

HOW MUCH DO WE SPEND ON CHILDREN AND THE ELDERLY?

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Summary

Public spending on children averaged \$8,942 per child under age 19 in 2004 according to estimates presented in the paper. In the same year, public spending on the elderly was \$21,904 per elderly person, or 2.4 times as high as that on children. The tilt toward the elderly is much higher if one looks just at the federal budget, with an elderly person receiving \$7 for every dollar received by a child. Parents' responsibility for raising their own children is often offered as justification for lower levels of public spending on children. Indeed, parents do contribute 50 to 60 percent of total investments in children, on average. Yet the elderly also have private sources of support. In addition to small support from family members, the elderly receive more than half of their income from a private source not available to children, namely, assets accumulated during their working years. High levels of private support for both the elderly and children raises some question as to why public support should be so much higher for the elderly than for children.

Spending on Children and the Elderly. This is the first in a series of three working papers looking at spending on children and the elderly. This first paper is descriptive in nature and provides estimates of public spending on children and the elderly, as well as information on private support for these two age groups. The second, *A Comparative Perspective on Public Spending on Children*, investigates whether the United States invests less in children than other rich countries and whether there is a common cross-national pattern of spending more on the elderly than on children. Finally, the third paper, *Public Spending on Children and the Elderly from a Life-Cycle Perspective*, tackles a challenging question raised by the observed spending patterns in the earlier papers, namely: does it make sense for our country to be spending so much less on children than on the elderly? While such a question sometimes raises issues of intergenerational warfare, the paper addresses it through a life-cycle framework.

The author of the series, Julia B. Isaacs, is the Child and Family Policy Fellow at the Brookings Institution. The papers benefited from the excellent research assistance of Emily Monea and the helpful comments of Isabel Sawhill. All three papers and a summary issue brief can be found [here](#) on the Brookings website.

Introduction

How much does this country invest in children? How does spending on children compare with spending on the elderly? And finally, how does public spending on children and the elderly compare with private investments from family resources? The purpose of this paper is to answer these questions, by providing basic information about public and private spending on children and the elderly.

This paper is the first in a three-paper series that is motivated by concern about the nation's long-term fiscal problems. The purpose of the three papers is to consider the efficacy of the federal government's spending priorities by looking at public spending over the human life cycle, with particular attention to spending on children and the elderly. At the moment, despite the strong interest most Americans have in the well-being of children, federal spending on children is relatively modest, while the amounts being spent on health care and pensions for the elderly continue to grow at a frightening pace. Between 1960 and 2008, spending on Social Security, Medicare and Medicaid combined rose from about 2.5 percent of the gross domestic product (GDP) to almost 9 percent, with costs projected to reach over 18 percent of GDP by 2050, according to the Congressional Budget Office (CBO). Spending 18 percent of GDP on these three major entitlement programs could easily consume all federal revenues, which totaled 17 percent of GDP in 2008 and have ranged from 16 to 21 percent of GDP over the past five decades (CBO, 2009). If no policy actions are taken, future policy-makers will face the choice of zeroing out *all* other spending, raising taxes to unprecedented levels, cutting the major entitlement programs dramatically, running up the federal debt to ruinous levels, or a combination of all of the above.

Faced with this looming crisis, budget experts from across the political spectrum have called for action, urging policy steps to put the country on a sounder and more sustainable fiscal path and avert the threats to economic stability (Antos et al., 2008). Such calls have been largely ignored by most of our nation's political leaders because of fears that any changes to entitlement programs will be viewed unfavorably by the electorate as attacks on the elderly and our system of social insurance. Indeed, policy-makers face a formidable challenge in trying to impose limits on spending while preserving the essential features of Social Security, Medicare and Medicaid, which have had large success in protecting the elderly against poverty during their retirement years and providing both elderly and disabled citizens with access to medical care. Yet this challenge is not insurmountable. If there were sufficient political will to re-examine the allocation of federal and other governmental resources, we could figure out how we can meet the real needs of elderly and disabled citizens without so overwhelming our fiscal capacity that we run completely out of resources for children and other priorities. This three-paper series will attempt to improve the quality and outcomes of the national debate on the budget by more closely examining the budget from the perspective of concern for children and the future.

In this paper I review available information on public expenditures (federal, state and local) on children and compare it to public spending on the elderly. The paper also examines private, family investments in children to add a critical dimension that is missing from some discussions of public expenditures. A second paper, *A Comparative Perspective on Public Spending on Children* (Isaacs, 2009b) provides perspective on the age differential in expenditures observed in the United States by looking at spending on children – and the elderly – in other countries.

Finally, after reviewing the available evidence, the final paper in the series, *Public Spending on Children and the Elderly from a Life-Cycle Perspective* tackles a challenging question raised by the observed spending patterns, namely: does it make sense for our country to be spending so much less on children than on the elderly? While such a question sometimes raises issues of intergenerational warfare, the paper addresses it from a life-cycle framework.

As discussed in more detail in the third paper, the life-cycle framework views the natural progression of human development as consisting of three basic stages: childhood, when one is dependent on others; working-age adulthood, when one generates sufficient income to support oneself and others; and old age, when one is retired and dependent on a combination of personal savings, public transfers from the government, and support from younger family members. From this life-cycle perspective, the two dependent groups – children and the elderly – must be supported by some combination of public and private support if society is to sustain itself and prosper. In order to make sense of a society’s level of public investment in children – my original interest in embarking on this project – it helps to take a more expansive view of public and private spending on children and the elderly, the two dependent groups in society. In the research that follows, I will alternate between a direct focus on public spending on children, and a broader view analyzing spending across the life-cycle. My hope is that examining human needs and capacities from a life-cycle perspective may help address some of the long-term fiscal challenges embedded in the federal budget.

Public Spending on Children

In 2004, public spending on children totaled \$691 billion, or an average of \$8,942 per child under age 19.¹ This level of public investment amounts to 6.0 percent of the Gross Domestic Product (GDP). Less than one-third of this investment was from the federal government, which spent only \$2,895 per child, while more than two-thirds was from state and local governments, driven by high spending on public elementary and secondary education. My estimate of close to \$9,000 per child in total public investments is derived by combining the results of a recent Urban-Brookings analysis of federal expenditures on children with a Rockefeller Institute analysis of state and local spending (Isaacs, Vericker, Macomber, and Kent, Forthcoming; Billen, Boyd, Dadayan, and Gais, 2008). Summing the two estimates together provides a good ball-park estimate of total public investments in children, although there are some differences in the methodological approaches of the two studies. Below I briefly discuss how the public spending estimates in my analysis were derived, and I then compare my figures to estimates from six other studies.

Estimating public spending on children or another age group is a challenging proposition, as it raises broad conceptual questions. For example, how much of a benefit to families with children should be allocated to children as compared to their parents? And should expenditures include tax advantages as well as direct spending programs? There also are significant data challenges, as not all programs collect data on benefits and recipients by age. Even defining who is a child is problematic, as programs use different age limits.

¹ As will be discussed later, this is the most recent year for which state and local data is available.

The Urban-Brookings estimate of federal child-related spending of \$224 billion or \$2,895 per child (in 2004 dollars) was based on a review of more than 100 federal programs, including programs serving children exclusively (e.g., school lunch, Head Start), programs with explicit child components or payments to child clients (e.g., the children’s portion of Medicaid, survivor and dependent benefits under Social Security,), and programs paying benefits to families with children (e.g., the earned income tax credit (EITC), housing assistance, cash welfare under the Temporary Assistance for Needy Families (TANF) program. For each program, my co-authors and I started with program outlay estimates from the *Appendix to the Budget of the United States Government* (various years) and then calculated a children’s share of spending, based on detailed programmatic data collected from a variety of sources, including the House Ways and Means Committee’s *Green Book*, the Annual Statistical Supplement to the Social Security Bulletin, statistical reports from other agencies, discussions with agency staff, and unpublished tabulations of administrative or survey data generated by the authors or other researchers.

When programs provide benefits to families without any delineation of a parents’ and children’s share, we first estimated the share of benefits going to families with children, based on the various data sources above. We then estimated a children’s share of those benefits, based on the number of children and adults in the family and usually assuming equal benefits per capita. For example, two-thirds of a family housing benefit would be assumed to go to the children in a two-child, one-parent family. This methodology represented our best estimate of spending on children, although we recognize that some of what we classify as “children’s spending” may also assist parents, and some of what we assign to parents may indeed help children. The Urban-Brookings estimate of children’s spending does not include programs that provide benefits to the population at large such as roads, communications, national parks, and environmental protection. We followed a general definition of children as those aged 0 to 18 and excluded spending on college or other forms of post-secondary education.

While the federal study collected data for five-year intervals from 1960 to 1995 and annually from 1996 to 2008, this paper focuses on estimates for 2004, the most recent year for which comparable state and local spending estimates are available.²

The state and local analysis by Billen et al. uses a similar definition of children, as those 18 and under, and took other steps to increase comparability of federal and state and local estimates.³ Differences remain, however. Because of the challenge of collecting data across 50 states, the state and local estimate was limited to providing information for four years (1992, 1998, 2003 and 2004) and 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 admittedly 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 substantially change the bottom-line estimate. In fact, 90 percent

² Much of the work in collecting data for 2004 and earlier years was conducted by earlier teams of researchers at the Urban Institute, who produced three earlier reports: Carasso, Steuerle, Reynolds, Vericker and Macomber (2008); Carasso, Steuerle and Reynolds (2007); and Clark, King, Spiro, and Steuerle (2000).

³ Patricia Billen met with Adam Carasso, Julia Isaacs, and Gene Steuerle in 2005 and 2006 in an effort to improve consistency in methodological approaches in measuring federal and state and local expenditures. Both studies received funding from the Annie E. Casey Foundation; the federal expenditures study also received funding from First Focus.

of total state and local spending, or an average of \$5,444 per child under 19, was due to one item: public education from kindergarten through grade twelve.⁴

Note that both the federal and state studies include some but not all tax credits in their estimates of spending on children. In brief, both studies include spending from earned income tax credits, the federal but not the state study also includes a portion of the child tax credit; and neither study includes revenue lost due to child or dependent exemptions, child or dependent care tax credits, or other child-related tax provisions. Estimates of this latter group of tax expenditures were not reported in the state study; they were estimated in the federal study but excluded from the \$2,895 estimate presented here to increase comparability with the state and local child spending estimates, as well as other estimates of spending on children and the elderly to be presented later.⁵

My total estimate of nearly \$9,000 of public investment per child in 2004 is somewhat higher than estimates found in six other studies, which range from about \$6,300 to \$7,600 per child (in 2004 dollars), though the analyses were for earlier years, as shown in figure 1. These estimates come from two journal articles that focus on spending on children (Garfinkel, 1996; Haveman and Wolfe, 1996), an unpublished dissertation on public and private spending on children (Bainbridge, 2002); two studies comparing public spending on children and the elderly (CBO, 2000; Pati et al., 2002); and a spreadsheet analysis showing the age profile of government spending from the work of Ronald Lee and colleagues (G. Donehower, personal communication, October 9, 2006). To a large extent, my higher estimate reflects an increase in spending over time. When I estimate expenditures for 1998, I come up with an estimate of \$7,136 (in 2004 dollars), which is more in line with the other estimates. It also is true that in the Urban-Brookings analysis, my co-authors and I included a very comprehensive array of programs in our analysis of federal expenditures on children, which may have led to a higher estimate of spending.

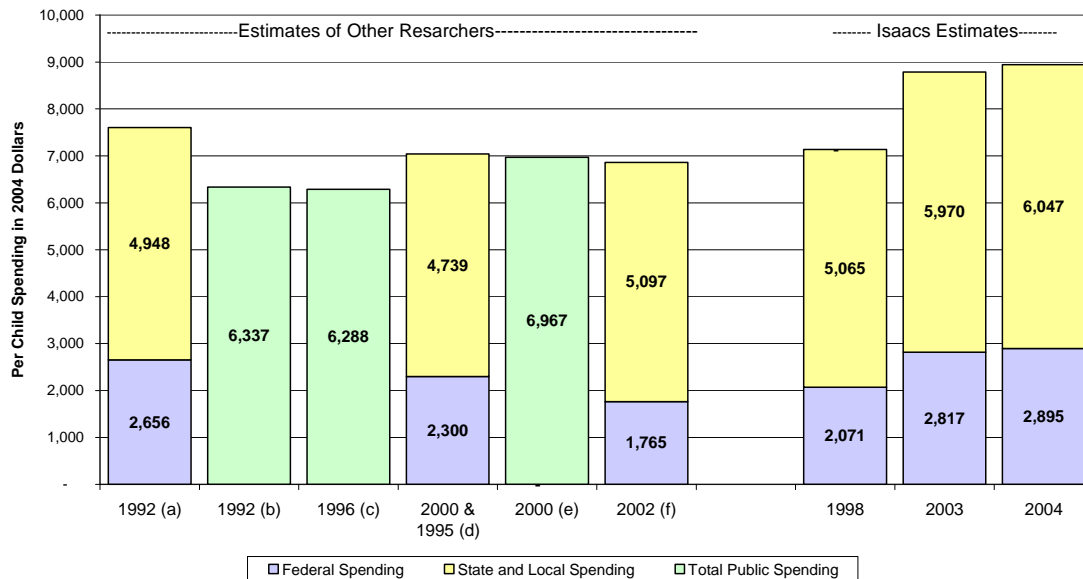
The range of estimates shown in figure 1 illustrates that estimating spending on children is an imprecise art; estimates of credible researchers can differ depending on approach. The range here would be even larger, except that I adjusted the estimates in figure 1 to improve comparability.⁶ Even so, important differences remain, such as the definition of a child (under 18 or under 19 years old), the breadth of programs covered, data sources, and methods for allocating benefits between children and their parents. The estimate by Garfinkel, for example, is not strictly speaking an estimate of spending on children, but rather on families with children; he thus includes spending on parents as well (and indeed his estimate of \$7,600 per child is higher than others for spending in the 1990s).

⁴ Average expenditures on pupils in school are higher; this per capita estimate is across all children 0 to 19, including children who have not yet entered school.

⁵ Note that the \$2,895 estimate of federal outlays on children includes the bulk of the EITC and much of the child tax credit; that is, it includes the refundable portions of these two large credits for families with children (i.e., the cash payment made to families when their tax credit is greater than their tax liability). I chose not to include the value of the dependent exemption, the non-refundable portions of the EITC and child tax credit, and other small tax expenditures – an amount totaling \$60 billion or \$774 per child in 2004 – because I don't have estimates for the elderly tax credit and tax expenditures, nor do I have estimates of state and local tax expenditures on children or the elderly (other than the state earned income tax credit).

⁶ Specifically, I excluded tax expenditures (other than on the EITC) from three sets of estimates, including my own, and I inflated all estimates to 2004 dollars.

Figure 1. Public Spending on Children (Per Child, in 2004 Dollars)



Sources and notes: Estimates by Isaacs combine federal estimates from Isaacs et al. (2009) with state and local estimates from Billen et al. (2007), as described in text. Children are defined as those aged 0 to 18. Other estimates are based on the following:

- a) Garfinkel (1996), Table 1. The author’s original estimate of \$491 million was adjusted downward by removing \$73 billion in tax expenditures other than the EITC and dividing by the population of those aged 0 to 18 in 1992. His estimate includes spending on parents, which is not included in other estimates.
- b) Haveman and Wolfe (1995), Table 1. Children are defined as those aged 0 to 18.
- c) Bainbridge (unpublished, 2002), Tables 2-5, 2-7 and 2-9. Bainbridge’s estimate was adjusted downward by removing tax expenditures other than EITC. Children are defined as those aged 0 to 17.
- d) CBO (2000). This estimate focused on federal expenditures in 2000 but included a reference to a \$4,000 per child estimate for state and local spending in 1995, which is adjusted for inflation since 1995 and included here. An alternate federal estimate including spending on parents was 18 percent higher. Children are defined as those aged 0 to 17.
- e) Pati et al. (2002). Children are defined as those aged 0 to 17. The analysis of Pati et al. does not include any portion of the EITC.
- f) Spreadsheet analysis of Ronald Lee and colleagues, from G. Donehower, personal communication, October 9, 2006. The methodology is explained in Lee, Tuljapurkar, and Edwards (forthcoming) and Edwards (unpublished, 2006). The spreadsheet analysis provides estimates for each individual age; I calculated an average per child estimate over the estimates for those aged 0 to 18.

One clear pattern emerging from figure 1 is that the federal government plays a much smaller role than state and local governments when it comes to investing in children. The federal share of public investments in children ranged from 26 to 35 percent in those studies that provide information by the level of government.⁷ In contrast, the federal government plays a very large role in spending on the elderly, as will be shown below.

⁷ The federal share may be higher in 2008-2010, as federal expenditures increase in response to the recession and state governments cut back on spending. The Urban-Brookings analysis shows that federal expenditures per capita rose through 2008, reaching \$3,354 per capita in that year (in 2004 dollars) and that they are projected to rise even higher in 2009 and 2010. Comparable state data are not yet available, however, and so the analysis of total investments can not proceed beyond 2004.

Public Spending on Children and the Elderly

Public spending on children is frequently compared to public spending on the elderly, and indeed three of the studies cited in figure 1 provide comparable figures for the elderly. These three studies find much higher spending on the elderly than on children, as does my own analysis.

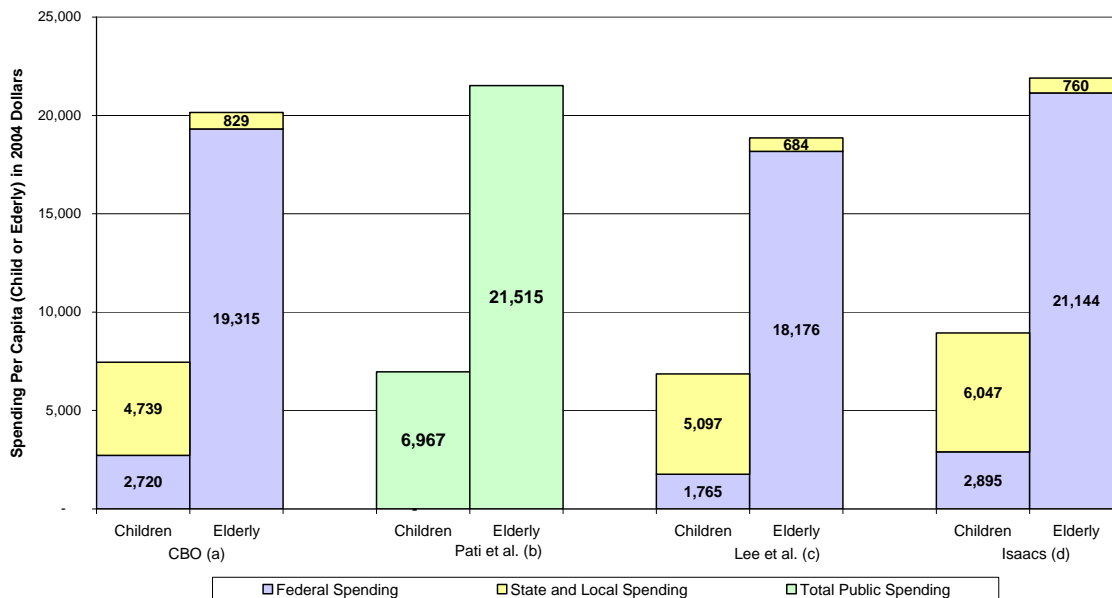
In 2004, the federal government spent at least \$767 billion on the elderly, or \$21,144 per person 65 and older, according to my estimates. This is 7.3 times higher than the \$2,895 per capita federal estimate for children. Because of high state and local spending on children (mostly provided through education) and low state and local spending on the elderly, total public investments are more balanced but still favor the elderly by a factor of 2.4 to 1. Specifically, total public investments in the elderly were estimated to be at least \$795 billion in 2004, or \$21,904 per elderly person, compared to total spending of \$691 billion on children, or \$8,942 per child. Stated as a share of the total economy, 6.9 percent of GDP was spent on public support for the elderly in 2004.

To estimate spending on the elderly, I first estimated the elderly share of spending in 2004 for three major federal programs – Social Security, Medicare and Medicaid – following the same methodology as in my analysis of children’s spending. These three programs alone accounted for \$675 billion of the total public spending on the elderly, or \$18,583 per person 65 and older. I calculated \$7 billion for the elderly share of Supplemental Security Income (SSI) and the Supplemental Nutrition Assistance Program (SNAP), formerly known as food stamps, and I added a rough estimate of \$86 billion for a dozen other federal programs that were included in CBO’s estimate of federal spending on the elderly in 2000 but that were not easily added to my analysis of children’s spending (e.g., programs dealing with civilian and military retirement, veterans’ benefits, and housing). This last component of \$86 billion may be a slight underestimate because while I adjusted the 2000 CBO estimate for inflation between 2000 and 2004, I did not adjust it for growth in population or real benefits.

For the state estimate, I simply estimated the state share of elderly spending on Medicaid (\$28 billion), ignoring state supplements to SSI or other small additional amounts of state spending on the elderly. Because my analysis of federal and state spending on the elderly is not as comprehensive as my estimate of spending on children, I view the \$21,904 per capita estimate and the 2.4 to 1 elderly-to-child spending ratio as conservative estimates.

Indeed, estimates from the three other studies that examine spending on the elderly find higher ratios of elderly to child spending: the ratio measures 2.7 to 1 in the analyses of CBO and Ronald Lee and colleagues and 3.1 to 1 in the analysis of Pati et al. Note that the age bias is much higher if one looks just at the federal budget, with an elderly person receiving \$7 to \$10 for every dollar received by a child according to the estimates in figure 2. Moreover, the federal budget is expected to become more and more slanted toward the elderly over time.

Figure 2. Per Capita Spending on Children and the Elderly, Various Estimates (in 2004 Dollars)



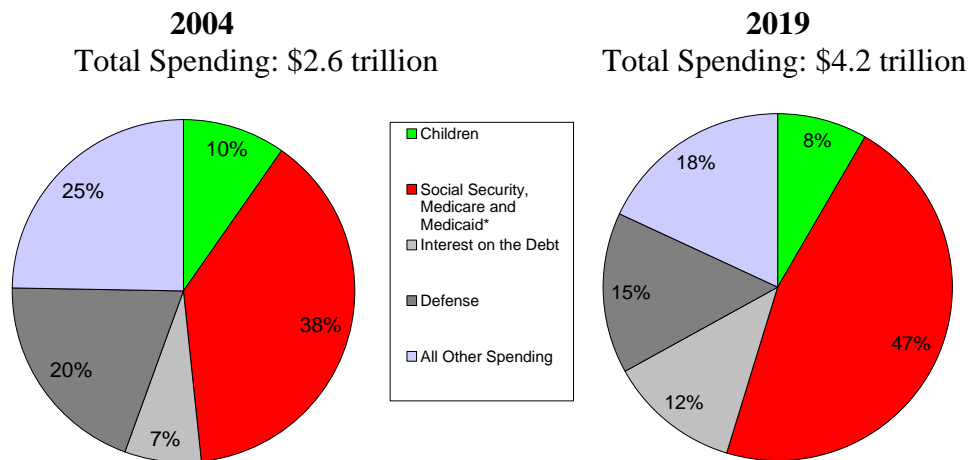
Sources and notes:

- a) The CBO estimate focused on federal expenditures in 2000 but included references to \$4,000 in state and local spending per child and \$700 in state and local spending per elderly person in 1995; these state and local estimate have been adjusted for inflation and included here, CBO (2000).
- b) Estimates are for the year 2000 from Pati et al., 2002;
- c) Estimates are for 2002 and are from a spreadsheet analysis of Ronald Lee and colleagues (G. Donehower, personal communication, October 9, 2006).
- d) The author's estimates are for 2004 and based on the methodology described in text.

The high levels of spending on the elderly combined with the rise in the elderly population have important implications for the future, particularly with regard to the federal budget. The share of the federal budget devoted to the non-child portions of Social Security, Medicare and Medicaid, already large in 2004, is projected to rise to nearly half of the entire federal budget by the end of the next decade, that is, to 46 percent of federal outlays in 2019 (see figure 3).⁸ In contrast, spending on children will fall slightly, from 10 percent to 8 percent of budget outlays, assuming no change in current law. Spending on defense and the rest of the budget will also fall as a share of the budget, except that interest on the debt is projected to soar, reaching 12 percent of total outlays – higher than spending on children – under pressure from the large deficits arising from a continuation of current policies.

⁸ The non-child portions of Social Security, Medicare and Medicaid serves as a rough proxy for spending on the elderly; it overestimates spending on the elderly, because while I have removed spending on children under Social Security and Medicaid, it includes some spending on non-elderly disabled persons. Such spending on disabled persons more than compensates for the omission of spending on the elderly through Supplemental Security Income and other programs. The non-child share of Social Security, Medicare and Medicaid was 7.7 percent of GDP in 2004, compared to my more refined estimate of 6.9 percent spent on the elderly. Because I do not have the refined estimate projected to 2019, I present these rougher estimates here.

Figure 3. Actual and Projected Share of Federal Budget Spent on Children, the Elderly and Other Major Items, 2004 and 2019



Source and notes: Isaacs et al. (2009), based on *The Budget of the United States Government: FY2010* and CBO Projections. Spending on Social Security, Medicare and Medicaid is provided as a rough proxy of spending on the elderly. The numbers have been adjusted to exclude spending on children (already captured as children's spending) but do include some spending on non-elderly disabled.

As noted in the introduction, CBO projects that the costs for Social Security, Medicare and Medicaid will continue to escalate, reaching over 18 percent of GDP by 2050. Such a level could consume nearly 100 percent of federal revenues, which totaled 17 percent of GDP in 2008 and have ranged from 16 to 21 percent of GDP over the past five decades (CBO, 2007). In other words, it is not so much the current levels of spending on the elderly, but rather their projected growth, which raises the specter of a federal budget that is both greatly expanded in size (thereby requiring some combination of higher taxes and financially draining deficits) and that has a strong tilt toward the elderly, leaving little room for spending on children and other priorities.

Much of my initial interest in comparing spending on children and the elderly is motivated by this looming budget squeeze, a threat first brought to my attention by C. Eugene Steuerle's 2003 analysis, *The Incredible Shrinking Budget for Children and Working Families*. As I delved into the topic, I recognized the importance of examining private as well as public expenditures. Much of the rationale for spending less on children than the elderly is the differential roles that family and government are expected to play in providing economic support to these two age groups. As a society, we no longer expect working-age adult children to financially support their elderly parents. We do, however, expect working-age parents to take primary responsibility for the economic as well as physical and emotional care of their children. To fully understand the differential in public spending on children and adults, therefore, requires some assessment of the role of the family in supporting these two age groups.

The Relative Role of Public and Private Spending on Children

Private investments in children are quite significant: middle-income families with two children spent an estimated \$11,337 per child on child-related expenditures in 2007, according to estimates by the U.S. Department of Agriculture (USDA) (Lino, 2007).⁹

The USDA estimates are based on consumer expenditure data from the early 1990s. Though they have been updated for inflation, they have not been adjusted for possible changes in consumer expenditure patterns over the past decade and a half, and so they are rough estimates at best. Lack of good information about how household expenditures on housing, transportation, and other shared expenses should be distributed between child and adult household members adds further uncertainty to the estimates. In general, the USDA estimate is lower than what would be found under a strict per-capita approach (which would assume children consume as much as adults) and in the mid-range between the two leading methods for estimating the marginal cost of each additional child.¹⁰

The \$11,337 estimate is for children in middle-income, two-parent, two-child families living in households with no other relatives or unrelated adults. Spending is considerably lower in lower-income families: families with income below \$45,800 spend an average of \$8,240 per child, while higher-income families (those with income greater than \$77,100) spend more than twice that (\$16,593 per child). Family structure can also affect the amount families spend on their children: low-income single parents, for example, spend less on their children than their two-parent counterparts, only \$7,807 per child in 2007. The USDA analysis found little difference between single- and two-parent families with higher incomes, however. Across all family types, expenditures per child are higher in families with only one child (by an estimated 24 percent) and lower in families with three or more children, due to economies of scale.

What amount does the average American child, who, in 2007, lived in a family with 1.8 children and had a 72 percent chance of living in a two-parent family, receive as an investment from his or her parent(s)? By combining the USDA estimates with Census Bureau data on the average number of children in families by family income, structure and size, I find that the average child benefited from a family investment of \$11,613 in 2007.¹¹

⁹ Average expenditures vary by age of child: the \$11,337 is a simple average across all ages.

¹⁰ Lino (2007). See also Rothe et al. (2001) for a review of different estimating approaches and discussion of the challenges of estimating costs per child from family-level expenditure data.

¹¹ My estimate is based on USDA estimates of average costs for children in two-child, two-parent and two-child, single-parent families in the low, medium and high income groups. (Following USDA, the medium and high income groups are collapsed into one category for single parents, due to small numbers of single parents with high income. There are thus five income/family structure groups.) To these estimates, I applied the USDA adjustments to determine per-child expenditures in only-child families and families with three or more children (within the same five income/family structure groups). Third, I used Current Population Survey (CPS) data to count the number of children in one-child, two-child, and three-or more child families, again by income and family structure, and I used these frequencies to generate an overall weighted average cost per child. Note that my estimate would be slightly higher, \$11,900, if I limited the CPS tabulation to children living with their parent(s) and no other adults, similar to the USDA sample. However, this higher estimate, while more consistent with the USDA data, leaves out children living in extended families or with non-related adults, many of whom are in low-income families and thus receive lower than average investments.

I am interested in the portion of total expenditures on children that are contributed by the family and the portion that are publicly financed. To make this comparison, I first adjust my \$11,613 private spending estimate from 2007 to 2004 dollars, yielding an estimate of \$10,608 in family spending compared to \$8,942 in public investments. A second adjustment takes into account the fact that there is some double-counting of expenditures in these two estimates. For example, food, clothing or other expenses that are partially financed through cash welfare, nutrition benefits or tax credits would be counted as a family expenditure by the USDA but also counted as an expenditure in the public estimates. I estimate that roughly \$1,044 per capita in family expenditures on children are provided through public payments to their parents, including cash payments through Social Security, other retirement and disability programs, the TANF program, food assistance under the Supplemental Nutrition Assistance Program (formerly food stamps), and the refundable portions of the earned income and child tax credits.¹² After adjusting for this double-count, my estimate of direct parental investments in children drops to \$9,536 and my total investment amounts to \$18,431, meaning that roughly half (52 percent) the amount invested in children was private and half (48 percent) was public.

Three earlier analyses of spending on children found that private family investments ranged from about 50 to 60 percent of total investments in children (see table 1). Robert Haveman and Barbara Wolfe (1996) estimate total investments in 1992 of about \$15,000 per child (in 2004 dollars). After subtracting out approximately \$1,000 in parental spending that is publicly subsidized through Aid to Families with Dependent Children (AFDC), food stamps and other programs, they find that 57 percent of the investment was provided by parents. In addition to public and family investments, Haveman and Wolfe provide an estimate of non-profit investments in children, though it is quite small, only \$57 per child in 2004 dollars.

Estimates from an unpublished dissertation of John Bainbridge (2002) suggest parents provide about 51 percent of total investments in children.¹³ The Bainbridge analysis includes an estimated children's share of employer-provided health insurance, which he estimates as amounting to 3 percent of total investments in children. Bainbridge notes that third-party health insurance can be viewed as quasi-public, and indeed third-party payments for health insurance are classified as a social investment in some of the international literature on social investments in children, as will be shown in the second paper in this series (Isaacs, 2009b).

Finally, an analysis of public and private institutional arrangements for providing economic support to children and the elderly by Andrew Mason, Ronald Lee, and other colleagues (2006) suggests that family transfers (within the household as well as between households) account for 57 percent of total expenditures on children. Children's labor income provides an additional 6 percent (children includes youth through age 19), leaving only 38 percent of spending provided

¹² The \$224 billion estimate in outlays on children in 2004 included \$12 billion in food stamp (SNAP) spending, \$39 billion for the refundable portions of the EITC and child tax credit, and \$29 billion in cash benefits under TANF, Social Security, SSI and other payments providing cash benefits. I thus estimated \$81 billion, or \$1,044 per child, in cash and near-cash benefits that would be double-counted in family expenditures reported in the Consumer Expenditure Survey.

¹³ The estimated parental share was actually lower – 46 percent – in Bainbridge's original analysis, before my adjustment that removed tax expenditures to improve comparability with the other two estimates. That is, the net parental contribution decreases when one considers that parental spending on home mortgages and child care expenses is partially offset by tax deductions and that parents pay less taxes because of the child tax credit and dependent deduction.

by public sources. Note that Mason et al. did not report their estimates in dollars but only as percentages of total expenditures per capita; in this and other ways, their methodology differs somewhat from that of the other estimates summarized in table 1.¹⁴

		Isaacs	Haveman and Wolfe	Bainbridge (adjusted)	Mason, Lee, Tung, Lai & Miller
	Year of Analysis	2004	1992	1996	2000
A	Private family expenditures	10,608	9,577	8,533	--
B	Public expenditures	8,942	6,337	6,216	--
C	Double counted (public subsidies through parents)	-1,044	-1,034	-1,624	--
D	Other expenditures	<u>n.a.</u>	<u>57</u>	<u>428</u>	<u>--</u>
E	Total expenditures	18,431	14,937	13,553	--
F	Family Net of Public Subsidies (A-C)	9,536	8,654	6,909	--
	Percentage Family, Net of Public Subsidies (F/E)	52	57	51	57
	Percentage Public (B/E)	48	42	46	38
	Percentage Other (D/E)	n.a.	<1	3	6

Notes: All estimates expressed in 2004 dollars, using the GDP deflator to adjust for inflation. The Bainbridge estimates were adjusted by removing spending on tax expenditures, in order to increase comparability across the three estimates. Private expenditures in line (A) are based on USDA estimates in the Isaacs and Bainbridge estimates and on an earlier estimate by Thomas Espenshade in the Haveman and Wolfe estimate. Public expenditures in line (B) and the overlap in line (C) were estimated by each of the authors, using somewhat different methodologies. "Other" in line (D) is non-profit organizations in Haveman and Wolfe and third-party payments for health insurance (net of tax expenditures) in Bainbridge. The estimates by Mason, Lee, Tung, Lai and Miller do not provide estimates by dollars, but do provide percentages; the "other" line is labor income of children (defined to include those 0 to 19). The 57 percent in Mason et al. includes both inter- and intra-household *inter vivos* transfers, most of which are familial transfers.

My estimate of total spending per child is limited to government and family investments, omitting children's labor income, employer spending on health insurance and non-profit organizations' investments in various aspects of children's well-being.¹⁵ To that extent, my estimate may be an underinvestment, although it is actually larger than the dollar estimates of

¹⁴ The first three estimates, including my own, estimated federal, state and local, and private expenditures separately, and then combined into a total, with adjustments for double-counting. In contrast, the national transfer accounts methodology used by Mason et al. begins with national aggregate amounts for labor income and consumption, as reported in National Income and Product Accounts, and then allocate those totals across all ages (not just children) and diverse funding sources. Mason et al. have a separate accounting for children's labor income, which is only included in the other estimates to the extent that children live at home and contribute to family expenditures. Note that the estimates from Mason et al. in table 1 are drawn from the same set of studies as the Lee et al. estimates shown in figures 1 and 2, although there may be slight refinements between the two sets of estimates. Further detail on the estimation methodology is provided in Lee, Lee, and Mason (2006); Mason, Lee, Tung, Lai, and Miller (2006); and at www.ntaaccounts.org.

¹⁵ According to the Foundation Center, \$3.57 billion of foundation grants provided in 2007 were designated for children and youth, which suggests an investment of \$46 per child averaged across all 78.2 million children under 19 in the United States (Foundation Center, 2008). Total non-profit investment in children is considerably larger, however, because foundation giving represents only 12 percent of total non-profit charitable giving (Blackwood, Wing and Pollack, 2008). Data on non-profit activities are not generally divided by age of recipient population, however, so I am unable to provide a numerical estimate of total non-profit spending on children.

Haveman and Wolfe (1995) and Bainbridge (2002), perhaps reflecting higher investments in children in 2004 than in the 1990s. Given the difference in estimating approaches and in the different years studied, it is striking to note the broad similarity across the four estimates regarding the relative public and private shares. Parental investments represent roughly 50 to 60 percent of the total monetary investment made in children. The parental investment would be even larger, and the government share more modest, if one included parents' large investment of time, as pointed out and estimated by Haveman and Wolfe as well as Bainbridge.¹⁶

Before turning to the role of private investments in the elderly, the issue of differential investments by family income level merits a brief discussion. Private investments increase as family income increases, as shown in the USDA estimates. Federal investments play somewhat of a compensating role, with the majority of programs providing supplemental investments for children in disadvantaged families (e.g., Medicaid, food stamp (SNAP), and earned income tax credits), although some federal programs provide benefits across most of the income distribution (e.g., the child tax credit, Social Security). Finally, state and local spending on education, which makes up the lion's share of public spending, provides universal benefits to children of all family incomes. Adding up public and private investments for children in five different income groups, Bainbridge found that total investments per child climbed steadily with income group, despite the moderating effect of federal investments for lower-income children, a finding consistent with that of Garfinkel (1996) and my own rough calculations.¹⁷ Thus, while most of this analysis focuses on average spending per age group, private and total investments on children do vary considerably by parental income level, adding another dimension to policy discussions regarding public spending on children.

The Relative Role of Public and Private Spending on the Elderly

In the United States, as in most other industrialized nations, much of the care of the elderly has shifted from families to public pensions and other sources of support. The percentage of elderly adults living with their adult children has declined from 64 percent in 1880 to 18 percent in 1980 (Mason et al., 2006, citing Ruggles, 1994). Even those living with their adult children have some independent means of support; indeed, only 7 percent of total expenditures on the elderly in 2000 came from familial support, according to the research of Mason et al. (2006). Moreover this 7 percent in *inter vivos* transfers to the elderly is more than offset by a negative transfer flowing *out* of the elderly generation, from bequests amounting to 15 percent of total expenditures on the elderly.¹⁸ In contrast to the elderly, who provide net support to their

¹⁶ Haveman and Wolfe estimate that the opportunity costs of the mother's time providing child care increases the total investment in children by at least 15 percent, under conservative assumptions. Similarly, Bainbridge estimates that the total investment increases by 15 to 42 percent, depending on whether parental time is valued at the wages of child care workers or the opportunity costs of the parents' own foregone wages.

¹⁷ Bainbridge's analysis suggests a particularly large spike in total investments for children in the highest income quintile, reflecting the high parental investments made in that group. This finding is true whether one assumes higher education spending in more affluent neighborhoods or makes an alternate assumption of equal education funding per capita across income groups.

¹⁸ Mason et al.'s estimates are all "net" amounts; that is, the 7 percent in *inter vivos* transfers is a net inflow after taking into account that some elderly parents still make *inter vivos* transfers down the generations, to their children and grandchildren. Also note that they define bequests to encompass not only transfers after the death of a household head, but also transfers arising from the merger of two households or a shift in individual designated as the household head.

descendents, children receive 57 percent of their support from familial sources according to Mason et al.'s analysis of national income and consumption patterns in 2000, discussed above and shown in tables 1 and 2.

Table 2. The Relative Role of Family, Government and Other Sources in Supporting the Consumption of Children and the Elderly, 2000		
	Children (0 to 19)	Elderly (65 and Older)
Private, <i>Inter vivos</i> Transfers	57	7
Bequests	--	-15
Public Transfers	38	37
Asset Re-Allocations	--	55
Work	6	15
Total	100	100
Source and notes: Mason et al. (2006), figures 6 and 7. The estimates for children were also shown in table 1 above.		

Interestingly, the intergenerational transfer analysis indicates that public expenditures on the elderly, while substantial, are not the major source of their support. Public expenditures accounted for 37 percent of total expenditures of the elderly, roughly the same as the 38 percent share of spending on children. The primary support for the elderly comes not from the government or their families, but from earned asset income on accumulated wealth and liquidation of saved assets, or what the intergenerational transfer researchers call asset re-allocation. This important source of funding, which is not available to children, finances more than 55 percent of total per capita expenditures on the elderly, on average. Note that children are not able to fund their consumption from such asset re-allocation. To do so, they would have to borrow credit against future earnings, which occurs only rarely.¹⁹ Finally, income from work funds 15 percent of total expenditures for adults aged 65 and older, compared to 6 percent for children.

As in the case of per capita expenditures for children, one would expect the relative amounts of public and private investments in the elderly to differ significantly by income. Low-income elderly individuals are likely to depend on Social Security, Supplemental Security Income, Medicare and Medicaid for the majority of their support. For the age group as a whole, however, private expenditures are more significant than public expenditures for both the young and the elderly.

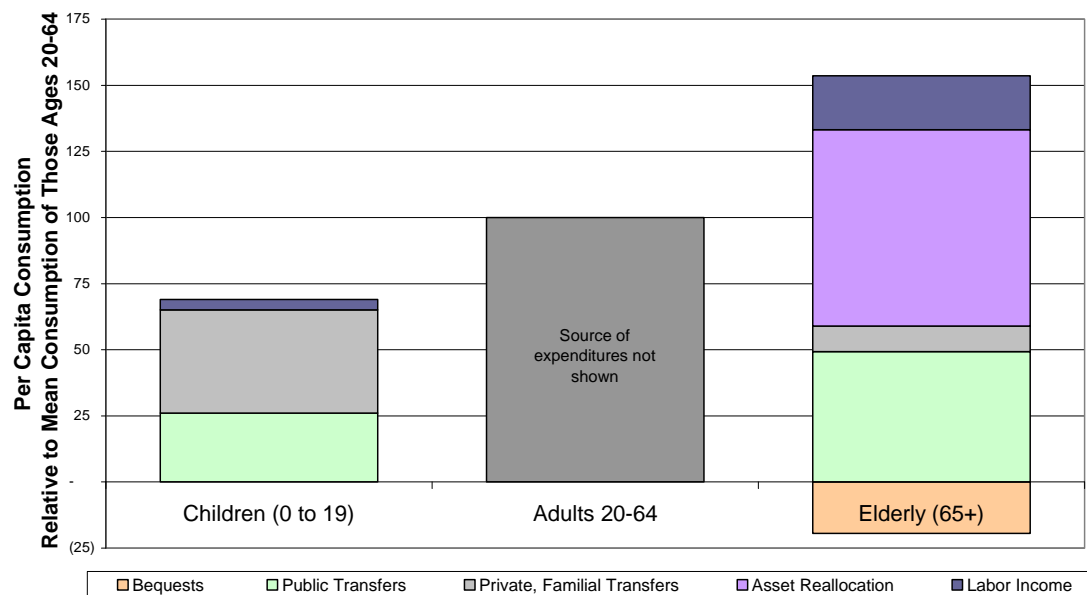
The estimates in table 2 focus on the proportion of public and private expenditures for each age group, without regard to total spending levels. I have already shown that public expenditures are higher on the elderly than on children: what about total expenditures? As shown in figure 4, Mason et al. find that children in the United States consume less than three-fourths that of adults ages 20 to 64, counting both public and private expenditures. Fairly high level of public expenditures during elementary and secondary years are more than offset by low levels of private

¹⁹ An exception is when children on the cusp of adulthood take out college loans which they will pay back out of future earnings.

expenditures relative to working-age adults, reflecting children’s lower levels of consumption of health care and basic necessities (data not shown). Per capita consumption increases steadily with age in the United States, with the average elderly person consuming 134 percent of the amount consumed by the average 20-to-64 year old in 2000, or nearly twice that of children.²⁰

Part of this increase is due to the dramatic ramp up in publicly-financed health care expenditures for those 65 and older (and a smaller increase in private health care expenditures). But it is important to note that Mason et al. find that non-health care consumption does not decline after retirement in the United States as it does in a number of other countries, but instead remains relatively flat (data not shown). Consumption of the elderly is maintained at elevated levels due to a combination of high levels of public funding and even more substantial income from savings generated during working life.

Figure 4. Total (Public and Private) Consumption Per Capita, by Age and Source, 2000



Source and notes: Author’s estimates based on figures 3, 7 and 8 of Mason et al. (2006). Note that while sources of expenditures are not shown for adults 20-64, another figure in Mason et al. (figure 6b) shows that the labor income of those 20-64 is more than 100 percent of their per capita expenditures, that bequests and asset reallocations are also positive, and that their *inter vivos* transfers and public benefits (net of taxes) are negative.

Conclusion

At the federal level we spent \$7 on each elderly person for every \$1 spent per child in 2004, or \$21,144 per person 65 and older compared to \$2,895 per child 0 to 18. The age bias is much smaller, though still present, when one adds in state and local spending on public schools and other programs: total public investments in children total nearly \$9,000 per child, which is significant, but still smaller than the nearly \$22,00 in total public investments per elderly adult.

²⁰ Mason et al. present their per capita results in terms of average consumption of working-age adults, rather than in dollars, to facilitate cross-country comparisons, including comparisons with Taiwan which will be presented in the third paper in this series (Isaacs 2009c).

The fact that parents are primarily responsible for raising their own children in the United States is often offered as justification for lower public spending on children relative to the elderly. Indeed, parents contribute 50 to 60 percent of total investments in children, on average. Yet the elderly also have private as well as public sources of support. Though they receive relatively little support from families, they have a funding source not available to children, namely, assets accumulated during working years. On average, more than half of their consumption is financed by asset income and asset liquidation. This high level of private support for both the elderly and children raises the question as to why public support should be so much higher for the elderly than for children. As public spending on the elderly increases in the coming decades, more attention must be paid to these difficult questions about the allocation of public resources across the human life cycle.

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