brinig and Buckley (1998a) find a positive effect of joint-custody reform on child-support payments.

decided in court, judges have discretion to rule in favor of joint custody if it conforms to the best interests of the child.[6] Depending on family-specific circumstances, joint custody can fall under a protocol of (*i*) joint legal custody in which parents share in the decisions of child upbringing but the child's primary residence is with one of the parents or (*ii*) joint physical custody in which both parents share in child-rearing decisions and also share physical custody of the child. Under either joint-custody settlement, courts expect divorced parents to maintain a cooperative relationship while raising their children.[7]

Divorce settlements also depend on a state's specific property-division laws. In the event of divorce, courts distribute marital assets according to three property-division regimes: (*i*) equitable-division, (*ii*) common-law, or (*iii*) community property. Equitable-division property laws authorize judges to divide marital property as they see fit, which generally protects the most damaged individual in the event of divorce (Gray 1998). However, courts in these states are expected to divide property evenly. In common-law states, the spouse who holds legal title receives control of the property in the event of divorce. By contrast, community-property states transfer assets from the legal title holder to the other spouse. Assuming the husband is the breadwinner, community-property states reward the wife a larger share of the marriage-specific assets following divorce, while common-law property states generally reward the husband a larger share of the marital assets (Gray 1998).

B. Child Investment in Models of Intrahousehold Distribution

[6] See Buehler and Gerard (1995) for a discussion of the Best Interests of the Child (BIOC) standard and how the standard varies by state.

[7] Our measure of joint-custody reform includes both joint physical and legal custody arrangements.

Becker (1991) assumes that families pool all sources of income and maximize a common utility function.[8] Becker's model predicts that changes in the laws governing child custody and marriage-specific assets would have the same effect on within-family distribution regardless of which spouse benefits.[9] However, Becker's common-preference assumption may not be realistic in the context of child custody if a change in a state's custody regime alters the expected value of child investment.[10]

Manser and Brown (1980) and McElroy and Horney (1981) develop models in which couples bargain over the marital surplus. Divorce represents an external threat point or outside option. The key feature of these models is the role of environmental factors (e.g., laws governing the division of children following divorce), which determine the threat point in the bargaining game.[11] A change in a state's child-custody laws may alter the value of each spouse's options outside of marriage, which could have consequences for within-marriage investment.

Assume the return on child investment is non-rival within marriage but rival outside of marriage. It follows that changes to laws which govern the allocation of child custody could

[8] In Becker's framework, maximizing the family's utility function occurs through the decision-making of a dominant altruist. Becker emphasizes the importance of the marriage market in determining the distribution of resources within marriage. Pollak (1985) specifies Becker's model in the context of a two-stage bargaining game in which the altruist moves first and makes take-it-or-leave-it offers to household members. The difference in Pollak's and Becker's models is the former assumes that it is not altruism but his/her bargaining position within the family that determines intrahousehold distribution.

[9] The main obstacle in testing Becker's model is finding an exogenous factor that could affect the control of resources within families. A number of studies use nonlabor income to test the income-pooling assumption in Becker's model (e.g., Thomas 1990; Schultz 1990). Supporters of the income-pooling hypothesis typically conclude that nonlabor income may be endogenous, implying that observed differences in within-family distribution could be due to unobserved heterogeneity. However, Lundberg et al. (1997), Attanasio and Lechene (2002), Gitter and Barham (2008), and Ward-Batts (2008) provide strong evidence rejecting the income-pooling assumption.

[10] The marriage market also plays a significant role in the distribution of marital resources. If prospective spouses can make costless, binding, distributional agreements, bargaining does not occur over the course of marriage. However, this assumption may also be unrealistic as courts in the U.S. have been reluctant to recognize marital contracts specifying child custody in the event of divorce (Francesconi and Muthoo 2003).

[11] Lundberg and Pollak (1993) contend that a within-marriage outcome is more reasonable since the costs associated with divorce are often high. They assume the existence of traditional gender roles that determine internal threat points (e.g., sleeping on the couch, burnt toast, or "silent treatment") in a Nash-bargaining framework, which have distributional and efficiency consequences. In their separate-spheres model, there is no outside option (i.e. divorce), and they make no assumptions regarding the efficiency of the equilibrium outcome. Since their model has no external threat point, joint-custody reform should have little impact on intrahousehold distribution.

alter the expected value of divorce by altering divorce costs for mothers and fathers. Joint-custody reform may lower divorce costs for fathers because they expect to lose less of the return from child investment when they expect shared-custody arrangements. By contrast, joint-custody reform may increase divorce costs for mothers because they expect to receive less of a return on child investment. Brinig and Allen (2000) find a significant increase (decrease) in the propensity of women to file for divorce when they (do not) expect to receive sole child custody. Their results suggest that the expectation of child custody is the most important factor in women's decisions to file for divorce. In the context of a Nash-bargained outcome, these findings suggest joint-custody reform should unambiguously shift bargaining power to fathers, as the value of divorce decreases for mothers. Hence, post-reform marital investment in children may reflect the preferences of fathers to a greater extent.

Rasul (2006) develops a model of within-family bargaining in which child quality is a public good and married couples contract an *ex ante* allocation of child custody should divorce occur.[12] If spouses have homogenous preferences for child quality, joint custody is the optimal post-divorce custody allocation because it maximizes investment in the public good during marriage. However, if spouses have heterogeneous preferences for child quality, sole custody with the high-valuation spouse is the optimal child-custody allocation. If both spouses have an equally high valuation of child quality, we may observe a rise in the probability that a child attends private school when a state adopts joint custody. Alternatively, if one spouse values child quality more on average, we may either observe a positive or negative impact of joint-custody laws on marital investment in child quality. If bargaining power shifts to the high-valuation

[12] Weiss and Willis (1985, 1993) also examine the allocation of child custody in the event of divorce; however, they only consider sole custody as a post-divorce allocation of children. Francesconi and Muthoo (2003) consider joint custody as an option and examine marital investment in chidlren. Their paper differs from Rasul's in several ways. For example, they consider cases in which the allocation of sole child custody to the low-valuation parent is optimal and divorce cannot occur in their model.

spouse, the rate at which parents invest in private school for their children could increase. However, if the reform shifts bargaining power to the low-valuation spouse, the probability of children's private school attendance may decline.

A growing empirical literature documents an increase in spending on and investment in children when women (primarily mothers) have greater control over household expenditures (Thomas 1990; Phipps and Burton 1998; Duflo 2003; Maitra 2003; Ward-Batts 2008). If joint-custody reform shifts bargaining power to fathers, who are, on average, the low-valuation spouse, Rasul's (2006) model predicts an unambiguous decline in marital investment in children.[13]

C. Joint Custody, Property Division, and Household Bargaining

It is likely that the effects of joint-custody laws on marital investment in children are predicated on the underlying property-division laws, which may benefit either fathers or mothers in the event of divorce. In divorce settlements, Gray (1998) contends that men benefit more in common-law states, and women benefit more in community-property states. In common-law states that enact joint custody, fathers may have additional incentive to invest in assets because the corresponding return is higher relative to child investment.[14] Mothers in common-law states may have less incentive to invest in children because joint-custody reform lowers their expected return from investment in child quality. Alternatively, mothers in these states may have

[13] However, Blundell et al. (2005) argue that changes in household investment in children resulting from an increase (decrease) in individual resources may not be the result of differences between fathers' and mothers' willingness to pay but rather the responsiveness of mothers' and fathers' willingness to pay to changes in private consumption.

[14] Under a joint-custody regime, fathers may expect a larger share of child custody in the event of divorce. This could result in lower paternal investment in children, in which that investment was previously directed toward binding the marriage so as not to lose time with children. Under these circumstances, a law change which grants more custody to fathers in states with property-division laws favoring them would likely increase the relative return to investment in marital assets.

additional incentive to invest in children to further bind their marriages rather than incur a loss of both assets and child custody.

Fathers in community-property states that enact joint custody may be more likely to send their children to private school because they will reap more benefits from child investment relative to their return on marital assets. Alternatively, joint-custody reform in community-property states could lower the return on child investment for mothers relative to the return on marital assets, as they may expect less time with their children after divorce.

In equitable-division states that adopt joint custody, the ways in which bargaining power shifts are less clear. Judges in these states are given discretion to rule as they see fit. However, equitable-division-property laws typically favor the spouse who is damaged the most by the divorce (Gray 1998). Weitzman (1985) and Hoffman and Duncan (1988) find that the economic well-being of divorced women falls by 73 percent and 30 percent, respectively. Assuming a decline in the well-being of women following divorce, equitable-division property laws tend to favor mothers. If joint-custody reform shifts bargaining power to fathers, children's private school attendance may increase in states with equitable-division property because fathers expect a greater return on child investment relative to the returns from assets. Mothers may have additional incentive to invest in assets, as the expected return on child investment declines. However, in equitable-division states, parents may not change their investment behavior in marital assets or children's schooling because courts are expected to divide marital property evenly between spouses.

III. DATA AND ECONOMETRIC METHODOLOGY

We use data from the 1980 and 1990 five-percent Integrated Public Use Microdata Series (IPUMS) from the U.S. Population Censuses and the child-custody-law coding from Brinig and Buckley (1998a, see TABLE 1) to determine whether the prospect of joint custody affects within-marriage investment in children. The units of observation are children whose biological parents are married at the survey date. We exclude children from blended families because child-investment decisions would likely be made by biological parents, one of whom is absent. The sample is also restricted by the categorical nature of the education variable provided by the IPUMS. The survey collapses children who are in kindergarten and those who are not enrolled in school in the same category. As such, we are unable to examine children in grades lower than first.

We use children's private school attendance as a measure of child investment for two reasons: (*i*) it is verifiable, and (*ii*) it is commonly used in the literature (e.g., see Cáceres-Delpiano 2006; Conley and Glauber 2006). One potential problem with using children's private-school education as a measure of child investment is the long-run planning of parents, as they could decide on private school before their children are of school age. Estimates of joint-custody reform's effect on marital investment in children may be biased if parents make child-investment decisions prior to the law change. We minimize this potential bias by eliminating observations from states that enact joint custody after 1983 so the oldest and the younger children in our sample in 1990 were one-year-old and unborn at the time of the last enactment, respectively.[15] This restriction also accounts for the greater influence of older children, relative to younger children, on the schooling decisions made by parents.

[15] This restriction results in the elimination of observations from Illinois, Maryland, Oregon, South Dakota, Tennessee, Texas, Utah, and Virginia.

The median marriage duration in which divorce occurs is approximately eight years (U.S. Census 2004).[16] This is important, as those who are considering divorce (i.e. those on the margin) are more likely to be aware of how states allocate children in the event of divorce. Although we cannot determine how long the couples in our sample have been married, the ages of children can aid in approximating length of marriage. Because we consider married couples with children aged four to eight years, the sample likely contains intact households with many different marriage durations.[17]

Variation in the timing of joint-custody reforms across states provides a natural experiment framework with which to examine how the prospect of joint custody affects within-marriage investment in children. Natural experiments require treatment and comparison groups. Married couples with children who live in states that change their child-custody laws to favor joint custody between 1980 and 1990 are the treatment group, while those who live in states that had either instituted joint-custody reform before 1980 or that did not adopt joint-custody laws before 1990 are the comparison group. Between 1980 and 1983, 21 of the 42 states in our sample adopted a preference for joint-custody arrangements. This provides substantial variation in the population who are affected by child-custody reform. In 1980, 32 percent of children in our sample (observations = 148,714) live in states with joint custody as the preferred custodial allocation, while the percentage of children who live in states with joint custody as the preferred

[16] See http://www.census.gov/population/www/socdemo/marr-div/2004detailed_tables.html.

[17] Consider the oldest children in our sample: those who are eight-years-old at the survey date. Assuming the couple had the child in their first year of marriage, their marriage duration is eight years as of the survey date. However, married couples could postpone having children for a few years. This implies marriage durations in excess of eight years. Parents could also be married a shorter time, as the child could have been born out of wedlock. As such, the sample likely contains a sufficient number of at-risk marriages—those who would be aware of how the states in which they live allocate children in the event of divorce.

option in 1990 is 84 percent (observations = 159,008). Approximately 14 percent of children in our sample attend private school, regardless of the custodial regime in place.[18]

The 1980 and 1990 U.S. Censuses provide a way to control for child and parent characteristics and time-invariant unobserved heterogeneity at the state level. However, omitted time-varying, state-specific variables correlated with the passage of joint custody and children's private school attendance could bias estimates.[19] For example, child custody was at the forefront of legislative agendas in the late-1970s and early-1980s because increased welfare receipts were attributed to delinquent child-support payments (Jacob 1988, Ch. 8). The spread of joint-custody reform could also be related to changing societal preferences for child-rearing responsibilities, as rising female labor-force participation rates and fathers' increasing role in child rearing provided fathers' rights groups with a political voice to argue for joint custody (Jacob 1988, Ch. 8). Reforms to the child-support-enforcement (CSE) program, participation in and the benefit levels of the Aid to Families with Dependent Children (AFDC) program, and the female labor-force participation rate are likely correlated with the passage of joint custody. These variables could also be correlated with children's private school attendance. Failure to account for these covariates could lead to biased estimates.

The empirical specification takes the probit functional form. We estimate the following equation:

$$Private_{i,s,t} = \beta_0 + \beta_1 Joint_{s,t} + \beta_2 \mathbf{C}_{i,s,t} + \beta_3 \mathbf{P}_{i,s,t} + \beta_4 \mathbf{S}_{s,t} + \sum_s \eta_s + \sum_t \tau_t + \varepsilon_{i,s,t} \quad (1)$$

[18] According to the 2000 U.S. Census (Table 247) approximately 2.7 million children (9.2 percent of the total population of elementary school students) attended private elementary school in 1990. Although our sample suggests a higher percentage of children attending private school, the difference likely comes from our sample consisting of only intact households with own children present.

[19] Stevenson (2008) finds that Gray's (1998) results are sensitive to the inclusion of time-varying, state-level controls.

The terms *i*, *s*, and *t* index children, states, and time, respectively. *Private* is an indicator variable that equals one if a child attends private school and equals zero if the child attends public school;[20] *Joint* is an indicator variable that equals one if a state explicitly codifies or reveals its preference for joint custody in any year prior to the 1990 Census year and zero otherwise; **C** is a vector of child-specific controls; **P** is a vector of parental controls; **S** is a vector of time-varying, state-level controls; η and τ are state and time fixed effects, respectively; ε is an error term; and the β_i are parameters to be estimated.[21]

The variables in **C** are the child's age, a squared term of their age, race, gender, and whether they live in a city, and those in **P** are parents' ages, races, and education levels. The variables in **S** include the unemployment rate, real per-capita income, the female labor-force participation rate, a measure of the extent to which a state's congressional delegation cast liberal votes, an indicator variable for the political party of the governor, the consideration of marital fault in the divorce settlement, the Aid to Families with Dependent Children (AFDC) participation rate and maximum benefit paid to families of four, the value of food-stamp outlays, the Supplemental Security Income (SSI) participation rate, and whether states universally withhold child-support payments from father paychecks.[22] The inclusion of **S** allows us to minimize the potential bias

[20] We are unable to distinguish between various religious or parochial private schools because the U.S. Population Census survey questions on school type are not consistent across the two decennial periods.

[21] In order to estimate the full effect of joint-custody reform, we do not control for covariates that may be affected by the reform, which is similar to the approach used by Stevenson (2007). For example, household income could be affected by the adoption of joint custody because the reform may change spousal labor-supply decisions. Because the reform may change investments in children, it could also alter fertility decisions. If the reform affects household income and/or the number of children, then at least a portion of the effect of the joint-custody laws on children's private school attendance would be removed, because its impact would also be captured in the estimates for household income and/or the number of children (Lee 2005). However, we checked the sensitivity of the estimates to controls for household income and family size. These models reveal little difference in the estimated effects of joint-custody reform on children's private school attendance. In fact, the inclusion of these covariates tends to strengthen our findings.

[22] There were a large number of child-support-enforcement (CSE) reforms that occurred concomitantly with the adoption of joint custody. We only control for those CSE variables that potentially affect married couples, as the bulk of CSE reforms and expenditures were directed at the increasing the child-support receipt of never-married

from a spurious correlation between joint-custody reform and other state-level influences.[23] Summary statistics and formal variable definitions for the controls in **C** and **P** are shown in TABLE 2, and those in **S** are shown in TABLE 3.

We also examine the potential tradeoff between child investment and other marriage-specific assets by allowing joint-custody reform to have asymmetric effects across three mutually exclusive property-division regimes: common law, equitable division, and community property.[24] We use Gray's (1998) property-division law coding found in TABLE 1. Because there is limited variation in joint-custody reform among states with certain property-division laws, the estimated interaction effects are more likely to capture a spurious relationship between time-varying, state-level variables and child-custody reform. This may not present a problem for the estimated effect of joint-custody reform in equitable-division states, as 13 of the 28 equitable-division states enact joint custody between 1980 and 1984. However, of the 14 common-law states and the eight community-property states, only four in each type of state enact joint custody between 1980 and 1984. Identification of these effects also relies on the variables in **S** to control for state-level changes correlated with the passage of joint custody and/or the underlying property-division laws and children's private school attendance.

The equation testing the potential tradeoff between investment in children and other marital assets is

---

mothers. Another reason to omit these variables from the model is the substantial collinearity between them and joint-custody reform.

[23] Controls for the underlying property-division laws and the adoption of unilateral divorce laws, which could be correlated with joint-custody reform, are captured as state fixed effects. Only South Dakota and Utah changed their divorce laws to favor unilateral divorce between 1980 and 1990 (See Gruber 2004). Both South Dakota and Utah also began to favor joint custody in 1987; therefore, these states are excluded because of our experimental design.

[24] Previous studies have also considered the effects of changes in family laws by whether states consider marital fault in the divorce settlement (e.g., see Gray 1998; Stevenson 2007). We checked the robustness of joint-custody reform's effects on marital investment in children, and our results are largely robust across no-fault and fault-based property-division states.

$$
\begin{aligned}
Private_{i,s,t} = {} & \alpha_0 + \alpha_1\, Joint\,with\,Community_{s,t} + \alpha_2\, Joint\,with\,Commom_{s,t} \\
& + \alpha_3\, Joint\,with\,Equitable_{s,t} + \alpha_4\, \mathbf{C}_{i,s,t} + \alpha_5\, \mathbf{P}_{i,s,t} + \alpha_6\, \mathbf{S}_{s,t} \\
& + \sum\nolimits_s \eta_s + \sum\nolimits_t \tau_t + \varepsilon_{i,s,t}.
\end{aligned} \tag{2}
$$

We define the terms *i*, *s*, and *t* and variables *Private*, **C**, **P**, **S**, η, τ, and ε above. The variables *Joint with Community*, *Joint with Common*, and *Joint with Equitable* equal one when community-property, common-law, and equitable-division states adopt joint custody and zero otherwise, respectively. The α_i are parameters to be estimated.

In our last set of models, we partition the sample by mothers' education, a measure of SES.[25] We then reestimate equations (1) and (2) separately for three SES groups: mothers who are high school dropouts, mothers who are high-school graduates and those who have attended some college, and mothers who are college graduates. We partition the sample by SES for several reasons. First, parental decisions to send children to private school are likely determined by SES. Second, divorced couples who are of high SES are more likely to receive joint-custody arrangements (Seltzer 1991). Third, divorce propensities differ by SES, with the lower-SES group having higher divorce propensities than higher-SES groups (Weiss and Willis 1997). Fourth, partitioning by mothers' education may provide a clearer picture of household bargaining, as the gain in bargaining power received by fathers following joint-custody reform could be mitigated by mothers' education. Fifth, joint-custody reform could lead to improvements in the bargaining position of mothers who are of high-SES. Sharing child custody with a former spouse could allow mothers to pursue professional careers, as fathers would likely participate in child rearing. It is well documented that women, including mothers, increasingly pursued professional careers over the sample period (Goldin 2006; Goldin et al. 2006).

[25] We use mother's educational attainment as a measure of SES because household income is a likely endogenous variable.

Comparison of the sample's descriptive statistics suggests that children's private school attendance varies greatly by mother's education: seven percent for those whose mothers are high school dropouts; 13 percent for those whose mothers are high school graduates or have attended some college; and 19 percent for those whose mothers are college graduates. We compare descriptive statistics on children's private school attendance by mother's education in states with and without joint-custody laws in TABLE 4. Children's private school attendance is greater in joint-custody states relative to sole-custody states for children in the highest-SES group, those whose mothers are college graduates. By contrast, private school attendance for children is lower in joint-custody states relative to sole-custody states for the lower-SES groups.

IV. RESULTS

A. Joint Custody, Property Division, and Child Investment

TABLE 5 shows the estimates from equations (1) and (2) for the full sample of children. Model 1 shows the results from the baseline model, which considers the effect of joint-custody reform on within-marriage investment in children's private-school education (i.e. Equation (1)). We find a 13 percent (1.7 percentage point) decline in the probability of children's private school attendance in states that adopt joint custody between 1980 and 1990. This estimated effect is statistically significant at the one-percent level.

The negative effect found for joint-custody reform's effect on within-marriage investment in children's private-school education rejects the common-preference model posited by Becker (1991), but it provides support for the predictions made by cooperative bargaining models and collective models of household behavior (e.g., see Manser and Brown 1980; McElroy and Horney 1981; Chiappori 1992; Blundel et al. 2005). In addition, our result is consistent with existing empirical research on policies that benefit one spouse over the other. This literature

shows that when women have a greater bargaining position within marriage spending on children increases relative to when men have more control over the resources (e.g., see Thomas 1990; Lundberg et al. 1997; Phipps and Burton 1998; Gitter and Barham 2008; Ward-Batts 2008). The model posited by Rasul (2006) also provides support for our findings, who suggests that within-marriage investment in child quality is driven by the preferences parents for child investment and their relative bargaining position within marriage. Our finding is also consistent with a prediction made by Rasul's model: if parents have heterogeneous valuations of child quality, a shift in bargaining power to the low-valuation parent unambiguously leads to a decline in within-marriage investment in child quality. Rasul's model also shows that when parents have an equally low valuation of investment in child quality, investment in the public good (i.e. children) declines. However, this should be the case regardless of whether states adopt joint-custody laws. In the context of Rasul (2006) and the existing literature, it could be that joint-custody reform shifts bargaining power to the low-valuation parent; in this case, the father.

Model 2 shows the estimates from equation (2). This specification considers the effects on the probability of children's private school attendance of joint-custody reform by the type of property-division law in place across states. This model tests for a tradeoff between investment in children and other marital assets.[26] The effects of joint-custody reform in both common-law and community-property states are negative and statistically significant at the one-percent level. In these states, the probability of children's private school attendance declines by 20 and 23 percent (2.6 and 3.0 percentage points), respectively. The estimated effect of joint-custody

[26] It is unlikely that the estimated effects of joint-custody reform by the type of property-division laws in place across states would reflect a substitution toward consumption of nondurable goods, because these goods are not subject to property division. However, the division of durable goods (e.g., cars, boats, homes, and other marital assets) is subject to the underlying property-division laws. As such, any difference in the probability of attending private school for children in states with certain property-division laws that adopt joint custody likely reflects a substitution of resources to investment in marital assets rather than consumption.

reform in equitable-division states is negative, but it is not statistically different from zero. As such, the overall effect of joint-custody reform shown for equation (1) appears to be present only in states that have property-division laws that consistently favor one spouse over the other.

Because men benefit in common-law states and women benefit in community-property states, the sizeable, negative effects found in these states suggest that spouses invest more in marital assets relative to children's schooling when they stand to receive a greater share of the marital assets following divorce. The results for joint-custody reform in common-law states supports the idea that bargaining power shifts to the low-valuation parent, perhaps fathers. In these states, fathers benefit both in terms of child custody and the portion of the marital surplus procured after divorce. As a result, the relative post-divorce return on marital assets may be higher than the returns from child investment for fathers. In addition, it could be that when women can take a larger share of the marital assets they prefer to invest in assets rather than child quality. As for the effect of joint-custody reform in equitable-division states, parents may not change their investment behavior in marital assets or children's schooling because property division is determined by courts, which likely have different preferences for the allocation of marital property following divorce. As such, it may be difficult for parents to forecast accurately how marital property will be divided.

B. Joint Custody, Property Division, Socioeconomic Status, and Child Investment

TABLE 6 presents estimates from equations (1) and (2) for subsamples partitioned by SES. Models 1 and 2 present the results for children whose mothers are high-school dropouts (low SES); Models 4 and 5 present the results for children whose mothers are high-school graduates

or have attended some college (mid SES); and Models 7 and 8 present the results for children whose mothers have graduated from college (high SES).

For children whose mothers are high-school dropouts, the impact of joint-custody reform on children's private school attendance is negative and statistically significant at the one-percent level in Model 1. This estimated effect translates into a 32 percent decrease (2.3 percentage points) in the probability of children's private school attendance. In Model 2, we investigate the impact of joint-custody reform by the underlying property-division regime in place across states on the probability of private school attendance for children. These effects translate into 74, 35, and 38 percent decreases (5.8, 1.6, and 2.5 percentage points) in community-property, common-law, and equitable-division states, respectively. The results from Models 1 and 2 for the lowest SES group indicate that joint-custody reform negatively affects the probability of children's private school attendance regardless of how the state divides marital property.

Model 3 indicates that joint-custody reform is negative and statistically significant at conventional levels for the mid-SES group. This effect translates into a seven percent (one percentage point) decrease in the probability of children's private school attendance. Similar to the results for the full sample, Model 4 indicates that the negative effects of joint-custody reform are larger in community-property and common-law states. In these states that enact joint custody, the probability of children's private school attendance declines by 22 and 17 percent (2.8 and 2.1 percentage points), respectively. Joint-custody reform in equitable-division states is not statistically different from zero for the mid-SES group.

For the highest-SES group, we find that the effect of joint-custody reform on the probability of children's private school attendance is negative and statistically significant at the five percent level in Model 5. This effect translates into a 10 percent (2.1 percentage point) decrease in the

probability of children's private school attendance. In Model 6, we find an 11 percent (2.2 percentage point) increase in the probability of children's private school attendance in community-property states that enact joint custody. By contrast, we find a 19 percent (3.8 percentage point) decline in the probability of children's private school attendance in common-law states that enact joint custody. The effect of joint-custody reform in equitable-division states is not statistically different from zero, which is similar to the estimates presented for the full sample and the mid-SES group.

Children from the lowest-SES households are more adversely and robustly affected by joint-custody reform than those from higher-SES groups. There are a number of potential reasons for the larger negative effects of joint-custody reform on children from the lowest-SES group. First, the lowest-SES group faces a higher probability of divorce. As such, they would be more likely to be affected by the reform. Second, low-SES families could have lower valuations of child quality on average. Third, because of positive assortative mating based on education, mothers from the lowest-SES group may have worse outside options. If the value of outside options is lower, they would be in an even worse bargaining position following custody reform. As a result, the preferences of fathers for investment in child quality may be reflected to a greater extent.

The effects of joint-custody reform without conditioning on the type of property-division regime in place are similar for the mid- and high-SES groups. However, the effects differ when the underlying property-division laws are considered in conjunction with joint-custody reform: the effect of joint-custody reform in community-property states is negative for the mid-SES group, while it is positive for the high-SES group. A potential explanation for the positive effect of joint-custody reform in community-property states could be that women who are of high SES,

on average, exhibit more bargaining power within marriage. If women are more altruistic toward their children, enactment of joint custody in community-property states in conjunction with their higher education attainment appears to eliminate the gain in bargaining power received by fathers. Alternatively, if fathers receive additional bargaining power following joint-custody reform but women retain a greater share of marital property, fathers may invest more in child quality because they stand to lose a larger share of the marital assets relative to the returns from child investment. Likewise, it could be that bargaining power shifts to mothers in the high-SES group. They may wish to invest more in child quality to compensate for the time they spend pursuing professional careers.

V. CONCLUSIONS

We investigate the effects of joint- or shared-child-custody laws on marriage-specific investment in child quality. We use variation in the timing of child-custody reforms across states to identify the effects of joint-custody reform on children's private school attendance. Although most children in the U.S. do not attend private school, observed differences in private school attendance can likely be generalized to other forms of child investment. We find a statistically significant, 13 percent decrease in the probability that a child attends private school in states that enact joint custody.

We interpret these results in context of recent literature on government programs which target financial transfers to specific family members, primarily women. States that move from a maternal-preference regime to a joint-custody regime decrease the bargaining power of mothers in married households. As a result, marital investment in children may reflect the preferences of fathers to a greater extent. Consistent with previous literature on intrahousehold distribution

(e.g., Thomas 1990; Lundberg et al. 1997; Phipps and Burton 1998; Maitra 2003; Ward-Batts 2008), we find a decrease in child-specific investment after joint-custody enactment.

We also consider the potential tradeoff for married couples between investing in marital assets and child quality. In both community-property and common-law states that enact joint custody, the probability of children's private school attendance declines by 20 and 23 percent, respectively. An economic explanation of these sizable, negative effects could be that spouses invest less in their children when they stand to gain more of the marital assets in the event of divorce.

Dividing the sample by SES for these models yields many interesting results. For the lowest SES group, we observe a decrease in the probability of children's private school attendance regardless of the underlying property-division laws in states that enact joint custody. In common-law states, joint-custody reform reduces the probability of children's private school attendance for all SES groups. However, joint-custody reform in community property states increases the probability a child attends private school for the high SES group, which may reflect an increase in bargaining power for more educated women.

Judges in the U.S. are directed to consider the best interests of the child in the adjudication of child-custody cases. To that end, joint-custody reform may lessen the impact on children of losing regular contact with one of their parents. However, the prospect of post-divorce cooperation under a joint-custody regime may have negative, within-marriage consequences regarding child investment. The incentives to invest in children and other marital assets could be predicated on the potential return to those investments in the event of divorce. According to our results, the effect of joint-custody reform on marital investment in children also depends on state laws specifying the division of marital assets. Further consideration of how joint-custody laws

alter child-investment incentives within married households could help avoid negative, albeit unintended, consequences for children.

REFERENCES

Attanasio, Orazio and Valerie Lechene. 2002. "Tests of Income Pooling in Household Decisions." *Review of Economic Dynamics*, 5(4): 720-748.

Becker, Gary S. 1991. *A Treatise on the Family*. Harvard University Press: Cambridge, enlarged edition.

_____, Elisabeth M. Landes, and Robert T. Michael. 1977. "An Economic Analysis of Marital Instability." *Journal of Political Economy*, 85(6): 1141-1188.

Bergstrom, Theodore. 1996. "Economics in a Family Way." *Journal of Economic Literature*, 34(4): 1903-1934.

Blundell, Richard, Pierr-Andre Chiappori, and Costas Meghir. 2005. "Collective Labor Supply with Children." *Journal of Political Economy*, 113(6): 1277-1306.

Brinig, Margaret and Douglas W. Allen. 2000. "These Boots Are Made for Walking: Why Most Divorce Filers Are Women." *American Law and Economics Review*, 2(1): 126-169.

Brinig, Margaret and Frank H. Buckley. 1998a. "Joint Custody: Bonding and Monitoring Theories." *Indiana Law Journal*, 73(2): 1-31.

Buehler, Cheryl and Jean M. Gerard. 1995. "Divorce Law in the United States: A Focus on Child Custody. *Family Relations*, 44(4): 439-458.

Cáceres-Delpiano, Julio. 2006. "The Impact of Family Size on Investment in Child Quality." *Journal of Human Resources*, 41(4): 738-754.

Cancian, Maria and Daniel Meyer. 1998. "Who Gets Custody?" *Demography*, 35(2): 147-157.

Chiappori, Pierre-André. 1992. "Collective Labor Supply and Welfare." *Journal of Political Economy*, 100(3): 437-467.

Chiappori, Pierre-André, Bernard Fortin, and Guy Lacroix. 2002. "Marriage Market, Divorce

Legislation, and Household Labor Supply." *Journal of Political Economy*, 110(1): 37-72.

Conley, Dalton and Rebecca Glauber. 2006. "Parental Educational Investment and Children's Academic Risk: Estimates of the Impact of Sibship Size and Birth Order from Exogenous Variation in Fertility." *Journal of Human Resources*, (61)4: 722-737.

Duflo, Esther. 2003. "Grandmothers and Granddaughters: Old-Age Pensions and Intrahousehold Allocation in South Africa." *World Bank Economic Review*, 17(1): 1-25.

Francesconi, Marco and Abhinay Muthoo. 2003. "An Economic Model of Child Custody." *CEPR Discussion Paper No. 4054.*

Genadek, Katie R., Wendy A. Stock, and Christiana Stoddard. 2007. "No-Fault Divorce Laws and the Labor Supply of Women with and without Children." *Journal of Human Resources*, 42(1): 247-274.

Gitter, Seth R. and Bradford L. Barham. 2008. "Women's Power, Conditional Cash Transfers, and Schooling in Nicaragua." *World Bank Economic Review*, 22(2): 271-290.

Goldin, Claudia. 2006. "The Quiet Revolution that Transformed Women's Employment, Education, and Family." *American Economic Review*, 96(2): 1-21.

_____, Lawrence F. Katz, and Ilyana Kuziemko. 2006. "The Homecoming of American College Women: The Reversal of the College Gender Gap." *Journal of Economic Perspectives*, 20(4): 133-156.

Goldstein, Joshua, Anna Freud, and Albert Solnit. 1984. *Beyond the Best Interests of the Child*. Free Press: New York.

Gray, Jeffrey. 1998. "Divorce-Law Changes, Household Bargaining, and Married Women's Labor Supply." *American Economic Review*, 88(3): 628-642.

Gruber, Jonathan. 2004. "Is Making Divorce Easier Bad for Children? The Long-Run of Implications of Unilateral Divorce." *Journal of Labor Economics*, 22(4): 799-833.

Hoffman, Saul D. and Greg J. Duncan. 1988. "What Are the Economic Consequences of Divorce?" *Demography*, 25(4): 641-645.

Huang, Chien-Chung. 2002. "The Impact of Child Support Enforcement on Nonmarital and Marital Births: Does It Differ by Racial and Age Groups?" *Social Service Review* 76(2): 275-301.

Jacob, Herbert. 1988. *Silent Revolution: The Transformation of Divorce Law in the United States*. University of Chicago Press: Chicago.

Lee, Myoung-Jae. 2005. *Micro-Econometrics for Policy*, *Program*, *and Treatment Effects*. Oxford University Press: New York.

Lundberg, Shelly and Robert Pollak. 1993. "Separate Spheres Bargaining and the Marriage Market." *Journal of Political Economy*, 101(6): 988-1010.

_____ and _____. 1996. "Bargaining and Distribution in Marriage." *Journal of Economic Perspectives*, 10(4): 139-158.

_____, _____, and Terrance Wales. 1997. "Do Husbands and Wives Pool Their Resources? Evidence from the U.K. Child Benefit." *Journal of Human Resources*, 32(2): 463-480.

Maitra, Pushkar. 2004. "Parental Bargaining, Health Inputs, and Child Mortality in India." *Journal of Health Economics*, 23(2): 259-291.

Manser, Marilyn and Murray Brown. 1980. "Marriage and Household Decision-Making: A Bargaining Analysis." *International Economic Review*, 22(1): 31-44.

McElroy, Marjorie and Mary J. Horney. 1981. "Nash-Bargained Household Decisions: Toward a Generalization of the Theory of Demand." *International Economic Review*, 22(2): 333-349.

Pollak, Robert. 1985. "A Transaction Cost Approach to Families and Households." *Journal of Economic Literature*, 23(2): 581-608.

Rasul, Imran. 2006. "The Economics of Child Custody." *Economica*, 73(289): 1-25.

Schultz, Paul. 1990. "Testing the Neoclassical Model of Family Labor Supply and Fertility." *Journal of Human Resources*, 25(4): 599-634.

Seltzer, Judith A. 1991. "Legal Custody Arrangements and Children's Economic Welfare." *American Journal of Sociology*, 96(4): 895-929.

Stack, Carol B. 1976. "Who Owns the Child? Divorce and Child Custody Decisions in Middle-Class Families." *Social Problems*, 23(4): 505-515.

Stevenson, Betsey. 2007. "The Impact of Divorce Laws on Marriage-Specific Capital." *Journal of Labor Economics*, 25(1): 75-94.

_____. 2008. "Divorce Law and Women's Labor Supply." *Journal of Empirical Legal Studies*, forthcoming.

Thomas, Duncan. 1990. "Intra-Household Resource Allocation: An Inferential Approach." *Journal of Human Resources*, 25(4): 635-664.

U.S. Census Bureau. 2005. "Number, Timing, and Duration of Marriages and Divorces: 2001." *Current Population Reports: February 2005.*

Ward-Batts, Jennifer. 2008. "Out of the Wallet and into the Purse: Using Micro Data to Test Income Pooling." *Journal of Human Resources*, 43(2): 325-351.

Weiss, Yoram and Robert Willis. 1985. "Children as Collective Goods in Divorce Settlements." *Journal of Labor Economics*, 3(3): 268-292.

_____ and _____. 1993. "Transfers Among Divorced Couples: Evidence and Interpretation." *Journal of Labor Economics*, 11(4): 629-679.

_____ and _____. 1997. “Match Quality, New Information, and Marital Dissolution.” *Journal of Labor Economics*, 15(1): S293-S329.

Weitzman, Lenore J. 1985. *The Divorce Revolution*. Free Press: New York.

TABLE 1—YEAR OF INTRODUCTION OF JOINT-CUSTODY LAWS AND THE PREVAILING PROPERTY-DIVISION LAWS BY STATE

State	Joint Custody	Property Division	State	Joint Custody	Property Division
Alabama		Common	Montana	1981	Equitable
Alaska	1982	Equitable	Nebraska	1983	Equitable
Arizona	1991	Community	Nevada	1981	Community
Arkansas		Equitable	New Hampshire	1974	Equitable
California	1979	Community	New Jersey	1981	Equitable
Colorado	1983	Equitable	New Mexico	1982	Community
Connecticut	1981	Equitable	New York	1981	Common
Delaware	1981	Equitable	North Carolina	1979	Common
Florida	1979	Common	North Dakota	1993	Equitable
Georgia	1990	Common	Ohio	1981	Common
Hawaii	1980	Equitable	Oklahoma	1990	Equitable
Idaho	1982	Community	Oregon	1987	Equitable
Illinois	1986	Equitable	Pennsylvania	1981	Common
Indiana	1973	Equitable	Rhode Island	1992	Common
Iowa	1977	Equitable	South Carolina		Common
Kansas	1979	Equitable	South Dakota	1989	Equitable
Kentucky	1979	Equitable	Tennessee	1986	Common
Louisiana	1981	Community	Texas	1987	Community
Maine	1981	Equitable	Utah	1988	Equitable
Maryland	1984	Common	Vermont	1992	Equitable
Massachusetts	1983	Equitable	Virginia	1987	Common
Michigan	1981	Equitable	Washington		Community
Minnesota	1981	Equitable	West Virginia		Common
Mississippi	1983	Common	Wisconsin	1979	Equitable
Missouri	1983	Equitable	Wyoming	1993	Equitable

Notes: The timing of the child-custody reforms are from Brinig and Buckley (1998a), and the coding for the underlying property-division laws are from Gray (1998).

TABLE 2—SUMMARY STATISTICS FOR CHILD, MOTHER, AND FATHER CONTROLS

Variable	Variable Description	Mean	Std. Dev.
Outcome Variable:			
Private	=1 if child attends private school	0.1340	0.3341
Child Covariates:			
Gender	=1 if child is a male	0.5004	0.5000
Hispanic	=1 if child is Hispanic	0.0911	0.2878
Black	=1 if child is black	0.0754	0.2641
City	=1 if child lives in a city	0.1331	0.3397
Mother Covariates:			
Age	In years	31.014	5.3260
Hispanic	=1 if mother is Hispanic	0.0872	0.2822
Black	=1 if mother is black	0.0732	0.2605
High School	=1 if mother has only a high-school degree	0.4291	0.4949
Some College	=1 if mother has attended college with no degree	0.2422	0.4284
College Graduate	=1 if mother is a college graduate	0.1572	0.3640
Father Covariates:			
Age	In years	36.660	6.3622
Hispanic	=1 if father is Hispanic	0.0868	0.2816
Black	=1 if father is black	0.0760	0.2650
High School	=1 if father has only a high-school degree	0.3506	0.4772
Some College	=1 if father has attended college with no degree	0.2382	0.4260
College Graduate	=1 if father is a college graduate	0.2364	0.4249

Notes: There are 307,722 observations for all variables. All children are aged four to eight years.

TABLE 3—SUMMARY STATISTICS FOR TIME-VARYING STATE-LEVEL VARIABLES

Variable	Variable Description	Mean	Std. Dev.
Unemployment Rate	Percentage of the population unemployed who is searching for employment	6.4349	1.5672
Per Capita Income	Average real personal income	14,679	5,149
Liberal Quotient (House)	The degree to which states' House of Representatives cast liberal votes	0.4932	0.1599
Liberal Quotient (Senate)	The degree to which states' Senate cast liberal votes	0.5195	0.2393
Governor	=1 if the governor is a Democrat	0.5923	0.4914
No-Fault Property	=1 if the state removes marital fault from consideration in the divorce settlement	0.4213	0.4938
AFDC Benefit	Dollar amount of the maximum AFDC benefit paid to families of four	576.65	218.65
AFDC Participation	AFDC participation rate	12.069	3.4964
Food Stamp Value	Dollar amount of Food-Stamp outlays	588.67	410.82
Social Security Rate	Supplemental Security Income participation rate	1.9502	0.8144
FLFPR	Female labor-force participation rate	54.240	4.7053
Universal Withholding	=1 if state withholds child-support awards from nonresidential parents' earnings	0.2327	0.4225

Notes: There are 307,722 observations for all variables. All variables in dollar amounts are adjusted for inflation. The state-level *Demographic* variables come from the United States (U.S.) Census and the Center for Disease Control (CDC): http://www.census.gov/popest/archives/1980s/, http://www.census.gov/popest/archives/1990s/, and http://wonder.cdc.gov/Census.html. The state-level *Economic* variables come from the Bureau of Labor Statistics (BLS) and www.economagic.com: http://www.census.gov/prod/99pubs/99statab/sec13.pdf and http://www.economagic.com/beapira.htm. The state-level *Political* variables come from http://www.adaction.org/votingrecords.htm and World Almanacs. The state-level, *Welfare Policy* variables come from http://aspe.hhs.gov/hsp/indicators07/apa.pdf and the Department of Health and Human Services. The variable *Universal Withholding* is from Huang (2002).

TABLE 4—SUMMARY STATISTICS FOR CHILDREN'S PRIVATE SCHOOL ATTENDANCE BY MOTHER'S EDUCATION AND JOINT-CUSTODY REGIME

Mother's Education	Joint Custody=0			Joint Custody=1		
	Mean	Std. Dev.	Obs.	Mean	Std. Dev.	Obs.
High School Dropouts	0.0847	0.2785	22,922	0.0652	0.2469	29,861
High School Graduates and Some College	0.1443	0.3514	130,813	0.1362	0.3481	150,283
College Graduates	0.1840	0.3878	15,597	0.2036	0.4027	32,779

TABLE 5—THE EFFECTS OF JOINT-CUSTODY REFORM ON CHILDREN'S PRIVATE SCHOOL ATTENDANCE

Variable	Model 1	Model 2
Baseline Model:		
Joint-Custody Reform	-0.0171*** (0.0044)	--
By Property Division:		
Joint-Custody Reform with Community Property	--	-0.0258*** (0.0039)
Joint-Custody Reform with Common Law	--	-0.0299*** (0.0029)
Joint-Custody Reform with Equitable Division	--	-0.0007 (0.0042)

Notes: There are 307,722 observations for each model. Estimates are reported as marginal effects. Standard errors clustered at the state-year level and are in parentheses. *, **, and *** indicate statistical significance at the ten, five, and one percent levels, respectively. All models include child and parent characteristics, state and time fixed effects, and time-varying state-level variables as controls.

TABLE 6— CHILD-CUSTODY LAWS, PROPERTY-DIVISION LAWS, AND MARRIED COUPLES' INVESTMENT IN CHILDREN'S PRIVATE SCHOOL BY MOTHERS' EDUCATIONAL ATTAINMENT

Variable	High School Dropout		High School Graduate and Some College		College Graduate	
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**
Baseline Model:						
Joint-Custody Reform	-0.0226*** (0.0041)	--	-0.0091** (0.0044)	--	-0.0206** (0.0092)	--
By Property Division:						
Joint-Custody Reform with Community Property	--	-0.0576*** (0.0042)	--	-0.0280*** (0.0041)	--	0.0216** (0.0109)
Joint-Custody Reform with Common Law	--	-0.0159*** (0.0038)	--	-0.0214*** (0.0034)	--	-0.0378*** (0.0083)
Joint-Custody Reform with Equitable Division	--	-0.0246*** (0.0040)	--	0.0059 (0.0052)	--	0.0125 (0.0098)
Number of Observations	52,783	52,783	206,563	206,563	48,376	48,376

Notes: Estimates are reported as marginal effects. Standard errors clustered at the state-year level and are in parentheses. *, **, and *** indicate statistical significance at the ten, five, and one percent levels, respectively. All models include child and parent characteristics state and time fixed effects, and a set of time-varying, state-level variables as controls.