

## Economic Impacts: Summary of Research

High-quality early education and preschool (often called **early childhood education, or ECE**) isn't just beneficial for children's development—research shows it has **measurable economic impacts** for individuals, families, communities, and society as a whole. Economists often frame this in terms of **return on investment (ROI)**, long-term cost savings, and contributions to economic growth through better workforce outcomes.

### Economic Returns and Cost-Benefit Evidence

#### High Returns on Investment

- Studies of programs like the **Child-Parent Center (CPC)** — a long-standing high-quality early education program — have found that for **every dollar invested**, society can receive **about \$7–\$11 in economic benefits over participants' lifetimes** through higher earnings, lower crime costs, and reduced need for special education or remedial services.
- Nobel laureate economist **James Heckman's work** shows that **birth-to-five high-quality programs can yield returns of around 13% per year** on investment — among the highest of any workforce or human capital development programs.

#### Detailed Benefit Categories

Economic benefits of high-quality early education include:

- **Higher lifetime earnings** for children who attend quality preschool, resulting in more tax revenue.
- **Lower societal costs** in areas such as criminal justice, welfare dependency, and healthcare.
- **Reduced educational costs**, including fewer repeat grades and less need for special education programs.
- **Better long-term employment outcomes**, supporting broader economic growth.

### Why These Economic Benefits Occur

#### Stronger Human Capital Formation

Early education helps children develop cognitive, language, and socio-emotional skills critical for success in school and later in life. Children who start school ready to learn are more likely to:

- Graduate from high school and attend college
- Achieve higher standardized test scores
- Be employed in higher-earning jobs

This builds **human capital**, increasing productivity and economic output over the long run.

#### Supports Families and Labor Markets

High-quality ECE also affects **parents' economic participation**:

- Access to preschool and child care enables **parents (especially mothers)** to join or remain in the workforce.
- Higher parental employment increases household incomes and broadens the tax base.

By reducing the burden of childcare costs, families can **spend more on other needs**, stimulating local economic activity.

## Cost of Inaction

Delaying or under-investing in quality preschool programs carries economic costs:

- Analyses suggest that failing to invest in universal, high-quality preschool in the U.S. could delay or forfeit **tens of billions of dollars in lifetime economic benefits** for cohorts of children.

## Broader Global and Policy Impact

- International policy reviews — such as those by the **World Bank** — are increasingly prioritizing early childhood investments, recognizing their potential to improve health, education, and economic outcomes in diverse contexts.

### Summary

Impact Area	Economic Effect
Individual earnings	↑ higher lifetime income
Public finances	↑ tax revenue from higher earnings
Social costs	↓ crime, welfare, special education expenses
Workforce participation	↑ parental employment
Economic growth	↑ productivity through stronger human capital

**In short:** high-quality early education and preschool deliver one of the most **cost-effective public investments** available, generating strong economic returns for participants and society — often outpacing returns from job training or later education interventions.

## Seminal Studies & Peer-Reviewed Research

### *Investing in Early Childhood Education: Economic and Social Returns*

A 2025 academic article synthesizes international research showing high returns from early childhood education (ECE).

- It summarizes evidence from multiple influential programs (e.g., Abecedarian, Perry Preschool).
- Estimated rates of return on high-quality ECE range from **7% to 18% annually**.
- Benefits include improved cognitive and socio-emotional skills, better school readiness, higher lifetime earnings, and reduced social costs like crime and welfare dependency.

### *The Rate of Return to the HighScope Perry Preschool Program*

A peer-reviewed economic analysis focused on the Perry Preschool program (targeted at disadvantaged children).

- It estimates annual **social rates of return between ~7% and 10%**, accounting for long-term earnings, reduced costs, and broader social impacts.

### *Investing Early: Economic Returns from Early Childhood Programs (RAND/Health Q synthesis)*

A systematic review of rigorous evaluations of more than 100 early childhood programs.

- Programs that improve child outcomes generally generate **positive economic returns** when benefits are monetized (e.g., better education and reduced social costs).
- The study covers a broad range of interventions, not just preschool classes, but it reinforces that well-designed early programs yield economic value.

## Influential Research & Estimates

*James Heckman's Human Capital Research* Nobel-winning economist James Heckman and colleagues have produced some of the most widely cited estimates on ECE returns:

- High-quality birth-to-five programs can deliver **~13% annual return on investment** through combined effects on earnings, health, employment, and reduced social costs.
- Earlier foundational work suggests benefits may range from **\$7 to \$13 in societal returns for every \$1 invested**, depending on the program and population studied.

**Chicago Child-Parent Centers (CPC) Cost-Benefit Analysis.** Longitudinal research on the CPC program reports substantial lifetime economic benefits:

- One study found that **each \$1 invested can yield around \$11 in benefits** in areas such as earnings, reduced crime costs, and lower special education expenses.

**Key Themes in the Academic Evidence** These provide *rigorous cost-benefit models* and are considered **top evidence in the economics of early childhood policy**.

#### High Returns Observable Over Time

- Multiple robust longitudinal and quasi-experimental studies show that **early investments pay off decades later** through higher educational attainment, better employment outcomes, and greater lifetime earnings.
- Reductions in crime, welfare use, and remedial education contribute significantly to economic returns.

#### Rich Data Across Populations

- Research includes both *targeted programs* (e.g., disadvantaged children) and broader evaluations, reinforcing that quality matters: **higher-quality programs produce stronger economic benefits**.

#### Economic Mechanisms

- Returns reflect a combination of **human capital formation** (skills that raise productivity and wages), **reduced public spending**, and **increased tax revenues** due to better lifetime incomes.

#### Academic Papers

1. “The Rate of Return to the HighScope Perry Preschool Program” – *Journal of Public Economics*.
2. “Investing Early: Taking Stock of Outcomes and Economic Returns from Early Childhood Programs” – *RAND Health Q*.
3. “Investing in Early Childhood Education: Economic and Social Returns” – *International Journal of Research* (2025).

#### 1. Investing in Early Childhood Education: Economic and Social Returns (2025)

**Summary:** This article reviews international evidence showing that high-quality early education yields *substantial long-term economic and social benefits* far exceeding costs, including increased earnings and reduced social costs like crime and welfare dependency. Available directly on the journal site (click “*Download Article (PDF)*”).  
<https://www.academicpublishers.org/journals/index.php/ijai/article/view/6072>

#### 2. Perry Preschool Study — HighScope Longitudinal Results

**Summary:** This landmark program (1962–1967) followed children into adulthood and measured lifetime outcomes including education, earnings, crime reduction, and public cost savings.

- **ROI Data:** It reports a return of **~\$12.90 per \$1 invested**, with major savings from reduced crime costs, higher earnings taxes, and lower welfare/education costs.
- **Download Longer Report via HighScope:** Scroll down to “*Download the Longitudinal Study*”.  
<https://highscope.org/research/>

#### 3. Oecd Reports on Early Childhood (Quality & Equity)

**Quality Early Childhood Education Report – PDF available from OECD**

[https://www.oecd.org/en/publications/quality-early-childhood-education\\_cd5ca149-en/full-report/component-2.html](https://www.oecd.org/en/publications/quality-early-childhood-education_cd5ca149-en/full-report/component-2.html)

**Reducing Inequalities by Investing in Early Childhood Education and Care – also PDF**

[https://www.oecd.org/en/publications/reducing-inequalities-by-investing-in-early-childhood-education-and-care\\_b78f8b25-en/full-report.html](https://www.oecd.org/en/publications/reducing-inequalities-by-investing-in-early-childhood-education-and-care_b78f8b25-en/full-report.html)

These OECD reports include **data on socioeconomic impacts, effects on inequality, and economic rationales for public investment**

**4. Heckman-Led Papers on Perry Preschool Economic Returns**

The classic peer-reviewed paper (Heckman et al.) *quantifies the social rate of return* — a key source for economic impact estimates. [https://www.researchgate.net/publication/222652255\\_The\\_Rate\\_of\\_Return\\_to\\_the\\_HighScope\\_Perry\\_Preschool\\_Program](https://www.researchgate.net/publication/222652255_The_Rate_of_Return_to_the_HighScope_Perry_Preschool_Program)

This Heckman et al. paper estimates **social rates of return around 7–10% annually** and includes numerous technical details for economics citations.

**“Exceptional Returns: Economic, Fiscal, and Social Benefits of Investment in Early Childhood Development”** — *Economic Policy Institute*

**NBER Working Papers by Heckman & Colleagues** (e.g., *A New Cost-Benefit and Rate of Return Analysis for the Perry Preschool Program*).