Economic Incentive and Foster Child Adoption

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Abstract

In 1998, over 286,000 children entered the foster care system. Many of these children were reunited with their biological parents, or quickly adopted. However, a significant number faced long-term foster care, some of whom were eventually adopted by their long-term foster parents. A foster parent's decision to adopt his or her foster child can carry significant economic consequences—forfeiting the foster care subsidy, and assuming responsibility for medical, legal, and educational expenses, to name a few. Since 1980, states began to offer adoption subsidies to offset some of these expenses, effectively lowering the cost of adoption. This article presents empirical evidence on the role that these economic incentives play in a foster parent's decision of when, or if, to adopt his or her foster child. We find that lowering the cost of adoption increases adoptions overall, particularly among children with the lowest adoption rates. These children tend to be older, with behavioral problems, placed with single foster parents or with relatives.

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1. Introduction

In 1998, there were approximately 560,000 children in the U.S. foster care system; with 286,000 of them entering in this year alone. Many of the children entering foster care are reunited with their biological parents or are quickly adopted. However, a significant number face long-term foster care. For these children, being adopted by their foster parents represents their best chance of leaving the foster care system. Unfortunately, only 36,000 foster children were legally adopted in 1998, while 122,000 were waiting to be adopted.[1] On average, these children have been waiting to be adopted for nearly four years. Although the adoption rates for boys and girls are similar, the adoption rate among black children is significantly lower than it is among white children. Adoption rates are also significantly lower for older children, those placed with single foster parents, and those placed with relatives.

A foster parent's decision to adopt his or her foster child carries significant economic consequences—forfeiting the foster care subsidy, and assuming responsibility for medical and educational expenses, to name a few. Recently states have offset, at least in part, theses economic consequences by offering adoption subsidies and credits for adoption related expenses. This effort began in 1980 with the passage of the Adoption Assistance and Child Welfare Act (AACWA, P.L. 96-272) aimed at reducing the length of stay in foster care and promoting adoptions. This act requires states to provide adoption assistant payments to families who adopt children with special needs. Although the AACWA provides an outline for the definition of special needs (including children

[1] The U.S. Department of Health and Human Services, Children's Bureau, defines children waiting to be adopted as those whose parents' rights have been terminated and/or with a stated case goal of adoption.

with a diagnosed disability, children in a sibling group, minority children, and older children), the details of the adoption assistant program, and payment amounts, are left up to the state. As a result, some states began to offer adoption assistance payments that are equal to what foster care payments would have been if the child were not adopted, while others offer a lower payment to adoptive parents than to foster parents. In either case, these payments effectively lower the cost of adopting a foster child.

Because many of the specifics of a state's adoption assistance program are under the control of state and local governments, policymakers have the potential to alter the probability and timing of the adoption of foster children. We use data from the 1998 Adoption and Foster Care Analysis and Reporting System (AFCARS) to analyze the role that economic incentives, in the form of foster care and adoption subsidies, play in a foster parent's decision to adopt his or her foster child. The AFCARS foster care data contain micro-level data on children in the foster care system, including information such as the child's age, gender, ethnicity, case goal, reason for removal, special needs status, length of stay, the termination of parents rights and time of adoption. The data also contains information about the foster caregivers. We link the AFCARS data on individual children to state foster care and adoption subsidy rates by the child's state of residence to examine the effects of these policies on the adoption rates of children waiting to be adopted.

Because a standard cross-sectional approach is not appropriate if state-level foster care and adoption policies reflect differences in attitudes toward children in general and toward foster care and adoption specifically, we control for state effects by exploiting the

variation in foster care payments by the child's age. For example, in certain states, there is little difference in foster care and adoption subsidies between 2-year-olds and 9-year-olds. In other states, this difference is large. Our analysis uses the variation in payments across age, rather than across states, to identify the effect that subsidies have on a parent's decision to adopt his or her foster child. We find that adoption subsidies do increase the adoption rate of children waiting to be adopted. Specifically, we find that it is the difference between the foster care payment and the adoption subsidy, rather than the levels of either, that foster parents respond to. Our logit model estimates suggest that a $100 reduction in the difference between the basic monthly foster care and adoption payments is associated with a 6.2-percentage point increase in the adoption rate of boys, and a 2.9-percentage point increase in the adoption rate of girls. These percentage point increases translate into an increase in the overall adoption rate of 31-percent for boys and 14-percent for girls. Furthermore, while increasing adoptions overall, we also find that adoption subsidies change the composition of children who are adopted and those waiting to be adopted. For example, increasing the adoption subsidy has about the same effect on the adoption rate of boys and girls. However, it has a much larger effect on the adoption rates of older children, those placed with a single foster parent, and those placed with relatives.

2. Adoption from Foster Care

To address the needs of foster children, legal scholars and policy makers have debated priorities in foster care policies for the past three decades (Guggenheim, 1999). The Adoption and Child Welfare Act of 1980 addressed some of these concerns by

providing federal guidelines for state child welfare agencies by mandating that foster care should be the option of last resort and that "reasonable efforts" should be made to preserve or reunify the family (Lowery, 2000). A shift in philosophy became evident with the passage of the Adoption and Safe Families Act of 1997 which mandated that States move children toward adoption after a relatively brief period of time, rather than provide services for families in crisis and work toward reunification (Pagano, 1999). The 1997 legislation provides financial incentives for states if adoption rates rise above current levels.

Whether the goal is reunification or adoption, most observers agree that long-term foster care is detrimental to the child. Policymakers and professionals dedicated to ensuring a developmentally beneficial environment for each foster child point to the need to avoid foster care "drift" that occurs when children are frequently moved from one foster care setting to another. The American Association of Pediatrics released a statement indicating that "[m]ultiple foster home placements can be injurious" to children (USA Today, 2001). Child development researchers suggest that multiple placements result in unstable adult-child relationships that deplete a child's ability to form attachments to significant others (Usher, Randolph and Gogan, 1999) and so the focus on adoption of children out of foster care has intensified.

With this consensus that long-term foster care should be avoided, the goal of current policy is to move foster children into the permanence of adoption if reunification with the biological family cannot be achieved quickly. However, large-scale research designed to identify which factors are associated with adoption and its timing have only

been conducted in the past few decades. For example, Finch et al. (1986) found that only one-quarter of the children placed in out-of-home care in New York in the late 1970s and identified as available for adoption were adopted within two years. Their findings, which are consistent with other studies conducted more recently in other states, suggested that the probability of adoption was related to the child's race and ethnicity and time spent in out-of-home care. Finch et al. also find that the probability of adoption declines with time spent in out-of-home care. This is similar to the finding that adoption is most likely for younger children (Barth, 1997).

It has been established that not only are children of color over-represented in the out-of-home care population than in the population at large, but that they face a lower probability of adoption than white children do (Finch et al., 1986; Wulczyn and George, 1992; Courtney and Barth, 1996; Barth, 1997; Brooks and James, 2003). Specifically, Finch et al. (1986) estimated that white children are nearly 11% more likely to be adopted than children in other racial and ethnic groups, although the racial gap in adoptions may be closing (Wulzyn, 2003). Concern about the overrepresentation of children of color among the foster care population, and low rates of adoption for these children prompted the passage of Multiethnic Placement Act of 1994 and the Interethnic Adoption Provisions of 1996 to remove barriers to interracial adoption and to move more quickly to permanent families for children of color (Brooks et al., 1999).

The call to move children from temporary foster care to the permanence of adoption is clear; however, the mechanism by which this goal might be achieved is not. Research suggesting that the probability of adoption varies by race, ethnicity, age and

time in foster care provides policymakers with little insight into how to increase adoption. Few studies have been conducted to determine the impact of factors that provide policymakers with the leverage to alter the probability and timing of the transition from foster care to adoption. In a report based on evaluation of the child welfare system in Washington state, Thompson et al. (2001, p.13) suggest that "… an increase in the state adoption subsidy ha[s] resulted in a substantial increase in foster family adoptions." Although it is clear that policymakers recognize that goals may be more easily achieved when "government aligns financial incentives with the outcomes it hopes to achieve" (McDonald, et al., 2003, p. 2) no large-scale national studies of the effect of these subsidies on adoption have been conducted.

A few studies have examined the impact of foster care subsidies on placement within the foster care system. They found that more generous foster care payments increase the overall supply of foster care providers (Doyle and Peters, 2002 and Simon, 1975), improves the retention of foster families (Chamberlain, Mooreland and Reid, 1992), increases kin placements (Doyle, 2004) and increases the probability of placement with a foster-family rather than in a group setting (Duncan and Argys, 2004).

To our knowledge, only two studies have addressed the impact of state subsidies on adoptions. Avery and Mont (1992) collected data from counties in New York state to identify the impact of subsidy levels on the timing and probability of adoption of children with special needs. They found that children with mental disabilities who qualified for greater adoption subsidies (based both on their own characteristics and practices within their county of residence) faced a greater probability of adoption. Their results also

suggested that subsidies had no effect on adoption for other special needs children. Hansen and Hansen (2005) used aggregate data from the 1996 AFCARS to perform a cross-sectional analysis of the association between a state's monthly adoption assistance payments to nine year-olds and the number of children adopted out of foster care per 100,000 state populations. They found a positive association between the monthly adoption subsidy for nine year-olds and the total number of children adopted out of state foster care.

3. Theoretical Framework

From the state child welfare agency's point of view, adoption—because it removes the child from the foster care system and provides a more stable environment—is more desirable than long term foster care. From the parent and child's point of view, adoption may be emotionally and psychologically desirable (Mulligan, 2003). However, parents take on increased financial and legal responsibilities when they adopt, and they must weigh these factors against the potential benefits of adoption.

For the purposes of this study, we assume that parents act as rational agents with preferences that value the overall well-being of their foster child. This implies that a foster parent must consider both the emotional and financial impact that an adoption will have on both the foster child's well-being and home environment. Many financial benefits and obligations are altered when a foster child is legally adopted. For instance, although basic expenditures for food, clothing and other provisions for the child are made by parents regardless of whether or not the child is adopted, foster parents do receive a basic monthly subsidy for providing care for the foster child. In many states, adoptive

parents will receive a reduced monthly subsidy when they adopt their foster child (Barth, 1997). There are also legal costs of adoption, although some states have implemented one-time adoption transfers to help offset these legal expenses. Furthermore, adoptive parents may become financially responsible for the child's future medical expenses, and may be liable for any legal costs or damages caused by the actions of the child.

In light of this, foster parents must weigh the benefits to the child and to themselves from adoption against the increased risk and financial obligations when making the decision to adopt. We do, however, assume a downward sloping demand for adoptions, meaning that, all else equal, a parent will be more likely to adopt a foster child as the cost of adoption goes down. Although there are many components to the cost of adoption, the specific components that we study in this paper are the monthly foster care subsidy and the monthly adoption subsidy. Before 1980, foster parents typically forfeited their monthly foster care payments when they adopted their foster child. After the Adoption Assistance and Child Welfare Act of 1980, states began to provide a monthly adoption subsidy. By reducing the difference between the monthly foster care adoption subsidies, states have significantly lowered the cost of adoption.

Calculating exactly how much reducing the difference between foster care and adoption payments lowers the cost of adoption is complicated by the nature of adoptions and by the structure of foster care and adoption payments. At any point in time, the adoption decision faced by foster parents is a dichotomous one, either to continue with the permanent foster care arrangement or to legally adopt the child. However, the timing of the adoption is not dichotomous. In many stats, both foster care payments and

adoption payments vary by the age of the child. Other states pay a flat rate regardless of the age of the child. This raises the question: do parents weigh current benefits against current costs, or are they more forward looking? A forward looking foster parent would calculate the expected net present value of foster care payments and adoption subsidies, and then use these calculations to determine the optimal time to adopt, if ever. To examine these issues, in addition to constructing measures of the current basic monthly foster care payments and adoption subsidies, we also calculate the present value of all future payments (assuming the child remains in foster care until eighteen). These present value calculations are based on the child's age and his or her state of residence. We find that current payments have a much larger effect on a foster parent's decision to adopt than do expected future payments.

4. Data

Our primary source of data is the 1998 Adoption and Foster Care Analysis and Reporting System (AFCARS) Version 6 data, which contains basic information on all children in foster care in 43 states.[2] From this data set, we extract all children 16 and under who were eligible for adoption in 1998. Following AFCARS guidelines, we consider a child to be eligible for adoption if both parents' rights have been terminated, or if the child's stated case goal is adoption. Our primary goal is to understand the factors that influence a foster parent's decision to adopt his or her foster child, and so we exclude children who are in supervised independent living, participating in trial home visits with their parents, in group homes or institutions, or who have runaway. Only a small

[2] Louisiana, Massachusetts, Nebraska, Nevada, New Hampshire, Ohio, South Dakota, and Tennessee are not included in the 1998 AFACRS data.

percentage of foster children eligible for adoption fall into these placement settings, and many of the records for these children contain missing information. Children in an additional fifteen states were dropped because the state failed to report key information, such as the year the child entered foster care, or because the foster care payments in 1998 were not determined by the state.[3] An additional 3,337 children were excluded due to missing or impossible age entering foster care (1,050), gender (42), or race (2,245). The resulting sample includes 81,980 children (41,724 boys and 40,256 girls) living in 29 states.

Although the AFCARS data identifies the state in which the child resides, it contains no information about state policy. Therefore, to measure the effect of economic incentives on the adoption rates of foster children, we link the child-level AFCARS data with measures of the basic monthly foster care and adoption subsidy rates by the child's state and age. Table 1 lists the 1998 basic foster care and adoption subsidy rates in the 29 states in our sample for children aged 2, 9, and 16. These subsidy rates are basic minimum guidelines which can be added to depending on the child's needs. In 1998, every state had some form of adoption subsidy program. Many states simply match their adoption subsidy payments to their foster care payments. In these states, foster parents will generally receive the same monthly payment if they choose to adopt their foster child. However, several states negotiate adoption payments with perspective adoptive parents under the condition that the adoption subsidy cannot exceed the foster care payment. In other states, foster parents could, according to the basic guidelines, lose up

[3] Children in Colorado, Indiana, Kansas, New York, and Pennsylvania are excluded because their subsidy rates are not set by the state. Children in Alabama, Alaska, Arizona, Arkansas, Delaware, District of Columbia, Florida, Michigan, and New Mexico are excluded because of missing data.

to $224 per month in basic foster care payments by adopting their foster child. This difference varies by state, and within a state by the child's age. Panel A in Figure 1 shows the average foster care payments and adoption subsidies across all of the states in our sample, by the child's age. As can be seen in Figure 1, states typically designate age ranges and pay one monthly subsidy for children under the age of 5 or 6, another, usually higher rate for children between the ages of about 6 and 12, and a higher rate yet for children over the age of 11 or 12. However, not all states increase their payments with age. In the empirical analysis below, we exploit this variation in foster care and adoption payments across states and within states across age groups to examine the effect of foster care payments and adoption subsidies on the adoption rate of eligible children.

Panel B in Figure 1 shows the average present value of foster care payments and adoption subsidies, by the child's age. Using a five percent discount rate, the average present value of foster care payments for a six year-old who remains in foster care until he or she ages out is $44,257. The average present value of adoption payments for the same child is $41,406. Thus, on average, it costs foster parents $2,859 in forgone payments to adopt a six year-old foster child. This cost varies considerably by state and by the child's age. For example, Figure 2 shows the foster care payments and adoption subsidies in four selected states, by the child's age. A foster parent who adopts their six year-old foster child in Minnesota forgoes $22,301 in basic foster care payments, whereas a similar parent in California receives the same monthly payment regardless of whether they adopt their foster child or not. Figure 2 also shows that the level of payments varies significantly across states. From a purely financial perspective, a parent's decision to adopt their foster child should be influenced by the difference in payments rather than by

the level of payments. However, the level of payments may influence who decides to become a foster parent, and thus, indirectly affect the adoption rate. In our analysis, we investigate this possibility, but find that only the difference in payments, not the level, influences the adoption rate.

5. Basic Patterns

The first two columns in Table 2 list the characteristics of children eligible for adoption in 1998, by the child's gender, whereas the last two columns list the adoption rate among these eligible children. There are nearly an equal number of boys and girls waiting to be adopted, and the adoption rates for boys and girls are both about 20-percent. The adoption rate is lower for older children than for younger ones, falling to about 14-percent for children aged 12 to 16. Black children are overrepresented among children waiting to be adopted. In fact, over half of children waiting to be adopted are black (53-percent of boys and 51-percent of girls). The adoption rate among black children, about 15-percent for both boys and girls, contributes to this overrepresentation. At about 26-percent for both boys and girls, a white child is nearly twice as likely to be adopted out of foster care as is a black child.

A foster child is considered disabled if he of she has a diagnosed disability including mental retardation, visual/hearing impaired, physically disabled, emotionally disabled, and other diagnosed disability. The disability rate among children eligible for adoption is 22.8-percent for boys and 18.4-percent for girls. Disabled children enjoy approximately the same adoption rate as non-disable children do.

Certain children may be less suited for adoption because of difficult to measure characteristics of the child. To capture some of these characteristics, we construct a dichotomous variable equal to one if a child reason for removal was indicated. Child reasons for removal include alcoholic child, drug addicted child, child disability, and child behavior problems. Approximately 11-percent of boys and girls report a child reason for removal. The adoption rate among this group (17-percent for boys and 19-percent for girls) is slightly lower than the overall rate.

Table 3 lists the characteristics of foster parents for children eligible for adoption and the adoption rate among eligible children, by the child's gender. Black parents and parents who are related to their foster child are the least likely to adopt. In fact, 24-percent of children eligible for adoption placed with a white foster parent are adopted. This adoption rate falls to 8-percent for children placed with a black foster parent. Finally, married couples are nearly twice as likely to adopt their foster child as single foster parents are. This suggests several possible explanations for the low adoption rate among black children. Black children are more likely to be placed with black foster parents, with single foster parents, and with relatives, all of whom have lower adoption rates. For instance, in our sample, 70-percent of black boys are placed with a single foster parent; whereas, this number is only 19-percent for white boys. Sixty-eight percent of black boys, and 20-percent of white boys, are placed with a relative. Thus, black children may suffer low adoption rates, not because of their own characteristics, but because of the characteristics of their foster parents.

6. Logit Regression Results

Although revealing, the basic patters described in Section 5 do not answer our underlying question of how state foster care and adoption payments influence adoption rates. To answer this question, we estimate the effect that foster care and adoption payments have on the adoption rates of children waiting to be adopted using univariate logit regressions taking the following form:

$$Adopt_{kji} = \alpha + \beta X_{kji} + \pi S_{kj} + \phi_k + \gamma_j + \varepsilon_{kji}, \quad (1)$$

where $Adopt_{kji}$ is a dichotomous variable equal to one if child *i* of age *j* in state *k* is adopted, and zero otherwise. The vector ϕ_k controls for state specific effects, and the vector γ_j controls for age specific effects. The vector X_{kji} represents set of control variables. These control variables include child characteristics, such as the child's race/ethnicity, months in foster care, disability status, and reason for removal, as well as parent characteristics, such as the foster parent's marital status, age, race/ethnicity, and relationship to the foster child.

The vector S_{kj} in (1) includes the foster care and adoption subsidy variables. This vector is subscripted by *k* and *j* because basic foster care and adoption subsidies vary by state and by the child's age. However, it is not subscripted by *i* because basic state payments do not vary among children who are the same age and live in the same state. Estimating the effects of aggregate policy variables on micro data can lead to standard errors that are biased downwards (Moulton, 1990). As a result, we correct the standard errors for clustering at the state/age group level in all of our logit regressions.

There are several possible ways to enter the foster care and adoption subsidies variables into (1). For example, one way to define the vector S_{kj} is:

$$S_{ki} = \{FC_{ki}, AD_{ki}\}, \tag{2}$$

where FC_{kj} and AD_{kj} represent the basic foster care and adoption subsidy rates for children for age *j* in state *k*, respectively. This specification does not impose any *a priori* relationship between foster care and adoption payments. This is appropriate if parents respond to the absolute levels of the foster care and adoption subsidies. However, if parents respond to the difference between the foster care and adoption payments, rather than to their absolute levels, then we should define S_{kj} as:

$$S_{ki} = \{AD_{ki} - FC_{ki}\}. \tag{3}$$

Definition (3) is the amount a foster parent must give up to adopt their foster child. From a purely financial point of view, this is the calculation that should matter to a foster parent, because is represents the cost of adoption. However, this supposition can be tested. In all of our regressions in which we include foster care and adoption payments separately, we fail to reject the hypothesis that definition (3) is true. This indicates that parents are responding at the margin of what they must give up to adopt their foster child, rather than to the overall level of the subsidies. Therefore, all of the following results use the difference in foster care and adoption payments specified by (3).

If parents are forward looking, then perhaps it is not just current payments that matter, but the value of all future payments. In this case, we should define S_{kj} as:

$$S_{ki} = \{PV(AD)_{ki} - PV(FC)_{ki}\}, \quad (4)$$

where $PV(FC)_{kj}$ and $PV(AD)_{kj}$ represent the present value of basic foster care and adoption subsidy rates for children age *j* in state *k*, respectively. Although the variables in (4) are highly correlated with those in (3), we find that the difference in current payment rates do a better job of predicting adoption rates than the difference in the present value of all future payments. As an additional test, we estimated models that included both the current difference in payments and the difference in the present value of all future payments (excluding the current year's payments). We find the difference in current payments to be statistically significant and the difference in the present value of future payments to be insignificant. For this reason, all of our results presented below examine the effect of the difference between current foster care and adoption subsidies as defined by (3).

Table 4 lists our estimates of (1) using the definition of S_{kj} given by (3), separately for boys and girls. Although not reported, all of the regressions include the state specific effects, ϕ_k. The logit coefficients have been converted into marginal effects, calculated at the sample mean, so that they can be compared directly with the summary statistics given in Tables 2 and 3. For example, according to the summary data presented in Table 2, a male black child is 12-percentage points less likely be adopted than a male white child. However, the marginal effects presented in Table 4 reveal that, controlling for other factors, a male black child is only one percentage point less likely to be adopted than a male white child. The reason that black children have a relatively low adoption rate is that the black foster parents' adoption rate is 7.4-percentage points lower than it is for whites, and that relatives have a 9-percentage point lower adoption rate than

unrelated foster parents. Although not reported, we calculate similar marginal effects for black children when we estimate a model that includes only the child's race, foster parent's race, and a dummy for related foster parent.

Table 4 also reveals that disabled children enjoy similar adoption rates as non-disabled children, although the adoption rate among disabled girls is 1.1-percentage points lower than among non-disabled girls. Having a child reason for removal lowers a child's adoption rate, particularly for boys. The adoption rate increases with age for very young children, but then decreases for children over three years old. This reflects an overall preference for adopting young children. The reason one year-olds have a slightly lower adoption rate than two year-olds most likely reflects the waiting time before an adoption can be finalized.

The regressions reported in Table 4 also include variables controlling for characteristics of the foster parents. These marginal effect revel that married couples have an adoption rate that is 2-percentage points higher than that of single foster parents. Younger foster parents have a higher adoption rate than do older foster patents.

7. Marginal Effects by Child and Parent Characteristics

The variables in (1) of most interest to this study are the foster care and adoption subsidy variables. In addition to estimating the overall effect of lowering the cost of adoption on the adoption rate, we also estimate versions of (1) allowing these effects to vary by child and parent characteristics. This is accomplished by estimating separate logit regressions of (1) that include interaction terms between the variables in (3) and the specific child or parent characteristic. For example, we estimate a model that interacts

the difference in payments with three age categories to examine if lowering the cost of adoption has different effects on older children than on younger ones. We also estimate alternate models that interact the payment difference with the child's race/ethnicity, disability status, reason for removal, as well as with the foster parents marital status, age, race/ethnicity, and relation to the child.

Table 5 presents marginal effects calculated from eighteen separate logit regressions of (1). Each regression contains the same control variables as those presented in Table 4. The marginal effects listed in Table 5 measure the impact that a $100 reduction in the difference between the basic monthly foster care payment and adoption subsidy will have on the adoption rate of a child with the indicated characteristic, calculated at the mean of the data. Model 1 in Table 5 is the same model that is presented in more detail in Table 4. Overall, reducing the cost of adoption by $100 a month is associated with a 6.2-percentage point increase in the adoption rate of boys, and a 2.9-percentage point increase in the adoption rate of girls. As seen in Model 2, this effect is stronger for older children than for younger ones. For boys under the age of five, reducing the cost of adoption by $100 a month is associated with a 3.8-percentage point increase in their adoption rate. There is no effect on the adoption rate of girls under the age of twelve years-old. In fact, all of our regression results suggest that reducing the cost of adoption has a greater impact on the adoption rates of boys than on girls.

Model 3 in Table 5 suggests that reducing the cost of adoption has a larger effect on white foster children relative to blacks. A $100 a month reduction in the cost of adoption is associated with a 7.3-percentage point increase in the adoption rate of white boys, and a 4.9-percentage point increase in the adoption rate of black boys. For white

girls, a $100 a month reduction in the cost of adoption is associated with a 3.7-percentage point increase in the adoption rate. For black girls, there is no statistically significant effect.

Model 4 indicates that reducing the cost of adoption has the same effect on the adoption rate of disabled boys compared to non-disabled boys, but a slightly larger effect on the adoption rate of disabled girls compared to non-disabled girls. Model 5 suggests that lowering the cost of adoption has a relatively large effect on the adoption rates of troubled children. These troubled children have a reason for removal that includes an alcoholic or drug addicted child, or a child with emotional or behavioral problems. A $100 reduction in the monthly cost of adoption is associated with a 9.5 and 4.5-percentage point increase in the adoption rates of these troubled boys and girls, respectively.

Models 6 through 9 include interactions between the basic foster care and adoption payment difference and selected characteristics of the foster parent. Model 6 indicates that reducing the cost of adoption has a larger effect on the adoption rate of boys placed with a single foster parent compared to married foster parents. Over 80-percent of single foster parents are single women. Model 6 suggests that a $100 reduction in the monthly cost of adoption is associated with a 10.0-percentage point increase in the adoption rate of boys placed with single foster parents, and a 5.5-percentage point increase for boys placed with married foster parents. The same is not true for girls. For girls, reducing the cost of adoption has about the same impact on their adoption rate regardless if they are placed with a single foster parent or with a married couple.

Finally, Model 8 indicates that reducing the cost of adoption has about the same effect on the adoption rates of girls placed with white foster parents compared to girls placed with black foster parents. However, reducing the cost of adoption has a slightly larger effect on the adoption rate of boys placed with black foster parents compared to boys placed with white foster parents. Furthermore, reducing the cost of adoption has a much larger effect on the adoption rates of children placed with relatives. For example, according to Model 9, a $100 reduction in the monthly cost of adoption is associated with a 10.6-percentage point increase in the adoption rate of boys placed with a relative. This is the largest marginal effect we calculate for any child or parent characteristic.

8. Conclusions

Beginning with the Adoption Assistance and Child Welfare Act of 1980, states and the federal government have actively encouraged adoption by lowering the cost of adoption. One way states have lowered the cost of adoption is by offering a monthly adoption subsidy that is, in some states, equal to the child's foster care payment. By examining the 1998 AFCARS data, we find that lowering the cost of adoption increases adoption rates across the board. Specifically, it is the difference between the monthly foster care and adoption payments, rather than the levels of either, that foster parents respond to.

However, while increasing the adoption rates of all children, lowering the cost of adoption has a stronger impact on some children than on others. For example, boys and girls enjoy approximately the same overall adoption rate. This is, in part, due the fact that lowering the cost of since 1980 has had a larger impact on the adoption rates of boys.

Reducing the cost of adoption also has a relatively larger impact on the adoption rates of older children compared to younger ones.

Furthermore, as seen in Model 3 of Table 5, a reduction in the cost of adoption has a greater impact on the adoption rate of white children relative to black children. However, this estimate is a marginal effect, meaning that it is calculated holding constant other characteristics of the child and his or her foster parents. The overall effect on the adoption rates of black children may, in fact, be greater than this estimate suggests. The reason for this is that, compared to white children, black children are much more likely to be placed with black foster parents, single foster parents, or with relatives. For instance, in our sample, 44-percent of black boys are placed with a single foster parent, and 28-percent are placed with a relative. The corresponding percentages for white boys are 19-percent and 13-percent, respectively. Reducing the cost of adoption has the largest impact on the adoption rates of children placed with single foster parents and with relatives.

In fact, comparing the adoption rates presented in Tables 2 and 3 with the marginal impact of lowering the cost of adoption presented in Table 5 revels an important trend. With the possible exception of black children, reducing the cost of adoption seems to have the largest impact on the children with the lowest adoption rates. These are particularly older children, with behavioral problems, placed with single foster parents or with relatives.

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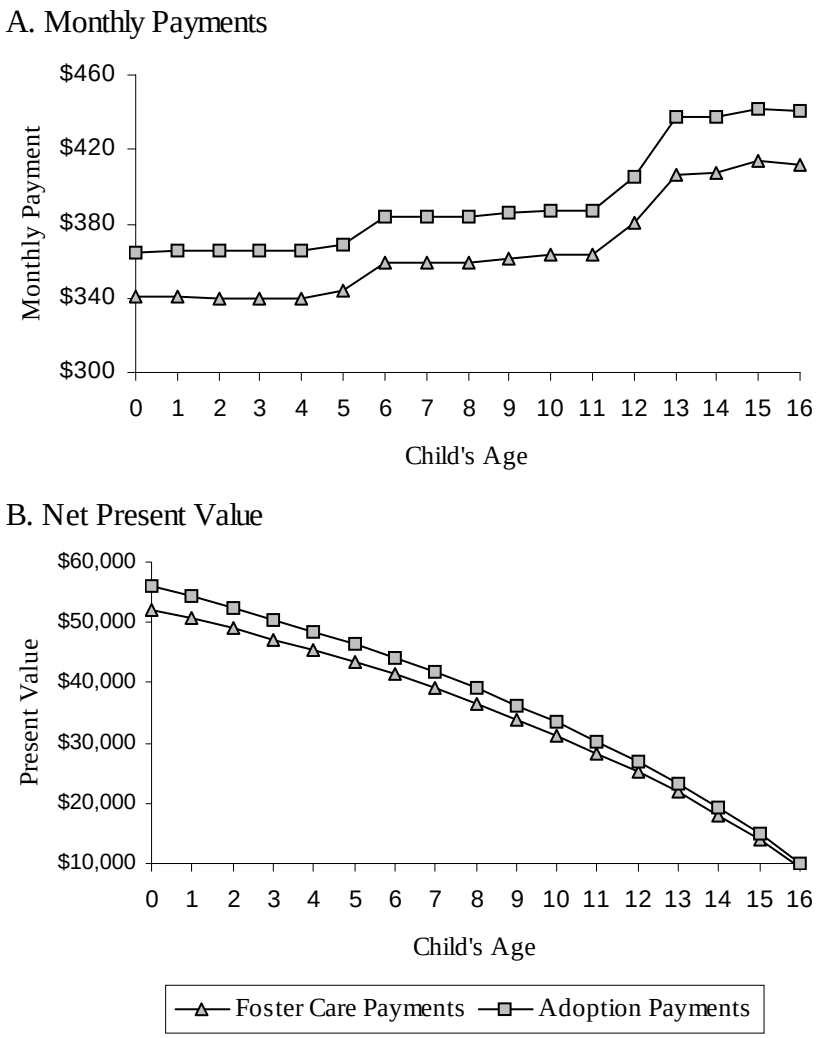
Table 1: State Basic Monthly Adoption Assistance and Foster Care Payments in 1998 for Children Aged 2, 9, and 16

	Two Year-Olds			Nine Year-Olds			Sixteen Year-Olds		
State	Adoption	Foster	Difference	Adoption	Foster	Difference	Adoption	Foster	Difference
California	345	345	0	400	400	0	484	484	0
Connecticut	622	622	0	642	642	0	708	708	0
Georgia	338	338	0	338	338	0	338	338	0
Hawaii	529	529	0	529	529	0	529	529	0
Idaho	228	228	0	250	250	0	358	358	0
Illinois	297	343	-46	333	382	-49	365	415	-50
Iowa	346	387	-41	366	409	-43	423	474	-51
Louisiana	247	331	-84	272	365	-93	298	399	-101
Maine	371	438	-67	379	447	-68	429	501	-72
Maryland	535	535	0	535	535	0	550	550	0
Minnesota	247	458	-211	277	458	-181	337	561	-224
Mississippi	225	325	-100	255	355	-100	290	390	-100
Missouri	212	316	-104	259	364	-105	286	392	-106
Montana	330	415	-85	330	415	-85	419	507	-88
New Jersey	294	351	-57	312	369	-57	368	439	-71
North Carolina	315	315	0	365	365	0	415	415	0
North Dakota	308	317	-9	349	359	-10	456	469	-13
Oklahoma	300	300	0	360	360	0	420	420	0
Oregon	346	346	0	360	360	0	444	444	0
Rhode Island	272	308	-36	252	285	-33	308	348	-40
South Carolina	212	212	0	239	239	0	305	305	0
Texas	475	482	-7	475	482	-7	475	482	-7
Utah	310	319	-9	310	319	-9	310	319	-9
Vermont	494	360	134	494	360	134	600	440	160
Virginia	262	270	-8	307	316	-9	388	400	-12
Washington	304	313	-9	375	374	1	444	468	-24
West Virginia	400	400	0	400	400	0	400	400	0
Wisconsin	282	289	-7	307	315	-8	365	374	-9
Wyoming	399	399	0	399	399	0	399	399	0
Minimum	212	212	-211	239	239	-181	286	305	-224
Maximum	622	622	134	642	642	134	708	708	160
Average	339	365	-26	361	386	-25	411	439	-28

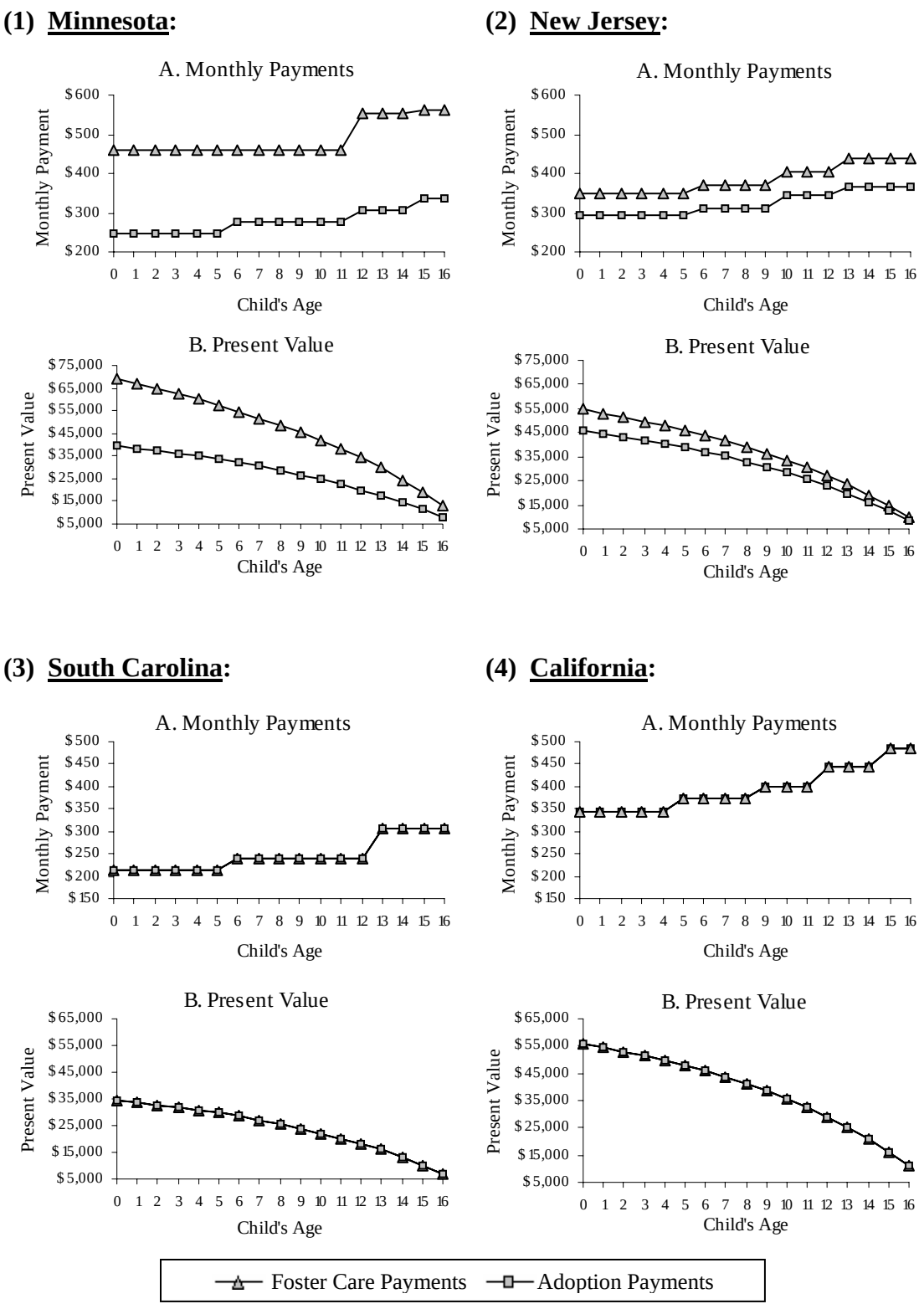
Source: Data obtained from the Child Welfare League of America's 1999 State Child Welfare Agency Survey and the North American Council on Adoptable Children. Louisiana, Massachusetts, Nebraska, Nevada, New Hampshire, Ohio, South Dakota, and Tennessee are not included in the 1998 AFACRS data. Children in Colorado, Indiana, Kansas, New York, and Pennsylvania are excluded because their subsidy rates are not set by the state. Children in Alabama, Alaska, Arizona, Arkansas, Delaware, District of Columbia, Florida, Michigan, and New Mexico are excluded because of missing data.

Figure 1: Average Foster Care and Adoption Subsidies, by Child's Age



Source: Data obtained from the Child Welfare League of America's 1999 State Child Welfare Agency Survey and the North American Council on Adoptable Children. See Table 1 notes for sample details.

Figure 2: Foster Care and Adoption Subsidies in Four Selected States, by Child's Age



Source: Data obtained from the Child Welfare League of America's 1999 State Child Welfare Agency Survey and the North American Council on Adoptable Children.

Table 2: Children Eligible for Adoption and Adoption Rates Among Eligible Children in 1998, by Child Characteristics

	Children Eligible for Adoption		Adoption Rate	
Child Characteristic:	Boys	Girls	Boys	Girls
Overall	100.00	100.00	19.98	20.36
Ages 4 and under	37.58	34.63	21.90	21.91
Ages 5 to 11	49.70	48.46	20.11	21.03
Ages 12 to 16	12.72	13.39	13.83	13.94
White	34.42	33.90	26.44	26.31
Black	53.40	50.69	14.84	15.40
Hispanic	9.22	9.02	22.24	23.24
Other race/ethnicity	2.96	2.87	30.66	28.74
Disabled	22.88	18.41	21.15	20.93
Child reason for removal	11.97	10.81	17.19	18.78
Months in foster care	50.02 (31.86)	49.83 (31.54)	-	-
Sample Size	41,724	40,256	41,724	40,256

Source: Adoption and Foster Care Analysis and Reporting System (AFCARS) 1998 version 6.
Table notes—the sample includes children 16 and under in foster care in 1998. See Table 1 notes for State restrictions. Children in supervised independent living, group homes/institutions, trial home visits, or who have runaway are not included in the sample. An additional 3,337 children are excluded due to missing or impossible age entering foster care (1,050), gender (42), or race (2,245). Child disabilities include mental retardation, visual/hearing impaired, physically disabled, emotionally disabled, and other diagnosed disability. Child reasons for removal include alcoholic child, drug addicted child, child disability, and child behavior problems.

Table 3: Children Eligible for Adoption and Adoption Rates Among Eligible Children in 1998, by Foster Parent Characteristics

	Children Eligible for Adoption		Adoption Rate	
Foster Parent Characteristic:	Boys	Girls	Boys	Girls
White	33.66	32.95	24.57	24.82
Black	38.11	36.80	8.14	8.13
Hispanic	4.58	4.55	18.49	18.54
Other race/ethnicity	1.82	1.75	27.86	27.81
Race/Ethnicity unknown	21.83	20.43	33.24	34.98
Ages 35 and under	11.99	11.31	22.03	21.14
Ages 36 to 50	36.02	35.28	19.89	20.24
Ages 51 and older	23.70	22.60	10.80	11.16
Unknown	28.29	27.29	26.93	27.82
Pre-Adoptive family	23.51	22.81	49.76	50.24
Relative	22.04	22.83	7.98	8.05
Unrelated foster family	52.76	49.07	11.85	12.39
Unknown	1.68	1.77	16.24	15.14
Couple	41.71	39.17	21.51	22.19
Single	33.86	33.61	10.65	10.54
Unknown	24.43	23.70	30.32	31.28
Sample Size	41,724	40,256	41,724	40,256

Source: Adoption and Foster Care Analysis and Reporting System (AFCARS) 1998 version 6. See Table 2 notes for sample restrictions.

Table notes—Race and Age represent the characteristics of the first foster parent. Couple represents both married and unmarried two foster parent households. The majority of single foster parents are single women.

Table 4: Marginal Effects on the Adoption Rate of Eligible Foster Children Calculated from Logit Regressions, by Child's Gender

	Boys	Girls
Difference in Monthly Payment	0.062***	0.029**
	(0.013)	(0.014)
Child's Race:		
Black	-0.010*	0.001
	(0.005)	(0.005)
Hispanic	-0.017***	-0.014**
	(0.006)	(0.006)
Other	-0.035***	-0.045***
	(0.008)	(0.008)
Months in Foster Care	0.002***	0.002***
	(0.0001)	(0.0001)
Disabled	0.003	-0.011**
	(0.004)	(0.004)
Child Reason for Removal	-0.031***	-0.014**
	(0.005)	(0.006)
Child's Age:		
Less than 1 year old	0.305***	0.298***
	(0.042)	(0.042)
1 year old	0.376***	0.429***
	(0.040)	(0.039)
2 years old	0.417***	0.471***
	(0.039)	(0.037)
3 years old	0.424***	0.457***
	(0.038)	(0.037)
4 years old	0.400***	0.445***
	(0.038)	(0.037)
5 years old	0.356***	0.421***
	(0.038)	(0.037)
6 years old	0.345***	0.404***
	(0.038)	(0.037)
7 years old	0.316***	0.373***
	(0.037)	(0.037)
8 years old	0.290***	0.323***
	(0.037)	(0.037)
9 years old	0.230***	0.300***
	(0.036)	(0.037)

(Continued)

Table 4 Continued:

	Boys	Girls
10 years old	0.244***	0.276***
	(0.037)	(0.037)
11 years old	0.195***	0.261***
	(0.035)	(0.037)
12 years old	0.134***	0.182***
	(0.032)	(0.034)
13 years old	0.166***	0.205***
	(0.035)	(0.037)
14 years old	0.090***	0.089***
	(0.031)	(0.030)
15 years old	0.027	0.071**
	(0.027)	(0.030)
Foster Parent Marital Status:		
Married Couple	0.020***	0.028***
	(0.005)	(0.005)
Unknown	0.167***	0.174***
	(0.010)	(0.010)
Related foster parent	-0.090***	-0.102***
	(0.004)	(0.004)
Foster Parent Age:		
Ages 36 to 50	-0.006	-0.002
	(0.005)	(0.005)
Ages 51 and older	-0.042***	-0.035***
	(0.005)	(0.006)
Age unknown	-0.015*	-0.002
	(0.008)	(0.009)
Foster Parent Race/Ethnicity:		
Black	-0.074***	-0.076***
	(0.005)	(0.006)
Hispanic	-0.006	-0.009
	(0.009)	(0.009)
Other	0.020	0.012
	(0.015)	(0.014)
Unknown	0.048***	0.040***
	(0.009)	(0.009)

Source: Adoption and Foster Care Analysis and Reporting System (AFCARS) 1998 version 6. See Table 2 notes for additional sample restrictions.
Table notes—Statistically significant at the ***99%, **95%, and *90% confidence levels. Standard errors clustered by state/age group in parenthesis. All regressions include state fixed effects.

Table 5: The Marginal Effect on the Adoption Rate of Eligible Foster Children of a $100 Reduction in the Difference Between the Basic Monthly Foster Care and Adoption Payments, by Child's Gender

	Boys	Girls
Model #1:		
Overall	0.062***	0.029**
	(0.013)	(0.014)
Model #2 (child's age):		
Younger than 5	0.038**	-0.005
	(0.017)	(0.018)
Between 5 and 12	0.042**	-0.005
	(0.017)	(0.018)
Older than 12	0.060***	0.026*
	(0.013)	(0.014)
Model #3 (child's race/ethnicity):		
White	0.073***	0.037**
	(0.014)	(0.014)
Black	0.049***	0.005
	(0.014)	(0.015)
Hispanic	0.055***	0.036*
	(0.017)	(0.018)
Other race/ethnicity	0.071***	0.036*
	(0.019)	(0.019)
Model #4 (child disability):		
Disabled	0.069***	0.033**
	(0.014)	(0.015)
Not disabled	0.061***	0.028**
	(0.013)	(0.014)
Model #5 (reason for removal):		
Child reason for removal	0.095***	0.045**
	(0.016)	(0.018)
Child not reason for removal	0.058***	0.028**
	(0.013)	(0.014)
Model #6 (foster parent's marital status):		
Married Foster Parents	0.055***	0.043***
	(0.013)	(0.014)
Single Foster Parents	0.100***	0.038**
	(0.014)	(0.015)
Unknown Marital Status	0.003	-0.023
	(0.014)	(0.015)

(Continued)

Table 5 Continued:

	Boys	Girls
Model #7 (foster parent's age):		
Foster parent 35 or under	0.060***	0.035**
	(0.016)	(0.016)
Foster parent 36 – 50	0.073***	0.040***
	(0.013)	(0.014)
Foster parent 51 or older	0.064***	0.015
	(0.015)	(0.016)
Foster parent age unknown	0.021	-0.004
	(0.014)	(0.015)
Model #8 (foster parent's race/ethnicity):		
White	0.064***	0.030**
	(0.014)	(0.014)
Black	0.079***	0.034**
	(0.015)	(0.016)
Hispanic	0.099***	0.112***
	(0.022)	(0.029)
Other race/ethnicity	0.060***	0.013
	(0.021)	(0.022)
Unknown race/ethnicity	-0.005	-0.029*
	(0.015)	(0.016)
Model #9 (kinship care):		
Foster parent related	0.106***	0.056***
	(0.016)	(0.017)
Foster parent not related	0.054***	0.026*
	(0.013)	(0.014)

Source: Adoption and Foster Care Analysis and Reporting System (AFCARS) 1998 version 6. See Table 2 notes for additional sample restrictions.

Table notes—Standard errors clustered by state/age group in parenthesis. Statistically significant at the ***99%, **95%, and *90% confidence levels. The coefficient estimates used in these calculations are calculated from interaction terms between the indicated child characteristic and the difference between the monthly foster care and adoption payment, measured in hundreds of dollars. This payment difference varies by State and by the age of the child. Each of the eighteen separate logit regressions includes the same controls reported in Table 4.