



U.S. DEPARTMENT OF THE TREASURY
**THE ECONOMICS
OF CHILD CARE SUPPLY
IN THE UNITED STATES**

September 2021

Abbreviations

ACF	Administration for Children and Families
AFP	American Families Plan
AGI	Adjusted Gross Income
ARP	American Rescue Plan
CCDBG	Child Care and Development Block Grant
CCDF	Child Care and Development Fund
CCES	Child Care Entitlement to States
CDCTC	Child and Dependent Care Tax Credit
CHIP	Children’s Health Insurance Program
FY	Fiscal Year
GAO	U.S. Government Accountability Office
GDP	Gross Domestic Product
HHS	U.S. Department of Health and Human Services
MOE	Maintenance-of-Effort
OECD	Organisation for Economic Co-operation and Development
SNAP	Supplemental Nutrition Assistance Program
SSBG	Social Services Block Grant
TANF	Temporary Assistance for Needy Families

EXECUTIVE SUMMARY

The child care sector is a crucial and underfunded part of the American economy. One in every 110 U.S. workers – and one in every 55 working women – makes a living in early childhood education and care. Parents of young children devote a sizeable share of their total income to child care. Children benefit enormously from high-quality early childhood settings that nurture and support healthy development, all while laying the foundation for future success by supporting early learning skills. An extensive body of research describes large potential economic returns to investments in early childhood education and care for preschool children, especially for children from less advantaged families. To allow more families to access high-quality care, capture the return to quality early childhood programs, and enable inclusive growth both today and for future generations, the Build Back Better Agenda proposes important investments in child care and early childhood education.

This report describes the existing child care system in the United States, which relies on private financing to provide care for most children, and documents how this system fails to adequately serve many families. This is not just happenstance – sound economic principles explain why relying on private money to provide child care is bound to come up short.

Currently, the average family with at least one child under age 5 would need to devote about 13 percent of family income to pay for child care, a number that is unaffordable for most families. Less than 20 percent of children eligible for one of the largest federal assistance programs for low-income families, the Child Care and Development Fund, actually receives funding. Notwithstanding the high costs borne by parents, margins for child care providers are low and many struggle to make ends meet. They survive by keeping costs low. Labor, the main input, is overwhelmingly provided by women, many of whom are nonwhite, who earn low wages leading to high turnover. Many child care workers are paid so little that they rely on public services for their own economic needs.

Several market failures help explain why the current system is unworkable. First, parents are asked to pay for child care when they can least afford it. Parents of young children often have little work experience, and most people earn higher incomes as they spend more time in the labor force and their careers progress. Some parents have other major expenses, like mortgages or student loans. And, even though most families' incomes and savings increase as their children age, they are unlikely to be able to borrow against their future savings to cover the costs of care for young children. This is an example of what economists describe as liquidity constraints, a classic market failure, which argues in favor of government support. Second, the spillover aspects of providing children with a high-quality early educational experience – what economists call “positive externalities” – also argue in favor of government subsidies for child care expenditures. Finally, since the vast majority of the workers are women and disproportionately women of color, the sector likely benefits from existing discrimination in labor markets. This does not suggest that child care providers are at fault but is an indication of just how untenable the economics of the industry are.

The President proposes to increase funding in the sector by offering universal preschool to all 3- and 4-year-old children and providing access to high-quality child care for low- and middle-income children. His child care plan will cut spending in half for most American families so that families do not have to spend more than 7 percent of their income on child care for young children by creating subsidized care and extending the expanded Child and Dependent Care Tax Credit. These steps would directly address the revenue shortfalls created by the market failures we identify: liquidity constraints and the positive externalities associated with child care. While our existing system leads to chronic underinvestment in our children and hinders many parents' ability to contribute to our nation's economy and make a solid living, a well-funded child care sector will help us all achieve more of our economic potential.

INTRODUCTION

Children, their parents, and the economies in which they operate are all better off when societies provide easily accessible, high-quality child care and early education options. This white paper aims to highlight the current economic state of child care provision in the United States and describe how fundamental economic principles explain why our investments in child care have been insufficient. We start by summarizing the literature that describes the benefits of child care, although that has been carefully outlined in other reports. We then highlight the severe liquidity constraints faced by most parents of young children, which can prevent them from investing in child care even though it would have large benefits both to their children and their own future earnings. We also describe the positive externalities associated with investment in child care based on the literature that documents the large social spillovers beyond the benefits for children and their parents. Finally, we describe how the child care industry, in which over 90 percent of the employees are female and more than a third are people of color, is likely benefiting from existing labor market discrimination.

While we are primarily focused on general trends that apply to most families, we will also occasionally draw attention to subsets of the population and disparities in families' opportunities and circumstances. For example, almost 20 percent of children from infancy to age 5 live with their mother only, and the share has been rising over time.¹ On a definitional note, we will use the term "child care" to encompass all types of nonparental care focusing on infants to 5-year-olds. Where relevant, we will differentiate between situations that are primarily focused on care and situations involving more formal education.

Available, affordable, and high-quality child care provides benefits to children, their parents, and the economy at large. First, consider the benefits of child care for children. Research documents that children who attend high-quality early childhood education programs, relative to similar children who cannot attend these programs, perform better on grade school tests,² stay in school longer,³ experience lower rates of depression,⁴ have better physical health, and have higher individual and household earnings.⁵ Supporting these findings, a growing body of research on brain development suggests that children's early life experiences can be foundational. A National Academy of Science report surveyed the literature and concluded that, "[t]he scientific evidence on the significant developmental impacts of early experiences, caregiving relationships, and environmental threats is incontrovertible."⁶ While the positive impacts have primarily been documented in programs involving group learning and care and may be stronger for disadvantaged children, the literature consistently suggests that investments in early childhood experiences can pay off over a lifetime.⁷

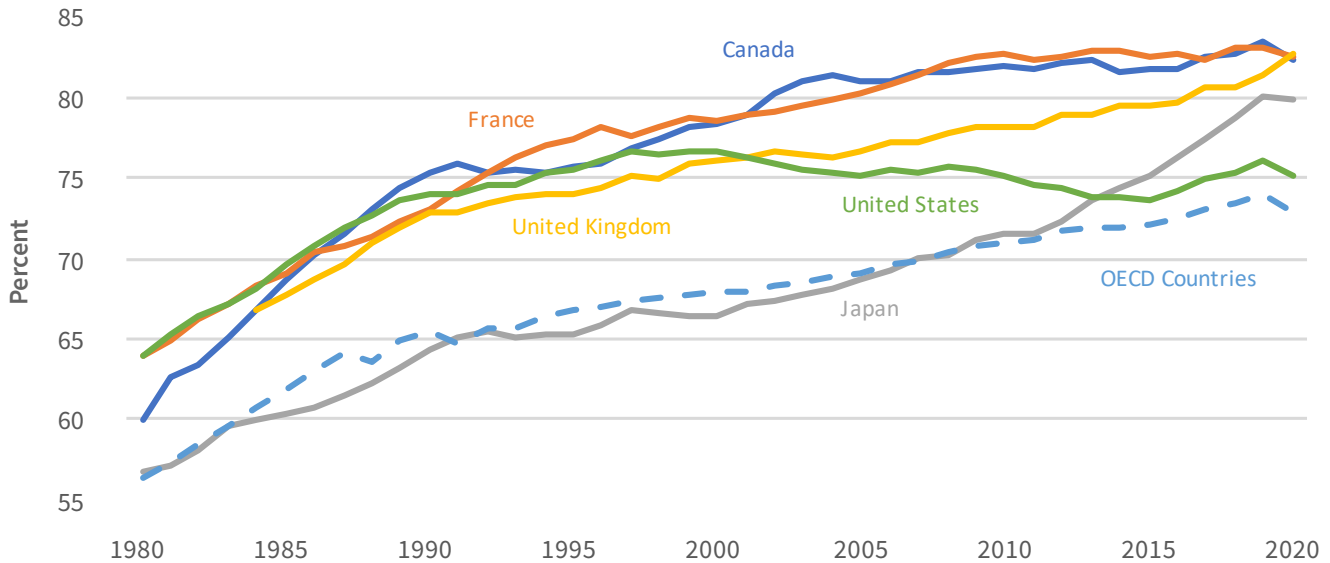
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- 1 Current Population Survey, 2020 Annual Social and Economic Supplement. 2020. "America's Families and Living Arrangements: 2020 – Table C2. Household Relationship and Living Arrangements of Children Under 18 Years, by Age and Sex: 2020." U.S. Census Bureau, December 1, 2020.
 - 2 Cascio, Elizabeth U., and Diane Whitmore Schanzenbach. 2013. "The Impacts of Expanding Access to High-Quality Preschool Education." *Brookings Papers on Economic Activity* (Fall): 127-178. <https://www.brookings.edu/bpea-articles/the-impacts-of-expanding-access-to-high-quality-preschool-education/>.
 - 3 Bailey, M.J., S. Sun, and B. Timpe. 2020. "Prep School for Poor Kids: The Long-Run Impacts of Head Start on Human Capital and Economic Self-Sufficiency." National Bureau of Economic Research Working Paper 28268. <https://doi.org/10.3386/w28268>; Pages, Remy, Dylan J. Lukes, Drew H. Bailey, and Greg J. Duncan. 2020. "Elusive Longer-Run Impacts of Head Start: Replications Within and Across Cohorts." *Educational Evaluation and Policy Analysis* 42 (3): 1-22. <https://doi.org/10.3102/0162373720948884>.
 - 4 Carneiro, Pedro, and Rita Ginja. 2014. "Long-Term Impacts of Compensatory Preschool on Health and Behavior: Evidence from Head Start." *American Economic Journal: Economic Policy* 6 (4): 135-173. <https://doi.org/10.1257/pol.6.4.135>.
 - 5 Thompson 2018 finds evidence of the impacts of Head Start on health, educational attainment, and earnings. Thompson, Owen. 2018. "Head Start's Long-Run Impact: Evidence from the Program's Introduction." *Journal of Human Resources* 53 (4): 1100-1139. <https://doi.org/10.3368/jhr.53.4.0216-7735R1>.
 - 6 National Research Council. 2000. *From Neurons to Neighborhoods: The Science of Early Childhood Development*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/9824>.
 - 7 We discuss these findings in more detail below. For a summary of the literature, see Cascio, Elizabeth. 2021. "Early Childhood Education in The United States: What, When, Where, Who, How, and Why." National Bureau of Economic Research Working Paper 28722.

For parents, typically mothers, access to high-quality care can be an important determinant of whether they remain in the labor force. Many studies find evidence that access to child care is an important factor in explaining female labor force participation in the United States,⁸ Canada,⁹ Latin America,¹⁰ and Western Europe.¹¹ Some research finds that single mothers are the most likely to drop out of the labor force if they cannot find adequate child care.¹² Multiple factors influence whether or not a working parent finds child care, including the availability of high-quality options nearby, the price of those options, and how the options fit the parent's scheduling and other needs. How hard a parent looks for child care may be a function of how closely they are tied to the labor force. The studies we just summarized measuring the benefits of child care to parents and children use exogenous variation in child care availability to isolate the impacts independent of the parents' input.

Aggregate female labor force participation rates in the United States have stayed flat since 2000 while other Organisation for Economic Co-operation and Development (OECD) countries continued rising, and the deceleration is most precipitous for women with children.¹³ (See Figure 1.) A number of factors are likely at play, and men in the United States experienced a similar drop in labor force participation relative to other countries.¹⁴ But child care may play a role in explaining the U.S. experience. For example, research points to the increased difficulties combining work with child care responsibilities brought on by just-in-time scheduling algorithms, which are particularly prevalent in low-wage retail and service industries.¹⁵

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- 8 Compton, Janice, and Robert A. Pollak. 2014. "Family proximity, childcare, and women's labor force attachment." *Journal of Urban Economics* 79 (January): 72-90.; Gelbach, Jonah B. 2002. "Public schooling for young children and maternal labor supply." *American Economic Review* 92 (1): 307-322.; Morrissey, Taryn W. 2017. "Child care and parent labor force participation: a review of the research literature." *Review of Economics of the Household* 15 (1): 1-24.
- 9 Baker, Michael, Jonathan Gruber, and Kevin Milligan. 2008. "Universal Child Care, Maternal Labor Supply, and Family Well-Being." *Journal of Political Economy* 116 (4): 709-745.
- 10 Martínez, Claudia A., and Marcela Peticar. 2017. "Childcare Effects on Maternal Employment: Evidence from Chile." *Journal of Development Economics* 126: 127-137.
- 11 Nollenberger, Natalia, and Nuria Rodríguez-Planas. 2015. "Full-Time Universal Childcare in a Context of Low Maternal Employment: Quasi-Experimental Evidence from Spain." *Labour Economics* 36: 124-136.
- 12 Cascio, Elizabeth. 2009. "Maternal Labor Supply and the Introduction of Kindergartens into American Public Schools." *The Journal of Human Resources* 44 (1): 140-170. Considering these findings, it is perhaps surprising that reduced access to child care during the pandemic did not lead to a larger exodus from the labor force. See Furman, Jason, Melissa Schettini Kearney, and Wilson Powell. 2021. "The Role of Childcare Challenges in the US Jobs Market Recovery During the COVID-19 Pandemic." National Bureau of Economic Research Working Paper 28934. <https://doi.org/10.3386/w28934>. Several factors could be at play. For one, many employers allowed parents substantial flexibility during the pandemic, allowing some families to juggle care while working in ways that may not have been available before COVID-19. Second, given the tight economic conditions during the pandemic, employed parents may have been particularly reluctant to leave the labor force.
- 13 Figure 1 originally from Black, Sandra E., Diane Whitmore Schanzenbach, and Audrey Breitwieser. 2017. "The Recent Decline in Women's Labor Force Participation." The Hamilton Project, October 19, 2017. https://www.hamiltonproject.org/papers/the_recent_decline_in_womens_labor_force_participation.
- 14 Abraham, Katharine G., and Melissa S. Kearney. 2020. "Explaining the Decline in the US Employment-to-Population Ratio: A Review of the Evidence." *Journal of Economic Literature* 58 (3): 585-643.
- 15 Boushey, Heather, and Bridget Ansel. 2016. "Working by the Hour." Washington Center for Equitable Growth, September 6, 2016. <https://equitablegrowth.org/working-by-the-hour-the-economic-consequences-of-unpredictable-scheduling-practices/>.

Figure 1: Prime-Age Women’s Labor Force Participation in Select OECD Countries



SOURCE: OCED.Stat Labor Force Statistics

Temporary child care crises can have long-lasting impacts for parents, as their decisions about whether to remain in the labor force, reduce hours, or set sights on a promotion when their children are young can have long-run effects on their career paths and earnings trajectories. For example, economists Claudia Goldin and Larry Katz find that for college-educated women 15 years after graduation, an 18-month break in work was associated with a decrease in earnings of 41 percent for those with an MBA, 29 percent for those with a JD or a PhD, and 15 percent for those with an MD.¹⁶ Even for parents who remain in the labor force, many choose to reduce their hours, in some cases out of necessity because they lack full-time child care. For example, working parents described difficulties handling child care during the pandemic: one-third of working mothers and one-quarter of working fathers reported that they needed to reduce their work hours.¹⁷ Moreover, jobs that allow flexible hours and part-time options pay lower wages, so parents’ earnings suffer both because they are working fewer hours and earning less for the hours they do work.¹⁸

Beyond earnings, many parents who cannot work full-time because of child care lose access to their employer’s healthcare insurance, retirement programs, and other benefits tied to employment. Fortunately, recent research suggests that children whose parents suffer a job loss retain access to routine healthcare services, at least in the short run. The researchers attribute their finding to public health insurance programs.¹⁹

16 Goldin, Claudia, and Lawrence F. Katz. 2008. “Transitions: Career and Family Life Cycles of the Educational Elite.” *American Economic Review* 98 (2): 363–69; Goldin, Claudia. 2014. “A Grand Gender Convergence: Its Last Chapter.” *American Economic Review* 104 (4): 1091–1119.

17 Igielnik, Ruth. 2021. “A rising share of working parents in the U.S. say it’s been difficult to handle child care during the pandemic.” Pew Research Center, January 26, 2021. <https://www.pewresearch.org/fact-tank/2021/01/26/a-rising-share-of-working-parents-in-the-u-s-say-its-been-difficult-to-handle-child-care-during-the-pandemic/>.

18 There is an extensive literature on the “child penalty” for women: estimates of lower earnings after the birth or adoption of a child. See, e.g., Goldin 2014, and Kleven, Henrik, Camille Landais, and Jakob Egholt Sogaard. 2021. “Does Biology Drive Child Penalties? Evidence from Biological and Adoptive Families.” *American Economic Review: Insights* 3 (2): 183–98. Researchers are still disentangling what drives the penalty and it is unlikely that access to child care explains the entire penalty. This is an important area for future research.

19 Schaller, Jessamyn, and Mariana Zerpa. 2019. “Short-Run Effects of Parental Job Loss on Child Health.” *American Journal of Health Economics* 5 (1): 8–41. Note that

Finally, the substantial benefits of child care for children and their parents spill over to the rest of the economy. Kids who stay in school for longer periods of time benefit society, as well as themselves, since education generates social returns.²⁰ And, since K-12 students are influenced by their peers, kids who have fewer behavioral problems or higher test scores provide benefits for their classmates.²¹ Additional evidence suggests that children who participate in organized early childhood programs are less likely to commit crimes later in life, which benefits the potential victims of those averted crimes and reduces expenditures in the criminal justice system.²² Lastly, recent research tracked the siblings and children of people who came from low-income backgrounds and were randomly selected to participate in a high-quality preschool program in the 1950s and found that the siblings and offspring completed more schooling and had higher earnings, providing direct evidence of spillovers to others.²³

Employers also lose if capable employees cannot find child care. The U.S. Chamber of Commerce Foundation worked with four states and estimated costs to employers ranging from \$375 to \$500 per working-aged adult due to child care-related absences and employee turnover.²⁴ Similarly, the 2018-2019 National Survey of Children's Health reported that the parents of two million children under the age of 5 "had to quit a job, not take a job, or greatly change their job because of problems with child care."²⁵ Although some employers recognize the costs of absences and turnover and provide onsite child care, referral services, or vouchers, not all employers are large enough to justify the costs of offering child care-specific benefits or setting up and running a child care facility.

While the benefits of child care and early childhood education are myriad and well-documented, the United States invests woefully little in early childhood education and care. One way to measure U.S. investments is relative to other countries. The United States invests fewer public dollars in early childhood education and care relative to gross domestic product (GDP) than almost all developed countries – ranking 35th out of 37 countries tracked by OECD. France invests \$7,400 per infant to 5-year-old child, the average country in the European Union invests \$4,700, and the United States invests only \$2,400. As a result, pre-primary school enrollment rates in the United States are near the bottom of OECD countries, below 40 other countries.²⁶

Another way to measure U.S. investment in early childhood education and care is relative to similar investment for older children. A recent report calculated public expenditures – federal, state, and local – on child care and education by age group and found that, in 2019, the United States spent less than \$500 per child for infants to 2-year-olds, about \$2,800 per child for 3- and 4-year-olds, and more

the paper studies parents who undergo involuntary job loss, so children whose parents leave a job because of insufficient child care may not be similarly insulated.

20 Gunderson, Morley, and Philip Oreopolous. 2020. "Returns to Education in Developed Countries." in *The Economics of Education*, Second Edition, edited by Steve Bradley and Colin Green, Chapter 3. Cambridge, MA: Academic Press.

21 Sacerdote, Bruce. 2011. "Peer Effects in Education: How Might They Work, How Big Are They and How Much Do We Know Thus Far?" *Handbook of the Economics of Education* 3: 249-277. <https://doi.org/10.1016/B978-0-444-53429-3.00004-1>.

22 García, Jorge Luis, Frederik H. Bennhoff, Duncan Ermini Leaf, and James J. Heckman. 2021. "The Dynastic Benefits of Early Childhood Education." *Becker Friedman Institute Working Paper* 2021-77.

23 Ibid.

24 See U.S. Chamber of Commerce Foundation. 2020. "Untapped Potential: Economic Impact of Childcare Breakdowns on U.S. States." February 28, 2020. <https://www.uschamberfoundation.org/reports/untapped-potential-economic-impact-childcare-breakdowns-us-states>. The four states examined were Idaho, Iowa, Mississippi, and Pennsylvania.

25 Child and Adolescent Health Measurement Initiative, Data Resource Center for Child and Adolescent Health. 2018-2019. "2018-2019 National Survey of Children's Health data query." Retrieved August 17, 2021. <https://www.childhealthdata.org/>.

26 All statistics in this paragraph are from the OECD Family Database (<https://www.oecd.org/els/family/database.htm>). The OECD notes that they may not fully capture all non-federal spending.

than four times that amount, or \$12,800, per child for children ages 5-18.²⁷ Most of the public expenditures on pre-kindergarteners are for low-income children through programs such as Head Start, though, as we will document below, public programs serve a small fraction of eligible children.

The next section of the report summarizes the current state of the U.S. child care system. The third section describes the economic forces that undermine the ability of private financing to provide adequate child care, and the last section outlines the President's proposals.

THE MARKET FOR CHILD CARE AND EARLY CHILDHOOD EDUCATION IN THE UNITED STATES

Existing Sources of Care

The child care sector is a significant part of the American economy, but care is decentralized and spread between a range of programs – from family, friend, and neighbor care that operates outside of child care licensing and is often based on the relationship between the family and the provider to licensed family child care homes and child care centers. This makes it difficult to collect comprehensive data on the sector. Several researchers have gone to great lengths to piece together a picture of providers, pricing, costs, and other economic variables in the industry, and we rely on their analyses to describe the economics of the sector. Nationally, the total value for the child care services market in the United States was estimated to be \$60 billion in 2019²⁸ – about 0.25 percent of GDP – although many children were cared for by unpaid nonparental adults. As another data point, one in every 110 workers²⁹ – and one in every 55 female workers³⁰ – makes a living in early childhood education and care.

In 2016, 40 percent of children under age 6 were cared for solely by their parents, and the remaining 60 percent – nearly 13 million children – received on average 30 hours of care weekly from a non-parent.³¹ Children in non-parental care are in a variety of child care arrangements. For example, 65 percent of children under age 3 are in home-based child care, including 42 percent in relative care, and 35 percent are in center-based care.³² Preschool-aged children are more likely to be outside of the home with 31 percent of 3- to 5-year-olds in home-based child care, and 69 percent in center-based care.³³ School-aged children (ages 6 through 12), who primarily receive care before and after school, are also less likely to be cared for in home-based settings. Additionally, in Fiscal Year (FY) 2019,

27 Davis, Elizabeth E., and Aaron Sojourner. 2021. "Increasing Federal Investment in Children's Early Care and Education to Raise Quality, Access, and Affordability." The Hamilton Project, May 2021. https://www.hamiltonproject.org/assets/files/Child_Care_PP_final.pdf.

28 The total market value includes revenues generated through sales, grants, or donations. Child care services include infant and child day care centers, pre-kindergarten and preschool centers, and nursery schools. The Business Research Company. 2020. "Child Day Care Services Global Market Briefing 2020: Covid-19 Impact and Recovery." Westlaw, February 26, 2021.

29 This calculation includes occupation codes 39-9011 (child care workers), 25-2011 (preschool teachers, except special education), 25-2051 (special education preschool teachers), 11-9031 (education and child care administrators for preschool and daycare), and 21-1021 (child, family, and school social workers). U.S. Bureau of Labor Statistics. 2020. "May 2020 National Occupational Employment and Wage Estimates." March 31, 2021. https://www.bls.gov/oes/2020/may/oes_nat.htm#39-0000.

30 This calculation includes the occupation codes referenced in footnote 29. Additionally, women make up 95 percent of the child care workforce and 47 percent of the overall workforce. Ewing-Nelson, Claire. 2020. "One in Five Child Care Jobs Have Been Lost Since February, and Women are Paying the Price." National Women's Law Center, August 2020. <https://nwlc-ciw49tixgw5lbab.stackpathdns.com/wp-content/uploads/2020/08/ChildCareWorkersFS.pdf>.

31 National Center for Education Statistics, U.S. Department of Education. 2017. "Early Childhood Program Participation Survey of the National Household Education Surveys Program (ECP-P-NHES:2016)." December 2017. https://nces.ed.gov/programs/digest/d18/tables/dt18_202.30.asp.

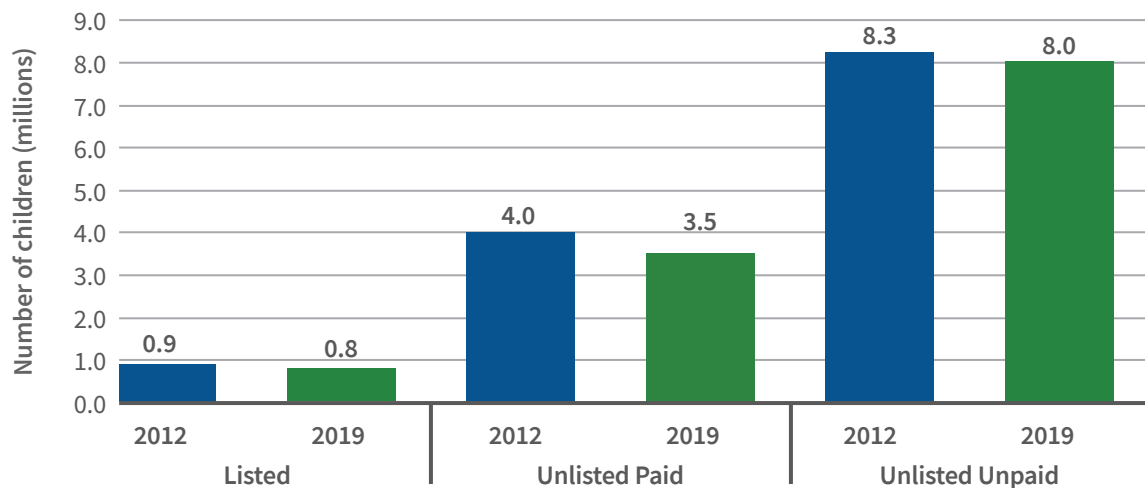
32 Ibid. Not including children in multiple care arrangements.

33 Ibid.

out of the approximately 1.4 million low-income children under the age of 13 receiving a child care subsidy through the Child Care and Development Fund (CCDF), 77 percent were cared for in a child care center compared to 21 percent in family child care homes and 2 percent in the child’s own home.³⁴

Home-based child care. In 2019, 5.2 million child care providers cared for 12.3 million children under the age of 13 in their homes.³⁵ The number of home-based child care providers was relatively constant since 2012. Of the home-based child care providers in 2019, 91,000 were listed providers (such as a licensed family child care home), 1.1 million were unlisted paid providers (such as nannies), and 4 million were unlisted unpaid providers (such as family or friends who may or may not live with the children they care for). Figure 2 describes the same distribution in terms of the number of children served. Comparing the number of unlisted unpaid providers to the number of children served by these providers indicates that the typical unlisted unpaid provider cares for two children. Unlisted paid providers are not much bigger, typically caring for fewer than four children, while listed paid providers typically care for eight to nine children.

Figure 2. Number of Children under Age 13 Served, by Type of Home-based Provider and Year



SOURCE: 2012 and 2019 NSECE home-based provider questionnaire, providers serving children under age 13.

States must have a licensing system in place to receive federal funds but have discretion to exempt certain categories of providers (i.e., relatives), including establishing a group size threshold at which point home-based providers must become licensed. Although these licensing requirements do not guarantee high-quality care, they ensure that child care services are monitored for compliance with the minimum health and safety requirements. The licensing threshold for home-based providers varies widely by state, ranging from caring for one unrelated child to six or more. In 2017, nine states and the District of Columbia required family child care homes to be licensed if the provider cares for at least one unrelated child (Alabama, Connecticut, Delaware, the District of Columbia, Kansas, Maryland, Massachusetts, Michigan, Oklahoma, and Washington), while the licensing threshold for family child care homes in most

34 Office of Child Care, Administration for Children and Families. 2021. “Characteristics of Families Served by the Child Care and Development Fund Based on Preliminary FY2019 Data Fact Sheet.” Retrieved August 17, 2021. <https://www.acf.hhs.gov/occ/fact-sheet/characteristics-families-served-child-care-and-development-fund-ccdf-based>.

35 Datta, A. Rupa, C. Milesi, S. Srivastava, C. Zapata-Gietl. 2021. NSECE Chartbook – Home-based Early Care and Education Providers in 2012 and 2019: Counts and Characteristics. OPRE Report 2021-85. Washington DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. <https://www.acf.hhs.gov/sites/default/files/documents/opre/NSECE-chartbook-homebased-may-2021.pdf>.

states is set at three or four children.³⁶ Additionally, child care providers who are exempt from licensing may still need to comply with basic health and safety requirements if the children they care for receive federal child care financial assistance.

Family child care homes typically charge lower prices in comparison to programs like center-based child care, but this is often due to lower wages for family child care providers. According to a report by Child Care Aware of America, the national average yearly cost of child care for infants to 4-year-olds was approximately \$10,000 for center-based care and approximately \$8,000 for family child care home-based care in 2017.³⁷

Child care centers. Private child care provided outside of a home-based setting includes child care centers (either non-profit or for-profit), as well as school programs, summer camps, private preschools, and programs operated by religious organizations.

As mentioned earlier, center-based care generally tends to be more expensive than home-based care, and home-based care tends to offer more flexible hours. Based on the latest data from the National Survey of Early Care and Education (NSECE) survey in 2012, more than half of the centers serving 3- to 5-year-olds were open less than 30 hours per week.³⁸ About half of center-based care only serves children in certain age ranges. For example, approximately one-third of programs accepted children ages 3 through 5 only, with some programs limiting further to a specific age in that range.³⁹ This can make it difficult for parents with more than one young child to find an acceptable child care solution for both children. Center-based care also varies in other dimensions, including enrollment size, affiliation, and organizational structure.

Public programs. A number of public programs provide either funding streams for child care or direct child care services, including CCDF, Head Start, the Social Services Block Grant (SSBG), and Temporary Assistance for Needy Families (TANF). The three largest programs—CCDF, Head Start, and TANF—are targeted toward low-income families with young children. Table 1 summarizes the main public child care programs. Additionally, many states offer early care and education programs, some of which mirror federal programs like Head Start. According to a report by the U.S. Government Accountability Office (GAO), there were 86 state early care and education programs provided across 46 states in 2018, a majority of which were preschool programs for 3- to 5-year-olds.⁴⁰

36 National Center on Early Childhood Quality Assurance. 2020. "Trends in Family Child Care Home Licensing Requirements and Policies for 2017 – Research Brief #2." March 2020.

37 Child Care Aware of America. 2018. The US and the High Cost of Child Care. Arlington: Child Care Aware of America. https://cdn2.hubspot.net/hubfs/3957809/costofcare2018.pdf?__hstc=&__hssc=&hsctaTracking=b4367fa6-f3b9-4e6c-acf4-b5d01d0dc570%7C94d3f065-e4fc-4250-a163-bafc3defaf20.

38 National Survey of Early Care and Education Project Team. 2014. Characteristics of Center-based Early Care and Education Programs. OPRE Report 2014-73a. Washington DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. https://www.acf.hhs.gov/sites/default/files/documents/opre/characteristics_of_cb_ece_programs_111014.pdf.

39 Ibid.

40 GAO. 2019. Child Care and Early Education: Most States Offer Preschool Programs and Rely on Multiple Funding Sources. GAO-19-375. Washington DC: U.S. Government Accountability Office. <https://www.gao.gov/products/gao-19-375>.

Table 1. Public Child Care Programs*

Program	Number of Children Served in FY 2019	Funding Type	Target Population	Of Note
Child Care and Development Fund (CCDF)	Approximately 1.4 million	Federal block grant to states, territories, and tribes	Low-income working families with children under age 13	Includes both the Child Care and Development Block Grant and Child Care Entitlement to States. A monthly average of 10 percent of families receiving CCDF assistance also report receiving income from TANF.
Head Start	0.9 million	Federal grants to public agencies, private organizations, tribal governments, and school systems	Children from birth to age 5 in low-income families	Offers comprehensive services in center-based and home-based settings. A majority (72 percent) of children served are age 3 or 4.
Social Services Block Grant (SSBG)	4.6 million	Federal block grant to states, territories, and tribes	Low-income families with children	In FY 2019, 30 states expended \$273 million on childcare services.
Temporary Assistance for Needy Families (TANF)	Approximately 1.6 million	Federal block grant to states and territories	Households with low income	In FY 2019, TANF provided some funding for CCDF, Head Start, and the SSBG, as well as direct childcare services, through combined federal and state expenditures and transfers. 20.5 percent of total TANF funding went towards early care and education in FY 2019.

* We list programs that explicitly fund childcare. We do not include programs, such as the Child Tax Credit, that families may use to pay for childcare.

The CCDF encompasses several federal funding streams for child care assistance—discretionary funding authorized by the Child Care and Development Block Grant Act (funding commonly known as the Child Care and Development Block Grant (CCDBG)); mandatory funding authorized by Section 418 of the Social Security Act (known as Child Care Entitlement to States (CCES)); and funds related to CCES that have state maintenance-of-effort (MOE) or matching requirements. The CCDF funding is distributed to state, territory,

and tribal governments to provide child care subsidies for low-income working parents and is the primary federal funding source for these subsidies. According to preliminary FY 2019 data, approximately 1.4 million children and 857,700 families received CCDF child care assistance per month. Nationally, the monthly subsidy paid to providers by the CCDF was \$319 for child home providers, \$456 for family child care home providers, and \$506 for child care centers. Of those families with reported income in FY 2019 who received CCDF child care assistance, approximately 74 percent paid a copayment for child care, while the remaining 26 percent of the families did not pay a copayment. The average copayment was 6 percent of family income for the families who paid a copayment.

The Head Start program was established in 1965 to promote school readiness for children in low-income families by offering educational, nutritional, health, social, and other services. Head Start is administered by the Office of Head Start within the Administration for Children and Families (ACF) and awards federal grants directly to public agencies, private non-profit and for-profit organizations, tribal governments, and school systems. Head Start programs, including the Early Head Start program, served 894,681 children from birth to age 5 and pregnant people throughout the 2018-2019 program year, a majority of which were 3- and 4-year-old children (a combined 72 percent). The Head Start program received approximately \$10 billion in federal appropriations for FY 2019, 96 percent of which went directly towards Head Start programs and 4 percent towards training, technical assistance, research, and program support.⁴¹

The SSBG grants flexible federal funds to states to provide services for at-risk children, adults, and families. Of the \$2.9 billion in total SSBG expenditures in FY 2019, 30 states expended \$0.3 billion on child care, 68 percent of which was funding transferred from TANF. In FY 2019, 4.6 million children received small-scale assistance for child care from the SSBG.

The TANF program provides flexible federal grants to states, territories, and tribes, which is then used to provide monthly cash assistance payments and other services (including child care) to low-income families with children. In addition to the basic TANF block grant of \$16.5 billion, states must spend at least \$10.3 billion of their own funds per year for TANF and TANF-related activities. In FY 2019, the combined federal TANF and state MOE expenditures and transfers was \$30.9 billion, which included \$3.7 billion on child care assistance, \$2.6 billion on pre-kindergarten and Head Start programs, \$1.3 billion transferred to the CCDBG, and \$1.1 billion transferred to the SSBG. An average of 1.6 million children received TANF assistance per month in FY 2019.

Generally, the funding for public child care assistance programs is capped and subject to the Congressional annual appropriations process, which hinders the programs' ability to provide assistance for all eligible families.⁴² As an example, only 14 percent of eligible children (under federal rules) received public child care assistance in FY 2017.⁴³ Additionally, the purchasing power of child care funding has decreased over time. After adjusting for inflation, the total funding for child care in 2018 was \$1 billion less than in 2001.⁴⁴ An increase in public child care assistance for eligible families may expand access to paid child care providers (such as family child care homes or center-based programs) for low-income families, as well as allow a return to the labor force for parents who want to work but are staying home to care for their children due to high child care costs. To illustrate this, Urban Institute modeled the effects

41 Head Start, Early Childhood Learning and Knowledge Center. 2021. "Head Start Program Facts: Fiscal Year 2019." April 20, 2021. <https://eclkc.ohs.acf.hhs.gov/about-us/article/head-start-program-facts-fiscal-year-2019>.

42 Rice, Douglas, Stephanie Schmit, and Hannah Matthews. 2019. "Child Care and Housing: Big Expenses With Too Little Help Available." Center on Budget and Policy Priorities, April 26, 2019. <https://www.cbpp.org/research/housing/child-care-and-housing-big-expenses-with-too-little-help-available>.

43 See GAO. 2021. Child Care: Subsidy Eligibility and Receipt, and Wait Lists. GAO-21-245R. Washington DC: U.S. Government Accountability Office. <https://www.gao.gov/products/gao-21-245r>; Chien, Nina. 2020. "Factsheet: Estimates of Child Care Eligibility & Receipt for Fiscal Year 2017." Office of the Assistant Secretary for Planning & Evaluation, U.S. Department of Health and Human Services, November 2020. https://aspe.hhs.gov/sites/default/files/migrated_legacy_files/200071/CY2017-Child-Care-Subsidy-Eligibility.pdf.

44 Rice, Schmit, and Matthews 2019.

of providing CCDF child care subsidies for all eligible families with incomes below 150 percent of the federal poverty level. They found that the increase in CCDF subsidies would allow about 270,000 mothers to join the labor force, increase the number of children under the age of 13 receiving assistance to two million, and reduce the number of children living in poverty by 3 percent.⁴⁵

Basic Economics of Child Care Supply

We next outline the basic economics of the U.S. child care sector – what are the typical firm’s costs, revenue sources, and profits? How concentrated is the industry? In general, we describe a highly fragmented industry populated by small, single-establishment non-profit and for-profit firms, most of which struggle to make ends meet. Labor, the main input, is overwhelmingly provided by women (many of whom are nonwhite) who earn low wages and turnover frequently. Firms must keep costs low because their potential revenue is severely constrained. Only 6 percent of all children age 5 and under in the United States received assistance from CCDF and TANF in 2019.⁴⁶ Additionally, many families who do not have access to the public programs pay more than ten percent of household income for child care. The unfavorable economic conditions lead to a chronic underinvestment in future generations.

In the section following this one, we explain how several market failures help explain the current state of the U.S. child care sector. In particular, parents are asked to pay for child care when they can least afford it. And, even though most families’ incomes and savings increase as their children age, they are unlikely to be able to borrow against their future savings to cover child care costs. This is an example of what economists describe as liquidity constraints, a classic market failure, which argues in favor of government funding. Second, even if parents could readily afford child care costs, the positive externalities associated with providing their children a high-quality early educational experience, also argues in favor of government subsidies for child care expenditures. Government funding would help address the revenue gap described in the previous paragraph. Finally, since the vast majority of the providers are women and disproportionately women of color, the sector benefits from existing unfairness and discrimination in labor markets. This suggests that the economics of the industry would be even more untenable without the structural unfairness. While government funding for child care will not solve the larger systemic issues, it may help a number of providers earn a better living.

Revenues. Several factors influence what families are willing to pay out of pocket for child care services. Many families make the concrete calculation of the costs of care relative to the income the parent (typically the mother) would earn if they worked outside the home. For many households, what economists describe as the “outside option” – in other words, not paying for the service altogether and leaving the labor force – puts an upper bound on what they are willing to pay.⁴⁷ For other families, such as single parents, staying out of the labor force is not an option if they want to maintain health benefits or a reliable source of income.

45 Giannarelli, Linda, Gina Adams, Sarah Minton, and Kelly Dwyer. 2019. “What If We Expanded Child Care Subsidies?” Urban Institute, June 2019. https://www.urban.org/sites/default/files/publication/100284/what_if_we_expanded_child_care_subsidies_5.pdf

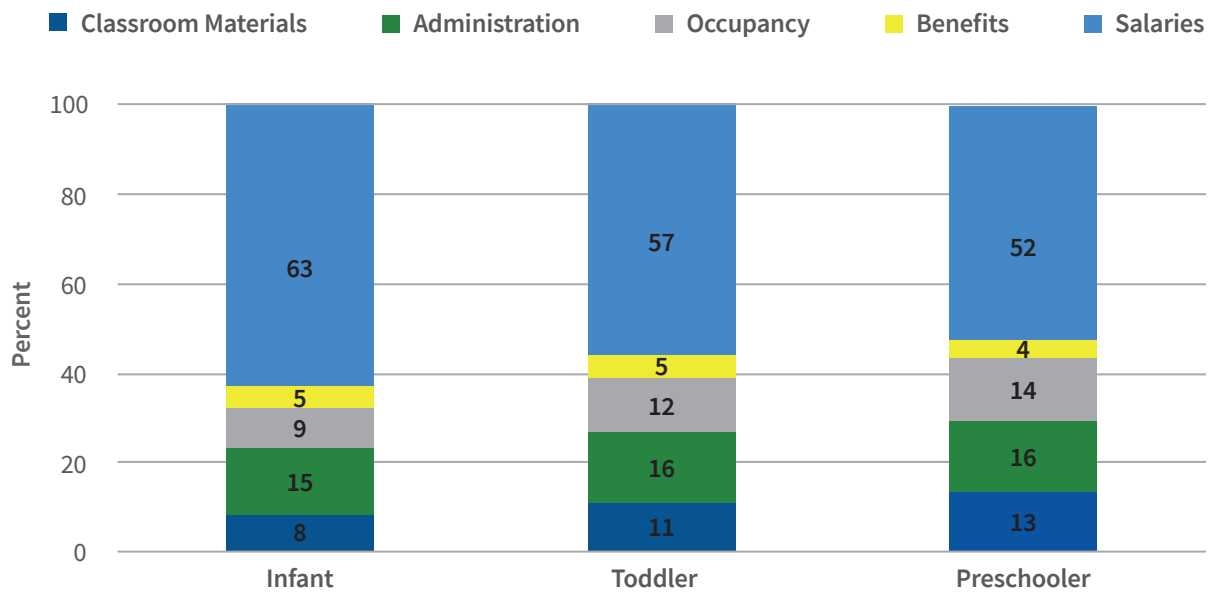
46 Based on authors’ calculations using data from Office of Child Care, Administration for Children and Families. 2021. “Characteristics of Families Served by the Child Care and Development Fund Based on Preliminary FY2019 Data Fact Sheet.” Retrieved August 17, 2021. <https://www.acf.hhs.gov/occ/fact-sheet/characteristics-families-served-child-care-and-development-fund-ccdf-based>; Temporary Assistance for Needy Families. 2020. “Characteristics and Financial Circumstances of TANF Recipients Fiscal Year (FY) 2019 – Table 30: TANF Child Recipients by Age Group.” August 28, 2020. https://www.acf.hhs.gov/sites/default/files/documents/ofa/fy19_characteristics_final.pdf.

47 In a survey of literature, Morrissey 2017 finds that estimates of the elasticity of maternal employment to early care and education costs in the United States vary widely (between -0.05 and -1.1), but most estimates are on the order of -0.1, implying a 10 percent decrease in price would increase maternal employment by about 1 percent. The price of child care may also impact the intensive margin of employment (i.e., number of hours worked rather than just the decision to work at all). Bettendorf, Jongen, and Muller 2015 find that a reform that roughly halved the out-of-pocket child care costs in the Netherlands increased maternal hours worked (6.2 percent) by about twice as much as the increase in maternal employment (3 percent). Bettendorf, Leon J.H., Egbert L.W. Jongen, and Paul Muller. 2015. “Childcare subsidies and labour supply – Evidence from a large Dutch reform.” *Labour Economics* 36 (October 2015): 112-123. <https://doi.org/10.1016/j.labeco.2015.03.007>.

Among families with children under age 5 that pay for child care, average child care spending amounted to 13 percent of family income in 2017.⁴⁸ According to the U.S. Department of Health and Human Services (HHS), child care is considered affordable if it costs families no more than 7 percent of their income. Most working families (more than 60 percent) exceed this level of expenditures for center-based child care, and this is true by parents’ marital status, race, age, or education level, and across a broad range of income levels.⁴⁹ In general, families are stretched very thin and some end up deciding not to pay for child care, which puts a hard constraint on what child care facilities are able to charge and on the revenues they have to cover their costs.

Costs. Given the needs of young children, child care is very labor-intensive and a large share of the typical facility’s costs are wages for the providers. Figure 3, from a report by the Center for American Progress,⁵⁰ suggests that wages are at least 50-60 percent of expenses, based on U.S. averages. The Figure also highlights how labor is a larger share of expenditures when the care is for younger children, especially infants, since they require more oversight and thus more adults per child. Labor and other expenses vary by location based on other factors, such as the local labor market, commercial real estate conditions, and state-level regulations on the required number of providers per child.

Figure 3. Breakdown of Child Care Program Expenses by Child Age



SOURCE: Center for American Progress

48 Based on authors’ calculations using data from U.S. Census Bureau. 2020. “Survey of Income and Program Participation – 2018 SIPP Data.” Last revised November 4, 2020. <https://www.census.gov/programs-surveys/sipp/data/datasets/2018-data/2018.html>.

49 Baldiga, Maura, Pamela Joshi, Erin Hardy, and Dolores Acevedo-Garcia. 2018. “Data-for-Equity Research Brief: Child Care Affordability for Working Parents.” Diversitydatakids.org, November 2018. https://www.diversitydatakids.org/sites/default/files/2020-02/child-care_update.pdf

50 Workman, Simon. 2018. “Where Does Your Child Care Dollar Go?” Center for American Progress, February 14, 2018. <https://www.americanprogress.org/issues/early-childhood/reports/2018/02/14/446330/child-care-dollar-go/>.

Figure 3 does not reflect differences across sources of care as it only describes licensed child care centers. Informal providers may be able to pay lower salaries, but they also likely have lower non-salary costs as many use existing space in community buildings or people's homes and so do not have a direct occupancy cost. On net, salaries likely account for a larger share of total costs for less formal care establishments, although it is difficult to collect systematic data on informal providers. So, given the constraints on their revenue, child care centers need to keep overall costs down, which primarily involves minimizing their labor cost.

Wages and provider turnover. Across the United States, child care workers are paid little and have high rates of turnover, and many report experiencing high stress and economic insecurity. In turn, most early childhood education workers lack collective bargaining rights, making it difficult for them to advocate for better working conditions.⁵¹ By contrast, unionization rates are much higher among K-12 teachers.

The Center for the Study of Child Care Employment reports wages for the more than 1,000,000 workers in the sector, covering both licensed and some informal care providers.⁵² With average annual pay of \$24,230, child care workers are in the second percentile of all occupations. Based on these low wages, more than 15 percent of child care workers are below the poverty line in 41 states, and almost 35 percent are below the poverty line in the District of Columbia. Similarly, nearly half of child care workers use public assistance, such as the Children's Health Insurance Program (CHIP), Supplemental Nutrition Assistance Program (SNAP), and TANF.⁵³

Demographically, 95 percent of early childhood education workers are women and over one-third are people of color.⁵⁴ Additionally, 87 percent of center-based teachers serving 3- to 5-year-old children had at least some college education.⁵⁵

The child care industry experiences a significant amount of provider turnover. National estimates suggest that 26 to 40 percent of the workforce leaves their job each year, even though developmental professionals have noted the importance of consistency and routines to children's experiences.⁵⁶ In surveys, early childhood educators report high levels of burnout and stress, although this is mediated when workers have more control over their work environments.⁵⁷

51 Only 12 states have collective bargaining rights for family child care workers.

52 McLean, Caitlin, Lea J.E. Austin, Marcy Whitebook, and Krista L. Olson. 2021. Early Childhood Workforce Index - 2020. University of California, Berkeley: Center for the Study of Child Care Employment. <https://cscce.berkeley.edu/workforce-index-2020/report-pdf/>. Citing the International Labour Office, the report covers workers in settings that are "usually school-based or otherwise institutionalized for a group of children (for example, center-, community-, or home-based), excluding purely private family-based arrangements that may be purposeful but are not organized in a program (for example, care and informal learning provided by parents, relatives, friends, or domestic workers)."

53 Whitebook, Marcy, Deborah Phillips, and Carollee Howes. 2014. Worthy Work, Still Unlivable Wages: The Early Childhood Workforce 25 Years after the National Child Care Staffing Study. University of California, Berkeley: Center for the Study of Child Care Employment. <https://cscce.berkeley.edu/wp-content/uploads/2014/ReportFINAL.pdf>.

54 Ewing-Nelson 2020.

55 Phillips, Deborah, Lea J.E. Austin, and Marcy Whitebook. 2016. "The Early Care and Education Workforce." *The Future of Children* 26 (2): 139-158. <https://files.eric.ed.gov/fulltext/EJ1118553.pdf>.

56 Roberts, Amy M., Kathleen C. Gallagher, Susan L. Sarver, and Alexandra M. Daro. 2018. "Early Childhood Teacher Turnover in Nebraska." *Buffett Early Childhood Institute*, December 2018. <https://buffettinstitute.nebraska.edu/-/media/beci/docs/early-childhood-teacher-turnover-in-nebraska-new.pdf?la=en>.

57 Schaacka, Diana D., Vi-Nhuan Leb, and Jennifer Stedronc. 2020. "When Fulfillment is Not Enough: Early Childhood Teacher Occupational Burnout and Turnover Intentions from a Job Demands and Resources Perspective." *Early Education and Development* 31 (7): 1011-1030.

Several researchers from the University of Virginia set out to study the link between pay and provider retention in detail.⁵⁸ They offered teachers at a randomly selected set of sites \$1,500 if they stayed in their current position. They found that nearly a quarter of teachers who were not selected to receive payments were no longer at their sites after eight months. These modest bonuses had large impacts, cutting departures nearly in half to 13 percent. In follow-up surveys, the teachers described how they used their retention payments, and their statements illustrate the economic insecurity some early childhood educators face. One shared, “My family and I were struggling, and I have debt from being a single mom. The program helped me considerably.” Another explained, “It meant I could continue to go to work and not worry about food, car bills, or my child’s care.” A third wrote, “The grant helped me keep a roof over my head and food on my table and my medication because I’m a diabetic.”

Not only is labor an important part of child care costs, but the adults who care for young children play a critical role in children’s early development as well as their growth through life. And psychologists suggest that common and consistent daily routines contribute stability and predictability to a child’s life, which greatly enhances their well-being and health.⁵⁹ Daily routines may be especially helpful for children from high stress environments, where consistent scheduling is thought to counter some of the potential developmental risks of these environments.⁶⁰ So, turnover is wrenching for the children as well as the caregivers.

Profits. Most for-profit child care facilities operate on razor-thin profit margins that are usually less than 1 percent.⁶¹ Guidance for providers emphasizes the importance of minimizing bad debt and maintaining full enrollment.⁶² Many child care facilities are relatively small, so even if all families pay what they owe, a month or two without full enrollment can erase their margins. To avoid these difficulties, some child care facilities are operated as non-profits or are affiliated with religious or community organizations. Some of these facilities receive direct or indirect subsidies, such as free space or below-market leases.

Industry structure. The child care market is extremely diffuse, and the modal provider cares for two children and is unpaid (see Figure 2 above).⁶³ There are some for-profit chains, but the 10 largest providers (KinderCare Education, with capacity for 200,000 children, and Learning Care Group, with capacity for 130,000, are the two largest) care for less than 6 percent of the children.⁶⁴ On-site or near-site child care at workplaces is only available at 7 percent of employers, with larger companies (1,000 or more employees) more likely to offer on- or near-site child care.⁶⁵

58 Bassok, Daphna, Justin B. Doromal, Molly Michie, and Vivian C. Wong. “Reducing Teacher Turnover in Early Childhood Settings: Findings from Virginia’s PDG B-5 Recognition Program.” University of Virginia. Accessed on August 17, 2021. http://www.see-partnerships.com/uploads/1/3/2/8/132824390/pdg_teacher_turnover_study_summary.pdf.

59 Wildenger, Leah K., Laura Lee McIntyre, Barbara H. Fiese, and Tanya L. Eckert. 2008. “Children’s Daily Routines During Kindergarten Transition.” *Early Childhood Education Journal* 36: 69-74. <https://link.springer.com/article/10.1007/s10643-008-0255-2>.

60 Ibid.

61 Davies, Phil, and Rob Grunewald. 2011. “Hardly child’s play.” Federal Reserve Bank of Minneapolis, July 1, 2011. <https://www.minneapolisfed.org/article/2011/hardly-childs-play>.

62 Workman, Simon, and Steven Jessen-Howard. 2019. “Conducting a Child Care Cost of Quality Study: A Toolkit for States and Communities.” Center for American Progress, February 2019.

63 Datta, A. Rupa, C. Milesi, S. Srivastava, C. Zapata-Gietl. 2021. NSECE Chartbook – Home-based Early Care and Education Providers in 2012 and 2019: Counts and Characteristics. OPRE Report 2021-85. Washington DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. <https://www.acf.hhs.gov/sites/default/files/documents/opre/NSECE-chartbook-homebased-may-2021.pdf>.

64 Statista Research Department. 2021. “Top 10 largest for-profit child care organizations in the U.S. in 2017, by capacity.” January 20, 2021. <https://www.statista.com/statistics/719471/top-10-largest-for-profit-child-care-organizations-by-capacity-us/>.

65 Matos, Kenneth, Ellen Galinsky, and James T. Bond. 2017. National Study of Employers. Alexandria, VA: Society for Human Resource Management. <https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/Documents/National%20Study%20of%20Employers.pdf>.

The diffuse and unconcentrated nature of the industry may be an outcome of the low margins: if profits are low and there are few economies of scale (i.e., few advantages to operating a large chain compared to an individual establishment), there is little incentive for individual firms to grow.

Nearly a third of the licensed facilities are non-profit or governmental establishments. The U.S. Census Bureau estimates that 47 percent of the \$48 billion in total operating revenue for child care services in 2019 (primarily reflecting center-based care) came from federal and state government expenditures.⁶⁶ This likely overstates the true government share of expenditures as the data do not easily capture family spending on informal arrangements.

In sum, the industry is constrained to charge low prices to keep services affordable for families. It survives with non-profit donations and public funding, and by keeping costs low by cycling through low-wage, non-unionized providers, many of whom rely on public services for their own economic needs.

Low Supply and Child Care Deserts

Given the tenuous state of most child care facilities' finances, it is perhaps not surprising that the overall number of facilities is low relative to the number of young children.

A series of research papers have developed approaches to measure the supply of child care facilities and have provided an in-depth picture of the options available to families around the country. The Center for American Progress uses the approximately 75,000 census tracts (defined by the U.S. Census Bureau as encompassing roughly 4,000 people) around the country to identify areas where there are more than three young children for every licensed child care slot.⁶⁷ Drawing on the notion of food deserts, they describe these areas as “child care deserts.” Nationwide, over half of Americans live in child care deserts, and low-income and rural families are more likely to live in areas that are underserved (see Figure 4 below).⁶⁸

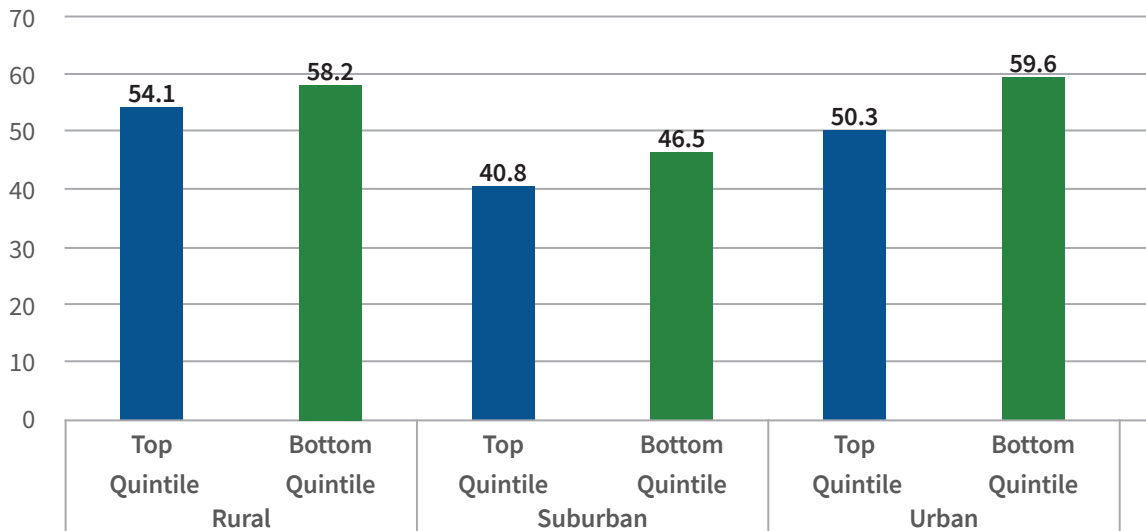
66 U.S. Census Bureau. 2021. “Total Revenue for Child Day Care Services, All Establishments [REV6244ALLEST144QNSA].” Federal Reserve Bank of St. Louis, June 10, 2021. <https://fred.stlouisfed.org/series/REV6244ALLEST144QNSA>. Total federal and state expenditures directly related to child care were estimated to be \$22.6 billion in FY 2019. Of this total, 42 percent was estimated appropriations for the Head Start program that went towards center-based, home-based, and family child care funded enrollment; 34 percent was TANF expenditures on child care assistance, pre-kindergarten and Head Start programs, and transferred funding to CCDF; 23 percent was CCDF expenditures on direct services, quality activities, and targeted funds; and 1 percent was SSBG expenditures on child care.

67 Malik, Rasheed, Katie Hamm, Leila Schochet, Cristina Novoa, Simon Workman, and Steven Jessen-Howard. 2018. “America’s Child Care Deserts in 2018.” Center for American Progress, December 6, 2018. <https://www.americanprogress.org/issues/early-childhood/reports/2018/12/06/461643/americas-child-care-deserts-2018/>.

68 The Universal Child Care and Early Learning Act, introduced by Senator Elizabeth Warren and Representative Mondaire Jones, recognizes disparities in access to child care facilities, as well as the low economies of scale in the industry, discussed above. The bill authorizes funding for technical assistance for individual entrepreneurs to start child care facilities. People from the local communities may be best poised to serve their neighborhood’s needs.

Figure 4: Prevalence of Child Care Deserts by Income Quintile

Share of census tracts that are child care deserts, by urbanicity and median family income quintile (percent)



SOURCE: Center for American Progress

However, proximity to child care facilities is but one dimension of access to care. The cost of the care, proximity to a parent's workplace, hours of operation, services for children with different abilities, cultural and language fit, and other dimensions also influence parents' child care choices. Researchers have incorporated some of these attributes in expanded depictions of child care supply. For example, Elizabeth Davis, Won Lee, and Aaron Sojourner measure access to child care facilities accounting for the time a parent would likely spend driving there, which allows for a more realistic depiction of child care choices. Using data from Minnesota, they show that the average family only has access to half a slot within a 20-minute drive.⁶⁹

Without nearby child care providers, families spend a lot of time and money just getting to and from the existing options. Unlike K-12 education, transportation is not typically provided as part of the service. Jonathan Borowsky, Elizabeth Davis, and Aaron Sojourner use data from Minnesota on families using child care subsidies and find that over 75 percent of families choose a provider within five miles of their home. Examining the full suite of child care options available to the families, they find that location and minimizing travel time is very important to families' decisions: parents are willing to pay substantially more for a provider that is one mile closer.⁷⁰ Borowsky, Davis, and Sojourner's findings highlight how low supply densities could contribute to families' decisions to keep one parent at home instead of bearing the costs of getting their child to and from child care.

It may be tempting to interpret long waitlists, which many people experience anecdotally, as additional evidence of excess demand relative to supply. Because it is relatively costless to join a waiting list, economists are generally reluctant to interpret this as evidence of supply constraints. But the hassle of applying to multiple child care centers, evaluating the right match for their family, and waiting

69 Davis, Elizabeth E., Won F. Lee, Aaron Sojourner. 2019. "Family-Centered Measures of Access to Early Care and Education." *Early Childhood Research Quarterly* 47: 472–486.

70 Borowsky, Jonathan, Elizabeth Davis, and Aaron Sojourner. 2021. "How Far Will They Go? Choice and Distance in Subsidized Child Care." Working paper.

for slots to open adds to the time and mental energy that parents spend finding the right child care solution. Through that process, some give up. The general picture emerging from the literature is of struggling enterprises and parents struggling to find child care options nearby. The next section describes how unaddressed market failures have led to this situation.

The pandemic has made a bad situation worse. Over the first eight months of the pandemic, 166,000 workers in the child care industry lost their jobs. And the child care industry was 83 percent smaller in October 2020 than it was in February 2020.⁷¹ To emerge stronger from the pandemic, public and private facilities will need to make significant investments in finding locations, hiring staff, and restarting operations. Until they do, the existing metrics of child care deserts will underestimate the experiences most parents will face in the near future.

Physical Structures Are Not Well Maintained

In any industry, firms often defer maintenance when they face low margins and regularly confront the possibility they will need to close. The child care sector is no exception, and evidence suggests that many of the physical structures that shelter the nation's children for most of their days are in poor repair. A 2019 report by the Bipartisan Policy Center noted that:

The U.S. Department Health and Human Services Office of the Inspector General, in an investigation across 10 states, found that 96 percent of child care programs receiving Child Care and Development Fund dollars had one or more potentially hazardous conditions, such as broken or unlocked gates, water damage, or chemicals within reach of young children. Furthermore, a 2011 statewide study conducted in Massachusetts found excessive levels of carbon dioxide in child care facilities throughout the state, as well as insufficient ventilation systems and furnishings that contained formaldehyde. The study also found that nearly 70 percent of programs lack classroom sinks, which has negative impacts on infection control and children's hygienic practices.⁷²

The report concluded that, "the challenges plaguing child care facilities are part of a greater infrastructure problem in the United States."⁷³

Inequities in Child Care Supply

The difficulties facing the child care industry are magnified for children in low-income families, children whose parents are below the median level of educational attainment, and nonwhite children. Existing public programs, which target low-income families, serve a small fraction of eligible families. The CCDF is the largest source of federal funding for child care assistance and funds state-administered child care subsidies for low-income families. However, as of FY 2017, just 14 percent of children eligible under federal rules receive publicly funded child care subsidies, and in most cases, the subsidy amount is too low to support the cost of high-quality child care.⁷⁴ As described above, low funding, which has declined in real terms since 2001, is undoubtedly a key factor in explaining why so few eligible children are served. As a result, in 2018, 3-year-olds whose parents' maximum educational attainment was at or below the median level were 22 percentage points less likely to be enrolled in an early childhood education program.⁷⁵ Similarly, in 2019, preschool enrollment rates for 3- and 4-year-olds in households below the poverty threshold were 12 percentage

71 McLean, Caitlin, Lea Austin, Marcy Whitebook, and Krista Olson. 2021. Early Childhood Workforce Index – 2020. University of California, Berkeley: Center for the Study of Child Care Employment. <https://cscce.berkeley.edu/workforce-index-2020/report-pdf/>.

72 Bipartisan Policy Center. 2019. "From the Ground Up: Improving Child Care and Early Learning Facilities." May 2019. <https://bipartisanpolicy.org/download/?file=/wp-content/uploads/2019/07/From-the-Ground-Up-Improving-Child-Care-and-Early-Learning-Facilities.pdf>.

73 Ibid.

74 See GAO 2021.; Chien, Nina 2020.

75 Cascio 2021.

points below enrollment rates in households above 185 percent of the poverty threshold.⁷⁶ Given differences in family income and educational attainment across racial and ethnic groups, this percentage difference is even larger for Black and Hispanic families. In a 2016 survey of Black women and Latinas, the majority indicated that cost is the primary reason for difficulty in finding reliable, high-quality child care.⁷⁷

Poor families who might not have access to federally funded programs and pay for care spent approximately 30 percent of their income on child care—considerably more than the national average.⁷⁸ Moreover, 95 percent of low-income working families would need to spend more than the federal affordability benchmark of 7 percent on licensed child care.⁷⁹

The availability of licensed child care is similarly unequal, although the literature suggests that some factors may be related to demand as well as supply. While 51 percent of Americans live in neighborhoods classified as child care deserts (measured as communities in which the ratio of young children to licensed child care capacity is greater than three) nearly 60 percent of Hispanic and Latino families live in neighborhoods that are considered child care deserts and three out of five rural communities are considered child care deserts.⁸⁰

These inequities are particularly troubling since research on the benefits of early education programs suggests that children from low-income families stand to gain the most, and providing access to high-quality programs can reduce about half of the achievement gap in test scores between high- and low-income children.⁸¹

WHY THE PRIVATE MARKET DOES NOT PROVIDE ENOUGH HIGH-QUALITY CHILD CARE

Private enterprises are the engines of economic well-being, and free market competition provides many benefits to society. But sometimes fundamental economic forces hamper the ability of private funding to deliver adequate services. In the case of child care supply, several “market failures” weaken private entities, which helps explain why the current U.S. system does not provide adequate child care options for many families.

76 Irwin, Véronique et al. 2021. Report on the Condition of Education 2021. NCES 2021-144. Washington, DC: National Center for Education Statistics, U.S. Department of Education. <https://nces.ed.gov/programs/coe/indicator/cfa>.

77 Schochet, Leila. 2019. “The Child Care Crisis Is Keeping Women Out of the Workforce.” Center for American Progress, March 28, 2019. <https://www.americanprogress.org/issues/early-childhood/reports/2019/03/28/467488/child-care-crisis-keeping-women-workforce/>.

78 Based on authors’ calculations using data from U.S. Census Bureau 2020.

79 Baldiga, Joshi, Hardy, and Acevedo-Garcia 2018.

80 Malik, Hamm, Schochet, Novoa, Workman, and Jessen-Howard 2018.

81 Chaparro, Juan C., Aaron J. Sojourner, and Nathan Huey. 2019. “Differential Effects of High-Quality Early Care: Lessons from the Infant Health and Development Program.” In *Sustaining Early Childhood Learning Gains: Program, School, and Family Influences*, edited by Arthur J. Reynolds and Judy A. Temple, 287-302. Cambridge, UK: Cambridge University Press; Duncan, Greg J., and Aaron J. Sojourner. 2013. “Can Intensive Early Childhood Intervention Programs Eliminate Income-Based Cognitive and Achievement Gaps?” *The Journal of Human Resources* 48 (4): 945-968. <https://doi.org/10.3368/jhr.48.4.945>; Cascio and Whitmore Schanzenbach 2013.

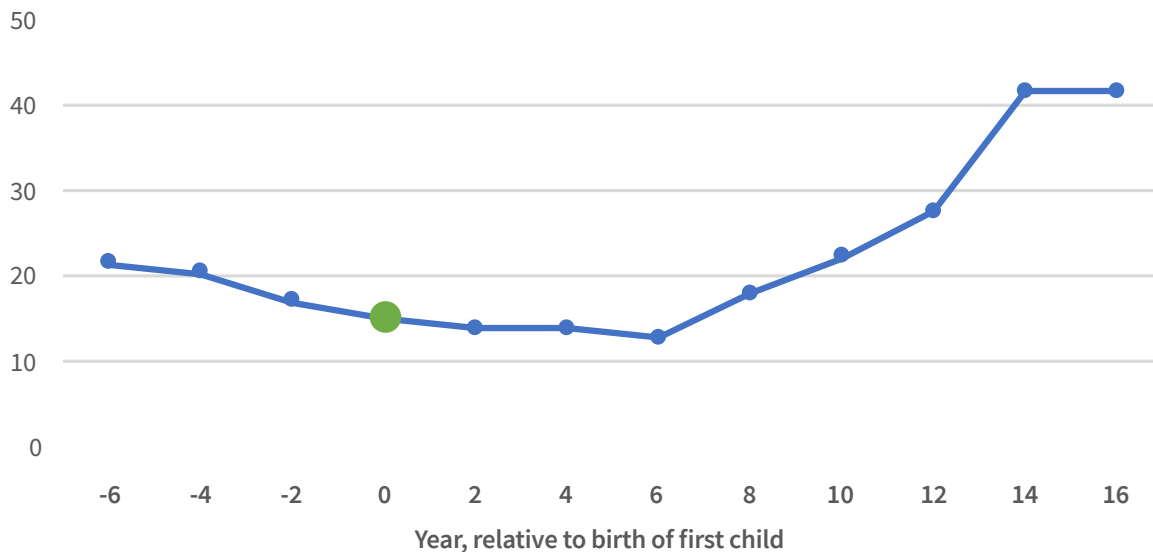
Liquidity Constraints

As documented above, child care costs can represent a significant share of parents' current incomes and an even larger share of their net pay. However, most people have children relatively early in their working lives but earn higher incomes as they gain more experience and their careers progress. In addition to having higher income over time, many households accumulate wealth as they pay off their mortgage and amass savings in retirement accounts.

Figure 5 below summarizes net wealth for the average family with children relative to the year their first child was born using data from a nationally representative survey.⁸²

Figure 5: Median Family Net Wealth Relative to Birth of First Child

For births from 2001-2018, in constant 2019 dollars (thousands)



SOURCE: PSID and authors' calculation

The substantial costs of child care are largest, on average, in the five years after the birth of a family's first child. These expenses arise when parents find themselves in the worst position to afford them; through their adult lives, this is when parental savings reach their nadir. By the time the median family's first child reaches age 16, they will have over three times as much wealth as they did in those initial years.

Knowing they will earn more over time and accumulate savings, and particularly if they think they will face an earnings penalty for taking time out of the labor force when their children are young, some parents might want to borrow money to pay for child care. This is similar to the way that people borrow to pay for a college education, knowing that it will very likely pay off over time in the form of higher earnings. But no banks of which we are aware offer loans to pay for child care, so it can be difficult for families to find the resources to pay for all the child care they might want when they most need it.

⁸² Net wealth measures equities, business/farm assets, checking/savings accounts, real estate and home equity, vehicles, retirement accounts, and other assorted assets. It is net of all associated debts (e.g., mortgages), plus debt from credit cards, student loans, family loans, and medical, legal, and other assorted debts.

For example, thinking purely about the impact on earnings, a parent who risked a 20 percent earnings penalty 15 years after the birth of their child for taking 18 months out of the labor force⁸³ should be willing to pay their entire paycheck for child care to avoid the 18-month employment gap.⁸⁴ But borrowing this amount of money would involve huge risks for an individual family, and no bank would offer a loan to a family for 100 percent of their income on the promise that, based on statistical averages, they would be able to pay it back starting in 15 years because their earnings would be higher. This is a simple example of the substantial liquidity gaps that exist to pay for child care.⁸⁵

While liquidity constraints are exacerbated for parents at the low end of the income distribution, the point is distinct from simply highlighting the general financial instability faced by many families. Increased income inequality in the U.S. economy is certainly an issue, but it should be addressed by confronting the larger structural issues that lead to it, as the President is doing through other actions, such as the Executive Order on Promoting Competition in the American Economy or the Child Tax Credit. Put differently, even with less income inequality, the market failures in the child care industry would require government interventions.

Child Care Creates Positive Spillovers

The benefits of child care and early childhood education spill over to others, who are not themselves paying for the care. As described in the introduction, multiple researchers have found that children who attend early childhood education and care programs stay in school longer, commit fewer crimes, and stay healthier over their lifetimes, thereby imposing fewer burdens on the healthcare industry. In economic terms, providing child care creates positive externalities, and fundamental economic principles prescribe that governments subsidize the provision of goods that create positive externalities.

James Heckman, along with several co-authors, has quantified the benefits of early childhood education programs to society. In an exciting research innovation, they measure the spillovers to society, including to the children and siblings of people who were provided child care compared to a control group of similar people who were randomized out of the program. They calculate that a dollar invested in preschool programs pays off more than nine times over in terms of benefits to society.⁸⁶ For example, children of people who attended preschool are less likely to commit crimes, suggesting that the choices their grandparents made about their parents' early childhood opportunities carry on to the third generation and to the society they will grow up in. Not all young parents are thinking about their future grandchildren, let alone spillovers they may generate, so early childhood education presents a classic opportunity for public support. And, given Heckman's estimates, the public investment will pay off dearly.

Importance of Quality

While liquidity constraints and social spillovers may lead parents to underinvest in any form of child care or early childhood education, it is also important to consider choices about the type of experience for children. One important distinction is between care and more formal education. Typically, the older the child, the more likely the program is to involve a substantial amount of education, while experiences for younger children and infants are mainly geared at keeping children cared for, safe, and nourished. The literature measuring benefits to children summarized in the previous section mostly focuses on early childhood education and pre-kindergarten programs, in large part because those are the programs for which researchers have systematic data that allow them to track participants as they age. Further, researchers have pointed out that a number of studies focus on highly specialized, custom programs.

83 See, e.g., Goldin and Katz 2008.

84 This calculation assumes that the earnings penalty starts at year 15 and lasts for 10 more years, earnings increase by 5 percent per year, and that the household discounts future earnings at 10 percent per year.

85 The President's Child Tax Credit will help families begin to overcome this liquidity problem.

86 Garcia et al. 2021.

Several recent analyses have found that the outcomes for children in non-parental care are less promising and, in several cases, negative. For example, the Canadian province of Quebec expanded access to care for very young children by offering universal subsidies, which allowed any parent care for \$5 per day. Michael Baker, Jonathan Gruber and Kevin Milligan found that after the program started, young children in Quebec eligible for the care were more anxious and more likely to engage in aggressive behavior in school.⁸⁷ Researchers have put forward two general hypotheses for why these results differ from the literature that finds large positive impacts. One potential explanation is that the programs were less focused on educational activities and more focused on care, in some cases by necessity as the programs served infants and young toddlers. The second potential explanation is that the programs were larger, city- or even Canadian province-wide rollouts, which could either make it more difficult to provide highly specialized programs or would bring in higher income participants, for whom benefits might not be as great. Several states, including Georgia and Oklahoma, have rolled out universal pre-kindergarten programs, which research suggests led to positive impacts on children.⁸⁸ Similarly, Norway's universal preschool programs led to higher lifetime earnings.⁸⁹ In summary, the evidence appears to point to the quality of care, as well as the importance of understanding what care arrangements a program replaces.

There are several reasons why markets, left to their own devices, will not deliver high-quality care. For one, a rich literature in economics documents the inefficiencies associated with principal-agent relationships, where in this case, the provider is acting as the parent's agent in taking care of the child. It can be difficult for the parent to obtain information about the child's experience, especially for preverbal children. Challenges assessing quality, combined with the likely importance of the experience for children's future outcomes, suggest a possible public role assessing, certifying, and disseminating information about the child care industry. Second, liquidity constraints, as discussed above, may force some parents to opt for lower quality options.

Larger Structural Issues Contribute to Underpaid Child Care Workers

As we described above, child care provision is labor-intensive and women, disproportionately women of color, are the primary providers. Women and people of color are undervalued and underpaid in the U.S. labor market, which contributes to low operating costs in the child care industry.

The economics literature has documented a persistent gender pay gap between women and men. The commonly cited pay gap metric is the earnings-ratio for the median full-time female-to-male worker, which was 0.82 in 2019.⁹⁰ An alternate metric – often preferred by economists – is the gender “residual,” meaning the female-to-male earnings gap after controlling for observable differences such as education, experience, industry, and occupation. In 2010, this ratio was approximately 0.92 – leaving an unexplained 8 percent pay gap.⁹¹

The literature is still sorting out the extent to which the gender pay gap reflects discrimination, decisions about human capital investment, and other factors. However, there is evidence of overt discrimination and other systemic factors which directly decrease

87 Baker, Gruber, and Milligan 2008.; Baker, Michael, Jonathan Gruber, and Kevin Milligan. 2019. “The Long-Run Impacts of a Universal Child Care Program.” *American Economic Journal: Economic Policy* 11 (3): 1-26. Fort, Ichino, and Zanella 2020 find similar results based on a program in Bologna. Fort, Margherita, Andrea Ichino, and Giulio Zanella. 2020. “Cognitive and Noncognitive Costs of Day Care at Age 0-2 for Children in Advantaged Families.” *Journal of Political Economy* 128 (1): 158-205.

88 Cascio and Whitmore Schanzenbach 2013.

89 Havnes, Tarjei, and Magne Mogstad. 2011. “No Child Left Behind: Subsidized Child Care and Children's Long-Run Outcomes.” *American Economic Journal: Economic Policy* 3 (2): 97-129.

90 Semega, Jessica, Melissa Kollar, Emily A. Shrider, and John F. Creamer. 2020. *Income and Poverty in the United States: 2019*. Current Population Reports, P60-270. Washington, DC: U.S. Government Publishing Office.

91 Blau, Francine D., and Lawrence M. Kahn. 2017. “The Gender Wage Gap: Extent, Trends, and Explanations.” *Journal of Economic Literature* 55 (3): 789-865.

women's wages. Recent papers have highlighted several mechanisms, including different approaches to bargaining (particularly when a woman would potentially bargain with a male supervisor),⁹² diminished credit for group work,⁹³ harsher penalties for mistakes, and reduced benefits for producing good outcomes.⁹⁴ Consequently, it is likely that women are disproportionately drawn to work in child care at low wages because their options in other industries are constrained by discrimination.

Similarly, economists have documented a persistent racial pay gap and considerable evidence of racial discrimination exists. An extensive literature has attempted to quantify how much of the observed pay gap is attributable to direct racial discrimination. One such study analyzes initial wages offers made to black and white unemployed workers.⁹⁵ In order to compare like with like, the study matches workers with similar wages in their previous job, arguing that prior wages are a direct signal of the worker's value to a future employer. The authors find that, at minimum, one-third of the roughly 40 percent average pay gap is attributable to discrimination.

Other researchers have documented direct evidence of discrimination by studying discrimination against "distinctively black names." In one experiment, fictitious resumes with "white-sounding names" received 50 percent more callbacks from employers than those with "black-sounding names," despite the names being randomly assigned to resumes.⁹⁶ Subsequent replications and extensions of that study have reached the same conclusion, although the magnitudes of the effects varied. A recent version of this experiment found that resumes from "distinctively black names" are called back at a rate 2.1 percentage points less than those from "distinctively white names."⁹⁷ Notably, this same study found no evidence of aggregate discrimination against women during the callback stage.

These experimental results speak to discrimination in hiring, but can they result in wage gaps as well? Early theoretical work suggested that discrimination by some firms would not lead to discriminatory results in the aggregate. The argument held that non-discriminatory firms would take advantage of the market inefficiency introduced by others' refusal to hire productive employees.⁹⁸ However, from the perspective of now-canonical search-and-match models of the labor market, this result need not hold.⁹⁹ If some employers discriminate against Black candidates, then this means that Black candidates can expect to receive fewer job offers. This directly leads to lower "reservation wages," which is the lowest wage at which a worker would accept a job offer. Knowing this, firms willing to hire Black candidates can offer lower wages – resulting in wage gaps in equilibrium.

Profits in the child care industry may benefit from unfairness in the labor market, and simply increasing revenues to this sector will not solve the problems arising from gender and racial discrimination. Instead, more direct strategies aimed specifically at improving

92 Biasi, Barbara, and Heather Sarsons. 2021. "Flexible Wages, Bargaining, and the Gender Gap." Accepted, Quarterly Journal of Economics. National Bureau of Economic Research Working Paper 27894.

93 Sarsons, Heather, Klarita Gërkhani, Ernesto Reuben, and Arthur Schram. 2021. "Gender Differences in Recognition for Group Work." *Journal of Political Economy* 129 (1): 101-147.

94 Sarsons, Heather. 2017. "Interpreting Signals in the Labor Market: Evidence from Medical Referrals." Working Paper, November 28, 2017. <https://scholar.harvard.edu/sarsons/publications/interpreting-signals-evidence-medical-referrals>.

95 Fryer, Roland, Devah Pager, and Jörg Spenkuch. 2013. "Racial Disparities in Job Finding and Offered Wages." *The Journal of Law and Economics* 56 (3): 633-689.

96 Bertrand, Marianne, and Sendhil Mullainathan. 2004. "Are Emily and Greg more employable than Lakisha and Jamal? A field experiment on labor market discrimination." *American Economic Review* 94 (4): 991-1013.

97 Kline, Patrick, Evan Rose, and Christopher Walters. 2021. "Systemic Discrimination Among Large U.S. Employers." National Bureau of Economic Research Working Paper 29053.

98 Becker, Gary. 1957. *The Economics of Discrimination*. Chicago: University of Chicago Press.

99 See, e.g., Black, Dan. 1995. "Discrimination in an equilibrium search model." *Journal of Labor Economics* 13 (2): 309-334.

labor market conditions can more effectively help offset the negative impact of unequal labor market treatment. That being said, some of the economic incidence of increased public support for child care will likely accrue to workers, indicating that such a strategy may raise wages and improve benefits for employees in the child care sector.

BIDEN ADMINISTRATION PROPOSALS TO EXPAND THE SUPPLY OF CHILD CARE

As highlighted earlier in this paper, increasing access to high-quality, affordable child care is essential to investing in the future of the American labor force. The White House's Build Back Better Agenda, which includes the American Families Plan (AFP) and some elements of the American Jobs Plan, would help lower child care costs by building the supply of high-quality child care, providing low- and middle-income families with subsidies so that they pay no more than 7 percent of their income on high-quality options, permanently expanding the Child and Dependent Care Tax Credit (CDCTC), and providing universal preschool for all 3- and 4-year-olds. The Build Back Better Agenda would also institute paid family and medical leave, which would make it easier for parents to care for their children under extraordinary circumstances.

Child Care for American Families Program

The President's plan will cut costs of child care by more than half for most American families, and enable them to access more convenient, higher quality care where workers receive a better wage and benefits. His plan fully covers the cost of high-quality child care for young children for the most hard-pressed working families, and ensures that families earning up to 1.5 times their state's median income will pay no more than 7 percent of their income for high-quality child care for all children under age 5. His plan would also help build the supply of high-quality child care by providing funding for states to upgrade existing child care facilities and build a supply of child care in high-need areas. Families will be able to choose from a variety of childcare options, from center-based care to Early Head Start. And his plan would boost the compensation of child care workers, ensuring they earn a living wage and a wage comparable to elementary school teachers if they are similarly qualified. He will also invest in professional development and training opportunities for these workers. Investing in a well-compensated, well-trained workforce is not only critical for the workers, but for families' ability to access high-quality care.

Child and Dependent Care Tax Credit

Under the Build Back Better Agenda, the temporary expansion of the CDCTC, enacted under the American Rescue Plan (ARP), would become permanent. The CDCTC allows taxpayers to deduct a percentage of expenses incurred for the care of a child under 13 years old or a dependent who is unable to care for themselves. The credit is designed to help taxpayers work, look for work, or go to school.¹⁰⁰ Under the ARP, the CDCTC was made refundable, allowed a higher level of maximum expenses, and increased the credit rate for 2021. The amount of qualifying expenses increased from \$3,000 to \$8,000 if a taxpayer had one qualifying child or other dependent and from \$6,000 to \$16,000 if a taxpayer had two or more qualifying children or other dependents. This expansion also increased the credit rate for taxpayers with an adjusted gross income (AGI) under \$125,000 from 35 percent to 50 percent and allowed taxpayers with an AGI between \$125,000 and \$400,000 to retain a partial credit of at least 20 percent.¹⁰¹

100 U.S. Internal Revenue Service. 2021. "Child and Dependent Care Tax Credit FAQs." June 14, 2021. <https://www.irs.gov/newsroom/child-and-dependent-care-tax-credit-faqs>.

101 Crandall-Hollick, Margot L. 2021. "The Child and Dependent Care Tax Credit (CDCTC): Temporary Expansion for 2021 Under the American Rescue Plan Act of 2021." Congressional Research Service, May 10, 2021. <https://crsreports.congress.gov/product/pdf/IN/IN11645>.

Support Employers to Build On-Site Child Care Facilities

The President is calling for an expanded tax credit to encourage businesses to build child care facilities at places of work. Employers will receive 50 percent of the first \$1 million of construction costs per facility so that employees can enjoy the peace of mind and convenience that comes with on-site child care.

Universal Preschool

The universal preschool program proposed in the AFP would increase access to free, high-quality child care for all 3- and 4-year-olds in the country.¹⁰² Between 1985 and 2019, the number of children enrolled in pre-kindergarten increased from 0.2 million to 1.5 million, which is still only about one-fifth of all preschool-aged children in the United States.¹⁰³

This program would allow children to attend preschool in a variety of settings (including licensed family child care providers, child care centers, Head Start, and public schools) by implementing a mixed-delivery system. The universal preschool program would include funding for states, territories, and tribes to upgrade and expand their preschool systems, and matching funding from states would be phased in over time.

The universal preschool program would also include higher wages for early childhood educators. This program would provide a living wage for all employees in participating preschool and Head Start programs and include pay increases for teachers to retain well-qualified educators. It is important to reduce turnover among Head Start teachers as Head Start is expected to be an integral part of the expansion of preschool services.

Paid Leave

Currently, there are no federal requirements for paid family or sick leave.¹⁰⁴ The Family and Medical Leave Act provides certain employees with up to 12 weeks of unpaid, job-protected leave per year and requires their group health benefits be maintained during leave,¹⁰⁵ while the Federal Employee Paid Leave Act makes paid parental leave in connection with a qualifying birth or placement (for adoption or foster care) available to certain categories of federal civilian employees.¹⁰⁶ The AFP, however, proposes establishing a national comprehensive paid family and medical leave program.

While not a direct child care program, more flexible leave policies complement child care services by making it easier for parents to care for their children during extraordinary times. For example, child care centers often do not accept infants younger than 6 weeks old. The President's proposal would ensure partial wage replacement for workers to care for a newborn child or deal with other life events that can place strain on parents of young children, such as a seriously ill family member, a family member's military deployment, or the death of a loved one. It would be available to workers regardless of employer size, sector, or type of employment. Under this proposal, the leave program would also guarantee twelve weeks of paid parental, family, and personal illness/safe leave by year 10

102 Administration for Children and Families. 2021. FY 2022 Justification of Estimates for Appropriations Committees. Washington, DC: Administration for Children and Families, U.S. Department of Health and Human Services. https://www.acf.hhs.gov/sites/default/files/documents/olab/fy_2022_congressional_justification.pdf.

103 National Center for Education Statistics. 2021. "Digest of Education Statistics: 2019 - Introduction." February 2021. <https://nces.ed.gov/programs/digest/d19/>.

104 Kaiser Family Foundation. 2020. "Paid Family and Sick Leave in the U.S." December 14, 2020. <https://www.kff.org/womens-health-policy/fact-sheet/paid-family-leave-and-sick-days-in-the-u-s/#:~:text=The%20Federal%20Employee%20Paid%20Leave%20Act%2C%20which%20took%20effect%20in,or%20placement%20of%20a%20child.&text=Nine%20states%20and%20D.C.%20have,from%20four%20states%20in%202016>.

105 U.S. Department of Labor. n.d. "Family and Medical Leave (FMLA)." Accessed on August 17, 2021. <https://www.dol.gov/general/topic/benefits-leave/fmla>.

106 Office of Human Resources Management, U.S. Department of Commerce. 2021. "Paid Parental Leave for Federal Employees." Accessed on August 17, 2021. <https://www.commerce.gov/hr/paid-parental-leave-federal-employees>.

of the program, and ensure workers get three days of bereavement leave per year starting in year one. This program would be funded using tax reforms proposed in the AFP.

In summary, the Build Back Better Agenda proposals discussed above may benefit families by providing millions of children with access to high-quality, affordable child care and free, high-quality preschool. Additionally, these proposals could help place money back in the pockets of American families. Eligible families would save more than half of their current spending on child care through the subsidy program, while receiving higher quality care. Other families could choose to receive up to \$8,000 (or \$4,000 for a single child) with the CDCTC. Parents could also save about \$8,600 in annual preschool costs, while accessing high-quality preschool, through the implementation of the universal preschool program.¹⁰⁷

CONCLUSION

The future economic growth of our country rests on the opportunities we create for our children. Decades of social science research emphasize the significance of early childhood experiences and show that high-quality care can have lasting positive impacts on people's lives. However, the United States currently lags most developed countries in how we educate young children.

We have outlined many problems currently faced by the nation's child care sector, including low revenues, thin profit margins, low numbers of providers relative to the number of young children, and low pay for workers. We have also described the fundamental economic principles that underlie those problems. Parents of young children face severe liquidity constraints, so their options for affordable child care are limited and child care center revenues are constrained. Some parents, ordinarily mothers, end up out of the labor force, a choice some might not make if they had access to more child care options. Not only is this a loss for those parents, but many children and our entire economy also miss out on the documented benefits and spillovers from high-quality early childhood educational experiences. We also described how the industry, facing pressure from low revenues to keep costs down, pays workers low wages and offers few benefits, likely facilitated by gender and racial discrimination in labor markets.

The President's proposals will address these market failures by providing funding to parents at the nadir of their lifetime liquidity. Some of these funds also need to target child care directly, and not only be pure grants, given the positive externalities associated with child care and the economic principle that societies benefit when governments subsidize goods that create positive externalities. Finally, as discussed above, the President's proposals may allow some providers to earn higher wages and receive more benefits.

Many of the President's other policies, beyond those specifically related to child care, will also help address the market failures we identified. Notably, the expanded Child Tax Credit, which includes substantially higher tax credits paid monthly, will begin to overcome liquidity problems by providing families with young children additional resources they may use to pay for child care. More generally, the Administration's actions that help reduce income inequality will also help low-income households pay for goods and services they value, which could include child care.

In basic economic terms, the President's proposals will expand both demand for and supply of child care. With expanded demand,

¹⁰⁷ Workman 2018; The Tax Policy Center. 2021. "Key Elements of the U.S. Tax System: How does the tax system subsidize child care expenses?" May 2021. <https://www.taxpolicycenter.org/briefing-book/how-does-tax-system-subsidize-child-care-expenses>.

more children will have access to the rich early experiences and more parents will be able to choose to remain in the labor force. Some of the President's proposals will also increase supply, including the Child Care for American Families Program, which will help drive prices down and decrease child care costs for American families.

A well-funded child care sector will help parents remain in the labor force, work the number of hours and schedule that are best for their career and family, earn a living, and join in our shared economic prosperity. And it will help prepare our children for the future. The President's proposals are crucial to maintaining our economic success.

