The Business Case for Action on Childcare

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1. Introduction

“America is facing an unprecedented workforce crisis: a large and growing shortage of skilled workers... The world of work is changing -- and our strategies for developing tomorrow's workforce must change with it.”


The national workforce crisis is especially pronounced here in our local communities. As of early 2018, unemployment rate in Dubuque and in Iowa hovered at 3.0%, the lowest since 2000. At the same time, labor force participation has fallen from 72.4% in 2008 to 69.6% in 2016.

The Midwest is the only region of the US with more job openings than out-of-work job seekers. We have a net population outflow and attract fewer immigrants than other regions. Over the next ten years, the national working age population is expected to stay flat, but the Dubuque region will experience a 5.8% decline.

In an increasingly competitive environment for American business, strengthening our workforce should be a top priority. As leaders in business and society, our dominant approach to workforce issues has been to focus on K-12 education and adult training programs. But we underestimate the importance of establishing a foundation for future success in early childhood years. There is extensive evidence that access to quality, affordable early childhood education boosts recruitment, retention, and quality of our current workforce, and strengthens tomorrow's workforce. Investments in early childhood experiences have been proven to yield significant

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1 Local Area Unemployment Statistics, Iowa Workforce Development,
2 Iowa's Labour Force Participation Rate, Legislative Services Agency, 2017,
returns on investment, for business and society. In fact, the rate of return to quality early childhood programs is much greater than for other types of education and training programs.

**We need to re-conceptualize childcare as critical infrastructure that supports our workforce today and builds a high-quality workforce for tomorrow.** Our approach to early childhood has not kept pace with fundamental shifts in the American workforce. Until recent decades, the first years of life took place in the home. From the mid-1970s to 2012, workforce participation rates for mothers of young children rose from 40% to 65%\(^5\). In Iowa, 3 out of 4 households with children under age 6 have all parents working\(^6\).

Over time, childcare responsibilities have shifted from the home into the formal economy. However, no accompanying structural reforms have taken place in the provision or funding of childcare to accommodate this change and ensure quality, access and affordability.

Today, childcare is typically the single biggest expense for families with young children. On average, families spend more on infant care than on food and transportation combined\(^7\). As of 2014, infant care in a childcare centre costs a family in Iowa upward of $9,185 annually\(^8\), which exceeds the annual cost of attending a four-year college in the state\(^9\). A family at the median household income level in Dubuque ($58,602) with an infant spends 15% of their income on childcare\(^10\).

Low- and moderate-income families are disproportionately affected.\(^11\) In Iowa, childcare costs 89% of the income of someone working full time at minimum wage, and 23% of the median household income\(^12\). Across the US, Iowa is the 7th least affordable state for families seeking part-time center-based care for 2 children\(^13\).

Childcare is costly for parents, but also costly to provide because of the high staff-to-child ratio - young children’s development requires extensive one-on-one interaction with adults -- and other regulatory requirements. To stay afloat, childcare providers pay employees a low wage, typically with no benefits. In the City of Dubuque, the average childcare worker earns $8.68 per hour, less than a fast food cook or a cashier\(^14\).

The absence of affordable, quality childcare has serious and immediate financial implications for employers’ ability to attract and retain employees, and to ensure they are productive and engaged while at work. It also has significant, long-term consequences for business and society. In their first months and years of life, children develop a broad base of skills that are socially and economically valuable. Education and training later in life are much less effective.

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\(^7\) "Parents and the High Cost of Child Care", Child Care Aware of America, 2017.


\(^9\) RegionTrack, Inc, "Child Care in State Economies", August 2015.


\(^11\) "Early Care and Education: The Economic Case," Early Care and Education Research Series, Issue Brief 1, February 2018

\(^12\) Brigid Schulte and Alieza Durana, "The New America Care Report", 2016.

\(^13\) "Parents and the High Cost of Child Care", Child Care Aware of America, 2017.

without this initial foundation for success. For the US, the cost of failure to provide early education can be as high as $400 billion.

The market-driven model of childcare provision fails to fulfil the need for affordable childcare: it poses often-prohibitive costs to parents while paying extremely low wages to childcare workers. And the returns to quality childcare for economic development and society -- outstripping those of K-12 education and job training -- are clear. These facts underscore the need for increased public and private investment. Currently, corporations and philanthropies cover just 1% of the cost of childcare, while parents shoulder 60% of the burden. Government bear 39% via subsidies to low-income families. But this is still not enough to cover all families who need affordable childcare.

The problem of childcare access in the Greater Dubuque area is serious, with long-term implications for our economy. But it is solvable. Re-centering early childhood care as the most fundamentally driver of a quality workforce and healthy society will require investments by public, private, and nonprofit stakeholders and analysis of a range of options that improve affordability and access to childcare.

2. Gaps in access to quality, affordable childcare

Childcare availability and affordability in Iowa has declined significantly in recent years.

- Since 2012, the number of childcare businesses listed with Iowa Child Care Resource & Referral (CCR&R) has dropped by 40%
- The total number of childcare spaces (i.e. the number of children served) has fallen by 6%, from 178,885 in 2012 to 167,817 in 2017
- Over the past five years, childcare has become substantially more expensive, increasing by 14% for in-home care (to $136.91 per week) and 28% for licensed centers (to $192.76 per week)

There are other general barriers to access. In the City of Dubuque, there is a lack of available sites that comply with regulations for setting up new centers. There are few viable options for parents who work second shifts or weekends. Many families find childcare through word of mouth or informal pre-existing connections, so immigrants and newcomers to the Dubuque area face particular difficulty identifying childcare providers.

To begin to understand the gap in access to childcare, we attempted to quantify the availability of childcare in the Greater Dubuque area.

Methodology

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18 “Iowa Families can’t Find Childcare”, Des Moines Register, May, 17, 2018.
19 Interviews with stakeholders, March 2018.
The following table compares the population of children under 9 to the total number of existing childcare spots, either full- or part-time, by community. Child Care Resource & Referral (CCR&R) provided data on registered childcare spots. (They do not have information on unregistered providers.) We include all children under 9 because the number of children needing childcare (including part-time care) may not be less among the children over 5 compared to children under 5.

<table>
<thead>
<tr>
<th>Community</th>
<th>Total Population</th>
<th>Percentage of Children under 5</th>
<th>Number of Children under 5</th>
<th>Children from 5 to 9 years = (5)</th>
<th>No. of Children under 9 (5+6)</th>
<th>Total Childcare Spots</th>
<th>Ratio of childcare spots (Col.8) and children under 9 (Col.7)</th>
<th>Poverty Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
<td>(7)</td>
<td>(8)</td>
<td>(9)</td>
<td>(10)</td>
</tr>
<tr>
<td>Peosta</td>
<td>1747</td>
<td>10.2</td>
<td>178</td>
<td>178</td>
<td>356</td>
<td>359</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>Bellevue</td>
<td>2134</td>
<td>6.5</td>
<td>139</td>
<td>139</td>
<td>278</td>
<td>129</td>
<td>0.46</td>
<td>10.8</td>
</tr>
<tr>
<td>Maquoketa</td>
<td>6029</td>
<td>4.9</td>
<td>294</td>
<td>294</td>
<td>588</td>
<td>522</td>
<td>0.89</td>
<td>23.3</td>
</tr>
<tr>
<td>Cascade</td>
<td>1984</td>
<td>7.4</td>
<td>147</td>
<td>147</td>
<td>296</td>
<td>215</td>
<td>0.73</td>
<td>13.3</td>
</tr>
<tr>
<td>Dyersville</td>
<td>4214</td>
<td>10.3</td>
<td>434</td>
<td>434</td>
<td>868</td>
<td>260</td>
<td>0.3</td>
<td>6.57</td>
</tr>
<tr>
<td>Dubuque</td>
<td>58409</td>
<td>5.9</td>
<td>3457</td>
<td>3457</td>
<td>6914</td>
<td>4349</td>
<td>0.63</td>
<td>16.8</td>
</tr>
<tr>
<td>Dubuque County</td>
<td>95906</td>
<td>6.2</td>
<td>5953</td>
<td>5953</td>
<td>11906</td>
<td>5689</td>
<td>0.48</td>
<td>12.5</td>
</tr>
</tbody>
</table>

In the absence of Greater Dubuque population data for children age 5 to 9, we estimate that the population of this group roughly equals the number of children under 5. We make this assumption because the ratio of these age groups is approximately one to one in the state of Iowa (statewide, the number of children under 5 is 196,868 and the number of children age 5 to 9 is 204,844).

**Limitations and Assumptions**

- In stakeholder meetings, we learned that many parents use childcare facilities at or near work, rather than near their homes. Thus, spatial matching of demand and supply, based

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20 ACS 5 Years Estimates, 2015, as reported by https://datausa.io sourced on 22nd March 2018
21 ACS 5 Years Estimates, 2015, as reported by https://datausa.io sourced on 22nd March 2018
22 ACS 5 Years Estimates, 2015, as reported by https://datausa.io sourced on 22nd March 2018
23 This is an estimate based on the fact that, in the state of Iowa, number of children between 5 to 9 (204,844) is roughly equal to the number of children below five years of age (196,868), as per ACS (5 Years estimates, 2016).
24 Data as provided by the CCR&R office of Dubuque and Jackson County.
25 ACS 5 Years Estimates, 2015, as reported by https://datausa.io sourced on 22nd March 2018
26 ACS 5 Years Estimate, 2016.
on communities where children live, may not accurately estimate the gap in childcare availability.

- To estimate the gap in childcare services, we obtained the total number of childcare spots from CCR&R by age group and facility type. However, not all childcare spots are equivalent; for example, a spot in an after-school program will not be useful to the parent of an infant. Additionally, some facilities may not be equally accessible for all members of a community.
- For the purpose of this analysis, the ratio of childcare spots and total children up to the age of 9 is presumed to be the best indicator to compare childcare availability across regions.

Findings

Based on data analysis and stakeholder interviews, the team arrived at the following findings:

- In the above table, the ratio of childcare spots to children under 9 is calculated for all the regions. In comparison to other regions, the relative availability of childcare spots (as shown by the ratio in col. 9 of the table) is much lower in Dyersville and Bellevue. In Bellevue, public feedback during our field visits supported this analysis; interviewees perceived greater availability of childcare in Maquoketa (poverty rate of 23.3%\(^{27}\)), compared to Bellevue (poverty rate of 10.8%\(^{28}\)). Higher availability of childcare spots may be due in part to the inability of many low-income families to afford childcare.

- During interviews, many stakeholders pointed out the lack of availability of childcare spots for infants. Government regulation requires one childcare worker for every four infants, the lowest child-adult ratio requirement across different age groups. Thus, market forces keep availability of infant care very low.

- There is a strong positive correlation between the poverty rate and childcare availability (as indicated by the ratio of childcare spots to the number of children under 9), as evidenced in the chart. Communities with lower poverty rates (Bellevue, Dyersville) have lower availability of childcare spots compared to areas with higher poverty (Maquoketa, Cascade).

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\(^{27}\) ACS 5 Years Estimates, 2015, as reported by [https://datausa.io](https://datausa.io) sourced on 22nd March 2018

\(^{28}\) ACS 5 Years Estimates, 2015, as reported by [https://datausa.io](https://datausa.io) sourced on 22nd March 2018
Communities with higher availability require demand-side solutions. In these areas, the childcare needs to be made more affordable with public or private funding. Areas with lower availability of childcare require supply-side interventions.

3. Driving labor force participation and productivity of today’s workers

Access to affordable, quality childcare directly impacts parents’ workforce participation and effectiveness in the workplace. It may help account for labor market inefficiencies that we observe. Dubuque-area employers stress that filling vacant positions has been difficult in recent years. Recent interviews with local employers suggest that many have long-standing vacant positions and experience trouble filling them. This is consistent with historically low rates of both unemployment and workforce participation in the Greater Dubuque area and in Iowa more broadly. In a 2017 Greater Dubuque Development Corporation (GDDC) survey of 66 local employers, CEOs rated the availability of workforce a 3.51 on a scale of 1 to 7. Twenty-eight percent of employers reported that the number of unfilled positions was increasing29.

In a recent interview, a Dubuque-area stakeholder who works with individuals who are underemployed or trying to re-enter the workforce affirmed that childcare is one of the most important factors preventing Iowans from entering the workforce30. A 2016 Project HOPE assessment of Dubuque-area childcare needs also suggests that childcare access plays a role in employment and recruitment. The study found that inability to secure childcare can negatively impact parents’ ability to accept job offers, or to work the number of hours they would like to work. Forty-nine percent reported having turned down a job or worked fewer hours due to childcare responsibilities. This figure rises to 63% among low-income parents31. This was recently echoed in a 2018 focus group of newcomers to Dubuque, organized by the Greater Dubuque Development Corporation, in which a participant remarked that they had to turn down a job because they couldn’t find childcare32.

The childcare-work tradeoff is most starkly visible among low-income families. An American Enterprise Institute study found that among nonworking adults in official poverty who have young children, 70% say that the reason

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30 Interview with an employee of Iowa Works, April 2018.
32 Greater Dubuque Development Corporation, Spring Workforce Presentation, 2018.
for not working is that they are taking care of their home or family. In the Project HOPE study, 25% of Dubuque-area parents reported having turned down a job because they could not afford childcare (49% among low income parents). Among lower-wage workers, a “cliff effect” in federal and state subsidies creates a disincentive for workforce participation. In Iowa, workers making above $11.15 an hour lose all eligibility for childcare assistance.

In Michigan, a 2015 study found that access to affordable, quality childcare was the primary obstacle to workforce participation for low-income families, followed by transportation and job skills. Business leaders in Michigan recently published an op-ed supporting this view. They emphasized the importance of childcare not only to parents, but also to employers and to the state economy: “Labor shortages are constraining our state’s economic growth…. Affordable, quality childcare reduces a major barrier to getting people into the workforce… [and] is an essential tool in any meaningful economic development strategy.”

Access to childcare disproportionately affects workforce participation rates among women. When a household makes the difficult decision to have a parent either enter the workforce or stay home to look after children, mothers tend to be the ones to stay home. For each 10% increase in child care expenses, the employment of single mothers and married mothers decreases by 3-4% and 5-6% respectively. Mothers are twice as likely to quit jobs due to inadequate or lack of childcare provided by the employer. Research shows that 74% of highly educated women who drop out of the workforce each year do so because of lack of quality childcare.

The Iowa Women’s Foundation has worked with 18 communities across the state to identify barriers to women’s economic self-sufficiency. Half of the communities named childcare access as their number one obstacle.

In addition to affecting workforce participation, reliable childcare access improves employee productivity. Satisfied employees are productive employees who improve a company’s financial performance. A 2000 study of 405 companies on the NASDAQ and New York Stock Exchange found a strong positive correlation between the strength of a company’s human capital and its shareholder returns. Human capital index was measured by employees’ attitude toward their workplaces and work lives. Significant improvement in a range of key HR practices was associated with a 30% increase in company market value. Employees working for companies with high ratings on an HR strategy index produce 35% more revenue per

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35 Iowa Policy Project
41 “Iowa Families can’t Find Childcare”, Des Moines Register, May, 17, 2018.
employee, according to a 2002 PriceWaterhouseCoopers survey.\textsuperscript{43} Employees also report being more productive and spending less time dealing with personal issues when using quality, reliable childcare. Among employees with access to quality care for their dependents, 63\% reported an improvement in productivity\textsuperscript{44}. In another study of employees with onsite employer-provided care, 95\% said the onsite child care improved their ability to concentrate at work, 87\% reported that it made them more productive, and 79\% said it enabled them to volunteer for things not formally required by their job.\textsuperscript{45} Breakdowns in childcare also exact several different types of direct costs for employers, including those associated with absenteeism and turnover. One majority-female employer in the Greater Dubuque area estimated that childcare issues caused 50\% of absenteeism.\textsuperscript{46} Across different studies, it is estimated that breakdowns in childcare cause between 5 to 9 missed days of work per year\textsuperscript{47}. In a 3-month period, 29\% of employed parents experience some kind of childcare breakdown, which are associated with absenteeism, tardiness, and trouble concentrating at work.\textsuperscript{48} In a national survey of 305 human resource executives representing more than 1 million employees, unscheduled absences for reasons such as childcare issues cost employers $610 (in 2004 dollars) per employee per year.\textsuperscript{49} Nationwide, childcare-related absenteeism costs businesses $4.4 billion in productivity losses\textsuperscript{50} and costs working families $8.3 billion in lost wages each year.\textsuperscript{51} Virtually all Americans believe family is the most important or one of the most important elements in their lives\textsuperscript{52}. It is unsurprising, then, that access to childcare plays a huge role in workers’ decisions to stay at a job. Among millennials -- who will comprise 75\% of the workforce in the next ten years\textsuperscript{53} -- 83\% report that they would leave their jobs in favor of one that provides more family-friendly benefits.\textsuperscript{54} The Center for Work-Life Policy found that the proportion of women who have left their career due to childcare issues increased from 45\% in 2004 to 74\% in 2009.\textsuperscript{55} In fact, the proportion of women who are stay-at-home mothers appears to be on the rise, increasing to 29\% in 2012, after declining for decades to a low of 23\% in 2009. Escalating costs of childcare are likely to be a major contributing factor\textsuperscript{56}; the cost of childcare has

\begin{thebibliography}{99}
\bibitem{43} Shellenback 2004
\bibitem{44} Shellenback 2004
\bibitem{45} Matthews, Russell and Horizons Work Consulting. \textit{"The Lasting Impact of Employer-Sponsored Child Care Centers."}
\bibitem{46} Interview (Sedgwick)
\bibitem{47} (Carillo, 2004, Emlen & Koren, 1984) via Hipp et al 2017
\bibitem{49} \textit{"Unscheduled Employee Absenteeism Rises to Five-Year High"}, 2004 CCH Unscheduled Absence Survey.
\bibitem{50} \textit{"Parents and High Cost of Childcare' 2017 Report"}, Child Care Aware of America,
\bibitem{51} Sarah Jane Glynn and Danielle Corley, \textit{"The Cost of Work-Family Policy Inaction"}, 2016, Centre for American Progress.
\bibitem{52} Anne Weisberg and Ellen Galinsky, \textit{"Family Matters The Business Case for Investing in the Transition to Parenthood,"} Families and Work Institute, 2014.
\bibitem{53} \textit{"This is what work-life balance looks like at a company with 100\% retention of moms"}, Quartz At Work, Oct 16, 2016.
\bibitem{54} Care@Work Better Benefits Survey, August, 2015. \url{https://www.care.com/careatwork}
\bibitem{55} \textit{"Time Outs - Take an Increasing Toll on Women’s Careers"}, American Management Association.
\bibitem{56} \textit{"Rising cost of child care may help explain recent increase in stay-at-home moms"}, Pew Research Centre, Apr 2014.
\end{thebibliography}
approximately doubled in the past 25 years\textsuperscript{57}.

In the Greater Dubuque Development Corporation’s 2017 survey of local employers, 24\% reported that their turnover rate was increasing over time\textsuperscript{58}. In light of the fact that the cost to replace a worker amounts to at least 20\% of an entry-level salary, not counting lost productivity, Dubuque-area employers are likely incurring huge losses from childcare-related turnover\textsuperscript{59}.

**Supporting access to childcare options could significantly increase retention rates.** After opening an onsite childcare center, Union Bank in California found that employees who used it had a 2.2\% turnover rate, compared to 9.5\% among employees who did not utilize the service. Children’s Healthcare of Atlanta, a healthcare provider, found that offering a benefits plan for dependents increased employee retention from 83\% to 89\%, eventually reaching its goal of 92\%. The options included subsidized, near-site childcare, back-up options for infants, and childcare credits\textsuperscript{60}.

### 4. Building a high-quality workforce for tomorrow

Employers recognize the importance of soft skills to employee success. Yet many indicate that lack of soft skills is one of their most pressing workforce-related challenges.\textsuperscript{61} In recent interviews, many Dubuque-area employers said that poor attitudes, low work ethic, and unexplained absenteeism and tardiness were common.

In research conducted by the Greater Dubuque Development Corporation, employers were asked to cite skills gaps observed in new hires. 55\% of employers named work ethic as a major skills gap, 50\% cited communication skills, and 38\% mentioned the ability to take initiative and do self-directed work. Surveyed CEOs rated workforce quality 3.96 out of 7.\textsuperscript{62}

Dubuque employers’ challenges reflect a nationwide problem. According to a nationwide survey of employers by Adecco Staffing, 92\% of senior executives believe there is a serious gap in workforce skills, with 44\% citing soft skills as the biggest gap\textsuperscript{63}. In another study of business decision-makers, 62\% indicated that they were having more difficulty finding candidates with social-emotional skills than technical skills. 55\% indicated that they were spending more resources to recruit candidates with the necessary social-emotional skills than in previous years.\textsuperscript{64}

This gap has serious implications for business: in the Adecco staffing study, 64\% of executives feared that the skills gap causes investment to flow to companies abroad instead of staying in


\textsuperscript{58} Greater Dubuque Development Corporation, “HR Action Dashboard”, FY 16-17.

\textsuperscript{59} “Workforce of Today, Workforce of Tomorrow: The Business Case for High-Quality Childcare”, Stevens 2017

\textsuperscript{60} Kimberly Gilsdorf and Fay Hanleybrown, “Investing in Entry-Level Talent: Retention Strategies that Work.” FSG, March 2017.

\textsuperscript{61} Interviews with Dubuque-area employers, March 2018.

\textsuperscript{62} Greater Dubuque Development Corporation, “HR Action Dashboard”, FY 16-17.

\textsuperscript{63} Adecco Staffing, “Mind the Skills Gap,” 2014.

the US, and 45% said that the skills gap forced businesses miss out on growth opportunities.65

Our typical response to skills gaps is to invest in training programs and K-12 and higher education. These interventions may help address more immediate workforce needs. But returns to early childhood education dwarf those of education and training later in life. A solid early foundation is necessary to ensure success in school and work. For businesses to stay abreast of sweeping changes in the workforce and economy, we need a longer-term strategy of investing in the human capital of the next generation of workers.

An extensive body of scientific research shows that critical social-emotional skills are developed during our earliest years of life, through quality early childhood experiences. Employers understand this: among decision-makers surveyed by Zogby Analytics, 90% believed that it is easier to develop soft skills in early childhood than after an employee enters the workforce.66 Soft skills, also known as “social-emotional” or “character” skills, consist of both intrapersonal and interpersonal skills that are critical for workplace success. Intrapersonal skills include self-motivation, responsibility, and being hardworking and dependable; interpersonal skills include relationship skills, communicating with others, and working well together.67

Social-emotional skills have been shown to be equally important as, or more important than, cognitive skills in determining personal achievement. They affect productivity, the ability to acquire new skills, and a range of behaviors that matter for performance in school and in the workplace.

It is now clear that provision of quality early childhood experiences is one of the most cost-effective investments for the economy, education system, and society. Studies consistently show that the economic benefits of investing in quality early childhood programs significantly outweigh the costs.

Yet spending on early childhood comprises only 3% of all education spending in the US, with 53% directed toward K-12, 39% to postsecondary education, and 5% to corporate training.68

Developmental gaps emerge early between disadvantaged children and their higher-income peers and are difficult to overcome through education and training.

As summarized in a 2017 US Chamber of Commerce Foundation report, “Many children enter school unprepared to succeed, and schooling largely cannot close initial gaps.”69

A range of long-term studies of early childhood programs, which follow individuals into their 20s

68 Stevens (2017)
69 Stevens (2017)
or beyond, have demonstrated that closing initial developmental gaps yield substantial returns to society and the economy.\textsuperscript{70} These returns typically range from 16-18%.

One evaluation of an early-childhood program serving low-income families in Chicago identified a total return to society of $10.83 per dollar invested (18\% annual return). This occurred primarily through increased earnings and tax revenues, and averted costs of the criminal justice system. Benefits were more pronounced among males, 1-year preschool participants, and children from higher risk families.\textsuperscript{71}

Another long-term study in Michigan measured the rate of return to individuals and society, and found total annual returns of 16\% (4\% for individuals and 12\% for the public). These returns manifested themselves primarily through increased earnings and reductions in crime, as well more efficient K-12 education (through reduced grade retention and higher achievement), and decreased welfare payments.\textsuperscript{72}

A randomized evaluation of the Perry Preschool Program followed children to age 40. It found that the program, a 2-year intervention for disadvantaged African-American children ages 3-4, boosted achievement test scores, school attainment, and social skills. Children receiving the program achieved higher test scores because they were more motivated to learn, a social-emotional skill developed through quality early childhood experiences.\textsuperscript{73} Students receiving the program had a 66\% high school graduation rate, compared to 45\% of the control group. Forty-nine percent performed at or above the lowest 10th percentile in the California Achievement Test at age 14 (compared to 15\% in the control group), and were significantly less likely to engage in illegal activities by age 40.\textsuperscript{74}

A wealth of research on early childhood programs shows that quality early childhood care has strong, sustained effects on children’s future employment outcomes. The social-emotional skills developed in early childhood enable individuals to achieve greater success as future members of the workforce. Children with strong prosocial skills are significantly more likely to have a full-time job and be stably employed 20 years down the line.\textsuperscript{75}

More broadly, access to childcare has direct implications for economic development. As noted by the Federal Reserve Bank of Minneapolis, “Any proposed economic development list should have early childhood development at the top.”\textsuperscript{76} In addition to the returns to economy and society discussed in the previous section, childcare access contributes to economic growth through two main pathways:

\textsuperscript{73} Heckman, J. “Skill Formation and the Economics of Investing in Disadvantaged Children.” Science 30 JUN 2006 : 1900-1902
\textsuperscript{75} Damon E. Jones PhD, Mark Greenberg PhD, and Max Crowley PhD. “Early Social-Emotional Functioning and Public Health: The Relationship Between Kindergarten Social Competence and Future Wellness” American Journal of Public Health (AJPH) November 2015
1. Affordable child care enables new workers to enter the workforce, particularly women. This directly contributes to increase in total employment and economic output.

2. As individuals enter the workforce, they demand additional child care services. This supports the growth of organized child care services.\(^{77}\)

Increases in female workforce participation have added $2 trillion to the US economy since 1970, and $14,000 to median family income\(^ {78}\). Childcare access is critical to continue supporting economic growth through labor force participation.

The labour force participation rate is also a key determinant of poverty rates and income. In general, states with higher labour participation rates have lower poverty levels\(^ {79}\). This is consistent with the fact that the children most affected by lack of access to quality childcare are low-income; 45% of young children are from families making below 200% of the federal poverty line. For such families, the cost of childcare tends to exceed 25% of a year’s income\(^ {80}\).

In the US, we view childcare as a private good for parents. However, market forces alone have been inadequate in providing quality childcare that is broadly accessible and affordable. Expanding childcare access will require broad recognition of the fact that quality early care and education yield significant long-term benefits to society, making childcare a public good as well.

We observe a market failure in provision of quality, affordable childcare for the following reasons\(^ {81}\):

1. Low quality: Government regulations require a low staff-child ratio to maintain quality. Childcare provision is highly labor-intensive; salaries constitute the biggest cost of running a childcare centre. In the childcare industry, there is limited scope for innovation or technological interventions to lower costs without reducing the number of staff. Most childcare workers are already paid a low wage and further reducing costs by lowering salaries would negatively affect quality.

2. Multiple consumers with different self-interests:
   a. Children need high quality care.
   b. Parents value quality, but the high cost of purchasing childcare and lack of information on quality of different options may compel them to prioritize cost and convenience over quality.
   c. Government is interested in long-term human development and positive externalities.

3. Short term focus: Markets and parents have a short-term focus while the biggest return of quality childcare is a long-term positive effect on human development.


\(^{80}\) Stevens (2017).
