The Role of Affordable Child Care in Promoting Work Outside the Home

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Executive Summary

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Under President Trump's Administration, the prime-age labor force has expanded by 2.1 million people, reversing the loss of roughly 1.5 million under the prior administration's expansion period. Higher wages, combined with 19 straight months of more job openings than jobs seekers, have created strong incentives for people who were previously on the sidelines to seek and find paid work. These incentives also apply to parents with young children at home, although the high costs of child care constrain these parents' options to work outside the home.

Compared with 50 years ago, women with young children are about twice as likely to participate in the labor force, and women in general are much more likely to pursue high-skill careers. In the last year under the Trump Administration, women have filled 67 percent of new jobs. An efficient market for nonparental child care is essential for the transformation in labor force participation because it allows for an alternative to parental care and thus expands parents' available work choices. In this way, markets for nonparental child care, as with markets in general, allow for efficient specialization.

However, the current high price of child care is often cited as a major barrier keeping parents of young children from being able to work. Consequences of high child care prices include not only reduced parental employment but also lower family incomes, increased dependence on welfare programs, and, possibly, decisions to have fewer children.

In this report, we first estimate how many parents of young children are currently on the sidelines of the labor force and may require lower child care prices before they would be willing to engage in work outside the home. We estimate that as of December 2016, there were 3.8 million nondisabled, working-age parents with children under age 6 currently outside the labor force, and another 6.6 million such parents with children under age 13 working part time, each of whom might need to have child care to be able to enter the workforce or increase their work hours. The vast majority of this population are women (86 percent), and most are married (71 percent). Evidence on the responsiveness of work status and hours to wages and child care costs suggests that some of these parents would enter the labor force or increase their work hours in response to a reduction in the market price of child care.

We next document the market prices for child care that these 10.4 million parents would likely face if they were to join the workforce or increase their work hours, and the role of excessive regulation in raising these prices. For the average State, as of 2018, the average hourly price of

center-based child care for a child age 4 represented 26 percent of the hourly median wage. Safe and adequate care is necessarily costly, and some level of regulation is justified to ensure that child care is high quality and safe. However, evidence suggests that regulations play a major role in determining market prices for child care without necessarily improving its overall quality. Reevaluating the effectiveness of regulations, and relaxing those State and local regulations that unproductively and unnecessarily increase the market price of child care, can provide parents with additional safe child care options and greater opportunities to work.

Finally, we document the many existing government programs that reduce market prices for child care paid by families. These include direct transfer programs as well as tax provisions that allow families to deduct a portion of child care expenses from their income. These programs potentially improve economic efficiency by offsetting work-related costs. And these programs could also potentially serve more families if regulations that unnecessarily increase market prices for child care were relaxed.

Reducing inefficiently high market prices for child care would promote increased choice among families regarding the balance between work outside the home and child rearing, and could ultimately bring more Americans off the sidelines and into the labor market. This would increase economic growth and lead to greater choice regarding parents' allocation of their labor between child care and working outside the home. Thus, creating a system that maximizes opportunity without interfering with personal family decisions is a vitally important goal for the economy and American society as a whole.

Introduction

Under President Trump's Administration, the prime-age labor force has expanded by 2.1 million people, reversing the loss of roughly 1.5 million under the prior administration's expansion period. As the economy continues growing and the labor force remains tight, wages are rising at a consistent rate of 3 percent or more, year over year. Higher wages, combined with 19 straight months of more job openings than jobs seekers, have created strong incentives for people who were previously on the sidelines to seek and find paid work. In the third quarter of 2019, 73.7 percent of workers entering employment came from out of the labor force rather than from unemployment, which is the highest share since the series began in 1990. These incentives apply to parents with young children at home, though the high market costs of child care constrain these parents' options to work outside the home.

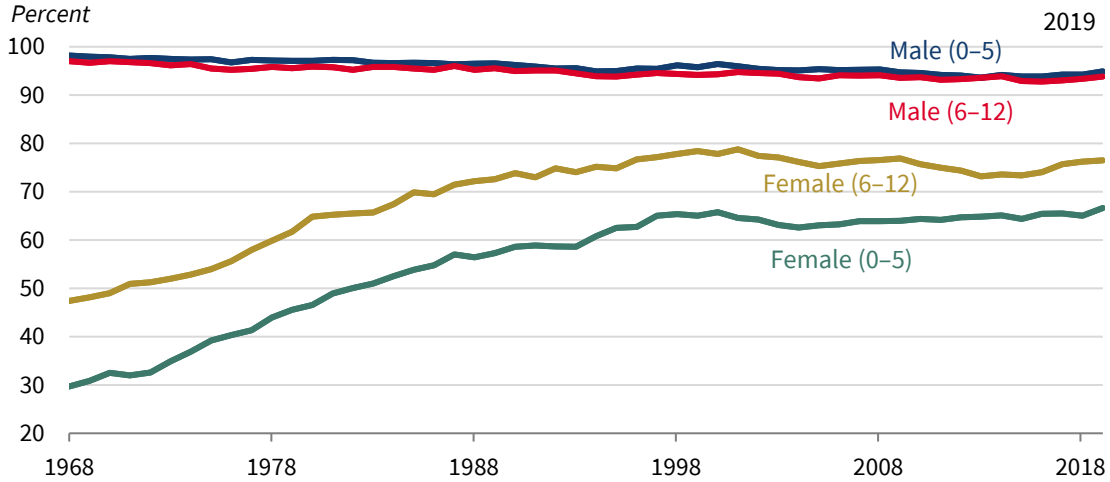
About a half century ago in 1968, less than one-third of mothers with a child under the age of 6 years participated in the labor force. At that time, women earned a minority of bachelor's degrees (43 percent), master's degrees (39 percent), and doctoral degrees (10 percent). They tended to be second earners in their families, and they worked in jobs with greater long-term flexibility, even among those with college degrees. In 1970, about two-thirds of college graduate women between the age of 30 and 34 worked as teachers, nurses, librarians, social workers, secretaries, or other clerical workers (Goldin 2006). A half century later, the role of women in the economy has changed dramatically. In 2019, two-thirds of mothers with a child under age 6 participated in the labor force, double the share in 1968. In the last year under the Trump Administration, women have filled 67 percent of new jobs. Women now earn a majority of bachelor's degrees (57 percent), master's degrees (59 percent), and doctoral degrees (53 percent), investing in skills that they use in a diverse set of long-term careers. By the beginning of the 21st century, almost half of college graduate women between the age of 30 and 34 worked as doctors, lawyers, professors, managers, or scientists (Goldin 2006).

As women increasingly invest in their human capital and embark on careers that are less conducive to lapses of multiple years at a time, market-provided nonparental child care has played an increasingly important role in the economy. When all parents of a young child work, nonparental adults are needed to care for the child. In 2016, 60 percent of all children under age 6 who were not yet in kindergarten received nonparental care in a typical week (NCES 2019). Just under half (47 percent) of children under age 1 used nonparental care (NCES 2019). The market for nonparental child care leads to more choice and a more efficient allocation of labor across care for children and other market activities. This market allows parents with a comparative advantage in caring for and raising their own or others' children to do so, while other parents with a comparative advantage in other market activities can perform those tasks while nonparent adults care for their children. This specialization of labor through the market

increases overall economic productivity and economic growth. For example, Woetzel and others (2015) estimate that global gross domestic product (GDP) would increase by $28 trillion if the contribution of women to GDP rose to that of men.

Historical trends in labor force participation suggest that there could be substantial room for parents of young children to increase their participation even further. Figure 1 shows the participation rate among parents with young children since 1968. For fathers with a youngest child age 5 or under, the participation rate fell from 98 percent in 1968 to 94 percent in 2018. A similar decline occurred among fathers of older children. While participation rates have fallen, the vast majority of fathers continue to either work or look for work. This high level of participation contrasts with participation among mothers with young children. The participation rate of mothers with a child under age 6 increased from 30 to 66 percent between 1968 and 2000. This increase was driven largely by shifting societal norms, as well as welfare reforms that rewarded and required work for those receiving welfare benefits and tax credits (CEA 2019). However, participation rates for mothers with young children stopped growing in 2000. In 2019, the participation rate of mothers with a child under age 6 is 67 percent—just 1 percentage point higher than their rate 19 years earlier. Moreover, the gender gap in participation rates stands at 28 percentage points for parents of children under age 6 and 17 percentage points for parents of children age 6 to 12.

Figure 1. Labor Force Participation Rate among Parents by Age of Youngest Child in Household and Sex of Adult, March 1968–2019



Sources: Current Population Survey, Annual Social and Economic Supplement, 1968–2019; CEA calculations.
Note: The age of the youngest child is shown in parenthesis. Only biological children, adopted children, or stepchildren living in the same household as the adult are counted. Only adults between the ages of 18 and 64 are included.

Despite practically no overall change since 2000, the labor force participation rate for mothers with children under age 6 increased by 1.2 percentage points between 2016 and 2019, and the rate for mothers with older children age 6 to 12 increased by 2.5 percentage points. The Trump Administration's policies have created a strong economy spurred by deregulation and tax reform, and a significant expansion of child care assistance for low-income families signed into law by the President may have partly contributed to this recent increase in labor force participation. Still, a large share of mothers with young children remain out of the labor force compared with fathers with similarly young children. (See box 1 for a comparison of female labor force participation rates in the United States compared with other OECD countries.)

Many parents who are out of the labor force may prefer to work in their homes while parenting their children, which is an important vocational choice that must be available to those who desire this type of work. However, other parents may remain outside the formal labor force due to the inefficiently high market price of child care. Child care prices are inefficiently high when regulations make them exceed the economic cost of producing child care without giving corresponding benefits to child care quality or safety. Overly stringent regulations increase the price of child care above efficient levels, so the choice between caring for one's children inside the home and working outside the home is distorted toward self-produced care. This distortion means that parents are less able to specialize in the most efficient type of production. Thus, addressing this barrier to work by reducing inefficiently high child care prices could potentially give more parents more choices, thereby bringing some of them into the formal labor force and increasing economic efficiency.

To quantify the extent to which inefficiently high market prices for child care may be reducing labor force participation, this report first estimates the number of parents who may require cheaper child care to join the labor force or move from part-time to full-time work. We find that in December 2016 (our most recent year of data from the Survey of Income and Program Participation, or SIPP), there were 3.8 million nondisabled, working-age parents who might incur child care expenses if they were to enter the labor market. Each of these 3.8 million parents had a child under age 6 who was not in school and had no other potential nonworking caretaker in the household. More than 71 percent of these parents were married mothers, 21 percent were single mothers, 6 percent were married fathers, and 2 percent were single fathers.

In addition to these parents on the sidelines of the labor market, we estimate that another 6.6 million nondisabled, working-age parents were working only part time and could need to have child care to be able to increase their working hours. Each of these 6.6 million parents had a child under age 13 (children under age 13 may require part-time care outside school hours) and had no other potential nonworking caretakers in the household. Even after a reduction in the market price of child care options, many parents will prefer to work in their homes parenting their children. However, the evidence on labor supply responses to child care prices and wages

in general suggests that a significant portion of the 10.4 million parents who are either out of the labor force or only working part time would increase their work hours in response to a reduction in the market price of their child care options.

We then document the high price of child care that parents currently outside the labor force might face when deciding to work. Survey data indicate that the market prices for child care are substantial, on average more than $7 per hour in 2016 (which implies an annual cost of more than $15,000 for a full-time worker) for those who pay for center-based, nonrelative care. Data on market prices charged by child care providers similarly indicate substantial child care prices. For the average State as of 2018, the average hourly center-based child care price for a child age 4 represented 26 percent of the pretax hourly median wage. To potential workers, these high market prices for child care function as a disincentive to work.

Overly stringent child care regulations, defined as those that do not effectively address market failures, are a major driver of these high child care prices. These overly stringent regulations—including extensive facility, staff, and startup requirements—significantly increase child care costs, and thus reduce the labor force participation of parents.

Finally, we document the substantial scope of existing government subsidies for child care that defray child care expenditures. Because child care is a major work-related cost, subsidies that compensate for taxes on earnings that are spent on child care can potentially enhance economic efficiency. That is, if labor supply decisions were made without consideration of the taxes paid on earnings or the resulting reduction in welfare benefits, then the most efficient policy would be to provide no government subsidies for child care. But because labor supply decisions are affected by taxes and reductions in welfare benefits, child care subsidies that tend to increase work can be a second-best alternative. Direct child care provision and subsidies, along with child care expense deductions in welfare programs like SNAP, are particularly important for low-income parents. Middle- and higher-income parents benefit from tax code provisions that partially offset child care expenses. It is important to note that deregulatory efforts that reduced the price of child care would have the additional benefit of expanding the number of families that could be served by means-tested child care subsidies, because reductions in the market price of child care would free up government funds to be used for additional families that are currently eligible for, but do not currently receive, child care assistance.

Box 1. Female Labor Force Participation in Developing and Developed Countries

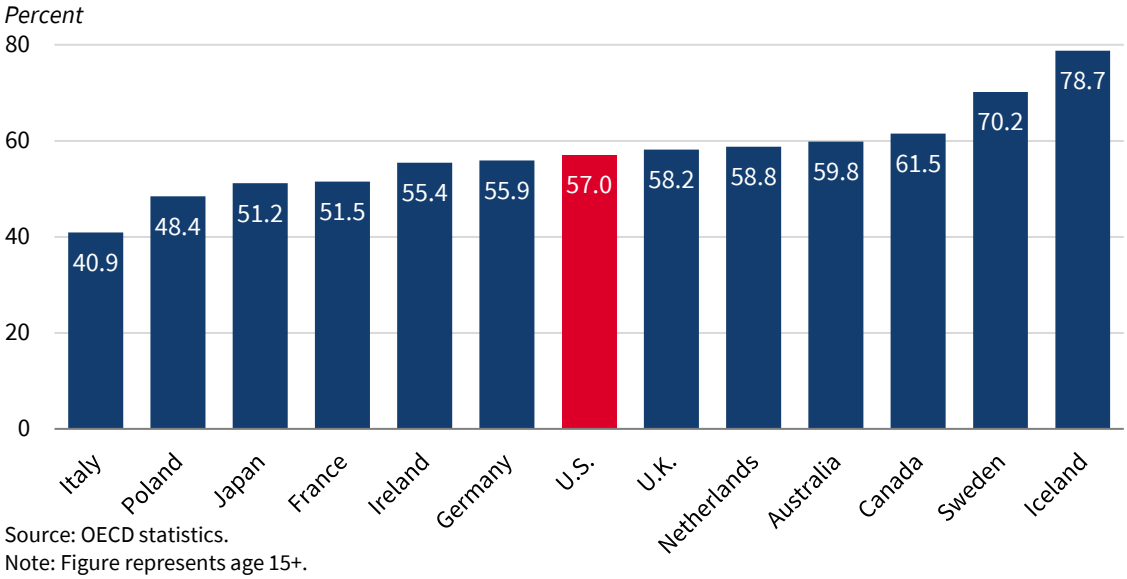
A wide range of circumstances can affect a woman's decision whether to participate in the labor force. For example, some women may prefer work activities outside the formal labor market, such as taking care of children or family members. At the same time, increasing female labor force participation by offering opportunities to women not in the labor force who might otherwise elect to participate could have substantial positive effects on a country's economy.

It is for this reason that the Trump Administration established the Women's Global Development and Prosperity (W-GDP) initiative, which seeks to spur growth in developing countries by promoting women's economic empowerment. Unleashing women's full potential to contribute to the economy will help increase innovation, drive economic growth, and advance global peace and stability. W-GDP takes a whole-of-government approach to help women overcome barriers to economic participation. The initiative aims to reach 50 million women in the developing world by 2025 through a combination of U.S. government activities, public–private partnerships, and a central fund to support various projects.

Among developed countries that belonged to the Organization for Economic Cooperation and Development (OECD) in 2017, the United States had a female labor force participation rate higher than 22 out of 36 member countries (2017 is the year with the most recently available data for OECD-wide comparisons). The lowest rate within the OECD was Turkey's 33.6 percent—a full 23.4 percentage points below the United States. The 13 OECD countries that had higher participation rates than the United States were Australia, Canada, Denmark, Estonia, Finland, Iceland, Israel, the Netherlands, New Zealand, Norway, Sweden, Switzerland, and the United Kingdom. Iceland had the highest rate of all OECD countries—about 22 percentage points higher than the United States. While the United States has a relatively high female labor force participation rate compared with other OECD nations, there may be room for additional growth, given the higher rates in some peer countries (see figure 2).

A number of factors can likely explain the differences in female labor force participation rates among developed countries that belong to the OECD, including cultural factors, demographics, and policy differences. Blau and Kahn (2013) estimate that almost 30 percent of the increase in women's prime age labor force participation in the United States relative to other OECD countries between 1990 and 2010 can be attributed to differences in family-related policies, such as those relating to child care. Reducing the inefficiently high market prices that families pay for child care may help to increase U.S. female participation.

Figure 2. Female Labor Force Participation Rate, by Selected OECD Country, 2017



Source: OECD statistics.
Note: Figure represents age 15+.

Parents for Whom Child Care May Be a Barrier to Work

To quantify the extent to which inefficiently high child care prices may be reducing labor force participation, in this section we estimate how many parents who are out of the labor force may need to have child care to be able to work. Though it is less recent than some other data sources, we use SIPP data because it provides information on the work status of adults, program receipt and child enrollment in school, and other arrangements in a given month. The richness of the SIPP data provides the best way to accurately identify employment decisions that are most likely to be affected by changes in the market price of child care.

We estimate that in December 2016 (our most recent year of data from the SIPP), there were 3.8 million nondisabled, working-age parents who might need to have child care if they were to enter the workforce.[1] Each parent had a child under age 6 who was not in school and had no other potential nonworking caretakers in the household. In addition to these parents on the sidelines, we estimate that another 6.6 million nondisabled, working-age parents who were

[1] We use the month of December because the SIPP asks its respondents questions regarding events that occurred in each of the 12 months of the previous year. Thus, December of the previous year is the most recent month about which they are asked, presumably leading them to provide the most accurate information for that month.

working part time might incur child care expenses if they increased their work hours. Each of these 6.6 million parents had a child under age 13 (children under age 13 may require part-time care outside school hours); but no other nonworking caretakers lived in their household. Of course, only a subset of these parents would actually enter the labor force if market prices for child care fell, because other factors also affect their decision to pursue work outside the home.

Parents Who May Need Child Care to Be Able to Enter the Labor Force

In table 1, we estimate the number of parents who may need to have child care to be able to enter the labor force. The universe for table 1 is all adult parents who live with their own child under age 6. While parents with children who are all above age 5 may require child care to work full time, they are likely able to work at least part time during school hours at no additional cost for child care, and thus these adults are excluded from table 1.

The final column of table 1 shows that there were 31.2 million parents living with a child of their own under age 6 in December 2016, of whom 25.2 million were in the labor force. Meanwhile, 0.6 million were disabled, 1.0 million had all children in school (which may or may not have been for a full day, given that the child was under age 6), and 0.6 million had another potential caretaker in the household (another nonaged, nondisabled adult in the household who is not in the labor force). The populations in each of these groups are either disabled or presumably would not require formal child care to work. That leaves 3.8 million nondisabled, working-age parents who have no other potential caretakers in the household, and who have at least one child under age 6 who is not in school. A reduction in child care prices is most likely to affect the labor force participation of these parents, of whom 2.9 million (77 percent) are married and 0.9 million (23 percent) are single.

As a check on the reasonableness of our estimated aggregate numbers of parents in December 2016 who may need to have child care to be able to work, we compare them with a similarly defined population based on the 2017 Annual Social and Economic Supplement (ASEC) to the Current Population Survey. Using these data, we find that a somewhat higher 4.4 million nondisabled, working-age parents with a child under age 6 reported that the main reason they did not work in 2016 was that they were taking care of their home or family. In the most recent 2019 ASEC survey, covering employment experiences in 2018, 4.3 million parents of young children reported that they were not working for this reason. There are substantial differences between the ASEC survey and the SIPP survey used for table 1 that prevent these results from being truly comparable. Nevertheless, the closeness of these results both offers validation of the estimates given in table 1 and suggests that a similar number of parents may need to have child care to be able to work in a more recent year.

Table 1. Number of Parents (18 to 64) with One Child Under Age 6 in Household, by Marital Status and Labor Force Situation, December 2016

Characteristic	Single	Married	Overall
Not in labor force	1,839,131	4,221,953	6,061,084
…Disabled	358,335	257,380	615,715
…Nondisabled and all children in school	257,727	756,275	1,014,002
…Nondisabled and at least 1 child home; other nonworking caretaker	347,094	280,658	627,752
…Nondisabled and at least 1 child home; no other nonworking caretaker	875,974	2,927,640	3,803,615
In labor force	5,671,943	19,504,294	25,176,237
Total	**7,511,074**	**23,726,247**	**31,237,321**

Source: Survey of Income and Program Participation, 2014 Wave 4.

Note: Age of youngest child is the age of the working-age (18–64) parent's own child (biological child, stepchild, or adopted child) who lives in the same household as the parent. "Aged" means age 65 or older. "Disabled" means receives disability benefits. "In school" means part-time or full-time enrolled children. There is an "other caretaker" if there is a nonaged, nondisabled adult in the household aside from the parent who is not in the labor force. "Married" includes only married adults with the spouse present in the household.

Table 2 shows the characteristics of these 3.8 million working-age parents who are not in the labor force, have no other potential caretaker in the household, and have at least one child under age 6 who is not in school. Aside from the fact that the vast majority of such single and married parents are female (89 and 92 percent, respectively) with a similar number of children under age 6 who are not in school (on average, 1.2 and 1.3, respectively), single and married parents in this group are substantially different. Single parents have high rates of welfare receipt, with 46 percent receiving SNAP and 13 percent receiving Federal rental housing assistance in December 2016. Consistent with the lack of a wage earner in the family (at least in December), their family incomes are low, with more than half receiving less than $7,000 in income in 2016. Married parents are substantially better off financially. They are much less likely to rely on welfare programs, with only 12 percent receiving SNAP benefits and less than 2 percent receiving housing benefits in December 2016. Their median family income of over $56,000 is more than eight times that of single parents in this group.

Table 2. Characteristics of Nondisabled, Working-Age (18 to 64) Parents Not in the Labor Force with at Least One Child Under Age 6 in the Household Who Is Not in School, with No Other Nonworking Caretaker in the Household, by Marital Status, December 2016

Characteristic	Single	Married	Overall
Female (%)	89.3%	92.4%	91.7%
Children 0 to 5 at home	1.2	1.3	1.3
Welfare			
SNAP (%)	46.0%	12.1%	20.0%
TANF (%)	3.2%	0.0%	0.7%
Housing (%)	13.0%	1.8%	5.0%
Family income			
25th percentile ($)	$0	$33,294	$19,609
50th percentile ($)	$6,567	$56,329	$45,479
75th percentile ($)	$22,339	$92,460	$82,031
Number	**875,974**	**2,927,640**	**3,803,615**

Source: Survey of Income and Program Participation, 2014 Wave 4.

Note: Age of youngest child is the age of the adult's own child (biological child, stepchild, or adopted child) who lives in the same household as the adult. "Aged" means age 65 or older. "Disabled" means receives disability benefits. "In school" means part-time or full-time enrolled children. There is an "other caretaker" if there is a nonaged, nondisabled adult in the household aside from the parent who is not in the labor force. "Married" includes only married adults with the spouse present in the household. Dollar values reported for 2016 are not adjusted for inflation.

Parents Who May Need Child Care to Move from Part-Time to Full-Time Work

Although the 3.8 million adults for which data are given in tables 1 and 2 include parents who might need to have child care to be able to enter the labor force, this estimate does not include working parents whose number of hours worked may be affected by child care prices. Working additional hours and potentially moving to full-time work could not only increase a family's income but could also increase the availability of fringe benefits and could help sustain longer-term careers that reward sustained full-time work over a person's lifetime. In this section's analysis, we switch from only considering parents with at least one child under age 6 to those with at least one child under age 13, because some parents may work part time while their child is in school but still not work full time due to child care responsibilities.

For parents who are working part time but who are not currently paying for market-based child care (for instance, if all their children are in school during all work hours), a reduction in the market price of child care would increase the likelihood of hiring a caretaker and working additional hours. This is because the lower price of each additional hour of child care outside the school day effectively increases the hourly wage of these parents' additional work hours. For example, consider a part-time worker earning $10 per hour (net of taxes) whose children are all in school, and who only works during school hours. The effective hourly wage of this worker for work performed during school hours is $10 because there is no need to pay for child care. Out-of-school child care is available at the market price of $5 per hour (close to the

national average for center-based care, according to data from Child Care Aware for 2018). If the worker chooses to work outside school hours, his or her effective hourly wage would be $5 ($10 wage, minus $5 child care cost), because he or she would need to pay $5 for child care for every hour worked. Now assume that the hourly cost of child care falls to $3 per hour. Then the effective hourly wage for work performed outside school hours rises to $7 ($10 wage, minus $3 child care cost). This increase to the hourly wage would make the worker more likely to work outside school hours and increase the total number of hours worked.

For working parents who are already paying for market-based child care, a reduction in the market price of child care could in theory either increase or decrease the likelihood of working additional hours, depending on the assumptions. This is because the effective wage for these parents is increased not only for the additional hours they work but also for the hours already worked while paying for child care. The reduction in the market price of child care is like an increase in the parent's income, holding work hours constant. Lower child care prices could induce the parent to work less (called the income effect), and potentially could outweigh the inducement to work more hours based on the higher marginal return to working those additional hours (called the substitution effect).

For example, suppose the same worker who is now making $10 per hour works outside school hours for 5 hours every day, requiring the worker to purchase child care for these work hours. When the hourly cost of child care is $5, the worker's effective hourly wage for these work hours is $5. Now assume the hourly cost of child care falls to $3. Holding constant hours worked, the worker's daily income increases by $10 (the $2 savings on each hour of child care multiplied by 5 work hours). This extra income is expected to induce the worker to work fewer hours (income effect). However, the effective wage on every additional hour worked increases from $5 to $7 per hour, inducing the worker to work additional hours (substitution effect). In this case, the worker will only work more hours if the substitution effect outweighs the income effect. Economists use this same logic to discuss and estimate the effect of an increase in hourly wage rates because, effectively, a reduction in hourly child care prices is the same as a net increase in wage rates.

Thus, it is an empirical question as to whether parents who currently pay for market-based child care would increase or decrease their work hours in response to a reduction in child care costs. Because the reduction in child care costs is an increase in the effective wage rate, it is useful to consider the large academic literature that estimates the response of hours worked to wage changes. In a review of the literature, McClelland and Mok (2012) find that wage increases for workers already working lead to small increases (or at least not decreases) in hours worked. For workers who are able to work part time without paying for child care (i.e., work during school hours), the increases would likely be larger than this literature suggests because the income effect would be based on only those current hours for which child care is

already purchased rather than all hours worked. Therefore, regardless of whether they currently pay for market-based child care, workers are more likely to increase their work hours when the cost of child care falls.

In table 3, we estimate the number of working parents who might increase their hours worked due to a reduction in the cost of child care. The universe for table 3 is all nondisabled, working-age (18 to 64) parents living with an own child under age 13, under the presumption that children age 13 and over no longer require out-of-school care. As can be seen in the table's final column, there were an estimated 51.7 million nondisabled, working-age parents living with an own child under age 13 in December 2014. Of those, 33.6 million were working full time, and 10.5 million were not working. Full-time working parents may not be able to increase the hours they work when child care costs fall, and we already discussed those who are out of the labor force, as shown in table 1. That leaves 7.6 million parents who were working part time, although 1.0 million had another nonworking caretaker in the home and thus may not need to have child care to be able to work additional hours. Thus, we estimate that there are 6.6 million part-time working parents who might need to have child care to be able to increase their hours worked—4.5 million of whom are married and 2.1 million of whom are single.

Table 3. Number of Nondisabled, Working-Age (18–64) Parents with Own Child Under Age 13 in Household, by Marital Status and Employment Situation, December 2016

Characteristic	Single	Married	Overall
Part-time	2,435,967	5,138,212	7,574,179
…Other caretaker	341,218	618,693	959,911
…No other caretaker	2,094,749	4,519,519	6,614,268
Full-time	7,149,963	26,450,371	33,600,334
Not working	3,004,047	7,509,015	10,513,062
Total	**12,589,977**	**39,097,598**	**51,687,575**

Source: Survey of Income and Program Participation, 2014 Wave 4.

Note: Age of youngest child is the age of the adult's own child (biological child, stepchild, or adopted child) who lives in the same household as the adult. "Working age" means age 18 to 64. "Disabled" means receives disability benefits. There is an "other caretaker" if there is a nonaged, nondisabled adult in the household aside from the parent who is not in the labor force. "Married" includes only married adults with the spouse present in the household. Part time means working more than 0 but less than 35 hours in an average week. Full time means working at least 35 hours in an average week.

Table 4 shows the characteristics of these 6.6 million part-time working parents. The vast majority, whether single or married, are female (84 and 81 percent, respectively), and on average the two groups have 1.6 and 1.9 children under age 13, respectively. However, just as with those out of the labor force considered in table 2, single part-time working parents are much more likely to receive welfare benefits and have much lower incomes.

Table 4. Characteristics of Nondisabled, Working-Age (18 to 64) Parents Working Part Time with at Least One Child Under Age 13 in Household, with No Other Nonworking Caretaker in the Household, by Marital Status, December 2016

Characteristic	Single	Married	Overall
Female (%)	83.8%	81.2%	82.0%
Children 0 to 12	1.6	1.9	1.8
Welfare			
SNAP (%)	37.8%	8.8%	18.3%
TANF (%)	2.5%	0.1%	0.9%
Housing (%)	13.8%	5.2%	9.6%
Family Income			
25th percentile ($)	$14,241	$49,319	$28,158
50th percentile ($)	$21,953	$83,411	$59,488
75th percentile ($)	$49,378	$124,795	$107,604
Number	**2,094,749**	**4,519,519**	**6,614,268**

Source: Survey of Income and Program Participation, 2014 Wave 4.

Note: Age of youngest child is the age of the adult's own child (biological child, stepchild, or adopted child) who lives in the same household as the adult. "Aged" means age 65 or older. "Disabled" means receives disability benefits. "In school" means part-time or full-time enrolled children. There is an "other caretaker" if there is a nonaged, nondisabled adult in the household aside from the parent who is not in the labor force. "Married" includes only married adults with the spouse present in the household. Part time means working more than 0 but less than 35 hours in an average week. Full time means working at least 35 hours in an average week. Dollar values reported for 2014 are not adjusted for inflation.

About 38 percent of these single part-time working parents received SNAP, and about 14 percent received Federal rental housing assistance in December 2016. Single part-time working parents had a median income of less than $22,000 in 2016. By contrast, less than 9 percent of married part-time working parents received SNAP, and less than 6 percent received housing assistance. They had a median income of more than $83,000 in 2016, or 3.8 times that of single part-time working parents.

Evidence on the Effect of Child Care Prices on Work

Of course, many of the 10.4 million parents of young children who are out of the labor force or who work part time and might need to have child care to be able to work would not actually increase their labor force participation if the price of child care fell. Still, evidence suggests that child care prices can have important effects on the labor supply, suggesting that a significant portion of these parents may do so.

One way to assess how parental labor supply might change if the price of child care fell is to recognize that a decrease in the hourly price of child care is effectively the same as an hourly wage rate increase for those parents who need to have child care to be able to work. If work increases when wages go up, then work should also increase when child care prices go down. Thus, we can consider estimates of the response of labor supply decisions to wages from the

academic literature. Based on their extensive literature review, McClelland and Mok (2012) conclude that for every 10 percent increase in the wage rate, there is a 1 percent increase in the number of people who work. In addition, there is a 1 percent increase in hours worked among those who were already working.[2] To contextualize the magnitude of these estimates, consider the case of workers (or potential workers) earning $15 per hour (just below the national median) facing child care prices of $10 per hour (about the national average cost for two children in center-based care). A 50 percent decrease in child care costs (from $10 to $5) would increase the effective wage rate by 100 percent (from $5 to $10), which would increase the number of workers and the number of hours worked among current workers by 10 percent each. An estimated 8.4 million families paid for child care in December 2016 (based on the SIPP), so a 10 percent increase would translate into 0.8 million new workers. This calculation is only illustrative because it fails to account for the actual hours of child care purchased relative to hours worked, the number of children each family has in child care, or the wage distribution of people who might use child care.

Another way to assess the effect of child care prices on the labor supply is to rely on evidence from expansions in public schooling for young children or explicit child care subsidies. An important caveat about studies focusing on public schooling and all-day child care provision is that child care prices are only reduced for a fixed number of hours during a fixed period each day, and potentially during specific months of the year. This should have the same directional effect in terms of bringing people into the labor force as would a reduction in the market price of child care. However, it could have a differently signed effect on the number of hours worked for current workers. Parents who were already working and paying for child care throughout the school day would face no change in the marginal cost of child care for working additional hours during after-school hours, but theory predicts that this increase in income would reduce their supply of labor. For example, consider a parent who worked 40 hours and paid for 40 hours of child care each week before the introduction of free schooling for 30 hours each week. The parent now receives 30 hours of free child care each week, increasing the parent's income by the cost of 30 hours of child care, while the marginal cost of an additional hour of child care remains unchanged. Economic theory predicts that the parent will consume more leisure time and spend fewer hours working. Thus, studies focusing on public schooling and fixed-hour child care subsidies are not as informative about the effect of reduced market prices for child care on hours worked as they are on the decision to work or not.

With this caveat in mind, studies focused on public schooling tend to find that schooling increases the number of mothers who work, although more recent studies suggest weaker effects. Gelbach (2002) exploits age cutoffs for public kindergarten eligibility in 1980 to

[2] McClelland and Mok (2012) report a range of 0 to 0.2 for both the elasticity with regard to the decision to work and the decision regarding how many hours to work conditional on working. Here we use a middle value of 0.1.

compare work rates among mothers whose child is on the margin of eligibility. He estimates that public kindergarten increases the probability of work for single mothers whose youngest child is age 5 (and thus eligible for public kindergarten) by 4 percentage points and the probability for married mothers by 5 percentage points. Fitzpatrick (2012) conducts a similar analysis for 2000 and finds that single mothers whose youngest child is age 5 see a significant increase in employment as a result of public kindergarten, but finds no effect for married mothers. Cascio (2009) similarly finds that expanded public kindergarten enrollment fueled by large government funding increases during the 1960s and 1970s led to substantial increases in employment for single mothers whose youngest child is age 5, but not for married mothers. Fitzpatrick (2010) uses age cutoffs for public pre-K programs for children age 4 in Georgia and Oklahoma in 2000 and finds near-zero, statistically insignificant effects of public pre-K on labor supply for single and married women. Studies based on international contexts tend to find significant positive effects of public schooling on maternal employment (e.g., Berlinksi and Galiani 2007; Goux and Maurin 2010).

Other studies evaluate the effect of government subsidies for child care programs. Baker, Gruber, and Milligan (2008) evaluate the effect of a Quebec policy that gradually introduced child care subsidies that required parents to pay at most $5 per day for each child age 4 and under, regardless of family income. They find that child care subsidies increased child care use by almost 15 percentage points, and increased labor force participation among mothers in two-parent families by close to 8 percentage points (mothers in single-parent families already received substantial subsidies before the policy reform, so the study focuses only on women in two-parent families). Lefebvre and Merrigan (2008) find similar effects of Quebec's child care subsidies, and Lefebvre, Merrigan, and Verstraete (2009) find that these effects persist in the long term. Herbst (2017) uses historical U.S. data to estimate the effect of the Lanham Act of 1940, which provided child care funding to U.S. communities in response to the deployment of a large percentage of their working-age men during World War II. He finds substantial effects on the labor supply of women in 1950 and 1960. Outside North America, studies find mixed results of effects of child care subsidies on maternal employment (e.g., Havnes and Mogstad 2011a; Nollenberger and Rodriguez-Planas 2015). In a review of the literature on the effects of child care costs on maternal labor supply, Morrissey (2017) concludes that a 10 percent decrease in child care costs increases employment among mothers by about 0.5 to 2.5 percent.

Altogether, the empirical evidence on the responsiveness of labor supply decisions to wages in general and to child care prices more specifically suggests that a reduction in the price of child care would lead to significant increases in the number of people who work and also the number of hours worked among current workers, especially for married women. Keeping parents connected to the workforce could potentially have advantageous effects on parents' long-term

careers as well. Also, as discussed in box 2, changes in child care prices can have important effects beyond parental employment—such as on child outcomes and potentially fertility.

Box 2. The Effect of Child Care on Child Outcomes

The price paid by families for various child care options can have important consequences beyond parental employment, such as for child outcomes and parental decisions about the number of children to have. A large body of research evaluates the effect of childhood environments on children's long-term outcomes, with many studies focusing specifically on child care and early education settings. Child care can affect child outcomes directly by either improving or worsening children's daily environment while in child care settings, and indirectly by increasing the amount of resources available to the child's family resulting from increased parental employment. Some studies find positive effects of child care provision on child outcomes, while other studies find negative effects, often depending on the quality of care provided and the types of children to whom care is targeted. In general, higher-quality care targeted at disadvantaged children is more likely to produce positive effects on child outcomes than care that is lower quality or that is targeted at less disadvantaged children. For example, because of its low quality, universal child care provision in Quebec had a substantially negative effect on children's development that has persisted in the long run, worsening health, reducing life satisfaction, and increasing criminal behavior (Baker, Gruber, and Milligan, forthcoming). Meanwhile, Havnes and Mogstad (2011b, 2015) find that a universal child care program boosted long-run outcomes for children with less-educated or low-income mothers in Norway; and Cornelissen and others (2018) find positive effects for children from low-income families in Germany. Similarly in the United States, high-quality child care targeted at disadvantaged children appears to be beneficial, especially in promoting noncognitive skills (e.g., Heckman et al. 2010).

The cost of child care may also affect parents' decisions about how many children to have. A lower cost of child care could induce parents to have additional children because they would be less expensive, although the additional income saved in child care expenses might also lead some parents to invest more in their existing children rather than having more children (the quantity/quality trade-off is discussed by Becker and Lewis 1974). There is mixed evidence on whether subsidies for children that are not necessarily tied to child care increase fertility. For example, Milligan (2005) finds that a large child tax credit introduced in Quebec for young children increased fertility, especially for higher-income women (also see Cohen, Dehejia, and Romanov 2013 for evidence that subsidies tied to higher-order births in Israel increase such births). However, Baughman and Dickert-Conlin (2009) find that the expansion of the Earned Income Tax Credit in the 1990s did not increase fertility. Some studies consider the effect of child care subsidies in particular, with positive effects on fertility found in Norway (Rindfuss et al. 2010), Sweden (Mork, Sjogren, and Svaleryd 2013) and Germany (Bauernschuster, Hener, and Rainer 2016).

Additional research could help inform whether reducing inefficiently high costs for child care in the United States could lead to the additional benefit of promoting fertility. Notably, the fertility rate reached 59.0 births per 1,000 women age 15 to 44 in 2018, the lowest rate on record (Hamilton et al. 2019). This reduction in future workers places long-run stress on the Social Security and Medicare trust funds, since there will be less tax revenue to cover outlays for retiring workers.

The Price of Child Care and the Role of Regulation

The extent to which child care is an important barrier to work for the population estimated in the previous section depends on its price. This section documents the price of market-provided child care for parents who currently use it—estimating the portion of children in market-provided care and how much their parents pay per hour for it. We then compare State-level data on market supply prices for child care with the median wages in each State. For the average State as of 2018, the average hourly price of center-based child care for a child age 4 represented 26 percent of the hourly median wage. Finally, we document the evidence that regulation plays an important role in increasing child care prices.

The Price of Child Care

Like all other goods and services in a market economy, the extent to which market-based child care will be substituted for parental care (thus increasing the market work of that parent), other things remaining equal, depends on its price for the parent. Table 5 uses data from the National Household Education Surveys Program, specifically the component on Early Childhood Program Participation (ECPP), to estimate the fraction of children in care paid for by parents, and what this average payment is, as of 2016. We consider children under age 6 who have no nonworking parents, and who utilize care from programs (center-based care or preschool programs), nonrelatives, or relatives. The final column of table 5 indicates that 70 percent of children who received some form of child care had parents who paid some positive amount for that care. This suggests that some parents can work without necessarily paying for care from others, either because they receive government subsidies that fully cover care or because they receive care for free from relatives. Among the 70 percent of children in care for which their parents pay some positive amount, the average hourly price paid is $4.60.

Prices paid vary across the three types of care options, with each type providing an important source of care for children. Slightly fewer than half of child care hours are spent in program care, with about 30 percent in relative care and about 20 percent in nonrelative care. Among children in program care, 78 percent have parents who pay for that care, and the average amount paid among those families that pay is $7.79 per hour. The price paid for nonrelative care is similar: 87 percent of children in nonrelative care have parents who pay for that care, and the average amount paid among those families that pay is $7.91 per hour. The proportion of children whose parents pay for relative care, among those who receive it, is much lower, at only 26 percent. The hourly price paid among those who pay for relative care is also lower, at $5.86.

These findings suggest that, in general, child care prices can be substantial among those families that must pay for it, especially when obtained from programs and nonrelatives.

However, some families do not necessarily pay for the child care they use, and relative care plays a particularly important role in no-cost child care. To the extent that parents on the sidelines face similar child care prices as the working families shown in table 5, the substantial market price of child care may pose a strong work disincentive for many considering entering the labor force.

Table 5. Mean Weekly Hours, Percentage of Children with any Parental Payment for Use of Care among Those with Care, and Average Hourly Payment among Those with Any Payment, by Care Type, 2016

Aspect	Program	Nonrelative	Relative	Any
Weekly hours	12.4	5.8	8.6	26.8
Percent who pay	0.78	0.87	0.26	0.70
Average payment	$7.79	$7.91	$5.86	$4.60

Sources: National Household Education Surveys Program; CEA calculations.

Note: We exclude one-parent families if the parent does not work, and we exclude two-parent families if one parent does not work. "Weekly hours" refers to the sum of hours spent in any care arrangement for each care type, while "percent who pay" and "average payment" only refer to the care arrangement for each care type in which the child spends the most time.

While table 5 provides important information about who pays for various types of child care and how much they pay, it has three main limitations. First, the estimates do not necessarily reflect the price of obtaining child care in the market. Government subsidies that reduce out-of-pocket costs (but not to zero) could cause these estimates to understate market supply prices. At the same time, the exclusion of families paying no out-of-pocket expenses (for instance, because government programs subsidized their entire cost) could cause these estimates to overstate supply prices if such families are more likely to use lower-cost care. Second, these estimates may be influenced by especially high reported prices from high-income families that increase the mean above what the typical (median) family pays (see Whitehurst 2018 for additional discussion of this and related points). And third, these national estimates may mask substantial differences in market prices for child care across the United States.

Given these limitations with the ECPP data, we next consider State-level estimates of the market supply price of child care. These estimates are published annually by Child Care Aware of America, a nonprofit organization that advocates for increased access to child care. In its most recent estimates of State child care costs, Child Care Aware of America (2019) surveyed State and local child care referral offices on 2018 prices based on surveys and data assembled by these offices. Child Care Aware publishes price estimates of child care in formal center-

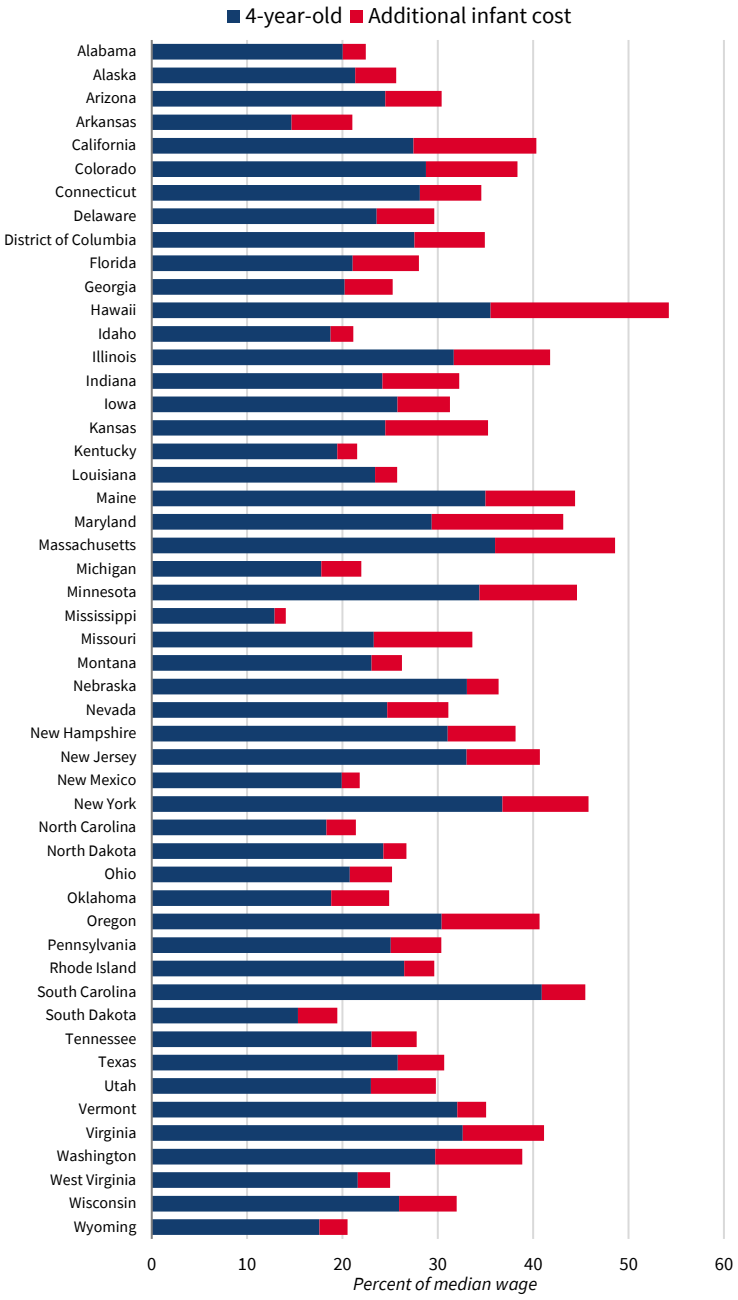
based care and child care offered in caregivers' homes, but it does not cover informal arrangements, such as a relative or nanny providing child care.[3]

Figure 3 shows the average hourly price of center-based child care for children age 4 and infants in each State as a share of the median before-tax hourly wage in the State. CEA-derived hourly child care prices are estimated by dividing the price of full-time care for each State by 2,000 hours (50 weeks multiplied by 40 hours per week).

These child care prices are substantial relative to wages. In every State, the hourly price of care for one young child represents at least 12 percent of the median hourly wage in the State. The hourly price of child care for a single child age 4 is on average 26 percent of the State median wage, while the price of child care for an infant is 32 percent of the State median wage. Including commuting times, when a child is with a paid caretaker but his or her parent is not paid for working, the financial burden would be even greater.

[3] Here we define costs as what parents are charged for their children's care, as opposed to out-of-pocket costs adjusted for subsidies and vouchers.

Figure 3. Child Care Costs as a Percentage of States' Median Hourly Wage, 2018



Sources: ChildCare Aware of America (2019); Bureau of Labor Statistics; CEA calculations.
Note: Child care costs per hour are obtained by dividing the cost of full-time, center-based child care for 4-year-olds by 2,000 hours. Montana's child care costs are for 2016. Infant care costs are not available for South Dakota, so these costs are computed as the toddler care costs scaled up by the national average percent difference between costs for infant and toddler care.

The Role of Regulation

Given the high price of child care relative to wages and the work disincentive it creates, it is important to consider the ways in which government policies may increase the cost of providing child care. Regulations can potentially address market failures when consumers have imperfect information about the type of care offered by different providers. A potential market failure is the presence of externalities from the quality of care provided to children. Regulations that attempt to improve quality could in theory have external benefits to society, given that quality child care is critical to develop the next generation's skills and human capital. These benefits include improved long-term child outcomes that increase their earnings potential and thus their tax liability, as well as reduce their dependence on transfer programs. But it is not clear that all existing child care regulations necessarily improve child well-being by addressing market failures.

Because staff costs make up the majority of the cost of child care, regulations that constrain the number, characteristics, and required activities of staff can greatly affect cost (National Center on Early Childhood Quality Assurance 2015). Wages are based on the local labor market demand for the employees' skills and qualifications, as well as the supply of workers in the field. Regulations that require higher-level degrees or other qualifications increase the wages required to hire and retain staff, increasing child care costs. Though recognizing that some facilities are exempt from these requirements, all States set requirements for minimum age and qualifications of staff, including some that require a bachelor's degree for lead child care teachers. Other staff-related regulations that can increase costs include required background checks, minimum staff-to-child ratios, and training requirements. In addition to setting standards for staff age and qualifications, many States set minimum requirements for buildings and facilities, regulating the type and frequency of environmental inspections, fire safety provisions, and the availability of indoor and outdoor space. Furthermore, most States set a maximum number of children in a given child care group, which can require additional building space.

These regulations can be beneficial for the health and safety of some children who continue to receive care (Hotz and Xiao 2011). To the extent that these regulations increase safety and reduce injuries in child care settings, they could have measurable societal benefits. This means that it is possible that externalities justify some types of government intervention, even when these interventions increase the cost of child care and make it costlier for parents to enter the workforce. Nevertheless, some regulations likely have little effect on children's well-being or the quality of care being provided while acting as a barrier to entry that can limit competition and increase prices (Gorry and Thomas 2017).

States must consider the trade-offs between a lower supply of child care and a possible increase in the quality and safety of child care when setting regulations governing staff requirements. Research generally finds that child care regulations reduce the supply of child care options. Hotz and Xiao (2011) estimate that decreasing the maximum number of infants per staff member by one (thereby increasing the minimum staff-to-child ratio) decreases the number of center-based care establishments by about 10 percent. Furthermore, each additional year of education required of center directors decreases the supply of child care centers by about 3.5 percent. Currie and Hotz (2004) find that when States adopt more stringent education requirements for child care center directors, increase minimum staff-to-child ratios, and require more frequent inspections, the number of children enrolled in center-based care falls.

Similarly, States must consider the trade-offs between a higher price of child care and a possible increase in the quality and safety of child care when setting regulations governing staff requirements. Other studies find that child care regulations increase the price of center-based child care. Gorry and Thomas (2017) estimate that allowing one additional child per staff member in a State is associated with child care prices that are 9 to 20 percent lower for infants and 2.0 to 4.7 percent lower for children age 4. Hotz and Kilburn (1996) find that child care prices fall by 0.8 percent for every 1 percent increase in the maximum child-staff ratio for children age 4. Heeb and Kilburn (2004) estimate a 12 percent increase in prices if the minimum staff-to-child ratio were changed to allow two fewer children per staff member. Furthermore, Gorry and Thomas (2017) find that requiring every lead teacher to have at least a high school education is associated with a 25 to 46 percent higher price of child care for infants and a 22 to 40 percent higher price of child care for children age 4. Currie and Hotz (2004) estimate that requiring an additional two years of education for the center director would raise annual costs by $130 for each child in center-based care. Bourne (2018) reviews the empirical literature and estimates that, overall, relaxing staffing regulations could save families with children in full-time care $500 each year.

When regulations increase the cost of center-based child care, parents may respond by placing their children in other care settings. Evidence for this can be seen in the shift away from center-based care and toward family care providers (also known as home-based care) after regulations on care centers are made more stringent (Hotz and Xiao 2011). These family care providers, where children are cared for in the provider's home rather than at a center, are typically subject to less regulation and offer care at a lower price than at a center. One-size-fits-all quality initiatives and regulations can push licensed family child care providers out of the market, limiting parental choices for child care. For example, from 2005 to 2017, the number of small, home-based family child care providers declined from about 200,000 to under 100,000 (National Center on Early Childhood Quality Assurance 2019). The National Survey of Early Care

and Education found that the median cost of home-based infant care was 28 percent below that for center-based care and 19 percent lower for a child age 4 (HHS 2015). In addition, the higher costs due to regulation may drive many parents to forgo employment outside the home. Thus, by loosening regulations that do not substantially affect the safety or quality of child care, States may be able to reduce the cost of formal child care and increase parental work.

Government Subsidies for Child Care

While deregulation can reduce inefficiently high child care costs and increase employment, it is also important to note that existing Federal and State governments currently provide substantial child care assistance to families at all income levels through the direct provision of child care, child care subsidies, and provisions in the tax code. At least to some extent, these existing government programs can improve economic efficiency by defraying work-related costs and boosting employment above the inefficiently low levels caused by the taxation of earnings or phasing out welfare benefits (see Viard 2010 for an in-depth explanation). In other words, if labor supply decisions were made without consideration of the taxes paid on earnings or the resulting reduction in welfare benefits, then the most efficient policy would be to provide no government subsidies for child care. But because labor supply decisions are affected by taxes and reductions in welfare benefits, child care subsidies that tend to increase work can be a second-best alternative. Of course, there are also policy rationales for providing child care assistance to low-income families, mainly as a form of redistribution conditioned on parental employment. Table 6 provides a list of government programs subsidizing child care and a short description of them. We discuss each program in more detail below.[4] Direct child care provision and subsidies, along with child care expense deductions in welfare programs like SNAP, are particularly important for low-income parents. Middle- and higher-income parents benefit from tax code provisions that partially offset child care expenses.

[4] In this table, we define "child care assistance" as any program that directly reduces the cost to families of child care expenses for children age 12 and younger. The Child Tax Credit (CTC) and Earned Income Tax Credit (EITC) are not child care assistance programs because they do not require beneficiaries to purchase child care in the marketplace, even though the generosity of benefits initially increases with earnings and thus can help cover child care expenses for those who work.

Table 6. Summary of Child Care Programs and Annual Spending, 2016

Program	Spending (billions $)	Description
	Direct government provision	
Public elementary schools	$307.9 [a]	Provides free, typically full-time schooling to children beginning at age 5 or 6 in kindergarten
Head Start / Early Head Start	9.2	Federally funded program providing care mostly to children age 3 and 4 whose families must have incomes below poverty thresholds to be eligible
Public pre-K	7.6	State and locally funded programs for children age 3 and 4; some States provide universal access while others restrict eligibility on basis of income
	Government subsidies	
Child Care and Development Fund (CCDF)	8.7	Combines funds from CCDBG and funds transferred from the TANF block grant, and provides vouchers to use for child care providers to families with income below 85 percent of State median with children under age 13
Temporary Assistance for Needy Families (TANF)	3.8	Provides additional assistance beyond CCDF funds for families that are eligible for TANF and meet program requirements, funded by Federal and State governments
Child care expense deduction in Supplemental Nutrition Assistance Program (SNAP)	0.6–0.9[b]	Child care expenses deducted from income for benefit determination; each dollar spent on child care increases benefit by $0.24 to $0.36
Child care expense deduction in Federal rental housing assistance programs		Child care expenses deducted from income for benefit determination; each dollar spent on child care increases benefit by about $0.30
	Tax provisions	
Child and Dependent Care Tax Credit (CDCTC)	3.4	Tax units count up to $3,000 per child under age 13 for child care expenses up to maximum deduction of $6,000 for two or more children; credit worth 20 to 35 percent of counted expenses
Flexible Spending Accounts for child care (FSA)	1.1	Employees contribute up to $5,000 of pretax earnings into FSA to be used for child care expenses, amount contributed to FSA deducted from CDCTC maximum
Employer tax credits for direct provision of child care	0.0	Employers may claim tax credit of 25 percent of expenses for child care provision to employees, and 10 percent of expenses for child care referrals; maximum credit is $150,000 per year

[a] CEA estimate based on total enrollment of public school students in kindergarten to grade 6, multiplied by average per pupil cost of primary and secondary school students.

[b] CEA estimate based on estimate of child care expenses deducted by SNAP households in 2016 multiplied by SNAP benefit phaseout rate of $0.24 to $0.36.

Direct Public Provision of Child Care

In addition to developing the skills and human capital of the next generation, the direct provision of elementary school to children beginning with kindergarten is the largest child care assistance program in the United States. In 2016, more than 26 million children were enrolled in public schools between the kindergarten level and grade 6, at an estimated cost of $308 billion (table 6). Additionally, many States provide public pre-K programs for children ages 3 and 4. States spent a total of $7.6 billion on pre-K programs in the 2016–17 academic year, serving more than 1.5 million children (Friedman-Krauss et al. 2018).[5] Most States have income limits for enrollment, while others provide access to children in families of all income levels (Friedman-Krauss et al. 2018). Program models and durations vary across States (Friedman-Krauss et al. 2018).

The major Federal program that provides direct care to young children is Head Start. At a Federal cost of $9.2 billion, it served 1.1 million children under age 6 (of whom 75 percent were between the age of 3 and 4) and pregnant women during the 2016–17 program year (HHS 2018a). Children from families below poverty guidelines published by HHS are eligible; for example, in 2018, a family of four had to have an income below $25,100 to qualify. Other children may be eligible as well, including those in families that receive TANF or Supplemental Security Income, although such families have low incomes as well (HHS 2018b). Head Start is not an entitlement; accordingly, many families that are eligible and apply are not admitted into programs. For preschool-age children, Head Start programs typically take place in centers for four or five days per week, with the majority lasting for at least 6 hours per day (HHS 2018a). Early Head Start serves children under age 3.

Public Subsidies for Child Care

The primary Federal program that provides significant subsidies for child care to low-income families is the Child Care and Development Fund (CCDF). CCDF is a consolidated block grant to States funded by both discretionary and mandatory Federal dollars. Discretionary funds for CCDF come from the Child Care and Development Block Grant (CCDBG), as well as any funds transferred by States from their Temporary Assistance for Needy Families allocations. Notably, Congress passed and President Trump signed into law an increase in CCDBG funding of $2.4 billion in 2018, the largest ever increase, and this was sustained in 2019. The mandatory portion of CCDF dollars comes from the Child Care Entitlement at section 418 of the Social Security Act and requires State matching and maintenance of effort contributions. In total, the Child Care and Development Fund (CCDF), provided $8.7 billion in child care assistance in 2016, with 75

[5] There may be some overlap with Head Start programs if they also receive substantial State funding.

percent of funds coming from the Federal government and 25 percent coming from the States (HHS 2018c).

CCDF generally funds child care by providing vouchers to families for use in child care centers (including faith-based), family child care homes, before-and-after school care, or potentially informal settings. Funds are generally limited to children under age 13 in families with incomes below 85 percent of a State's median income, with the additional requirement that parents must be working (Chien 2015). States retain significant discretion in determining how they use these funds and which populations they target among those who meet Federal criteria.

The second source of public subsidies for child care is additional funds that States spend directly through the TANF program, which go beyond funds transferred to CCDF (States are limited to transferring no more than 30 percent of their annual TANF allocation to CCDF). Unlike TANF funds transferred to CCDF, States provide these additional TANF funds to eligible families based on TANF rules, which vary by State but generally include only low-income families that meet program requirements. In 2018, $3.8 billion of TANF Federal block grant and state maintenance-of-effort funds were spent on child care (HHS 2019).

Neither CCDF nor TANF child care assistance is provided to all families that are eligible. Thus, deregulatory efforts that lower the market price of child care could reduce the amount of public spending needed to cover each child, freeing up funds to be used on additional families.

Other programs are not called child care assistance programs, but their structure effectively offers child care assistance. The Supplemental Nutrition Assistance Program (SNAP), the Housing Choice Voucher (HCV) Program, Project-Based Rental Assistance (PBRA), and public housing each allow families to deduct child care expenses from their income for purposes of benefit determination. For every dollar spent on child care, a child care expense deduction provides families with a child care subsidy (in the form of food or housing benefits) equal to the rate at which benefits phase out in keeping with income increases. The phase-out rate ranges from $0.24 to $0.36 per dollar of income for SNAP, and is about $0.30 for the rental housing assistance programs. There is no cap on the child care expense deduction in these programs. For families enrolled in both SNAP and a housing program, the deduction can be taken for both programs, creating a combined subsidy of about $0.54 to $0.66 for every dollar spent on child care. Of course, these child care subsidies cannot exceed the maximum SNAP (or housing) benefit for a given family size, so families will not necessarily receive increased subsidies for each additional dollar of child care spending.

In 2016, an estimated 779,000 SNAP households claimed the dependent care deduction, with an average deduction among those households of $278 per month (Lauffer 2017). This implies a total of $2.6 billion worth of deductions during all of 2016. With a phase-out rate of between

$0.24 and $0.36 for each household, this implies that SNAP provided between $624 million and $936 million worth of child care assistance in 2016.

Child Care Assistance through the Tax Code

Two tax benefits for households specifically subsidize child care that enables parental work or educational activities. The larger of these tax benefits is the Child and Dependent Care Tax Credit (CDCTC), which allows taxpayers to deduct up to $3,000 per child under age 13 for qualified child care expenses for up to two children, for a total deduction of $6,000. The credit is worth a fixed proportion, which ranges from 20 to 35 percent of these qualified expenses and depends upon the taxpayer's adjusted gross income, with the higher percentages applying to lower incomes. The credit is nonrefundable and thus only kicks in once the taxpayer begins to pay income tax. At an income of $43,000, the maximum credit plateaus at $1,200 (0.20 X $6,000) for two or more children. Crucial to this credit, both spouses (if filing jointly) must earn income or be enrolled in school, and the child care provider cannot be a spouse, parent, or other dependent. The Department of the Treasury estimates that the CDCTC cost the Federal government $3.4 billion in forgone tax revenue in 2016, after accounting for the possibility that families would claim other credits in lieu of the CDCTC if it were repealed.

The second tax benefit specifically tied to child care is a provision in which employers may allow employees to contribute up to $5,000 of pretax earnings into Flexible Spending Accounts (FSAs), which can then be used to pay for child care expenses (using the same qualifications as the CDCTC). However, any contribution to an FSA must be deducted from the amount of child care expenses claimed for the CDCTC. Thus, if the full $5,000 is contributed to an FSA, then only $1,000 can be claimed for the CDCTC (assuming two or more eligible children), thereby still limiting the total sum of the FSA and the CDCTC to $6,000. The Department of the Treasury estimates that FSAs for child care cost the Federal government $1.1 billion in forgone tax revenue, again allowing for the possibility that families would claim other credits, including the CDCTC, if FSAs were repealed.

In combination, the CDCTC and FSAs for child care expenses benefited 6.9 million families in 2016, for an average per-family benefit of $769 (Treasury, n.d.). The combined cost of the CDCTC and FSAs was $5.3 billion in 2016, which is larger than the sum of the two programs individually because repealing them together would not allow for substitution to the other credit.

A final tax code provision that subsidizes child care is the employer-provided child care credit. This credit allows employers to claim a tax credit of 25 percent of expenses for directly providing child care to employees, and 10 percent of expenses for child care referrals. The

maximum credit is $150,000 per year. The effect of this provision is minimal, with tax expenditures amounting to about $10 million per year (Treasury 2017).

Conclusion

The strong American economy under President Trump continues drawing more workers into the labor market, and there is room for the labor force to grow further. We estimate that as of December 2016, there were 3.8 million nondisabled, working-age parents of young children currently outside the labor force, and another 6.6 million such parents working part time, each of whom might need to have child care to be able to enter the workforce or increase their work hours. Evidence on the responsiveness of work status and hours to wages and child care costs suggests that some of these parents would enter the labor force or increase their work hours in response to a reduction in the market price of child care.

We document current market prices for child care, and find that while a substantial portion of parents utilize informal or otherwise unpaid care for their children, many pay substantial out-of-pocket prices for child care. For the average State as of 2018, the average hourly price of center-based child care for a child age 4 represented 26 percent of the hourly median wage.

Regulations play a major role in increasing market prices for child care, which reduces labor force participation for parents. While regulations governing the provision of child care can be necessary, some existing regulations may not improve child care quality or safety. Reevaluating the effectiveness of these regulations—such as extensive facility, staff, and startup requirements—and relaxing those State and local regulations that unproductively increase the cost of care can ensure that more parents have safe options for their children's care while simultaneously giving parents greater opportunities to work.

Many government programs provide substantial child care assistance to American families. At least to some extent, existing government subsidies that defray some child care expenses can mitigate the distortion arising from the taxation of labor earnings that inefficiently reduces the labor supply. A number of Federal programs currently subsidize child care, including the direct provision of care in Head Start, public pre-K and elementary schools, means-tested subsidies for child care purchased in the private market, welfare programs that allow parents to deduct child care expenses in benefit determinations, and tax provisions that allow families to deduct a portion of the cost of child care from their income. Programs targeting low-income families could potentially serve more families if regulations that increase child care prices were relaxed.

Ultimately, how families balance work and child rearing is a deeply personal decision that affects the long-term outcomes of their children as well as the economic growth of the United States. Thus, creating a system that maximizes opportunity without interfering with personal

family decisions is a vitally important goal for the economy and for American society as a whole.

Appendix: Data Sources

Table A1. Description of Data Sources and Tools Used in This Report

Current Population Survey (CPS) – Annual Social and Economic Supplement (ASEC)
The U.S. Census Bureau's annual CPS-ASEC asks a wide-range of supplemental questions on social and economic characteristics of a nationally representative sample of U.S. households (currently more than 75,000). We use CPS-ASEC to document trends between 1968 and 2018 in labor force participation of parents based on the age of their youngest child in the first section (figure 1).
Survey of Income and Program Participation (SIPP)
The SIPP is a longitudinal household survey conducted by the U.S. Census Bureau. It follows the same set of households for four consecutive years, collecting detailed information on income, welfare program receipt, child care utilization, among a number of other issues. The latest available data, which is used in this analysis, is Wave 4 of the 2014 Panel, which covers each month of 2016. We restrict our analysis to December 2016 because it is the most recent available month and because school is in session. In this report, we use the SIPP to estimate the number and characteristics of parents with young children for whom child care costs may affect work decisions in the second section (tables 1, 2, 3, and 4).
Early Childhood Program Participation (ECPP) of the National Household Education Survey (NHES)
The ECPP is a component of the NHES conducted by the National Center for Education Statistics (NCES) that surveys the parents or guardians of children age 6 or under and have not yet entered kindergarten. We use the 2016 survey results to estimate the number of hours each week children spend in various child care arrangements, whether their parents pay for that care, and how much those parents pay in the third section (table 5).
Child Care Aware
Care Aware surveys Child Care Resource and Referral (CCR&R) State Network offices and local CCR&Rs to gather data on the cost of child care. The cost data, which are based on State Market Rate Surveys and CCR&R databases, covers infants, toddlers, and children age 4 or school-aged in center-based programs or Family Child Care homes (i.e. legally operating child care that are licensed or exempt from licensing). We use the Child Care Aware data to document State-level variation in market supply costs for child care and the relationship between child care costs and minimum staff-to-child ratios in the third section (figures 3, 4, and 5).

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