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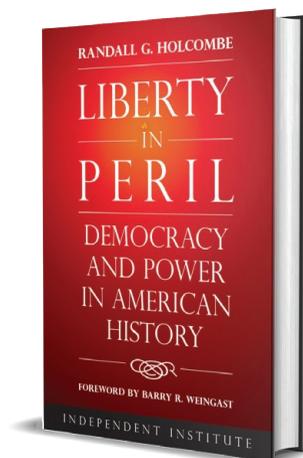
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No Child Left Behind in Foster Care

— ◆ —

BRIAN MEEHAN, SIMON HAKIM, AND
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In the United States, excess demand exists for adopting healthy babies, while an excess supply exists of older children or children with physical or emotional disabilities. Nationally, 5 percent of older children age out of the foster-care system without being adopted (Lucile Packard Foundation 2020). Children awaiting adoption who remain in foster care for long periods or incur changes in foster-care placements often experience life-long poverty, educational failure, homelessness, criminal behavior, substance abuse, and mental health problems (Fawley-King et al. 2017; Gypen et al. 2017). Nearly 18 percent of youth who age out of foster care become homeless within seventeen months after they leave care, and 70 percent of all California penitentiary inmates have spent time in foster care (Baccara et al. 2014). Channary Khun, Sajal Lehiri, and Sokchea Lim (2020) analyzed federal and state government spending and concluded that the primary stated objective of government adoption agencies is to achieve the permanency of adoption over foster care. Further, using a survey of adopting parents in 2007, Khun, Lehiri, and Lim (2020) estimated that a monthly subsidy of \$735 was necessary to shift interested parents from international to domestic adoptions and an additional \$506 to shift from domestic private-care to foster-care children. This paper suggests that introducing a market for the right to raise children could increase resources available for the hard-to-adopt children, improve the efficiency of resource allocation by government,

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speed up the adoption process following court approval, and improve the welfare of the adopted children and their adopting parents.

Children awaiting adoption numbered 123,754 in 2017, up from 106,636 in 2014. The total number of unrelated (nonfamily) adoptions during 2014 was 75,337, of whom 61 percent were placed through public agencies, 29 percent through private agencies and individuals, and 8 percent from outside the United States (National Council for Adoption 2017; U.S. Department of Health and Human Services [DHHS] 2019). In 2014,¹ the total number of infants adopted was 18,329 (Creating a Family 2020). During 2018, infants made up 5 percent of adoptions from foster care; the mean age of adoption was 6.2 years, while the median was 5.1 years. The mean time elapsed from termination of parental rights to adoption was 12 months, while the median time was 8.7 months (U.S. DHHS 2019). The number of foster-care children who aged out in 2014 was 22,392, or 9 percent of the total children discharged (Batista, Johnson, and Baach Friedmann 2018). Adoptions from abroad have declined over time. For example, 5,647 children were adopted from abroad in 2015, representing a decline of 75 percent from 2004 (Elleseff 2017). These statistics suggest that the largest source of adoption is foster care. Demand was high for the 18,392 infants adopted nationwide in 2014. Estimates show that for every baby adopted, thirty-six families are waiting to adopt a baby (Institute of Family Studies 2019). However, for the 57,008 older and special-needs children, adoption demand is much lower. Adoption would be crucial for improving the prospects of the children who may eventually age out from foster care (22,392 in 2014, as cited earlier) because these individuals will struggle to obtain success in society and will tend to generate significant social costs after they age out. The first section in this paper describes the existing process of adoption from foster care and the other sources of adoption. Next we present our market-oriented proposal and then evaluate the proposal vis-à-vis the existing practices. After this, we consider existing legal and ethical impediments to the implementation of the proposal, before drawing conclusions.

An Overview of Existing Adoption Procedures

Children in foster care become eligible for adoption when the court terminates parental rights. The mean time from this termination of parental rights to adoption was 17.4 months in 2018, and the median was 9.0 months, indicating that it took a considerable time for the adoption process to be completed for some children (U.S. DHHS 2019). Some children wait many years, and if a child is not adopted by the age of nine, the probability that he will not be adopted is higher than the probability that he will be (Herrmann 2010).

1. The year 2014 is the latest for which these particular detailed data are available.

Prospective adopting parents are screened for suitability by social workers at both foster-care agencies and private adoption agencies. These social workers are typically employees of their state department of public welfare or the private adoption agencies. After initial screening, prospective adopting parents enter an authorized pool and are normally required to complete a thirty-hour education course. They state their preferences for a desired child or a specific available child. The length of the adoption process depends on the parent's preferences for the adopting child and the matching conditions as determined by the social workers. Adopting a baby usually requires waiting two to seven years, whereas adopting an older child takes only six to eighteen months (National Adoption Foundation 2020). This indicates an excess demand for babies. A detailed survey of adopting parents (Baccara et al. 2014) revealed that they would switch from a Caucasian or Hispanic child to an African American child for a \$36,500 payment and from a girl to a boy for \$18,300. In that surveyed group, a \$10,000 increase, or about a 33 percent rise in the costs of adoption, decreases the probability of potential adopters' applications by only 1.9 percent, indicating inelastic demand for adoptions. It also suggests that a rise in potential adoption revenues would occur with higher prices charged for those adoptions. Again, there is substantial demand for healthy babies, while an excess supply exists of older children or children with physical or emotional disabilities (Deutsch et al. 2017).

The U.S. Department of Health and Human Services provides subsidies for adopting parents, but the subsidies can be no more than foster-care payments for children with special needs. The category of special needs is defined by each state. The federal government subsidizes adoptions when a child is classified by a state as having special needs.² Not surprisingly, in 2018, probably to obtain the federal subsidies for adopting parents, 93 percent of adopted children were classified as having special needs. Indeed, subsidies appear to significantly contribute to adoptions (Hansen 2007; Deutsch et al. 2017). Subsidies that reduce aging out from foster care save taxpayers \$143,000 in direct costs of maintaining children in adopting homes rather than in foster care. In addition, there are savings of \$190,000 to \$235,000 in other costs, such as special education and involvement in the criminal justice system, as well as between \$88,000 and \$150,000 in the extra lifetime income of those adopted (Kamarck et al. 2012).

The price for adoption through domestic private agencies ranges between \$5,000 and \$50,000 (Adopt US Kids n.d.). Independent adoption through an attorney ranges between \$8,000 and \$40,000. The average cost of adopting from foster care is modest, \$2,744 (American Adoptions 2020), and even the required home study can be subsidized (National Adoption Foundation 2020). The cost of adoption

2. An additional form of subsidy is a tax credit for adoption expenses up to \$14,300 in 2020, indexed for inflation. Such credit provides greater financial incentives for higher-income households interested in adopting a child.

from other countries by U.S. citizens ranges between \$20,000 and \$50,000, plus travel and accommodations estimated at \$10,000 (Snider 2020). Any adoption facilitator is permitted to pay specified living and medical expenses for the birth mother and hospital expenses for her and the baby. Under state laws, selling a child is illegal. Under federal law, selling of minors is punishable by imprisonment for not less than thirty years and often includes fines (Legal Information Institute n.d.). Presumably, the intent of the law is that the birth mother is not supposed to profit from delivering a child, which is considered illegal “baby selling,” and the ban on this process is strictly enforced. In five states, even living expenses for the birth mother are not allowed when a child is adopted. In a case in Texas in 1994, for example, criminal charges were imposed on the birth mother for selling five of her children to her lawyer for \$12,000; the defendants attempted to claim that the money received was for the children’s living expenses, but the court ruled that as illegal (Carroll 2011).

Elizabeth Landes and Richard Posner state in their path-breaking article “The Economics of the Baby Shortage” (1978) that a black market exists for babies and suggest the introduction of a legal market, which would reduce baby prices, reduce the baby shortage, and eliminate the black market. They implicitly suggest that because of this legitimizing of the market, importation of adoptable children should decline as U.S. market prices for babies decline. More recently, Jason Brennan (2015) has suggested the legalization of the black market for babies. The mothers rather than the adoption facilitators would then enjoy the revenues. The existing high penalties for market transactions for children may have reduced the black market but have not eliminated it.³ Existing U.S. adoption laws that prohibit market pricing for the various types of children without a permanent home creates a shortage of preferred groups of children and an excess supply of other children.⁴ Creating free markets leads to the reduction in avoidable social costs incurred as a result of domestic black markets and children aging out of foster care.⁵ It seems that only the international segment closely approaches free-market pricing for adopting children.

Currently, almost all U.S. adoptions are made within a single state rather than across states because any cross-state adoption requires approval of both state courts and compliance with both states’ usually different procedures. In fact, potential adopters must comply with the laws and policies of the state sending the adoptee before they can take the child to the state of their residence. This may involve a stay of days or weeks in the adoptive child’s state. Further, the adopting household may

3. For example, a Kentucky woman was arrested in 2019 for selling her baby for \$2,000 (Feuerherd 2019). An Arizona assessor was accused of selling babies for between \$25,000 and \$40,000 in 2019 (AP News 2019). Between 1997 and 2001, a woman sold eight hundred Cambodian children to unsuspecting Americans and earned more than \$8 million from this activity. The adopting parents typically paid \$11,000 (Wikipedia n.d.). Another case involving baby selling through private agency led to a plea agreement (Hopper 2011).

4. U.S. Code section 2251A, “Selling or Buying Children” (Legal Information Institute n.d.).

5. Illustrative of the problem for children who age out from foster care is the program in Pennsylvania that provides assistance for such young adults beyond the age of eighteen (McCarthy 2020).

find it necessary to obtain attorneys in both states to facilitate the process (Academy of Adoption and Assisted Reproduction Attorneys n.d.). Not surprisingly, in 2012, due to these restricting interstate laws, only one in two hundred adoptions involved parties from different U.S. states. Obviously, the limited “choice” of both available children and interested potential adopting parents in any one state leads to less-desirable matching and encourages potential adopters to turn to international and other adopting markets—a situation mostly relevant to the demand for healthy babies.

A Proposal to Use Auctions to Subsidize Adoptions of Less-Desired Children

The problem that we address is the shortage of babies, which creates long adoption wait times, mainly for infants, and excess supply of less-desired children. Both the excess demand and excess supply yield social costs for children who remain unadopted and age out of the foster-care system as well as avoidable transaction costs, which prohibit potentially beneficial adoption matches. Such undesirable results normally occur because of inappropriate market pricing. Since policy makers and the public may be concerned about unrestrained buying and selling of children, prices do not reach equilibrium in this market. We propose assigning the right to raise a child based on the willingness to pay for the desirable children and using the proceeds to fund subsidies to enhance the adoption of the less-desired children, who under the status quo are more likely to age out of the system and never become adopted.

Our proposal involves sealed-bid, second-price online auctioning of the right to raise each child. Separate bidding would occur for each child. Only parents who are screened and considered suitable can participate in the auctioning. Bidding would take place for all approved adopting parents, and the highest bidder would be awarded the adoption rights and would pay the amount equal to the second-highest bid. The auctioning would be conducted by setting a reservation (starting) price and allowing potential adoptees to bid higher to obtain the rights to adopt. This process would take place with a relatively high reservation price for the desired children (mostly babies); the highest bid would win, but the winner would pay the second-highest offer. A survey conducted by Maria Giovanna Baccara and her colleagues (2014) estimated a price-inelastic demand for the adoption of desired children, supporting the idea that potential revenues could be obtained through auctioning.

In the case of the less-desired children, the auctioning would presumably work by starting with subsidies. The bidding for each child will start at some reservation subsidy depending on age (or other characteristics like special needs), and the process will capture the willingness to accept in terms of subsidy amounts. Bids will move toward zero from large subsidy amounts to signal willingness to accept a smaller payment to adopt the child. The winner would make the lowest-subsidy bid and receive the second-lowest subsidy. If a given reservation

subsidy generates zero responses, it would shift the reservation subsidy to a higher amount, and a new auction would occur. If an auction starts with a reservation subsidy and receives bids up to zero dollars in subsidy (willingness to adopt the child without any subsidy), the auction will then accept positive payment bids, and the winning bids would pay the second-highest bid for the adoption rights, just like the auction outlined in the previous paragraph. The second-price auction format induces interested adopting households to bid at their actual value as a dominant strategy, such that no shading or bidding below an individual's subjective value occurs (Vickrey 1961). This sealed-bid, second-price auction, or "Vickrey auction," generates this dominant strategy of truthful bids as opposed to a first-price auction, where the winning bidder pays the high bid they entered, participants bid strategically to shade bids to gain consumer surplus, and no dominant strategy exists. Therefore, the second-price auction will yield the adoption rights to those who place the highest subjective value on the adoption rights being auctioned, and revenue equivalence holds between sealed-bid, first- and second-price auctions,⁶ meaning revenues raised from the two auction formats are equivalent. If the welfare and future prospect of the child is highly correlated to the degree of "wanted-ness," as suggested by John J. Donohue and Steven D. Levitt (2001), this truthful-bidding strategy and the highest bidder corresponding to the highest subjective value of the child could improve the adopted child's future outcomes. R. B. Myerson (1981) also finds that adding a reservation price can be used to maximize the bidding revenue in these Vickrey auctions, where bidders have private independent values, as should be the case with adoption rights that are not transferred to anyone else after the auction. If an auction generates only a single bid, this reservation price is what the bidder would pay, as opposed to a situation where there is a single bid and no reservation price, in which case the second-highest bid would be zero. Setting a reservation price could be done by age, with infants having high positive reservation prices because potential parents usually make larger monetary and nonmonetary sacrifices to obtain infants under the current institutions. Operationalizing the reserve price would probably not be optimized immediately; some children may generate no bids, in which case the reservation price could be lowered (or reservation subsidy increased). This modified Vickrey auction would maximize the revenue from all desirable children, and the reverse Vickrey auction would be used to minimize the subsidies for each less-desired child if no positive bidding occurs for the adoption rights of a child. As such, the revenues from adopting the desired children subsidize the adoption of the less-desirable children. The proceeds would be used with existing state and federal subsidies to encourage the adoption of the less-desired children. An increase in subsidies will increase the number of adoptions of the less-desired children (Hansen 2020). The auction will generate maximum proceeds

6. J. G. Riley (1989) shows that this revenue equivalence holds among different types of open- and closed-bid auctions, assuming monotonicity and continuity among bidders.

from the more-desired children and minimum subsidies for the less-desired children. This setup would not preclude the current practice of social workers periodically visiting for six months until the adoption is finalized by court approval. Such visitations are under the jurisdiction of state government but could be contracted out to authorized private entities.

We suggest extending the adoption market to either an online regional setting involving several adjacent states or even a national online market. By increasing the number of participants in the auctioning for each child, better matching would be achieved. However, increasing the market size could add to the transaction costs in the form of higher transportation costs and make adoption choices more difficult because of the increased number of available children (Blackstone et al. 2008). For a regional or national market setting to work, many of the state-level artificial barriers to interstate adoption would need to be reduced. As described by Elaine Kamarck and her colleagues (2012), Congress could reward states for interstate adoptions (potentially through access to the pool of subsidies raised by the auction), create more uniform standards across states for adoption procedures, and emphasize adoption over foster care as a long-term policy goal.

Under current practices, children can be returned to foster care in case the matching fails (Child Welfare Information Gateway 2012). From a social welfare standpoint, under our proposed system we would observe welfare gains for both children and parents who desire adoption. Under the auction system, the subsidy would be paid monthly for the less-desired children, and, therefore, if the child is returned, these payments would cease. For the desired children, the current practice of a lump-sum payment by the adopting parents would continue, and if the child is returned, a prorated payment would be made.

Because all states and the federal government prohibit the sale of children, we suggest that a government agency or a government-delegated private agency conduct the auction. This auction is not a pure sale of the child because neither the birth mother nor any intermediary would receive any revenue beyond legally permitted expenses and/or reimbursements. This proposal would be applied to the existing children in the foster-care and state adoption systems within the United States. It is simply a way of allocating the right to raise children and finding additional adoption matches within the existing system. Because government or delegated private social workers representing the interest of the child will oversee the quality of the matching, they can effectively terminate the auctioning-derived adoption. Contracts with these social workers, whether private or government, could be constructed to incentivize long-lasting matches between parents and adopted children. We propose making certain factors—salary and employment advancement, for example—based on finding long-lasting successful adoption matches between children and parents. These incentives could be structured based on the percentage of adoptions supervised that result in permanent or active parenting. Potential termination or salary cuts could be based on failure to achieve a high success rate. These contracts would

create incentive compatibility between all parties. Moreover, the courts would make the final decision and can provide oversight as well.

Under current conditions, there is limited knowledge regarding monetary transactions and the quality of adoptions by independent agents and for international adoptions. The only possible check on all monetary transactions is when court approval is required. The payments allowed for birth mothers are at most for normal living, obstetrical care, and delivery expenses. Birth mothers who turn babies over to foster care are also entitled under our proposal to such payments. Foster-care agencies would likely adhere to the prohibition of payments beyond expenses. Shifting more babies to foster-care adoption would at least enlarge our market and its proceeds.

Evaluation of the Auction Proposal

This model indicates how the welfare of hard-to-place children, adopting parents, and the most-desirable children increases when market prices are introduced to the existing adoption practices. Market pricing would increase the number of adoptions of hard-to-adopt children and shorten their time in foster care. Children who currently stay long periods in foster care or age out could be adopted with larger subsidies made available from a combination of already-existing government subsidies and the additional funds provided by the auctioning process. With appropriate subsidies, more children would be adopted rather than aging out of foster care, as happens under the current system. The auctioning allows government to determine the opportunity cost of resources that could be used elsewhere for the subsidy necessary to secure the adoption of the less-desirable children. These opportunity costs for an additional child should equal the long-term social costs if the child remains in foster care.

Queuing of parents who are attempting to adopt healthy babies would be reduced and possibly eliminated. International adoptions of babies could decrease because the wealthy, who predominately adopt healthy babies abroad, could adopt domestically more quickly (Merz and McCall 2010; Park 2020).

As mentioned earlier, the current high-transaction-cost environment for legal adoption in the United States encourages some people at the margin to look elsewhere for children, including potential black markets in adoption (King 2017). In these black markets, children are priced much higher than in legal markets because of the necessary compensation for supplier risk. These higher prices may also lead to more infants and children obtained via kidnapping or coercion (Landes and Posner 1978; Brennan and Jaworski 2016, 179–81). Having a well-functioning legal auction market for adoption rights will reduce the size of this black market. Foster care could also be allowed to make legally permitted reimbursements to birth mothers in order to equalize the attraction of foster care with that of other adoption providers.

If these payments are structured as medical and other pregnancy-related reimbursements, the possibility of having children solely to generate income would be low. Applying this proposal could increase the number of babies provided to foster care from the other markets and increase the auction market revenues. Allowing such payments by foster-care agencies will simply shift birth mothers from other adoption markets to the foster-care market. Further, at least some of the transaction costs paid in the other markets could be used in the bidding, which would support subsidies for the less-desired children.

Khun, Lehiri, and Lim (2020), using data from 2007, estimated the government subsidy necessary to shift interested parents from other adoption markets to foster-care-managed adoptions. Our conceptual model suggests that government could subsidize, if needed, just the difference between the amount raised from the auctioning of rights to adopt the desired children and the amount necessary to achieve the adoption of less-desired children. Because demand-and-supply conditions vary, the amount of the subsidy changes overtime.

Implementing our proposal faces legal impediments. It is difficult to adopt children across state lines. Increasing the market size requires greater flexibility by the Interstate Compact on Adoptions. We suggest that in the case of an interstate adoption, either state's courts could be empowered to handle the adoption-approval process, considering the laws of both states. This is a common process in a case where a person's will is drawn in one state but the decedent dies in another state.

Another possible impediment is whether the courts would accept as "in the best interest of the child" an adoption that is partially based on an auction. Every bidding household would be qualified through approval by a social worker and the court, so we would not expect this issue to be significant.

Arguments against Auctioning

A basic argument against the creation of markets for rights to adopt children is that a child is treated as a commodity. The Harvard philosophy professor Michael Sandel claims that "even if buyers did not mistreat the children they purchased, a market in children would express and promote the wrong way of valuing them. Children are not properly regarded as consumer goods but as beings worthy of love and care" (qtd. in Brennan 2015). In response, Brennan (2015) argues that under the current system, giving away a child is acceptable, but paying for a child is illegal and heavily criticized, which doesn't make sense. In addition, in the auctioning proposal the proceeds would be used to facilitate the adoption of hard-to-place children and thus to improve social welfare in general.

Relatedly, an argument against auctioning children is that they may develop psychological problems later in life as a result of being treated as a commodity. Margaret Jane Radin (1995) argues that such children might feel embarrassed that they

were sold for the price of a car. Again, a response to this claim is that any adoption, even for a price of zero, is likely to produce similar feelings of being unwanted. Clearly, an issue for any adopted child is being abandoned by biological parents. But it is not clear that payments for adoptions contribute to these feelings of unwantedness. In fact, Margaret Keyes and her colleagues (2008) found that international adoptees had fewer psychological problems even though international adoptions involve payments.

The auctioning proposal could be claimed to be inequitable because the wealthy are able to adopt the most-desired children, whereas the less affluent can adopt only the less-desired children. Because all interested adopters must be qualified, however, the queuing is replaced by the willingness and ability to pay. All else constant, most healthy babies and toddlers are likely to be adopted by affluent households. However, under current conditions, income level is usually a factor for the social worker that would, under our system, be replaced by the market. Under the independent-agent and private adoption agency avenues, the high fees already preclude the less affluent from adopting children. Further, our primary objective is to maximize the well-being of the adopted children, not necessarily of the adopting parents. *Ceteris paribus*, being adopted by a more-affluent household is probably preferable for a child. Every qualified household could participate in the auction; however, under our model, the final decision, as is currently the situation, is given to the court, which considers the social worker's recommendations before the adoption is finalized.

In the unlikely event that the auctioning produces revenues exceeding the needed subsidies, the extra funds could be used to improve the well-being of the remaining foster-care children not eligible for adoption. One may argue that in such a case placing a cap on the auction price would enable less-affluent households to adopt the desired children. However, such intervention in the market will reduce the demand for the less-desired children, and as such the subsidies will have to rise. Further, any price setting creates the problems of price ceiling, including a black market, and shifts affluent households now unable to adopt a healthy baby to venues such as international adoptions or private adoptions, thus reducing revenues for assisting in the adoption of less-desired children. If a price ceiling is set, then several bidders could offer that price, and a choice would have to be made regarding who can adopt the child, such that a shortage would persist for these desired children. Such a cap could then discourage potential adopting parents from participating in the auction and then turning to the other markets. The objective of our proposal is the welfare of the adopted children and to a lesser extent the welfare of the households seeking to adopt.

Another part of the commodification objection to a market in adoption rights is that this "commodification" will allow prices that reflect racial prejudices. Many people may prefer to adopt infants of the same race as themselves, and income levels of whites tend to be higher than that of blacks, so that white infants may fetch a higher auction price than other races. Brennan and Jaworski address this argument:

[In] existing adoption markets, in which parents pay adoption agencies but only offer token compensation to mothers, white babies already cost more than black babies. Also, the queue and waiting times for white babies are longer than for black babies, meaning that the non-pecuniary costs of white babies are already higher... . As far as we can tell, the market here does not introduce any immoral racial preference, but simply reflects underlying racial preferences. It also reflects other underlying issues and inequalities, such as that, thanks to historical injustice, blacks have less income than whites. The problem here, then isn't with the market. The market does not introduce a problem where there wasn't any to begin with. (2016, 182)

Another argument against the creation of markets is the worry that insufficient funds would be raised to achieve the adoption of the less-desired children. The number of children younger than three adopted from foster care was 13,401 in 2006 and grew at the rate of about 3 percent a year to 19,500 in 2018. The number of infants adopted from foster care in 2018 was 2,924. Adopting parents who prefer to adopt quickly and avoid being in the queue for a U.S. baby often travel overseas to adopt. A conservative estimate of their total average cost for adopting there is \$45,000. Our auctioning proposal would eliminate such queuing, and, therefore, we suggest conservatively that the market price for the right to adopt children younger than three could be \$45,000. Thus, the total funds raised to subsidize the less-desired children may be \$877 million in one year, or 35 percent of the total current federal subsidies (Lansner and Kubitschek 2020). In particular, only 5–6 percent of infants are adopted through foster care (Kingsbury 2013), and therefore the funds created are minimal compared to the amount that could be obtained if more infants were shifted to foster care.

This \$877 million is probably a vast underestimate of the potential funds that could be raised through the auction system. As Brennan and Jaworski (2016) indicate, adoption can also serve as a substitute for *in vitro* fertilization. According to PennMedicine (2018), this process costs between \$10,000 and \$15,000 per cycle, and multiple cycles are needed in most cases. In 2020, the market for *in vitro* fertilization was valued at \$4.9 billion in the United States (Allied Market Research 2020). Shorter wait times, more choice, and less-arbitrary allocation of foster children could make adoption a more appealing substitute for this expensive *in vitro* procedure. Our auction proposal should improve these allocation issues. Potential parents, at the margin, could allocate resources toward adoption auctions instead of investing tens or hundreds of thousands of dollars in trying *in vitro* fertilization.

In our proposal, we suggest that adoption from foster care should include the allowed expenditures for the birth mother in order to make foster care competitive with other adoption channels. Thus, birth mothers would be expected to move away from private and not-for-profit adoption agencies to government-controlled

foster care. Adopting parents who have been resorting to adoption outside the United States to avoid the lengthy wait for a healthy baby would probably be ready to pay significantly more than \$45,000. Further, the opioid crisis may have increased the number of young children put up for adoption (Wiltz 2020). These factors would likely yield higher expected revenues from auctioning the right to raise a child than our conservative estimate. However, birth mothers now may choose to keep their babies, which will reduce the number of such babies available for adoption.

Finally, our proposal will increase the share of foster-care adoptions relative to adoption through international and other domestic private providers, thus increasing industry concentration. The increased share of foster-care adoptions among all types of adoption will be aided by the legal allowance of reimbursement of pregnancy costs that other providers offer. Foster-care requirements for entering the allowable pool of adopters are probably more restrictive than the requirements stipulated by other providers, such that the alternative methods of adoption may allow less-qualified adopters. If more adopting parents and parents putting children up for adoption elect to use the foster-care system, the quality of the matches between adopting parents and adopted children may increase.

Conclusions

Our proposal differs from Landes and Posner's (1978) proposal in that we suggest a system to encourage adoption of more children, especially the hard-to-adopt children, whereas Landes and Posner focus on infants. Also, unlike Landes and Posner's, our proposal allows only for the usual limited payments to birth mothers in order to discourage birth mothers from selling their children.

Under this system, potential parents will bid for desired children, but redistribution will occur to those most "needy" children in the form of a subsidy. This payment and subsidy program will increase the number of adoptions taking place, and, thus, if on average most children prefer adoption to foster care, the welfare of these children will increase. Another social benefit of our proposal is the reduction of wait times for adopting parents of babies.

Supplementing government intervention with market forces appears to be socially efficient for many goods and services and could be implemented for the adoption of children (e.g., Savas 2000). Harnessing auctions in an enlarged adoption market could reduce the social costs of foster care, especially the personal costs for children who remain in foster care for an extended time or eventually age out. The amount budgeted by the federal and state governments for the adoption of less-desired children currently appears insufficient because many such children are not adopted. Our proposal could improve budget allocation by deriving the opportunity costs for more adoptions. The auctioning process might even achieve the goal of "no child left unadopted."

References

- Academy of Adoption and Assisted Reproduction Attorneys. N.d. Interstate Compact on Placement of Children (ICTC). At <https://adoptionart.org/adoption/adoptive-parents/interstate-compact-on-placement-of-children-icpc>.
- Adopt US Kids. N.d. 2019. What Is the Cost of Adoption from Foster Care? At <https://www.adoptuskids.org/adoption-and-foster-care/overview/what-does-it-cost>.
- Allied Market Research. 2020. *U.S. IVF Services Market by Cycle Type (Fresh IVF Cycle, Thawed IVF Cycle, and Donor Egg IVF Cycle) and End User (Fertility Clinics, Hospitals, Surgical Centers, and Clinical Research Institutes): Analysis and Industry Forecast, 2019–2027*. Portland, Ore.: Allied Market Research, June. At <https://www.alliedmarketresearch.com/US-IVF-services-market>
- American Adoptions. 2020. Comparing the Costs of Domestic, International, and Foster Care Adoptions. At https://www.americanadoptions.com/adopt/the_costs_of_adopting.
- AP News. 2019. Elected Arizona Official Accused of Selling Babies Suspended. October 28. At <https://apnews.com/822d161dba6a4f3db53b7068a03338d1>.
- Baccara, Maria Giovanna, Allan Collard-Wexler, Leonardo Felli, and Leat Yariv. 2014. Child-Adoption Matching: Preferences for Gender and Race. *Applied Economics* 6, no. 3: 133–58.
- Batista, Tara, Allen Johnson, and Lindsay Baach Friedmann. 2018. The Effects of Youth Empowerment Programs on the Psychological Empowerment of Young People Aging Out of Foster Care. *Journal of the Society for Social Work and Research* 9, no. 4: 531–49.
- Blackstone, Erwin A., Andrew J. Buck, Simon Hakim, and Uriel Spiegel. 2008. Market Segmentation in Child Adoption. *International Review of Law and Economics* 28, no. 3: 220–25.
- Brennan, Jason. 2015. Buying Babies: Adoption Markets Can Be Fair, Ethical, and Beneficial. Foundation for Economic Education, September 15. At <https://fee.org/articles/markets-for-babies/>.
- Brennan, Jason F., and Peter Jaworski. 2016. *Markets without Limits: Moral Virtues and Commercial Interests*. New York: Routledge.
- Carroll, Andrea B. 2011. Renegotiating the Baby Market: A Call for a Ban on Payment of Birth-Mother Living Expenses. *University of Kansas Law Review* 59, no. 2 (January): 285–330.
- Child Welfare Information Gateway. 2012. Adoption Disruption and Dissolution. June. At https://www.childwelfare.gov/pubPDFs/s_disrup.pdf.
- Creating a Family. 2020. Adoption in the U.S. 2020: How Many? How Much? How Long Do They Take? At <https://creatingafamily.org/adoption-category/adoption-blog/adoption-cost-length-time/>.
- Deutsch, Joseph, Simon Hakim, Uriel Spiegel, and Michael Sumkin. 2017. Privatization and Subsidization of Adoption Services from Foster Care: Empirical Evidence. *Children and Youth Services Review* 78 (July): 9–17.
- Donohue, John J., III, and Steven D. Levitt. 2001. The Impact of Legalized Abortion on Crime. *Quarterly Journal of Economics* 116, no. 2: 379–420.
- Elleseff, Tatyana. 2017. Dear SLPs, Here's What you Need to Know about Internationally Adopted Children. January 23. At <https://www.smartspeechtherapy.com/dear-slps-heres-what-you-need-to-know-about-internationally-adopted-children/>.

- Fawley-King, Kya, Emily V. Trask, Jinjin Zhang, and Gregory A. Aarons. 2017. The Impact of Changing Neighborhoods, Switching Schools, and Experiencing Disruption on Children's Adjustment to a New Placement in Foster Care. *Child Abuse and Neglect* 63 (January): 141–50.
- Feuerherd, Ben. 2019. Kentucky Woman Busted after Selling Her Baby for \$2000. *New York Post*, December 4. At <https://nypost.com/2019/12/04/kentucky-woman-busted-after-selling-her-baby-for-2000/>.
- Gypen, Laura, Johan Vanderfaeillie, Skrallan De Maeyer, Laurence Belenger, and Frank Van Holen. 2017. Outcomes of Children Who Grew Up in Foster Care: Systematic-Review. *Children and Youth Services Review* 76:74–83.
- Hansen, Mary Eschelbach. 2007. Using Subsidies to Promote Adoption from Foster Care. *Journal of Family & Economic Issues* 28, no. 3: 377–93.
- . 2020. An Economic Perspective on Ethics in Adoption. In *The Routledge Handbook of Adoption*, edited by Gretchen Miller Wrobel, Emily Helder, and Elisha Marr, 36–48. New York: Routledge.
- Herrmann, Katherine. 2010. Reestablishing the Humanitarian Approach to Adoption: The Legal and Social Change Necessary to End the Commodification of Children. *Family Law Quarterly* 44, no. 3: 409–28.
- Hopper, Jessica. 2011. Black Market Babies Seeking Answers through Facebook. *ABC News*, February 10. At <https://abcnews.go.com/US/adoptees-illegal-baby-selling-ring-led-seymour-fenichel/story?id=12886993>.
- Institute of Family Studies. 2019. Cultivating a Pro-adoption Culture. At <https://ifstudies.org/blog/cultivating-a-pro-adoption-culture>.
- Kamarck, Elaine C., Mary Eschelbach Hansen, Julie Boatright Wilson, and Jeff Katz. 2012. *Eliminating Barriers to the Adoption of Children from Foster Care*. Harvard Kennedy School Faculty Research Working Paper Series no. RWP12-040. Cambridge, Mass.: Harvard Kennedy School.
- Keyes, Margaret A., Anu Sharma, Irene J. Elins, William G. Iacono, and Matt McGue. 2008. The Mental Health of U.S. Adolescents Adopted in Infancy. *Archives of Pediatrics and Adolescent Medicine* 62, no. 5 (May): 419–25.
- Khun, Channary, Sajal Lehiri, and Sokchea Lim. 2020. Why Do U.S. Parents Prefer Private to Foster Care Adoption? The Role of Adoptions Subsidies, Gender, Race, and Special Needs. *Economic Inquiry* 58, no. 4 (October): 1757–782.
- King, Katie. 2017. Sold to the Highest Bidder: Black Market of International Adoptions. *Campbell Law Observer*, March 13. At <http://campbelllawobserver.com/sold-to-the-highest-bidder-the-black-market-of-international-adoptions/>.
- Kingsbury, Kathleen. 2013. Longer Wait Times, Higher Costs for U.S. Adoptions. Reuters, January 15. At <https://www.reuters.com/article/us-adoption-domestic-waits/longer-wait-times-higher-costs-for-u-s-adoptions-idUSBRE90E15Y20130115>.
- Landes, Elizabeth, and Richard Posner. 1978. The Economics of the Baby Shortage. *Journal of Legal Studies* 7 (June): 323–48.
- Lansner, David J., and Carolyn A. Kubitschek. 2020. Adoption Subsidies Are Unchecked for Fraud. American Bar Association, July 9. At <https://www.americanbar.org/groups/litigation/committees/childrens-rights/articles/2012/adoption-subsidies-are-unchecked-for-fraud/>.

- Legal Information Institute. N.d. 18 U.S. Code Section 2251A: Selling or Buying of Children. Cornell Law School. At <https://www.law.cornell.edu/uscode/text/18/2251A>.
- Lucile Packard Foundation. 2020. Kidsdata. At www.kidsdata.org.
- McCarthy, Eiren. 2020. Foster Care: In-person Visits with Biological Parents Halted. “Court Closures Affecting Adoptions.” *Philadelphia Inquirer*, May 6.
- Merz, McCall. 2010. Behavioral Problems in Children Adopted from Psychosocially Depriving Institutions. *Journal of Abnormal Child Psychology* 38, no. 4: 459–70.
- Myerson, R. B. 1981. Optimal Auction Design. *Mathematics of Operations Research* 6, no. 1: 58–73.
- National Adoption Foundation. 2020. Adopting a Child ... How Long Does It Take to Adopt a Child? At <https://www.fundyouradoption.org/resources/how-long-does-it-take-to-adopt-a-child/#1585597067724-0041bb9b-3eed>.
- National Council for Adoption (NCFCA). 2017. *Adoption by the Numbers: A Comprehensive Report of US Adoption Statistics*. Alexandria, Va.: NCFCA. At <https://www.adoptioncouncil.org/publications/2017/02/adoption-by-the-numbers>.
- Park, Madison. 2020. Adopted Children at Greater Risk for Mental Health Disorders. CNN, April 14. At <http://www.cnn.com/2010/HEALTH/04/13/children.adoption.mental.health/index.html>.
- PennMedicine. 2018. IVF by the Numbers. *Fertility Blog*, March 14. At <https://www.pennmedicine.org/updates/blogs/fertility-blog/2018/march/ivf-by-the-numbers>.
- Radin, Margaret Jane. 1995. What, If Anything, Is Wrong with Baby Selling? *Pacific Law Journal* 26, no. 2: 135–45.
- Riley, John G. 1989. Expected Revenue from Open and Sealed Bid Auctions. *Journal of Economic Perspectives* 3, no. 3: 41–50.
- Savas, E. S. 2000. *Privatization and Public–Private Partnerships*. New York: Seven Bridge Press.
- Snider, Susannah. 2020. What Adoption Costs—and Strategies to Pay for It. *US News & World Report*, June 11. At <https://money.usnews.com/money/personal-finance/family-finance/articles/what-adoption-costs-and-strategies-to-pay-for-it>.
- U.S. Department of Health and Human Services (DHHS), Administration for Children, Youth, and Families, Children’s Bureau. 2019. *The AFCARS Report, 2019*. Washington, D.C.: U.S. DHHS. At <http://www.acf.hhs.gov/cb>.
- Vickrey, William, 1961. Counter Speculations, Auctions, and Competitive Sealed Tenders. *Journal of Finance* 16:15–27.
- Wikipedia*. N.d. Child Selling. At https://en.wikipedia.org/wiki/Child_selling.
- Wiltz, Teresa. 2020. Foster Care Adoptions Reach Record High. Pew Research Center, January 7. At <https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2020/01/07/foster-care-adoptions-reach-record-high>.

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