

Public Investment in Children's Early and Elementary Years (Birth to age 11)

Jennifer Macomber, Urban Institute

Julia Isaacs, Brookings Institution

Tracy Vericker, Urban Institute

Adam Kent, Urban Institute



The Urban Institute

BROOKINGS

Public Investment in Children's Early and Elementary Years

(Birth to Age 11)

Jennifer Macomber, Urban Institute
Julia Isaacs, Brookings Institution
Tracy Vericker, Urban Institute
Adam Kent, Urban Institute

March 2010

The Urban Institute and The Brookings Institution

Copyright © 2010. The Urban Institute. All rights reserved. Except for short quotes, no part of this report may be reproduced or used in any form or by any means, electronic or mechanical, including photocopying, recording, or by information storage or retrieval system, without written permission from the Urban Institute.

The Urban Institute is a nonprofit, nonpartisan policy research and educational organization that examines the social, economic, and governance problems facing the nation. The views expressed are those of the authors and should not be attributed to the Urban Institute, its trustees, or its funders.



CONTENTS

Acknowledgments	v
Abbreviations	vii
Introduction and Key Findings	1
How Much Do We Invest in Children at Different Ages?	3
How Does Federal Spending Compare with State and Local Spending?	5
How Does the Federal Government Invest in Each Age Group?	7
Health	7
Nutrition	8
Education and Social Services	9
Income Support	9
Housing	9
What Portion of Federal Resources Is Targeted toward Lower-Income Children? ..	11
Are We Funding what Children Need When They Need It Most?	13
The Next Set of Questions	15
Investment by age	15
Government role	16
Investment type	16
Extent of targeting	16
Analysis Methods	18
References	20



ACKNOWLEDGMENTS

We are grateful to the Foundation for Child Development for sponsoring this research. This work was also supported by the Strategic Knowledge Fund, co-funded by the Foundation for Child Development and the W.K. Kellogg Foundation. This work expands upon the groundbreaking work of Rebecca L. Clark, Rosalind Berkowitz King, Christopher Spiro, and C. Eugene Steuerle in *Federal Expenditures on Children: 1960–1997* (Washington, D.C.: Urban Institute, 2000, Assessing the New Federalism Occasional Paper 45) and, more recently, the work of Adam Carasso, C. Eugene Steuerle, and Gillian Reynolds in developing *Kids' Share 2007: How Children Fare in the Federal Budget* (Washington, D.C.: Urban Institute, 2007) and *Kids' Share 2008: How Children Fare in the Federal Budget* (Washington, D.C.: Urban Institute, 2008) and the work of Julia Isaacs, Tracy Vericker, Jennifer Macomber, and Adam Kent in developing *Kids' Share: Analysis of Federal Expenditures on Children Through 2008* (Washington, DC: Urban Institute, 2009). In addition, a recent report *Federal Expenditures on Infants and Toddlers in 2007*, by Jennifer Macomber, Julia Isaacs, Tracy Vericker, Adam Kent, and Paul Johnson, provided a valuable foundation for this work. We also thank Paul Johnson for his help with the analysis and those who reviewed the report and offered many helpful insights, including Ajay Chaudry, Olivia Golden, and Jane Hannaway. We are also very grateful to Serena Lei for her assistance editing this brief.



ABBREVIATIONS

CCDBG, Child Care and Development Block Grant

CTC, child tax credit

EITC, earned income tax credit

IDEA, Individuals with Disabilities Education Act

SNAP, Supplemental Nutrition Assistance Program

TANF, Temporary Assistance to Needy Families

WIC, Special Supplemental Nutrition Program for Women, Infants, and Children



INTRODUCTION AND KEY FINDINGS

How government spends money, and who benefits, reveals our priorities. How, then, do children fare in the competition for public resources? While families have long been the primary caregivers of children, all levels of government—local, state, and federal—invest in the growth and development of children, whether through education, family supports, or health and nutrition benefits. Knowing how that money is spent, and whether it is being put to good use, is crucial for creating effective public policy.

To track government's investment in children, the Urban Institute and the Brookings Institution have documented historical, current, and projected levels of federal expenditures across more than 100 programs serving children (Isaacs et al. 2009; Carasso et al. 2008). More recently, we have looked in-depth to highlight federal investment by age group. Analyses by age allow us to evaluate spending in light of what we know about child development and about policy priorities. They also reveal which federal programs and categories dominate spending for each age group. Federal officials and the interested public may not know which programs spend more or less on different groups of children. As part of these reports, we also integrate estimates of state and local spending from a report by researchers at the Rockefeller Institute (Billen et al. 2007).

Our goal is to identify patterns of public investment in children by levels of government and across age groups. We cannot answer what amount of spending would be best for the country. We do, however, offer some context based on child development research. In doing so, this brief provides an overarching view of investments in children and illuminates critical decision points and questions for policymakers.

In this brief, we look at public investments across age groups, from birth through the elementary years. Key findings include the following:

- *Total public investment grows substantially as children get older.* Spending more than doubles per capita between the infant and toddler years and the elementary years. The increase is driven by growing state and local spending; the federal contribution is relatively stable across age groups. Research on children, however, finds significant value in investing in kids at the earliest ages, helping them build a foundation for growth and development.
- *States and localities spend more money than the federal government does on children, except when it comes to the youngest children.* The federal government is the junior partner in public investments for children overall. For the youngest children, however, more than three quarters of spending comes from the federal government. This pattern suggests that the fiscal health and priority choices of all levels of government matter when it comes to investment in children.
- *Key developmental needs, such as education and health care, are addressed to some extent by the federal government for each age group.* Across



age groups, the largest federal investment is in tax credits and other tax expenditures. On the spending side, the largest federal investments vary by age group, but some of the key players across age groups are Medicaid, food and nutrition programs, and Temporary Assistance to Needy Families (TANF). Only one education and social service program (the Child Care and Development Block Grant) breaks the top 10 largest federal programs for infants and toddlers, despite research showing how important early care and education are for this age group.

- *Federal expenditures for children become less targeted or means tested (that is,*

based on income), as children get older.

Methods for our analysis are described later in this report and in greater detail in our specific age-group reports (Kent et al. 2010; Macomber et al. 2009; Vericker et al. 2010). A few points are worth noting, however. Estimates of total public expenditure and those comparing federal with state and local expenditures are only for 2004 and do not include tax expenditures, due to limitations in available state data. For the more in-depth look at spending on federal programs alone, we provide 2008 data and are able to include tax expenditures.



HOW MUCH DO WE INVEST IN CHILDREN AT DIFFERENT AGES?

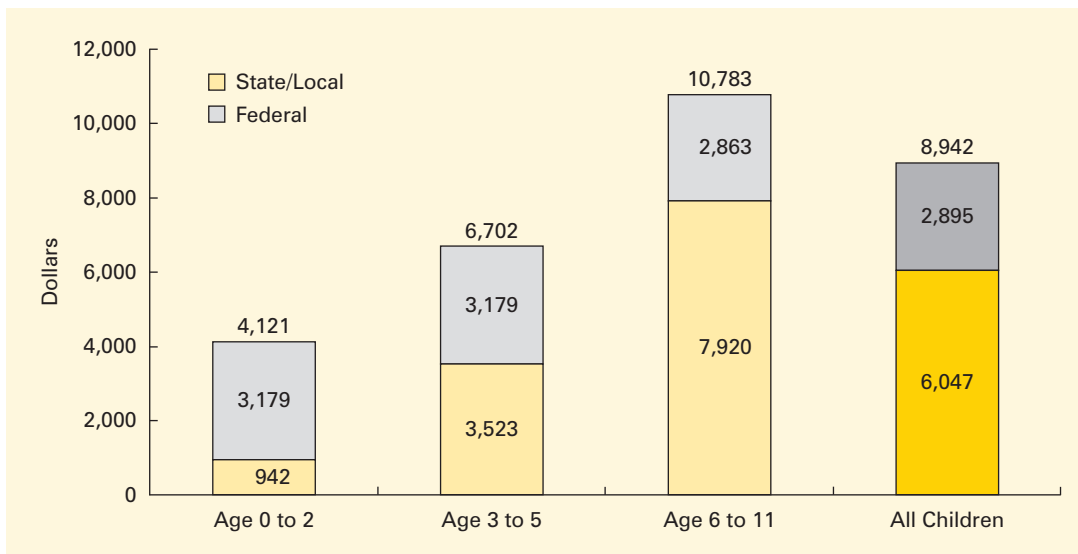
Public investment in children, not including tax expenditures, grows substantially as children reach their elementary school years, according to the most recent data available from 2004 (figure 1). The youngest children—infants and toddlers—receive the least in government spending. At this time, we do not have estimates specifically for youth (age 12 and older). The estimates we provide for “all children,” however, cover all children and so indirectly include youth:

- The nation invested roughly \$4,121 per infant and toddler in 2004.
- Pre-kindergartners and kindergartners received somewhat more, an average of \$6,702 per child.
- By the time children are elementary age, the public investment goes up to \$10,783 per child, on average.

- For all children, the average public investment was \$8,942 per child in 2004.

The differences across age groups are largely due to variation in state and local spending. Spending goes up as children start school and costs for their education rise. According to the Rockefeller Institute’s research, 90 percent of

FIGURE 1. Per Capita Public Spending on Children by Age, 2004



Source: Urban Institute and Brookings Institution 2010. Authors’ estimates are based on the *Budget of the United States Government, Fiscal Year 2010* and Billen et al. 2007.

Note: Tax expenditures are not included at either the federal or the state and local level.



state and local spending on children is on elementary and secondary education (Billen et al. 2007). The federal contribution to per capita spending is similar for each age group, around \$3,000 per child (although, as described below, the programs that make up the federal portion differ somewhat for each age group).

A couple of caveats are important to keep in mind. First, we do not have findings for youth (ages 12 and older). We might assume spending for youth is roughly the same as spending on children age 6 to 11, as both groups receive education funding at the state and local level, but for this brief, the pattern we observe follows only spending on children through their elementary years.

Second, these findings reflect averages across children in a particular age group—they do not tell us about spending for individual children. For example, a low-birth-weight infant on Medicaid will likely have far higher per capita spending than a normal-birth-weight child would. Similarly, because state and local spending is heavily focused on public education, children not in public schools likely receive less public funding than the average, regardless of their age. Or in the case of youth, those who drop out of school would receive less public funding than the average for their age. Per capita state and local spending on education and other services also differs considerably by state or locality.

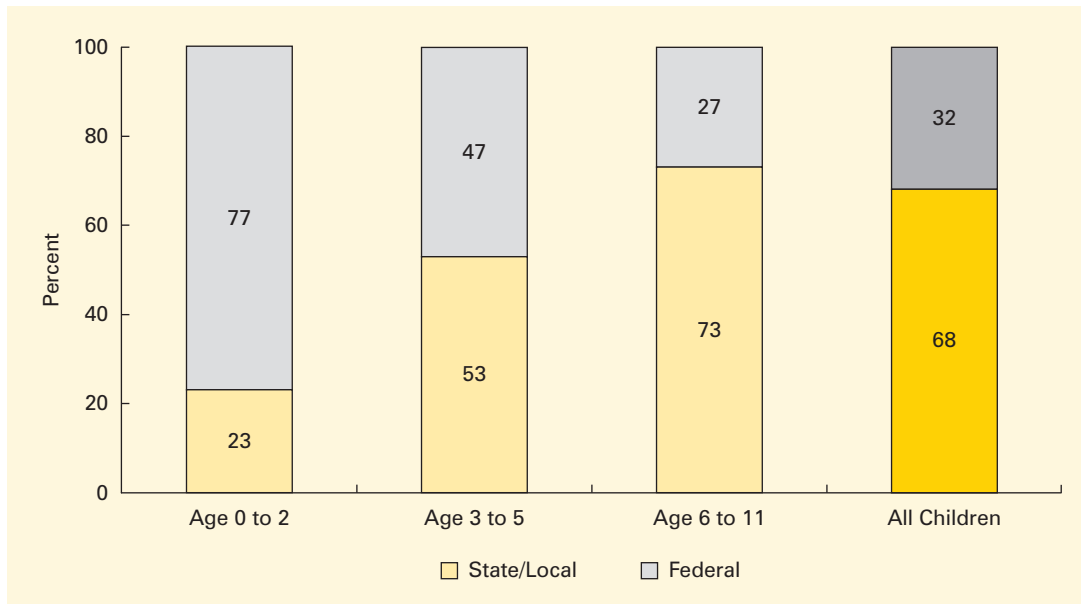


HOW DOES FEDERAL SPENDING COMPARE WITH STATE AND LOCAL SPENDING?

On average, the federal government is the junior partner in total investments (not including tax expenditures) in children. As figure 2 illustrates, about two-thirds of estimated public spending on children in 2004 came from state and local governments, compared with roughly one-third from the federal government. For the youngest children, however, the picture is reversed:

- For infants and toddlers, the federal government contributes more than three-fourths (77 percent) of the total investment, while states and localities play a much lesser role.
- For pre-kindergartners and kindergartners, the federal government and state and local governments each contribute about half, 47 and 53 percent, respectively.

FIGURE 2. Portion of Federal and of State and Local Spending on Children by Age, 2004



Source: Urban Institute and Brookings Institution 2010. Authors' estimates are based on the *Budget of the United States Government, Fiscal Year 2010* and Billen et al. 2007.

Note: Tax expenditures are not included at either the federal or the state and local level.



- By the time children are elementary age, state and local governments are providing the vast majority of the investment (73 percent), relative to the much smaller portion provided by the federal government (27 percent).

Higher federal spending on infants and toddlers is driven primarily by programs such as WIC (Special Supplemental Nutrition Program for Women, Infants, and Children), SNAP (Supplemental Nutrition Assistance Program) (formerly food stamps) child care assistance, and the federal share of Medicaid. At the same time, education spending, a substantial cost for older children, occurs mostly at the state and local level. Overall, the patterns suggest that the fiscal choices of *all* levels of government matter for investment in children—compared with other government functions that may be largely the responsibility of just one level of government.

The considerable amount that state and local governments spend to support children may be jeopardized by the recession-triggered budget crises facing many states. As of November 2009, at least 48 states had addressed or encountered FY 2010 budget shortfalls totaling \$190 billion

or 28 percent of state budgets (McNichol and Johnson 2009). As states and localities find ways to bridge these deficits, programs critical to children's future success could be compromised. At the same time, through the American Recovery and Reinvestment Act, the federal government did make substantial investments in many children's programs, in particular education, to avert such cutbacks.

Besides the budgetary implications, there are also potential operational implications as a result of the mix of federal, state, and local funding for children. These implications can be hard to tease out because a program's funding, operational responsibility, and the policy context shaping it may reside at different levels of government. It may, for example, be challenging to link federally funded health programs to state or local education programs. Policymakers also may think deliberately about creating smooth transitions between federally funded initiatives for younger children (such as Head Start) and state-funded initiatives for school-age children (such as K–12 education). Links between programs can ensure that children are seamlessly supported as they grow up.



HOW DOES THE FEDERAL GOVERNMENT INVEST IN EACH AGE GROUP?

The federal government makes a substantial investment in children through tax expenditures, which provide income support to families with children. (As noted above, federal tax expenditures on children are not included in the total investments shown in figures 1 and 2, because comparable estimates of state and local tax expenditures are not available.) The leading tax programs are the child tax credit (CTC), the Earned Income Tax Credit (EITC), and the Dependent Exemption (table 1). In 2008, the CTC was somewhat larger due to a one-time \$300 per child credit authorized under the Bush administration.

For every age group, the CTC is about evenly split between a tax reduction and a refundable credit, where families receive a cash payment if their tax liability is less than zero. The majority of EITC expenditures are for the refundable portion, with a small share in each age group going toward tax reductions.

The Dependent Exemption, a tax provision that reduces taxes for families with children, is also included in this analysis as a key expenditure on children. In contrast to the EITC, which is targeted to lower-income families, it provides a higher benefit to families in higher tax brackets.

On the spending side, the largest federal investments differ for each age group (table 1), although all children receive some investments in such important developmental areas as health, nutrition, and education.

Health

Medicaid is a consistent source of spending across age groups, but expenses are particularly high for infants and toddlers. For the youngest children, in

fact, Medicaid is the largest single federal investment, larger than any of the tax programs:

- In 2008, \$14.3 billion in Medicaid resources was spent on infants and toddlers, or an average of \$1,118 per child.
- Pre-kindergartners and kindergartners received less than half (\$497) the per capita costs of younger children.
- Spending on school-age children was roughly the same, averaging \$462 per child.

The cost difference can be explained by higher medical costs for very young children and the legal requirement that states have more expansive Medicaid eligibility rules for pregnant women and infants. Medicaid and other health programs represented fully 28 percent of federal expenditures on infants and toddlers in 2008 and therefore a large portion of the overall public investment in this age group. Medicaid's prominence in the total spending on children has been enhanced by the program's caseload growth between 2001 and 2007 (Dorn 2008).



TABLE 1. Ten Largest Federal Expenditure Programs on Children by Age, 2008

Infants and toddlers birth to age 2 ^a			Pre-kindergartners and kindergartners ages 3 to 5 ^a			Elementary-age children ages 6 to 11 ^a		
Total in Billions (\$) (Per Capita)			Total in Billions (\$) (Per Capita)			Total in Billions (\$) (Per Capita)		
1	Medicaid	14.3 (1,118)	1	CTC ^b	10.9 (886)	1	CTC ^b	21.4 (896)
2	CTC ^b	10.8 (849)	2	EITC	8.2 (663)	2	EITC	13.5 (566)
3	EITC	9.8 (768)	3	Head Start	6.2 (501)	3	Medicaid	11.0 (462)
4	Dependent Exemption	4.8 (376)	4	Medicaid	6.1 (497)	4	Dependent Exemption	10.0 (422)
5	WIC	4.5 (350)	5	Dependent Exemption	5.0 (405)	5	Education for the Disadvantaged	8.2 (346)
6	SNAP	4.3 (338)	6	SNAP	4.0 (326)	6	Child Nutrition	7.1 (297)
7	TANF	2.7 (214)	7	TANF	2.4 (196)	7	SNAP	6.4 (267)
8	Medicaid—Vaccines for Children	2.0 (155)	8	CCDBG	1.9 (156)	8	Social Security	4.9 (205)
9	CCDBG	1.7 (132)	9	IDEA	1.9 (151)	9	IDEA	4.5 (188)
10	Section 8 Housing	1.6 (127)	10	Section 8 Housing	1.8 (147)	10	TANF	4.0 (168)

Health Housing Income Security Taxes Food / Nutrition Education / Social Services

Source: Urban Institute and Brookings Institution, 2010; authors' estimates based on the *Budget of the United States Government, Fiscal Year 2010*.

(a) For infants and toddlers, the tax programs divide into the refundable portion and the reduction in taxes portion, respectively: CTC (\$5.9 / \$4.9), EITC (\$8.8 / \$1.0). For pre-kindergartners and kindergartners, the tax programs divide into the refundable portion and reduction in taxes portion, respectively: CTC (\$5.9 / \$5.0), EITC (\$7.3 / \$9). For elementary-age children, the tax programs divide into the refundable portion and the reduction in taxes portion, respectively: CTC (\$11.6 / \$9.7), EITC (\$12.1 / \$1.4). The dependent exemption expenditures are all through reductions in taxes.

(b) Due to the 2008 \$300 CTC credit passed to stimulate the economy, the refundable portion of the CTC is particularly large in 2008.

Nutrition

The high level of federal investment in nutrition programs is striking across age groups, a contribution not always well known to children's policy experts. SNAP consistently spends around \$300 per child from birth to age 11, although spending does decrease slightly as children get older. SNAP may be especially prominent now because of the effect of the recession; participation rates among eligible individuals have also increased significantly in recent years, growing 12 percent between 2002 and 2007 (Leftin and Wolkwitz 2009).

Other nutrition programs like WIC, which supports pregnant mothers and babies, and the Child Nutrition program, which provides nutri-

tious meals and snacks to kids during school, also make contributions:

- For the youngest children, the WIC program provided \$4.5 billion to infants and toddlers in 2008, or an average of \$350 per child.
- For pre-kindergartners and kindergartners, the Child Nutrition program provided \$1.7 billion, or about \$140 per child. While this program played a considerable role in 2008, it was just shy of the top 10 programs for this age group (table 1).
- For elementary-age children, the Child Nutrition program provided \$7.1 billion in 2008, which represents \$297 per child in this age group.



Education and Social Services

Although states and localities play the primary role in funding education, federal investments are still important for each age group examined. Head Start plays a significant role for pre-kindergartners and kindergartners, with \$6.2 billion spent in 2008, or about \$501 per child.

The federal government also invests in child care for children through the Child Care and Development Block Grant (CCDBG). In 2008, \$1.9 billion was spent on 3–5 year-olds through CCDBG, or about \$156 per child. For infants and toddlers, CCDBG is the only education and social service program that makes the list of top 10 largest federal programs for this age group. Through the grant, \$1.7 billion, or \$132 per child, was invested in infants and toddlers in 2008. Although subsidies from the grant support parents' work, many experts say it could do more to support children's early development (Adams and Rohacek 2002; Boots, Macomber, and Danziger 2008). Researchers also point out that the supply of quality child care for infants and toddlers is inadequate in low-income communities (Gordon and Chase-Lansdale 2001; Collins, Layzer, Kreader, Werner, and Glantz 2000; Matthews and Schumacher 2008). The American Recovery and Reinvestment Act of 2008 included \$93.6 million for activities to improve the quality of care for infants and toddlers (Center for Law and Social Policy 2009).

Federal investment in children with disabilities is made through the Individuals with Disabilities Education Act (IDEA). In 2008, the federal government spent \$1.9 billion on pre-kindergartners and kindergartners through IDEA, or an average of \$151 per child. Elementary-age children received \$4.5 billion, or \$188 per child, of federal investment through this program.

The federal government also supports elementary-age children by providing resources to states and localities based on the population of poor children through the Education for

the Disadvantaged program (\$8.2 billion, \$346 per child).

Income Support

The federal government provides most of its income support through tax credits and reductions, but it also offers financial assistance through the Temporary Assistance for Needy Families program. The program supports children in all age groups, particularly very young children, who are more likely to be poor and therefore to live in families eligible for TANF:

- In 2008, \$2.7 billion was expended through TANF for infants and toddlers, or \$214 per child, in this age group.
- Spending for pre-kindergartners and kindergartners went down slightly to \$2.4 billion, or an average of \$196 per child.
- TANF costs for elementary-age children were \$4.0 billion, or \$168 per child, in 2008.

For elementary-age children, Social Security is also a relatively substantial contributor to income security. The program provides cash benefits to eligible children of a retired or deceased worker who was insured at the time of death. The benefit amount is based on the worker's earnings history. In 2008, Social Security spent \$4.9 billion, or \$205 per child, on elementary-age children. Younger children are less likely to receive benefits from this program as their parents are often younger and therefore less likely to be deceased or to have lengthy earnings histories.

Housing

Section 8 Housing programs also make investments in children of all age groups:

- In 2008, \$1.6 billion, or \$127 per child, was spent on infants and toddlers.
- This investment increases slightly for pre-kindergartners and kindergartners to \$1.8 billion, or an average of \$147 per child.



- A comparable investment in Section 8 Housing was made in elementary-age children (\$3.5 billion or \$148 per child), but this program was not one of the 10 largest federal programs for this age group (table 1).

While housing might not typically be thought of as a support for children's development,

research has documented the importance of stable housing to children, particularly young children (Chang and Romero 2008; Haveman, Wolfe, and Spaulding 1991; Joydeep, Maynard, and Weiss 2008). In addition, research also indicates benefits, particularly for girls, of federal programs that offer families the opportunity to live in safer, low-poverty neighborhoods (Gallagher and Bajaj 2007; Orr et al. 2003).



WHAT PORTION OF FEDERAL RESOURCES IS TARGETED TOWARD LOWER-INCOME CHILDREN?

The child poverty rate was 19 percent in 2008, up from 18 percent in 2007 (U.S. Census Bureau 2008, 2009). Children under age 5 have the highest rates of poverty among children (U.S. Census Bureau 2008, 2009). Just above this group in income, 41 percent of children live in low-income families that struggle to make ends meet and have incomes under twice the poverty line, or about \$44,100 for a family of four (Wight and Chau 2009). To reach these children, the government can target resources to them by linking program eligibility to family income, or “means testing” a program.

The federal government targets most expenditures to low-income children, particularly younger children (figure 3). For some programs, such as Medicaid for infants, this targeting reaches low- and moderate-income families that still struggle to afford health coverage for their children; for other programs, the targeting is more narrowly focused on poor children. Public resources become broader based as children reach elementary age:

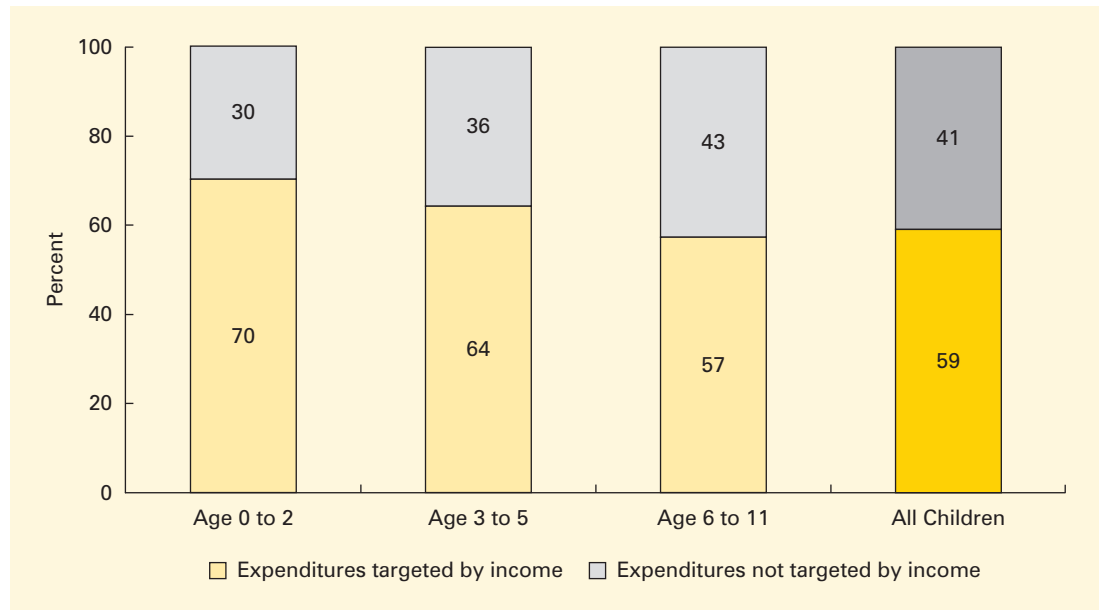
- For infants and toddlers, 70 percent of federal spending is means tested.

- Means testing declines to 64 percent for pre-kindergartners and kindergartners.
- For elementary-age children, means testing falls to 57 percent of federal spending.

For infants and toddlers, this higher portion is driven by Medicaid, which is means tested and is a significant source of expenditures for this age group. For older children, the larger role of Social Security, education programs that are not means tested, and the lesser role of Medicaid contribute to the lower percentage of targeted resources.



FIGURE 3. Percentage of Federal Expenditures on Children Targeted by Income by Age, 2008



Source: Urban Institute and Brookings Institution 2010; authors' estimates based on the *Budget of the United States Government, Fiscal Year 2010*.



ARE WE FUNDING WHAT CHILDREN NEED WHEN THEY NEED IT MOST?

Although the country invests more in children as they age, research suggests a great need for spending on younger children to help them build strong foundations. Each early developmental stage contributes to the next, ultimately constructing the foundation for future learning, relationships, and overall health. Similarly, experts emphasize that investments early in life rarely succeed if they are made as “one-shot” efforts. The key is to build on interventions and investments throughout a child’s and young person’s development (Zigler 1998; Reynolds, Magnuson, and Ou 2006).

The infant and toddler years lay a critical foundation for future cognitive and socio-emotional development. During the first years of life, a child’s brain grows significantly in size and architecture, and the relationships children form with caregivers create a template for future relationships (Ainsworth 1985; Bowlby 1969; Center on the Developing Child 2008). Between the ages of 3 and 5, children develop complex social and emotional capabilities, as well as problem-solving and preliteracy skills, building on skills attained in infancy (Center on the Developing Child 2007). In the early elementary years, children learn math and reading skills and continue to build the capacity to be self-reflective and to self-regulate (Shonkoff and Phillips 2000).

Policies that overlook the importance of the links between developmental stages may miss an opportunity. For example, education reforms focused just on middle and high school may rest on a shaky foundation. Child development experts note that “reinforcing this foundation requires a rigorous focus on the stretch of years from PreK to Third Grade, when children acquire

the cognitive, social, and academic skills that undergird later learning” (Shore 2009). As for nutrition, however, a child’s early years are recognized as a foundation for later growth and development. The WIC program, which provides nutritional services for low-income women, infants, and very young children at nutritional risk, “is based on the premise that early intervention programs during critical times of growth and development can help prevent future medical and developmental problems” (Oliveira and Frazao 2009).

Notable economists have also been documenting the value of investing in children when they are younger. Nobel Prize-winning economist James Heckman suggests that investing in disadvantaged children early has high rates of return that promote productivity in the economy and society at large (Heckman 2006). Federal Reserve economists Rob Grunewald and Arthur Rolnick describe returns on investment in early education as “extraordinary whether compared to most dollars invested in conventional economic development or even to opportunities in the private sector” (2006, 4).



Research also shows that counteracting poverty when children are young has substantial economic benefits for families and society (Duncan, Kalil, and Ziol-Guest 2008). Extreme poverty can weaken a child's brain architecture by inhibiting the development of neural connections (Center on the Developing Child 2008). Hart and Risley (2003) estimate that by age 4 the language experiences between children of higher and lower socioeconomic status differ by 30 million words, setting the stage for persistent achievement gaps.

Yet children under age 6 are among the poorest of children (Fass and Cauthen 2008). Census

data from 2008 indicate that 5.5 million, or roughly one child in five under age 6 (22 percent), lived in poverty, defined as families with income below 100 percent of poverty. There are many reasons young children may be among the poorest. Providing for infants is very costly. Parents may face high child care expenses or reduced income if they stop working to care for a child. Parents may be young when their children are born, and their earning potential is still relatively low. Finally, immigrant children, who experience relatively high rates of poverty, account for a large portion of young children under age 6 (22 percent) (Urban Institute 2006; Fass and Cauthen 2008).



THE NEXT SET OF QUESTIONS

This brief highlights several important patterns within the country's public investment in children:

- First, the government spends more money on children as they get older, with spending more than doubling per capita from the infant and toddler years to the elementary years. Child development research, however, stresses the importance of investing in high-quality education and child care at the earliest ages to help kids build a strong foundation. The spending increase is driven by growing state and local spending, as the federal contribution is relatively stable across age groups.
- Second, the federal government spends less on children than states and localities, except in the case of infants and toddlers, where more than three quarters of spending comes from the federal government. This pattern suggests that fiscal choices of *all* levels of government matter to investment in children.
- Third, for each age group in this analysis, the largest federal investment is in tax credits and other tax expenditures (although for infants and toddlers, Medicaid is larger than any single tax initiative). On the spending side, the largest federal investments vary by age group, although investments in key developmental needs are made, to some extent, for all age groups.
- Fourth, federal expenditures for children become less targeted based on income as children get older.

Each of these patterns, especially when viewed in light of current research discussed in this brief,

raises critical questions—both when future investments in children are under consideration and as the country faces difficult budget decisions in the years ahead.

Investment by Age

Are we adequately investing in children to meet their developmental needs at every age? Are we investing in the right programs and initiatives to ensure a strong future workforce and engaged citizenry?

In 2004, total public investments in the elderly were estimated to be \$21,904 per elderly person, which is five times what was spent per infant and toddler, three times what was spent per pre-kindergartner and kindergartner, and twice what was spent per elementary-age child (Isaacs 2009). A significant factor in the greater spending on the elderly, however, is health care costs, which are substantially higher for this population. Policymakers and budget experts might look at these numbers in several ways. They might ask whether these spending allocations are the most prudent way to invest resources across the lifespan, particularly as spending on the elderly is projected to rise yet further. And they might see these numbers as reflecting an important accomplishment (for example, the role of Social Security in reducing poverty among the elderly and the role of Medicare in providing universal health coverage) and seek to under-



stand how to expand on these accomplishments to reach children.

In addition, considering the value of investing in very young children, especially those in poor families, should infants and toddlers receive government's lowest level of investment? And, if not, what is the right balance of investment by age?

Policymakers might examine why current investment patterns have evolved as they have, whether changes are needed to better align with child development research, and what the barriers might be to making such changes. They might also consider how investments could be best targeted to each developmental stage, from early childhood through adolescence, and linked across developmental stages.

Government Role

How might budget and policy decisionmaking about children consider the fiscal health and priorities of all levels of government? Should the federal government have a role in balancing out state and local disparities in spending on certain age groups as well as disparities among different geographical areas?

In addition, how does the combination of federal and state and local resources and the shift from federal to state and local resources affect children as they age? For example, K–12 education is primarily funded by states and localities, while education for the most disadvantaged young children is funded in part by the federal government through Head Start, with national standards and community-level service delivery. What lessons can be learned about continuity from this and other examples?

Investment Type

A look at the major spending programs across age groups suggests that government generally addresses key developmental areas, such as education and health, for each age group. But are we investing the right amount and in the right pro-

grams for each age group? Does our spending match developmental need?

Policymakers may want to consider adjusting for the lack of a leading education or social services program for infants and toddlers. The recent American Recovery and Reinvestment Act of 2009, however, did increase Early Head Start resources by \$1.1 billion. In 2008, Early Head Start expenditures totaled \$693 million.


Policymakers may also want to consider investments in children of immigrants, as they represent a substantial portion of the child population and, hence, the future workforce.

Extent of Targeting

From this analysis, we cannot say what would be the best balance between targeted and nontargeted expenditures. Is it better to invest in the development of all children, focus more resources on the most vulnerable, or seek a balance? Budget expert Julia Isaacs points out that for two of children's critical needs—health and education—the government takes two different approaches. Public investment in health care for children is currently means tested, although reaching well up the income spectrum, but much education funding is not; yet both are critical to child development. (Should a national health insurance program pass Congress this year, it will provide yet another model of federal, state, and private funding designed to achieve universal coverage while targeting public funds on the most vulnerable.) Part of this discussion should also include the extensive role universal tax programs play in expenditures on children.

This study lends itself to broader questions, too—not just those about spending on children but also those about spending across the age spectrum. How should we define our choices? What are the country's investment priorities?

As the recession lingers, baby boomers retire, and entitlement programs grow automatically, policymakers will face hard budget decisions. Children have not always been prominent in these decisions, as evidenced by the country's



investments. Latest data reveal that less than one-tenth of the federal budget was spent on children in 2008, \$295 billion out of a total of \$2,983 trillion in outlays (Isaacs et al. 2009). Moreover, since 1960, the children's share of the federal budget has declined by a quarter, while spending on the share devoted to the nonchild portions of Social Security, Medicare, and Medicaid has more than doubled (Isaacs et al. 2009).

At the same time, a productive workforce will be essential to supporting the aging baby boomers and addressing the growing national debt. Thus,

monitoring the country's investment in children—their education, health, and nutrition—becomes critical. It will be up to policymakers to answer some of these tough questions and make hard choices when determining the country's future spending priorities. The patterns illuminated in this brief provide policymakers and legislators a first-time opportunity to do this—to step back and consider current patterns of investment in children, determine whether they reflect the country's priorities for future investments, and, if not, decide what needs to be changed.



ANALYSIS METHODS


For this brief, we assembled findings from two of our age-specific reports: *Federal Expenditures on Pre-kindergartners and Kindergartners in 2008* (Kent et al. 2010) and *Federal Expenditures on Elementary Age Children in 2008* (Vericker et al. 2010). We also incorporate 2008 analyses for infants and toddlers, which build on an earlier report, *Federal Expenditure on Infants and Toddlers in 2007* (Macomber et al 2009).

The basic methodology for estimating federal expenditures on children involves a review of more than 100 federal programs, including programs that serve children exclusively, programs with explicit components for children or payments to child clients, and programs that pay benefits to families with children. For each program, we apply to total program outlays (or tax expenditures) a children's share of spending and then a share of spending for each age group. These shares are derived from detailed programmatic data collected from a variety of sources. For details about this approach, please see the individual reports on different age groups.

We also calculate total public investment, incorporating state and local spending. To obtain estimates of state and local spending, we relied heavily on estimates for 2004 from a report by researchers at the Rockefeller Institute (Billen et al. 2007). Because of the challenge of collecting data across 50 states, the latest year of data in this report is 2004, and the estimate is based on a dozen major programs, namely, elementary and secondary education, the state share of Medicaid and several other large federal-state programs, and state earned income tax credits. The analysis is therefore not as comprehensive as the federal analysis, although the omitted categories—spending on state-only programs and small

federal-state programs—are relatively small and unlikely to change the bottom-line estimate substantially. Patricia Billen, coauthor of the report on state and local expenditures, consulted with the authors of our earlier children's budget reports in an effort to improve consistency in methodological approaches to measuring federal and state and local expenditures.

It is also important to clarify that the Rockefeller report on state and local spending did not disaggregate spending by age. To calculate state and local spending by age group, we apply our 2008 age-group multipliers for specific categories (health, education, income security) to the Rockefeller state and local spending estimates for 2004. In doing so, we assumed that the age break of children's spending was not significantly different between 2004 and 2008. This gives us 2004 spending by health, education, income security, and other categories for each age group. We also calculated per capita spending for age groups in these categories. We tied our per capita estimates by age breaks to what Rockefeller reported in aggregate (\$466.7 billion) and on a per capita basis (\$6,047 per child) in 2004. We decided to use these published numbers as an anchor, even though the population estimate used by Rockefeller to get from aggregate spending to per capita spending was slightly different from



that used in our federal estimate. If we had used our population estimate, the state and local estimate would have been \$6,039 instead of \$6,047 per child.

Overall, a few caveats about these estimates are worth noting. While the estimates provide a baseline for thinking about different governmental roles, the shares of expenditures attributable to federal and state and local resources may have shifted since 2004, especially considering how the 2008 recession affected state and local budgets. A second caveat is that in calculating the federal share for 2004, we assume the proportion of expenditures going to each age group was the

same in 2004 as it was in 2008, which may not be the case. Third, the Rockefeller report focuses on fewer programs than included in the federal analysis. However, it is the best available source of recent data on state and local spending, and we do not believe the omitted programs would substantially affect the bottom lines. Finally, because the federal and the state and local roles are sensitive to whether the child is in pre-kindergarten or kindergarten, the pre-kindergarten and kindergarten numbers may not hold the same relationship between government funding levels if broken down for each age, year by year.



REFERENCES

- Adams, Gina, and Monica Rohacek. 2002. "More Than a Work Support? Issues around Integrating Child Development Goals into the Child Care Subsidy System." *Early Childhood Research Quarterly* 17(4): 418–40.
- Ainsworth, M. D. S. 1985. "Patterns of Infant-Mother Attachments: Antecedents and Effects on Development." *Bulletin of the New York Academy of Medicine* 61: 771–91.
- Billen, Patricia, Donald Boyd, Lucy Dadayan, and Thomas Gais. 2007. "State Funding for Children: Spending in 2004 and How It Changed from Earlier Years." Albany, New York: Nelson A. Rockefeller Institute of Government.
- Boots, Shelly Waters, Jennifer Macomber, and Anna Danziger. 2008. "Supporting Parents' Employment and Children's Development," New Safety Net Paper 3, Urban Institute, Washington D.C.
- Bowlby, J. 1969. *Attachment*. 2nd ed. New York: Basic Books.
- Carasso, Adam, C. Eugene Steuerle, Gillian Reynolds, Tracy Vericker, and Jennifer E. Macomber. 2008. "Kids' Share 2008: How Children Fare in the Federal Budget." Washington, D.C.: Urban Institute.
- Center for Law and Social Policy. 2009. "Reinvesting in Child Care: Benefitting Babies." Washington, D.C.: Center for Law and Social Policy.
- Center on the Developing Child at Harvard University. 2007. "A Science-Based Framework for Early Childhood Policy: Using Evidence to Improve Outcomes in Learning, Behavior, and Health for Vulnerable Children." Cambridge, Mass.: Center on the Developing Child, Harvard University. http://www.developingchild.harvard.edu/content/downloads/Policy_Framework.pdf.
- . 2008. "In Brief: The Science of Early Childhood Development." Cambridge, Mass.: Center on the Developing Child, Harvard University.
- Chang, Hedy, and Mariajose Romero. 2008. "Present, Engaged, and Accounted For: The Critical Importance of Addressing Chronic Absence in the Early Grades." New York: National Center for Children in Poverty.
- Collins, Ann M., Jean I. Layzer, J. Lee Kreader, Alan Werner, Fred B. Glantz, 2000. *National Study of Low-Income Child Care—State and Community Substudy*, Abt Associates.
- Gordon, Rachel and Lindsay P. Chase-Lansdale, 2001. "Availability of Child Care in the United States: A Description and Analysis of Data Sources." *Demography*, 38 (2): 306.
- Dorn, Stan. 2008. "Health Coverage in a Recession." *Recession and Recovery* 6. Washington, D.C.: The Urban Institute.
- Duncan, Greg, Ariel Kalil, and Kathleen M. Ziol-Guest. 2008. "Economic Costs of Early Childhood Poverty: Raising Young Children Out of Poverty Can Substantially Improve Their Odds of Economic and Life Success." Washington, D.C.: Partnership for America's Economic Success.
- Fass, Sarah, and Nancy K. Cauthen. 2008. "Who Are America's Poor Children?" New York: National Center for Children in Poverty.
- Gallagher, Megan, and Beata Bajaj. 2007. "Moving On: Benefits and Challenges of HOPE VI for Children." Urban Institute Policy Brief 4. Urban Institute, Washington, D.C. http://www.urban.org/UploadedPDF/311488_HOPEVI_Children.pdf.
- Grunewald, Rob, and Arthur Rolnick. 2006. "A Proposal for Achieving High Returns on Early Childhood Development." Special Studies, Early Childhood Development. Minneapolis: Federal Reserve Bank of Minneapolis.
- Hart, Betty, and Todd R. Risley. 2003. "The Early Catastrophe: The 30 Million Word Gap by Age 3." *American Educator* 27 (1) (Spring): 4–9.
- Haveman, Robert, Barbara Wolfe, and James Spaulding. 1991. "Childhood Events and Circumstance Influencing High School Completion." *Demography* 28 (1): 133–57.
- Heckman, James J. 2006. "Skill Formation and the Economics of Investing in Disadvantaged Children." *Science* 312 (5782): 1900–1902.
- Isaacs, Julia, 2009. "How Much Do We Spend on Children and the Elderly?" Washington, D.C.: Brookings Institution.
- Isaacs, Julia, Tracy Vericker, Jennifer Macomber, and Adam Kent. 2009. "Kids' Share: An Analysis of Federal Expenditures on Children through 2008." Washington, D.C.: Urban Institute and Brookings Institution.
- Joydeep, Roy, Melissa Maynard, and Elaine Weiss. 2008. "The Hidden Costs of the Housing Crisis: The Impact of Housing on Young Children's Odds of Success." Partnership for America's Economic Success Issue Brief 7. Washington, D.C.: Partnership for America's Economic Success.
- Kent, Adam, Jennifer Macomber, Julia Isaacs, Tracy Vericker, and Elizabeth Bringewatt. 2010. "Federal Expenditures on Pre-kindergarteners and Kindergarteners in 2008." Washington, D.C.: The Urban Institute and Brookings Institution.

- Leftin, Joshua, and Kari Wolkwitz. 2009. "Trends in Supplemental Nutrition Assistance Program Participation Rates: 2000 to 2007." Washington, D.C.: Mathematica Policy Research.
- Macomber, Jennifer, Julia Isaacs, Tracy Vericker, Adam Kent, and Paul Johnson. 2009. "Federal Expenditures on Infants and Toddlers in 2007." Washington, DC: The Urban Institute and Brookings Institution.
- Matthews, Hannah, and Rachel Schumacher. 2008. "Ensuring Quality Care for Low-Income Babies: Contracting Directly with Providers to Expand and Improve Infant and Toddler Care." Child Care and Early Education Series Paper 3. Washington, D.C.: Center for Law and Social Policy.
- McNichol, Elizabeth and Nicholas Johnson. 2009. "Recession Continues to Batter States Budgets; State Responses Could Slow Recovery." Washington, DC: Center on Budget and Policy Priorities.
- Office of Management and Budget. 2009. *Budget of the United States Government, Fiscal Year 2010*. Washington, D.C.: Urban Institute and Brookings Institution.
- Oliveira, Victor, and Elizabeth Frazao. 2009. "The WIC Program: Background, Trends, and Economic Issues, 2009 Edition." Economic Research Report 73. Washington, D.C.: U.S. Department of Agriculture.
- Orr, Larry, Judith Feins, Robin Jacob, Erik Beecroft, Lisa Sanbonmatsu, Lawrence F. Katz, Jeffrey B. Liebman, and Jeffrey R. Kling. 2003. "Moving to Opportunity for Fair Housing Demonstration, Interim Impacts Evaluation." U.S. Department of Housing and Urban Development, Washington, D.C.
- Reynolds, Arthur, Katherine Magnuson, and Suh-Ruu Ou. 2006. "PK-3 Education: Programs and Practices that Work in Children's First Decade." Foundation for Child Development Working Paper, Advancing PK-3, 6. New York: Foundation for Child Development.
- Shonkoff, Jack, and Deborah Phillips, eds. 2000. *From Neurons to Neighborhoods: The Science of Early Childhood Development*. Washington, D.C.: National Academies Press.
- Shore, Rima, 2009. "The Case for Investing in PreK-3rd Education: Challenging Myths about School Reform." PreK-3rd Policy to Action Brief No. 1. New York: Foundation for Child Development.
- Urban Institute. 2006. "Children of Immigrants: Facts and Figures." Fact Sheet. Washington, D.C.: The Urban Institute.
- U.S. Census Bureau. 2008. *Current Population Survey, 2007, Annual Social and Economic Supplement*. http://www.census.gov/hhes/www/macro/032008/pov/new01_100_01.htm.
- . 2009. *Current Population Survey, 2008, Annual Social and Economic Supplement*. http://www.census.gov/hhes/www/cpstables/032009/pov/new01_100_01.htm.
- Vericker, Tracy, Jennifer Macomber, Julia Isaacs, Adam Kent, and Elizabeth Bringewatt. 2010. "Federal Expenditures on Elementary Age Children in 2008." Washington, D.C.: Urban Institute and Brookings Institution.
- Wight, Vanessa R. and Michelle Chau. 2009. "Basic Facts About Low-Income Children, 2008." National Center for Children in Poverty, New York.
- Zigler, Edward. 1998. Testimony of Edward Zigler for the House Committee on Government Reform and Oversight, in "Early Head Start: Goals and challenges: Hearing before the Subcommittee on Human Resources of the Committee on Government Reform and Oversight, House of Representatives, 105th Congress, 2nd Session." Government Printing Office, Washington, D.C.





The Urban Institute

2100 M Street, NW
Washington, DC 20037
ph 202.833.7200
fax 202.467.5775
<http://www.urban.org>

BROOKINGS

1775 Massachusetts Avenue, NW
Washington, DC 20036
ph 202.797.6000
fax 202.797.2495
<http://www.brookings.edu>