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Universal Child Care and Early Learning Act: Helping Families and the Economy

Introduction

American households are struggling to find high-quality, affordable child care for their young children. This is a serious financial burden to these families, and it is also weighing on the economy, because it crimps the ability of parents to work. Labor force participation of prime-age workers has at best been stuck in place for more than three decades, limiting the growth in the labor force and broader economy, particularly as the large baby boomer cohort retires. The Universal Child Care and Early Learning Act would go a significant way toward addressing the financial plight of these families and supporting economic growth.

Universal Child Care and Early Learning Act: Helping Families and the Economy

BY MARK ZANDI AND SOPHIA KOROPECKYJ

American households are struggling to find high-quality, affordable child care for their young children. This is a serious financial burden to these families, and it is also weighing on the economy, because it crimps the ability of parents to work. Labor force participation of prime-age workers has at best been stuck in place for more than three decades, limiting the growth in the labor force and broader economy, particularly as the large baby boomer cohort retires. The Universal Child Care and Early Learning Act would go a significant way toward addressing the financial plight of these families and supporting economic growth.

Need for child care

Families are in desperate need of high-quality, affordable child care. Fifty years ago, approximately half of all women stayed home to take care of their children. As female participation in the workforce increased rapidly in the 1970s and 1980s, stay-at-home moms became much less common. Today, only about one-fourth of moms are at home with their kids.

Spending on child care has risen commensurately. Some 4.9 million American households spent almost $36 billion on day care centers, nurseries and preschools in 2017.[1] The typical household that has child-care expenses spent $7,200 per year, equal to approximately 10% of their income.[2] Given this significant expense, only about one-third of families with the nearly 20 million kids under the age of 5 use child-care services; the rest rely on relatives or informal and often unreliable arrangements.

The cost of child care varies considerably across the country. Nationwide, the average cost of putting a child younger than 5 into full-time formal care was close to $10,000 in 2017. But costs range as high as more than $20,000 a year for center-based infant care in Massachusetts and Washington DC, to closer to $5,000 a year for family-based child care for a 4-year-old in Alabama and Texas.[3]

The cost of child care has also risen quickly, substantially outpacing overall inflation. Over the past 20 years, the cost of day care has doubled, while prices for all goods and services are up only about 1½ times (see Chart 1). Although day care costs have risen more slowly more recently, this is unlikely to last, since the tight labor market is quickly driving up wages for day care workers, the biggest cost of supplying day care services.

The high and quickly rising cost of child care has weighed heavily on female labor force participation. Indeed, participation by women in their 20s, 30s and early 40s peaked in the late 1990s.

Existing government support

There is a patchwork of government programs to help families get child care and prekindergarten educational services. At the federal level, the biggest programs include Head Start and the Child Care and Development Block Grant. These programs are effective, but are targeted to help only low-income families, typically those who earn less than 85% of a state's median income, and reach only a small percentage of eligible low-income families. The U.S. military also heavily subsidizes child-care centers for a couple of hundred thousand service members. Together, these programs reach about 2.5 million children under the age of 5 at a cost of approximately $10 billion per annum.

Middle-class families also benefit from federal child-care tax credits, but the support is modest and not nearly enough to cover their child-care costs. Moreover, the tax credits are not refundable, so the benefit does not help working-class families who do not have a tax liability. These tax credits are used by about 6.5 million taxpayers at a cost of close to $6 billion per annum.

And at the state and local level, 43 states and the District of Columbia provide prekindergarten programs that serve about 1.5 million 3- and 4-year-old children.

Universal Child Care and Early Learning Act

Senator Elizabeth Warren has proposed the Universal Child Care and Early Learning Act to address families' need for high-quality, affordable child care. The proposal establishes a federal government program, administered by state and local governments, nonprofit providers, tribal organizations, and other community entities, that guarantees families access to care for their children from birth to when they enter school. Access to high-quality, affordable child care would become an entitlement.

The program establishes a network of public child-care centers and family child-care homes, staffed by child-care workers who will receive wages competitive with public school teachers in their communities. It builds on current federal child-care programs, most notably the military child-care program and the federal Head Start program, which offers children a full range of educational, health, social and other services. This proposal significantly scales up Head Start, utilizing its existing centers and providers, allowing them to continue serving low-income children while also enrolling children who are not from low-income families.

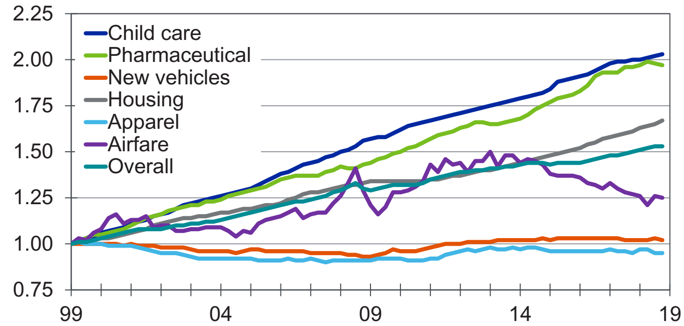
The current Child Care and Development Block Grant Program would become a supplemental support for low-income families who require additional services in the private child-care market for needs that may not be fully covered by the new system, including extended hours, some specialized services for children with disabilities, and after-school services for children 5 to 13 years old.

Under this proposal, all families will be able to access child-care and early learning services regardless of their income, employment or circumstance. Families below 200% of the federal poverty line could access these services at no cost. Middle-class families above this threshold would pay a subsidized fee based on their income. No family would pay more than 7% of their income for these child-care services.[4]

The Universal Child Care and Early Learning Act would substantially increase the number of children able to receive formal child care. An estimated 6.8 million children, equal to about one-third of those younger than age 5, receive formal care today. The proposal would ensure an estimated 12 million children, equal to 60% of those younger than 5, will ultimately receive formal care. Parents or other relatives will care for 30% of kids, about the same percentage as today, while only 10% of kids will have no regular arrangement for child care, down from just less than one-third of kids today. Of those receiving formal care, 8.8 million kids in families below 200% of the federal poverty line would receive free child care. The typical American family with young children currently paying for formal care would see their annual child-care costs decline by 17% to less than $6,000 per year.

Chart 1: Child Care Costs Surge

Consumer prices, 1999Q1=1



Sources: BLS, Moody's Analytics

Budgetary costs

The additional cost to the federal government of providing universal child care under this proposal is estimated to be approximately $70 billion per annum on average, or $700 billion over a 10-year budget horizon on a dynamic basis (after accounting for the economic impacts of the proposal).

This is based on a number of assumptions, including that the proposal becomes law this year and becomes effective in calendar year 2020 (see Table 1). We also assume that it takes two years before there is full take-up on the program. It will take time for the centers and family child-care homes to become fully operational across the country and for families to work out what options are best for them.

The budget cost estimates also depend on the assumption that almost two-thirds of families that use formal child care will use center care, which is more expensive than family child-care homes. We assume that the cost of center care by 2020 will be $14,500 per child, compared with almost $11,000 per child for family child-care homes. These costs also reflect the proposal's mandate to pay child-care workers substantially more than they earn currently to ensure consistently higher quality of care.[5]

To help defray some of the federal government's costs, for low-income children the local administrator will cover 20% of the cost and the federal government the remaining 80%. For children in families with higher incomes, 50% of the cost of care will be covered by the local administrator through the collection of parental co-payments and other means, and the federal government will pick up the remaining half. Regardless of the arrangement between the federal government and the local administrator, no family will be required to spend more than 7% of their income on public child care.

The proposed universal child care and early learning services could be paid for by revenues generated by Warren's proposed 2% tax on household net worth above $50 million and 3% tax on net worth above $1 billion. That is, $700 billion out of the total 10-year revenues generated by the proposed net worth tax could be used to pay for the child-care proposal.[6] The Universal Child Care and Early Learning Act is thus deficit neutral over the 10-year budget horizon on a dynamic basis.

Economic lift

To determine the impact of the proposal on the broader economy, we use the Moody's Analytics model of the U.S. economy.[7] The proposal quickly lifts economic growth, as the stimulus created by providing financial support to lower-income and middle-class families more than offsets the negative fallout from increasing taxes on the very wealthy. Low- and middle-income households have a much larger marginal propensity to spend—the share of their income they spend—than do the wealthy.

Table 1: Impact of Universal Child Care and Early Learning Act

	Children younger than 5 yrs old (mil)		Total cost of formal child care ($ bil)	Federal government cost of formal child care ($ bil)			Additional GDP due to Act ($ bil)
	Total	With formal child care		Static budget cost	Dynamic budget cost	Additional dynamic cost	
2019	19.81	6.79	na	na	na		na
2020	19.76	6.92	78.7	54.2	47.6	34.5	21.3
2021	19.77	9.89	134.3	86.4	75.6	62.2	34.9
2022	19.84	11.91	166.0	104.9	91.0	77.3	45.2
2023	19.91	11.95	171.3	108.3	92.3	78.3	51.7
2024	19.97	11.98	177.0	111.9	93.3	78.9	60.1
2025	20.00	12.00	183.2	115.8	94.1	79.4	70.1
2026	20.03	12.02	190.0	120.1	94.7	79.6	82.2
2027	20.04	12.02	197.8	125.0	95.0	79.5	96.9
2028	20.05	12.03	206.4	119.4	85.4	69.4	110.1
2029	20.04	12.02	215.3	124.5	84.3	68.0	130.0
2020-2029			1,719.8	1,070.4	853.4	707.2	702.4

Notes:
Static budget cost is the cost to the federal govt. of providing formal child care without accounting for the economic impact on the budget.
Dynamic budget cost is the cost to the federal govt. of providing formal care after accounting for the economic impact on the budget.
Additional dynamic budget cost is the dynamic budget cost excluding current federal govt. spending on formal child care.

Sources: Census Bureau, BEA, Moody's Analytics

Further boosting near-term growth will be the significant expansion of child-care centers across the country. Existing child-care centers employ 1.5 million workers, which will increase substantially under the proposal as the number of children receiving child care expands. The significantly higher wages paid to child-care workers will also increase their spending, adding to the economic benefit.

Longer run, the economy gets a boost from the proposal as lower child-care costs lift labor force participation and hours worked.[8] It becomes cost effective for more parents to work, and the extra time and scheduling flexibility created by the child care allows them to work more hours. Research on the labor supply impact of lower child-care costs shows there are meaningful impacts, and our own research is consistent with this.[9] Accessible child care facilitated by federal support to child-care providers has especially strong employment effects for single mothers, moms with young children, and lower-income mothers.[10]

There is little impact on the economy from the higher taxes on wealthy households. These households have substantial financial resources and will not significantly change their spending and saving behavior. Moreover, since the increase in tax revenues pays for the expansion of child-care services, it ensures that the Universal Child Care and Early Learning Act would be deficit neutral, with no resulting material impact on interest rates.

These results likely understate the economic benefits of the proposal. The model does not consider that the increased support for early childhood education should also ultimately reap economic benefits. According to the best known study on the issue, the benefits, including greater lifetime earnings, the non-earnings benefits of reduced transfer payments and remedial education expenditures, and savings from less demand on the criminal justice system, are substantial.[11] Studies conducted on a variety of other preschool programs find similarly large increases in earnings and societal benefits.[12]

Conclusions

The cost of high-quality child care is a heavy burden on the finances of American families and the economy. In many parts of the country, high-quality child care is not even available. The Universal Child Care and Early Learning Act addresses this serious problem. It is fiscally responsible proposal that would scale up federal child-care programs that are already in place and shown to be effective in meeting the challenges of providing high-quality child care. The proposal significantly reduces the cost burden of child care for most families, improves the quality of child care, enhances childhood development, and supports increased labor force participation and stronger economic growth.

Endnotes

1 This is based on data from the Bureau of Labor Statistics' 2017 Consumer Expenditure Survey.

2 Households in the top decile of the income distribution, with annual income of over $155,000, spend almost $12,000 per annum on child care, while those in the bottom decile, making less than $13,000 per annum, spend close to $3,600.

3 These costs are determined by a January 2018 survey conducted by ChildCare Aware of Child Care Resource and Referral agencies. Respondents were asked to provide 2017 cost data for infants, toddlers, 4-year-old children, and school-age children in legally operating child-care centers and family child-care homes. Legally operating programs include licensed programs and child-care programs that are legally exempt from licensing.

4 The U.S. Department of Health and Human Services considers child-care costs above 7% of a family's income unaffordable. The national average cost of center-based child care was $10,132 in 2017, according to ChildCare Aware, or 17% of median household income.

5 The mean hourly wage of a child-care worker in 2017 was $10.67, 44% of the mean hourly wage across all occupations. State qualifications for child-care workers vary across states, ranging from no required training to a college degree. Further, four-fifths of states establish different requirements depending on whether a program is home-based, center-based or public preschool. Even in states that require that caregivers hold a college degree, their earnings fall well below that of teachers of older children.

6 An estimate of the tax revenue generated by Warren's net worth tax is provided by University of California, Berkeley economists Emmanuel Saez and Gabriel Zucman.

7 One complication is that we have not evaluated the budget or economic implications of the senator's wealth tax. As such, we instead assume that her child-care program is paid for by reforms to the estate tax sufficient to generate the needed tax revenue. We have previously modeled the impact of estate taxes, as this is an oft-proposed change in the tax code and was used by the senator to pay for her recently proposed proposal to address the affordable housing crisis. The working assumption is that the budget and economic impacts of higher estate taxes are similar to those of her wealth tax. See "Addressing the Affordable Housing Crisis," Mark Zandi, Moody's Analytics white paper, September 2018 for an analysis of the economic impact of Senator Warren's Housing and Economic Mobility Act.

8 The personal financial costs to parents who leave the workforce to care for a young child because of the high cost of child care are high. They accumulate fewer skills, and their productivity is diminished, resulting in lower wages when the parent eventually returns to the workforce. The effect tends to fade only after several decades. Further, a woman's career progression is reduced even more if she has more than three children, and the penalty to wages is never made up. Even when women remain engaged through part-time work, their career progress is reduced.

9 For more information on the labor force participation rate impacts, a literature review is available in L. J. Bettendorf, E. L. Jongen, and P. Muller, *Child Care Subsidies and Labour Supply—Evidence From a Large Dutch Reform*, Labour Economics (2015).

10 Kimberly Burgess, Nina Chien, Maria Enchautegui, "The Effects of Child Care Subsidies on Maternal Labor Force Participation in the United States," Department of Health and Human Services, ASPE Issue Brief, 1-6 (2016).

11 James J. Heckman, Seong Hyeok Moon, Rodrigo Pinto, Peter A. Savelyev, and Adam Yavitz, *The Rate of Return to the High/Scope Perry Preschool Program, Journal of Public Economics* Vol. 94.1 (2010): 114-128.

12 Leonard N. Masse and W. Steven Barnett, *Comparative Benefit-Cost Analysis of the Abecedarian Program and Its Policy Implications, Economics of Education Review* Vol. 26.1 (2007): 113-125. Arthur J. Reynolds, Judy A. Temple, Suh-Ruu Ou, Irma A. Arteaga, and Barry A.B. White. 2011, *School-Based Early Childhood Education and Age-28 Well-Being: Effects by Timing, Dosage, and Subgroups Science* Vol. 333.6040 (2011): 360-364.

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Mark Zandi is chief economist of Moody's Analytics, where he directs economic research. Moody's Analytics, a subsidiary of Moody's Corp., is a leading provider of economic research, data and analytical tools. Dr. Zandi is a cofounder of Economy.com, which Moody's purchased in 2005.

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He is a trusted adviser to policymakers and an influential source of economic analysis for businesses, journalists and the public. Dr. Zandi frequently testifies before Congress and conducts regular briefings on the economy for corporate boards, trade associations, and policymakers at all levels. He is often quoted in national and global publications and interviewed by major news media outlets, and is a frequent guest on CNBC, NPR, *Meet the Press*, CNN, and various other national networks and news programs.

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