Birth Mother Search for Adoptive Parents

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March 2025

This version: March 21, 2025

** NB: For NBER Summer Institute submission, this is a preliminary and incomplete draft. It only includes the Introduction and references. We are awaiting final approval from our adoption agency partner who supplied the confidential data used in the paper before we can make the full paper available. We do not anticipate any issues with approval.

Abstract

Mothers considering placing a child for adoption face information and time constraints. We use a unique dataset from one of the largest private adoption agencies in the U.S. that records mothers' search and adoption decisions to characterize their decision-making. We establish several stylized patterns of mothers' behavior and show that these patterns conform to a model of search with deadlines. Evidence of decision inattention in the choice of adoptive families is present, implying the design of search platforms may be consequential for the welfare of the child. Building on the evidence of search behavior in the data, we use time remaining in pregnancy at the start of the search to measure search intensity. We estimate the welfare effect of the U.S. Supreme Court Dobbs decision to repeal national access to abortion using a sufficient statistics approach. Our preferred interpretation shows that the policy decreased the welfare of mothers considering adoption by at least nine percentage points. The deleterious effects of the Dobbs decision concentrate on minority mothers.

JEL classifications: J13, D91, J12, C78, D81, D83
Keywords: child adoption, birth mother, search, one-sided matching, quasi-random variation, Dobbs decision

The authors thank Jackson Bunting, Ben Klopack, Joanna Lahey, Jason Lindo, Texas A&M PLIO Workshop and Atlanta PPCW Workshop participants for valuable feedback. We are grateful for the consistent support and willingness to share data of our adoption agency partner, without whom this study would not be possible. We thank Francesco Romano for research assistance. The study has human subjects approval from Texas A&M University (IRB2022-1275M). Bullard, Castillo and Petrie declare no conflicts of interest.

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1 Introduction

One in twenty-five households with children in the US has an adopted child, and five million American adults are adopted (Adoption History Project, 2014; Kreider and Lofquist, 2014). For non-familial adoptions, markets play a crucial role in matching mothers who consider adoption an alternative to terminating a pregnancy or raising a child and families who want to raise a child but cannot have one or prefer not to. Adoption markets are a classic example of what Roth (2007) calls repugnant markets where money has only a limited role in arranging an agreement. In the US, this market is characterized by the co-existence of adoption agencies and decentralized transactions aided by facilitators.[1] Adoption agencies serve several purposes. They vet prospective parents, provide services related to the adoption process and show families to mothers searching for an adoptive family. These agencies maintain online platforms that facilitate adoptions and aim to increase the safety of the transaction for both sides of the market, which would otherwise have to be conducted through decentralized searches with the aid of hired agents (see Baccara et al., 2014, for a description of these transactions). Since personal and market-level conditions likely affect birth mothers' behavior, their interactions with these platforms can reveal their decision-making processes. This information is crucial in understanding the constraints birth mothers face and how these interact with the current market structure to affect decisions.

This paper uses a unique dataset of birth mother visits to the online platform of one of the largest adoption agencies in the U.S. to characterize stylized patterns of search behavior and adoption decisions overall and by the race of the mother. We exploit a platform policy change that effectively randomly assigned birth mothers consideration sets of adoptive families to test for evidence of inattention and framing effects on adoption decisions. We also exploit

[1] Adoption agencies generally provide services for adoptive families and birth mothers from the start to the end of the adoption process. These services include completing the mandated home study of adoptive families to determine eligibility to adopt, matching families with birth mothers with assistance from social workers and completing the legal paperwork to place the child for adoption. Decentralized facilitators do not provide comprehensive services, i.e. they might provide counseling to birth mothers or a platform for families and mothers to find one another. Finalization of adoption is typically passed to lawyers.

changes in global economic conditions due to the COVID-19 pandemic and restrictions on access to abortion due to the 2022 US Supreme Court Dobbs decision that overturned Roe v Wade to test theoretical predictions of search models. We evaluate the welfare impact of these policy changes on mothers seeking adoptive parents.

Due to lack of regulation and privacy concerns, there is a paucity of data on private adoptions in the U.S., and very little is known about behavior in the adoption market broadly (see Bernal et al., 2009, for an historical perspective). Even less is known on the decision-making of birth mothers who are considering placement of their child for adoption. To our knowledge, our study is the first to document birth mother search behavior and how that behavior is affected by policy changes. Baccara et al. (2014) look at the preferences of adoptive parents for children relinquished for adoption in a decentralized matching market of birth mothers and adoptive parents and establish preferences for children by sex and race. Landes and Posner (1978) also document similar sex and race preferences. There is more information on public domestic adoptions through the foster care system because of government oversight (Gateway, 2025). These adoptions, however, involve children who have been removed from parental care and an agency serves as the representative of the child. Our focus is on understanding the behavior of a birth mother deciding whether to place a child for adoption.

We partner with one of the largest private adoption agencies in the U.S. to peer into the decisions of birth mothers. Our partner provides comprehensive services and matching between families seeking to adopt a child and birth mothers seeking a family. Importantly, they record detailed information on adoptive family and birth mother behavior. As many other adoption agencies, our partner has an online platform that provides information to birth mothers and adoptive families and helps facilitate the adoption process. Families are vetted and complete a detailed intake that includes their preferred characteristics of the adopted child. Their profiles are posted on the platform for anyone to see. By contrast, birth mother information is kept private. They make an initial inquiry to the agency via an

online request or a phone call and are followed up by a social worker. Birth mothers choose an adoptive family they find acceptable and initiate a possible match with the adoptive family through the agency. They do not contact an adoptive family directly, and adoptive families do not initiate matches. In this setting, one side makes the match proposal that the other must accept. That is, birth mothers decide which adoptive family to choose among the families that would find the birth mother's child acceptable.

Because of the one-sided nature of the matching process, we focus on the behavior of birth mothers, not the adoptive families.[2] Our de-identified data on birth mother search is limited to their interactions with the agency. We do not observe their behavior prior to making an initial inquiry, nor their behavior, or child outcomes, after completing interactions with the agency. This means that we do not know what birth mothers who make an initial inquiry and do not follow up decide to do, i.e. raise the child themselves, follow through on adoption via another agency or have an abortion. Our data provides a window into behavior, but it is not the complete decision process. Nonetheless, we do know several important pieces of information on all birth mothers who make an initial inquiry:[3] the age of the child at initial inquiry, the mother's age and race, her state of residence and whether she attempted and succeeded in matching with an adoptive family to place her child for adoption. Detailed information on the birth mother, i.e. medical history, personal background, is obtained only if the process is started to place the child for adoption. These data are available for the 6% of our sample that complete placement. Detailed data on all adoptive families are available as they provide this information in the vetting process.

Our main analysis examines the behavior of over 11,800 birth mothers over a five year period (2018-2023). The granular data on the age of the child at initial inquiry, i.e. arrival

[2]The analysis of the adoptive family side of the market is more complicated. We observe waiting times, given their preferences on sex and race of the child, mother's health, etc. However, these restrictions may be strategic, and we do not have access to random variation on policies that would help assess their choices. Birth mothers are closer to random dictators, thus allowing abstraction from strategic considerations. We leave modeling both sides of the market for future work.

[3]Almost all inquiries (99%) are by the birth mother herself. There is little to no information on the birth father.

time, allow us to establish several stylized patterns about birth mother search intensity and probability of placement by time remaining in pregnancy when search is inititated on the platform. We also examine how birth mother inattention varies by arrival time. A policy change on the platform that randomized consideration sets gives a measure of decision attention, and we examine how attention varies with arrival times. We use the patterns in the data to inform a model of search with deadlines. The model is used to derive comparative statics and welfare implications of policy changes that affect outside options and the probability of continuing search. Once empirical patterns and theoretical predictions are established, we examine the effects of two policy changes on mother behavior, i.e. the economic downturn due to the COVID-19 pandemic, the repeal of Roe v. Wade that restricted access to abortion. To test for the causal effect of reproductive rights legislation on mothers' search behavior, we exploit the fact that some states had trigger laws in place that changed abortion deadlines automatically in the event that Roe v. Wade was repealed. These two policy changes provide an empirical test of the model predictions and confirm that data patterns are consistent with a model of search with deadlines. We also explore heterogeneity by birth mother race in search behavior, response to policy changes and the welfare impacts of these changes on mothers.

Our first result is a set of stylized patterns of behavior by birth mothers that conform with a search model with deadlines. We find that initial inquiries to the agency peak at the start of the third trimester and sharply decline thereafter through the date of the child's birth. Also, the probability of placing a child for adoption steadily increases as the date of the child's birth approaches and plummets to roughly zero thereafter. These deadlines coincide with changes in mothers' choice sets: the date at which an abortion would be considered late-term (roughly the start of the third trimester) and the child's birth date. White and Hispanic mothers make initial inquiries earlier in their pregnancy than Black mothers who arrive close to the start of the third trimester. There is less heterogeneity in the pattern of placing a child for adoption by arrival times.

Second, we find that mothers seeking an adoptive family exhibit attention-driven biases, as reported in many other contexts (see Cattaneo et al., 2020; Goldin and Reck, 2020; Abaluck and Adams-Prassl, 2021, for review of evidence and analytical frameworks). This is notable in this setting as the stakes of these decisions are high, yet inattention still exists. While adoptive family profiles are shown to a birth mother in an as good as random order, she is almost twice as likely to choose an adoptive family that is presented first. We show this result is not due to any remaining correlation between order and characteristics of adoptive families: the same family is less likely to be chosen if shown later. This framing effect becomes more pronounced as the mother is later in her pregnancy, especially for White and Hispanic mothers. We interpret this finding as analogous to the observation that reservation wages decrease as unemployment insurance termination approaches (Moffitt, 1985; Katz and Meyer, 1990b,a; Card et al., 2007).

Third, mothers' search behavior responds to global economic conditions and the level of reproductive rights. Both the COVID-19 pandemic and the US Supreme Court Dobbs' decision to repeal Roe v Wade legislation altered mothers' search intensity. For both events, we find that birth mothers arrive to the site earlier in their pregnancy. Consistent with abortion being an alternative to adoption, we find that the median age of the child when mothers first visited the platform in states with trigger laws decreased by -15.7 days (s.e. 7.6) from a baseline of -106 days. This change is more pronounced for Black mothers (-28.6 days, s.e. 12.8) and shifts their arrival times post-Dobbs to be on par with White mothers. This change is absent in states without trigger laws. A similar change in the age of the child at arrival for mothers who place a child for adoption is also present, but our data is too sparse to determine statistical significance. These results also confirm that patterns of search behavior we uncover are not due solely to unobserved heterogeneity among mothers visiting the platform. Indeed, they do react in intuitive ways to policy changes.

Finally, we build on these findings to inform a simple model of search intensity with deadlines and derive the welfare implications of policy changes. Mothers' search behavior

parallels that of unemployed workers searching for a job and facing the expiration of unemployment benefits. We take advantage of this similarity to derive sufficient statistics on the effect of a drop in the probability of continuing their search. We note that we do not have access to changes in monetary subsidies as in the labor context. That is, any welfare evaluation, therefore, requires justification. As we discuss in the paper, under certain assumptions, we can measure mothers' perceived welfare loss due to changes in reproductive rights legislation. In our preferred specification, which we argue potentially underestimates the effect, mothers' shift in search behavior reveals a nine percent anticipated loss in welfare. These losses are concentrated in non-White mothers.

Our first contribution is characterizing the behavior of birth mothers who are considering an adoption as consistent with models of costly search with a deadline. This fits in a long tradition of conceptualizing fertility and reproductive decisions as dynamic problems (e.g. Hotz and Miller, 1993). The stylized patterns of behavior we document present new knowledge and resemble workers searching for jobs as the expiration date of unemployment benefits approaches. In that literature, the unemployment hazard rate drops sharply at that deadline (Moffitt, 1985; Katz and Meyer, 1990b,a; Card et al., 2007; Le Barbanchon et al., 2024), and changes in outside options, i.e. unemployment benefits, affect the timing of search (DellaVigna et al., 2017, 2022). Importantly, we show that birth mothers react to economic and policy conditions in intuitive ways. For instance, changes in abortion deadlines increase searches early in the pregnancy. We illustrate the advantage of this approach by showing how sufficient statistic techniques developed for the labor market context (Chetty, 2008, 2009; Card et al., 2007) can be used to assess possible welfare effects of policy changes like the repeal of Roe v. Wade. Independent of the accuracy of our welfare effects estimates, we provide evidence that birth mothers' search behavior offers a revealed preference approach to evaluate welfare changes due to changes in their choice sets. Our research is complementary, not a substitute, to evidence on actual outcomes.

The second contribution is to the empirical literature on platforms in matching and

assignment problems (see Arteaga et al., 2022; Kapor et al., 2024; Agarwal et al., 2019, 2021, for recent examples). To the best of our knowledge, we are the first to investigate behavior on a platform in the adoption market. Platforms like the one we analyze have emerged as a way to increase the safety of transactions. The platform we study vets potential adoptive families. This increases the safety for birth mothers. The platform also insures the costs an adoptive family incurs in the matching process in the event a birth mother backs out of an agreement. This increases the safety for adoptive parents. The adoption market is one where no one dominant platform exists and one in which decentralized transactions are nontrivial. Kapor et al. (2024) document gains from increasing the number of institutions in an education platform in Chile. Benefits of centralization in dynamic settings are explored empirically and theoretically in Agarwal et al. (2019, 2021); Baccara et al. (2020). There might be benefits to centralization in our context, however, we cannot assess this issue given our limited data on the market.

Different from the settings mentioned discussed above, in our setting, mothers are behavioral and tend to choose the first family they see, especially when they arrive close to the child's birth (see Rees-Jones, 2017; Kapor et al., 2020, for evidence of biases in school choice). This raises the question of whether there are corrective policies that could be implemented in the presence of these "behavioral wedges" introduced by mothers' inattention. Mothers may need nudges or suggestions to insure that final matches are close to first-best (see Belot et al., 2019; Rees-Jones, 2017, for an example of providing advice for job search). Alternatively, there might be gains from altering who is shown first to mothers as is done in position auctions (Haeringer, 2018, chapter 8, for a textbook exposition). Two-sided markets to facilitate adoption may require additional constraints on what information is revealed about the other side and how compensations are used to make them safe, especially for the most vulnerable side of this market, i.e., mothers and children.

Finally, our paper contributes to the broader literature on child wellbeing and long run outcomes due to adoption (e.g., Sacerdote, 2002, 2011), foster care (e.g, Baron et al., 2024;

Doyle Jr and Aizer, 2018) and child neglect (e.g, Currie and Spatz Widom, 2010; Currie and Tekin, 2012). Our paper shows that the economic and legal environment affect the decision of birth mothers regarding adoptions. The matching of children to non-biological families likely depends on the interaction of all these markets and therefore a more complete view of the problem requires investigating how difference decisions like abortion versus adoption interact. We provide first evidence of the linkage between abortion access and adoptions and that a mother's choice of an adoptive families is not always done with full attention to all options. This implies that a mother's decision is affected by ancillary characteristics of the choice set available to them. Future work will exploit this feature to assess how family characteristics affect children wellbeing and long run outcomes.

The remainder of the paper is structured as follows. Section 2 discusses the different forms of adoption in the U.S., features of the private domestic adoption market and our partner adoption agency. Section 3 reports characteristics of birth mothers and adoptive families in our data. Section 4 presents stylized patterns of mothers' behavior: arrival times, probability of placing a child in adoption and decision attention. Section 5 presents a decision framework for the birth mother's choice of adoptive family and derives predictions and welfare implications. Section 6 uses the Dobbs decision and COVID-19 to test the model's predictions in the event of policy changes and evaluates welfare. Section 7 concludes.

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