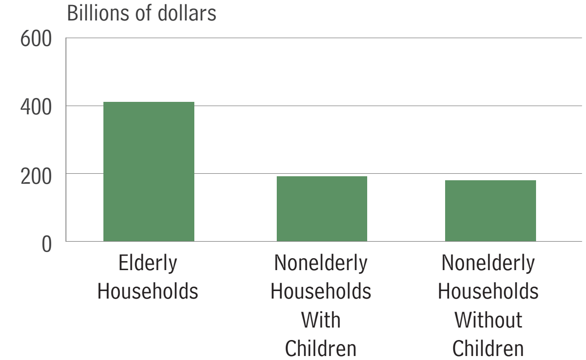
CONGRESS OF THE UNITED STATES
CONGRESSIONAL BUDGET OFFICE

CBO

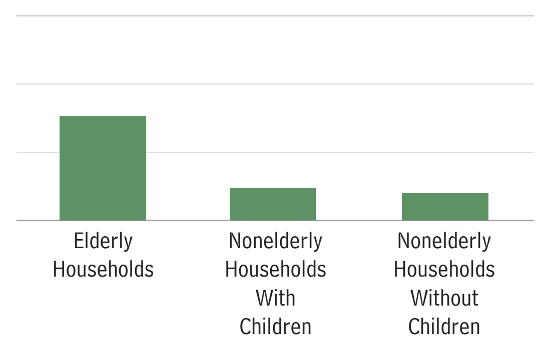
The Distribution of Federal Spending and Taxes in 2006

Spending on Cash and Near-Cash Transfers

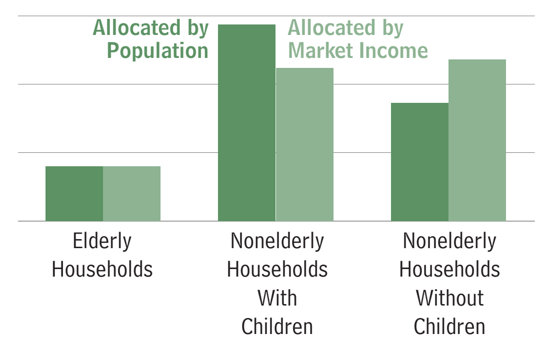
Billions of dollars



Spending on Health Care Transfers

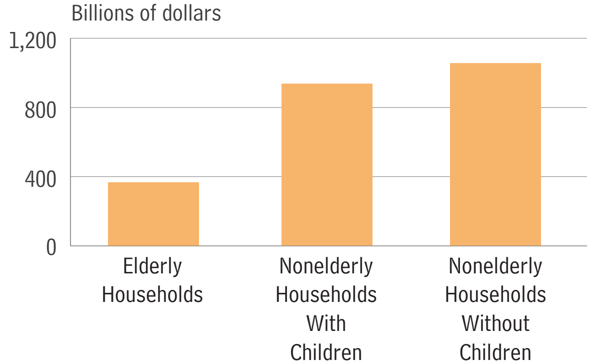


Spending on Other Goods and Services



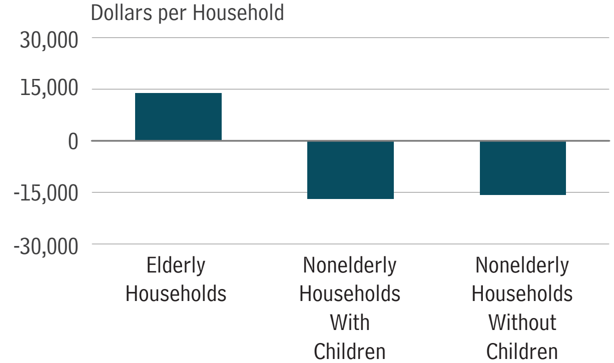
Taxes

Billions of dollars

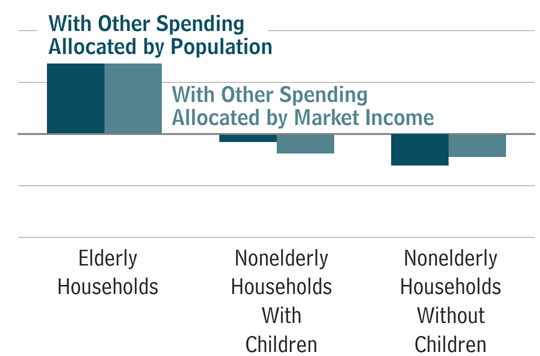


Average Transfers Minus Taxes

Dollars per Household



Average Spending Minus Taxes



NOVEMBER 2013

Notes and Definitions

Numbers in the text, tables, and figures of this report may not add up to totals because of rounding.

Unless otherwise indicated, all years referred to in this report are calendar years, and all dollar amounts are for calendar year 2006. Those amounts reflect only federal spending and taxes (state and local governments' spending and taxes are not included in this analysis).

Market income consists of labor income, business income, capital gains, capital income (excluding capital gains), and other sources of nontransfer income.

Cash and near-cash transfers are payments to households from social insurance and other government assistance programs. In general, cash transfers can be used for any purpose, whereas near-cash transfers can be used only for specific purposes, such as buying food. The cash transfers allocated to households in this analysis are Social Security benefits, the refundable portions of the earned income tax credit and the child tax credit, Supplemental Security Income benefits, unemployment benefits, Temporary Assistance for Needy Families, cash assistance for veterans who have limited income or assets, and Black Lung benefits. The near-cash transfers allocated to households are benefits from the Supplemental Nutrition Assistance Program (formerly called Food Stamps); housing assistance; student financial assistance (primarily Pell grants); benefits from child nutrition programs; benefits from the Special Supplemental Nutrition Program for Women, Infants, and Children; and energy assistance from the Low Income Home Energy Assistance Program.

The **health care transfers** allocated to households in this analysis are benefits from Medicare, Medicaid, the Children's Health Insurance Program, and health care programs for veterans who have limited income and assets. The Medicare spending allocated to households is net of offsetting receipts, such as premiums paid by enrollees.

Other goods and services include almost all of the things that the federal government spends money on other than transfers—everything from defense to transportation, medical research, and national parks (excluding interest on federal debt held by the public).

Pub. No. 4314

Taxes consist of the federal government's individual income taxes, payroll taxes (also called social insurance taxes), corporate income taxes, excise taxes, estate and gift taxes, and customs duties.

Household types are defined by the structure of a household (the people who share a housing unit, regardless of their relationships). In *elderly households,* the "householder" (generally someone who owns or rents the housing unit) is age 65 or older; such households may or may not have children present. In *nonelderly households with children,* the householder is younger than age 65, and at least one member of the household is under age 18. In *nonelderly households without children,* the householder is younger than age 65, and no member is under age 18.

In this report, **income groups** are defined by ranking all people living in nonelderly households, with or without children present, by the household's annual market income, adjusted for household size. (That adjustment involves dividing income by the square root of the number of people in the household.) The income ranking is divided into five groups ("quintiles") that contain approximately equal numbers of people, although unequal numbers of households. Households with negative income (such as from business or investment losses) are excluded from the lowest income category in the tables and figures but are included in the totals.

Those concepts are explained in greater detail in the appendix.

Supplemental data showing the components of spending and taxes allocated to households in this analysis, as well as the numbers underlying the figures in this report, are available at www.cbo.gov/publication/44698.

Contents

Figures

Tables

List of Exhibits

The Distribution of Federal Spending and Taxes in 2006

Summary

In previous reports, the Congressional Budget Office (CBO) analyzed how household income (which included some federal benefit payments, or transfers) and federal taxes were distributed among different segments of the U.S. population.[1] This report goes a step farther by analyzing the distribution of most federal spending—including spending on transfers and a host of other government activities—and almost all federal revenues among U.S. households in 2006. In that calendar year (the most recent one for which relevant data were publicly available when CBO began the analysis), the federal government spent $2.7 trillion on a wide range of goods and services and collected $2.4 trillion in taxes and other revenues to pay for them. About 88 percent of that spending and 98 percent of those revenues are allocated to households in this report.[2]

With the economy still recovering from the 2007–2009 recession, federal spending was much higher in calendar year 2012 ($3.6 trillion) than it was in 2006.[3] Some of the additional spending went to households affected by the recession, so the distribution of spending in 2012 probably differed from the distribution presented here. Although total revenues were similar in 2006 and 2012, the distribution of taxes also probably differed because of changes in tax laws and in the distribution of income.

This analysis examines spending and taxes for three types of households, which are defined by the age of their members: elderly households, nonelderly households with children present, and nonelderly households without children present.[4] The nonelderly households are further divided into five income groups on the basis of their annual market income—a measure that includes most sources of income other than transfer payments. (CBO excluded elderly households from the analysis of income groups because annual market income is not a good measure of resources for those households, many of whom rely heavily on nonmarket income, such as Social Security benefits.)

To compare how much the federal government spent on people in those types of households or income groups with how much the households paid in taxes in 2006, CBO calculated two measures:

- **Average transfers minus taxes** represents average federal spending per household on cash transfers (such as Social Security benefits),

---

1. See, for example, Congressional Budget Office, *The Distribution of Household Income and Federal Taxes, 2008 and 2009* (July 2012), www.cbo.gov/publication/43373.

2. Most of the unallocated spending consists of interest payments on federal debt held by the public. The largest component of unallocated revenues is remittances to the Treasury from the Federal Reserve System. In addition, the future costs associated with repaying the money that the government borrowed to cover the $0.2 trillion deficit in calendar year 2006 are not allocated to households.

3. Although budget figures are generally presented on a fiscal year basis (covering the period from October 1 to September 30), this report analyzes spending and taxes on a calendar year basis because the survey data used for the analysis are reported on that basis. For fiscal year 2012, federal spending totaled $3.5 trillion and federal revenues totaled $2.5 trillion; see Congressional Budget Office, *Updated Budget Projections: Fiscal Years 2013 to 2023* (May 2013), www.cbo.gov/publication/44172. By comparison, for fiscal year 2006, federal spending totaled $2.7 trillion and revenues totaled $2.4 trillion.

4. For definitions of those and other terms used in this report, see the notes page. Although not a tax, customs duties are included in the revenue sources allocated to households in this analysis. Throughout the report, “taxes” is often used for simplicity to refer to taxes and customs duties.

near-cash transfers (such as food assistance), and health care transfers (such as Medicare benefits) minus average taxes paid per household. CBO calculated average transfers minus taxes for each of the three types of households and five income groups included in the analysis. That measure—which is sometimes used as a proxy for how the federal government's spending programs and taxes affect the resources available to households—incorporates all of the taxes examined in this analysis but omits a substantial share of federal spending.

- **Average spending minus taxes** per household is a broader measure. It represents average federal spending per household on cash, near-cash, and health care transfers, plus average spending on almost all of the other goods and services that the government provides (such as national defense), minus average taxes paid per household. That measure incorporates all of the spending and taxes examined in this report.

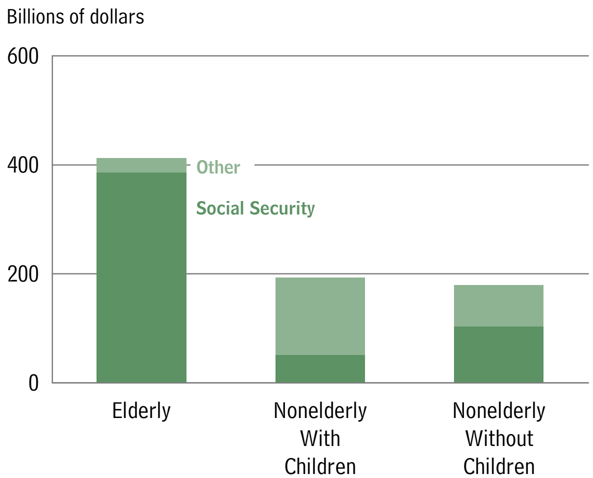
CBO allocated spending on transfers to participants in various programs using survey data collected by the Census Bureau as well as data from the Internal Revenue Service (IRS)—but such data are not available for spending on most other goods and services, so CBO allocated those amounts to all households. Because of uncertainty about the best approach to use, CBO allocated that spending in two ways: in proportion to each household's share of the population and in proportion to each household's share of total market income.

Summary Figure 1 summarizes the results of CBO's analyses by type of household, and Summary Figure 2 shows the results by income group for nonelderly households.

Summary Figure 1.

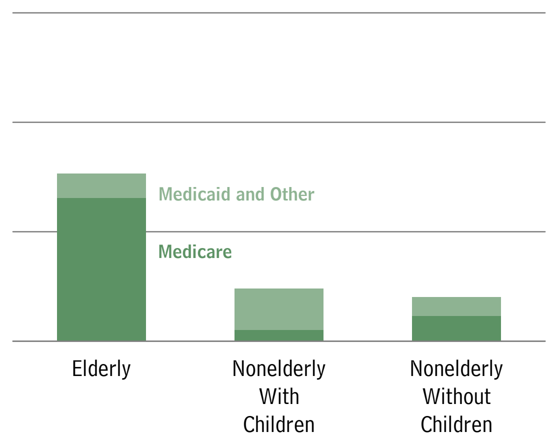
Distribution of Federal Spending and Taxes, by Type of Household, 2006

Spending on Cash and Near-Cash Transfers



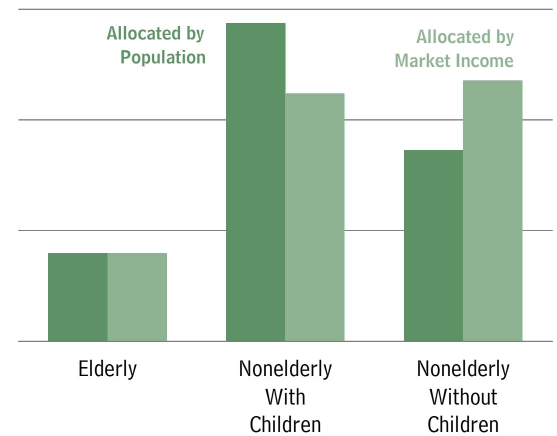
About 30 percent of federal spending in 2006, or $785 billion, went to assistance programs that provide cash payments or "near-cash" benefits (such as help with food, housing, or college tuition) to households. Social Security accounted for more than two-thirds of that spending and therefore significantly affected its distribution. About $415 billion in cash and near-cash transfers went to elderly households, of which more than $385 billion—or almost 95 percent—was spending on Social Security.

Spending on Health Care Transfers



About 18 percent of federal spending in 2006, or approximately $480 billion, went to programs that provide health care benefits. The largest of those programs is Medicare, which accounted for over two-thirds of spending in this category. About $305 billion in health care transfers went to elderly households, including about $260 billion—or 85 percent—in net spending on Medicare.

Spending on Other Goods and Services

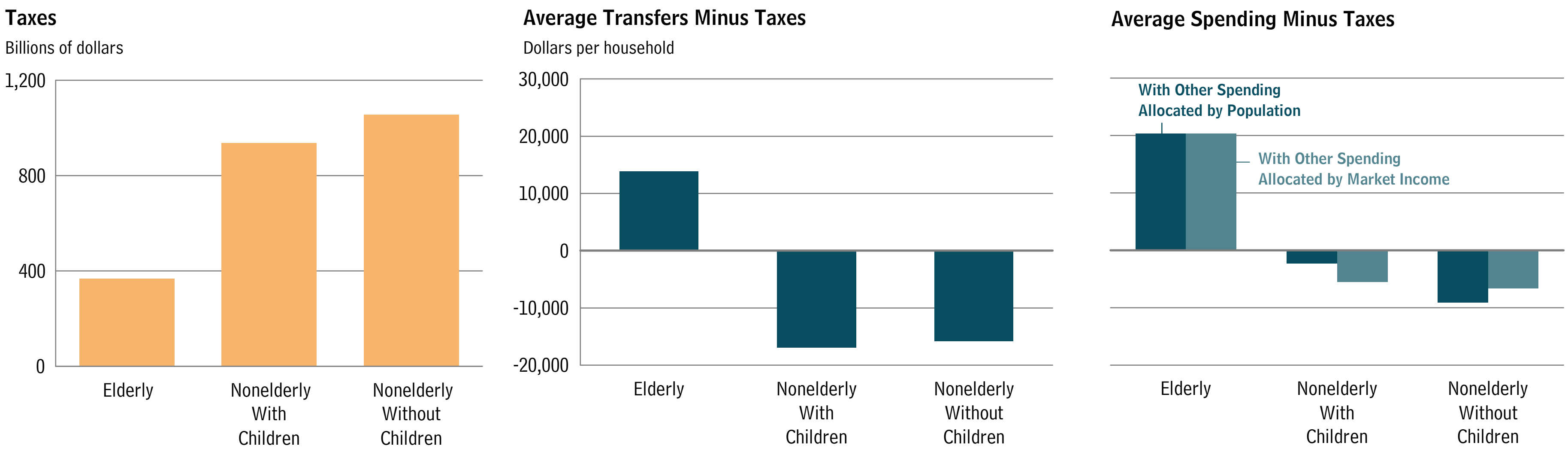


About 40 percent of federal spending in 2006, or $1.1 trillion, was for things other than transfers, such as national defense, the judicial system, agriculture, and education. (That figure excludes interest payments on federal debt held by the public.) Because of uncertainty about how best to allocate such spending among households, CBO allocated it in two alternative ways: in proportion to each household's share of the population (that is, with spending divided equally among everyone in the United States) and in proportion to each household's share of total market income.

Continued

Summary Figure 1. **Continued**

Distribution of Federal Spending and Taxes, by Type of Household, 2006



The federal government collected $2.4 trillion in revenues in 2006. Overall, the three types of households accounted for shares of total revenues that were roughly equal to their shares of total market income. People in elderly households paid taxes (including customs duties) that accounted for 15 percent of revenues in 2006; people in nonelderly households with children, 39 percent; and people in nonelderly households without children, 44 percent. (The remaining 2 percent of federal revenues were not allocated to households in this analysis.)

On average, elderly households received more in cash, near-cash, and health care transfers in 2006 than they paid in taxes, whereas nonelderly households paid more in taxes than they received in transfers. Average transfers exceeded taxes paid by about $14,000 for elderly households, but tax payments exceeded transfers by about $17,000 for nonelderly households with children present and by about $16,000 for nonelderly households without children present.

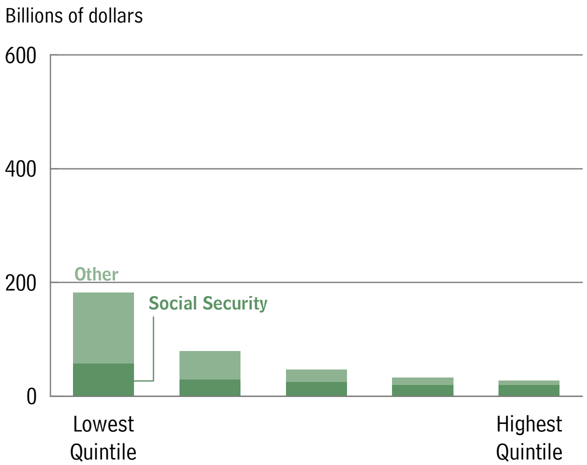
With federal spending on other goods and services added to spending on transfers, average spending on elderly households in 2006 outstripped the average taxes paid by those households by about $20,000. In contrast, taxes paid exceeded federal spending by an average of about $2,000 for nonelderly households with children present and $9,000 for nonelderly households without children present if spending on other goods and services is allocated in proportion to each household's share of the population; those differences were about $6,000 and $7,000, respectively, if such spending is allocated in proportion to a household's share of market income.

Source: Congressional Budget Office.

Summary Figure 2.

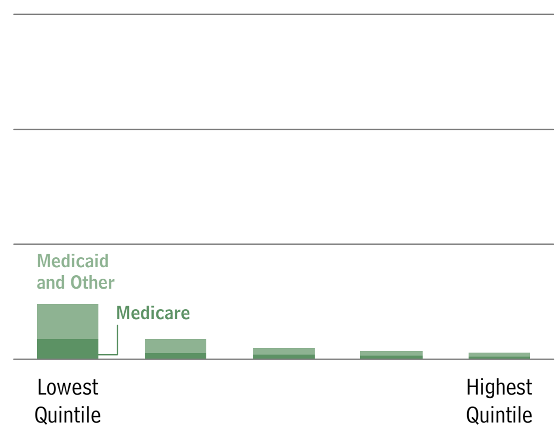
Distribution of Federal Spending and Taxes for Nonelderly Households, by Income Group, 2006

Spending on Cash and Near-Cash Transfers



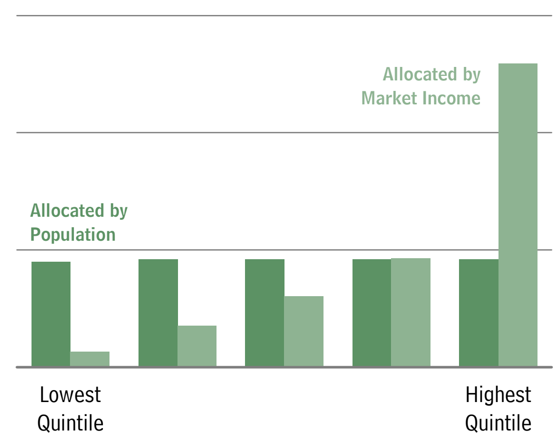
The federal government spent almost $375 billion in 2006 to provide cash and near-cash transfers to people in nonelderly households. Nearly half of that spending went to the one-fifth (or quintile) of people in nonelderly households with the lowest market income (adjusted for household size). That pattern occurred largely because many of the transfer programs included in this category are designed to assist low-income people.

Spending on Health Care Transfers



Federal spending on health care transfers for people in nonelderly households totaled about $175 billion in 2006. Over half of that spending went to people in the lowest income quintile, primarily in the form of Medicaid and other benefits. (The numbers in this analysis reflect only federal spending for Medicaid and other transfer programs, not spending by state or local governments.)

Spending on Other Goods and Services



CBO allocated about $920 billion of the federal government's $1.1 trillion in spending on other goods and services in 2006 to nonelderly households, using two alternative approaches. When that spending is allocated in proportion to each household's share of the population, all income groups have an equal share of the spending (because each quintile contains about the same number of people). When spending on other goods and services is apportioned according to each household's share of total market income, about $25 billion goes to the lowest income group and about $520 billion to the highest income group.

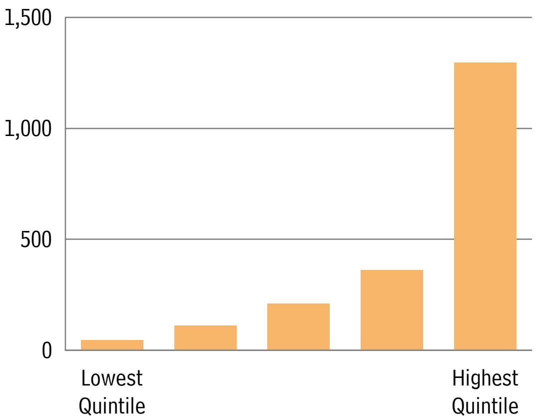
Continued

Summary Figure 2. **Continued**

Distribution of Federal Spending and Taxes for Nonelderly Households, by Income Group, 2006

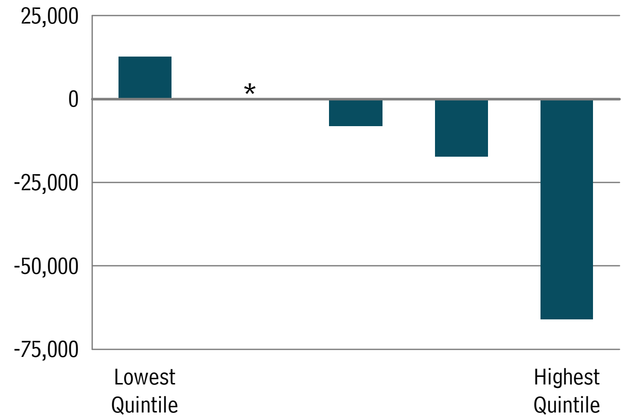
Taxes

Billions of dollars

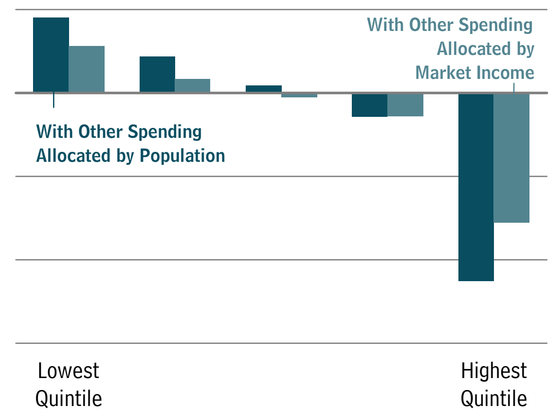


Average Transfers Minus Taxes

Dollars per household



Average Spending Minus Taxes



Among people in nonelderly households, the 20 percent in the lowest income quintile paid a total of about $45 billion in federal taxes in 2006, and the 20 percent in the highest income quintile paid a total of $1.3 trillion in federal taxes. (Those tax figures include customs duties.)

On average, federal spending on cash, near-cash, and health care transfers for households in the lowest income quintile of nonelderly households exceeded the federal taxes that those households paid by about $13,000 in 2006. For households in the three highest income quintiles, on average, spending on transfers was lower and tax payments were higher, meaning that average transfers minus taxes were negative. Among nonelderly households in the highest quintile, for instance, taxes surpassed transfers by an average of $66,000.

Including all of the federal spending and taxes allocated to households in this analysis, average spending for nonelderly households in 2006 exceeded average tax payments by about $22,000 for households in the lowest income quintile—whereas taxes exceeded spending by about $56,000 for those in the highest quintile—if spending on other goods and services is allocated in proportion to a household's share of the population. Alternatively, with spending on other goods and services allocated according to a household's share of total market income, average spending outstripped taxes by $14,000 for nonelderly households in the lowest quintile, whereas tax payments exceeded federal spending by about $39,000 for those in the highest quintile.

Source: Congressional Budget Office.

Note: * = between zero and $500.

CBO's Analytic Approach

This study builds on previous CBO reports that analyzed the distribution of household income, some federal spending, and federal taxes.[5] Using data from the Internal Revenue Service and survey data collected by the Census Bureau, this analysis extends earlier work by allocating most federal spending to households. Unlike in previous reports, CBO adjusted the federal spending and taxes reported in those data to match totals reported in the Treasury Department's *Monthly Treasury Statements*. Not all federal spending and revenues are allocated to households in this report, however: In all, the distributional analysis that encompasses all types of households includes 88 percent of federal spending and 98 percent of federal revenues. (It excludes the government's interest payments on debt held by the public, transfers to people living in institutions or abroad, and miscellaneous receipts, such as remittances to the Treasury from the Federal Reserve.)

Several caveats apply to this analysis:

- The information presented here focuses on 2006, the most recent year for which relevant IRS data were publicly available when the study began. Because those data precede the severe economic downturn that began at the end of 2007, this analysis does not reflect the policies implemented in response to the recession or the ways in which federal spending and taxes automatically change during a downturn.

- This report focuses on spending and taxes in a single year and does not analyze the way in which the taxes that people pay for certain programs (such as Social Security and Medicare) compare with the benefits they receive from those programs over their lifetime. In a recent report, CBO projected (under the assumption that all scheduled benefits are paid) that real median lifetime payroll taxes dedicated to Social Security would exceed real median lifetime Social Security benefits for people born in the 1940s through 1960s, but the opposite would be the case for people born in the 1970s and 1980s. In contrast, real median lifetime payroll taxes dedicated to Medicare would be much lower than real median lifetime Medicare benefits for people born in any of those decades.[6]

- Although this report examines the direct effects of federal spending and tax policies in 2006, in many cases the overall impact of those policies is not limited to 2006. For instance, the effects of federal spending on education, capital investments, and basic research are likely to last for many years. Similarly, the payroll taxes that wage earners paid in 2006 affect eligibility for Social Security and Medicare in future years.

- In this analysis, CBO does not examine how all of the federal government's activities affect households. For example, it does not address the effects of the government's regulatory policies or the indirect benefits that a household may derive from federal spending directed toward other households (such as the benefits to the entire population from having an educated, healthy, and economically secure citizenry). This analysis also does not address how federal spending and taxes affect the decisions that people make about such things as working or saving.

- The tax code contains numerous exclusions, deductions, preferential rates, and credits—known as tax expenditures—that are similar to spending programs. This analysis does not separately identify how tax expenditures, which totaled approximately $1 trillion in 2006, affect the distribution of the taxes that households pay; those effects are, however, embedded in the distribution of taxes presented here. In a recent report, CBO examined 10 of the largest tax expenditures in the individual income tax system and concluded that over half of the benefit from those tax expenditures goes to households in the highest income quintile.[7]

Allocation of Spending on Transfers

The spending on transfers that CBO allocated to households in this analysis is categorized as either spending on cash and near-cash transfers or spending on health care transfers. Cash transfers generally provide cash directly to households without

5. See Congressional Budget Office, *The Distribution of Household Income and Federal Taxes, 2008 and 2009* (July 2012), www.cbo.gov/publication/43373, and *Trends in the Distribution of Household Income Between 1979 and 2007* (October 2011), www.cbo.gov/publication/42729.

6. See Congressional Budget Office, *The 2013 Long-Term Budget Outlook* (September 2013), www.cbo.gov/publication/44521.

7. See Congressional Budget Office, *The Distribution of Major Tax Expenditures in the Individual Income Tax System* (May 2013), www.cbo.gov/publication/43768.

conditions on how the money is used; examples include Social Security benefits, refundable tax credits, and unemployment benefits.[8] Near-cash transfers provide various forms of assistance to households but with restrictions on how the assistance can be used; examples include benefits from the Supplemental Nutrition Assistance Program (SNAP), housing vouchers, and student financial assistance, such as Pell grants. The amount of federal spending on cash and near-cash transfers that CBO allocated to specific households was based on the amount of benefits that people reported receiving in the data used for this analysis. Those amounts were then adjusted to match spending totals for various programs in 2006 as reported by the Treasury Department (see the appendix for details).

The health care transfer programs examined here are Medicare, Medicaid, the Children's Health Insurance Program (CHIP), and health care programs for veterans who have limited income and assets. CBO allocated federal spending on health care transfers to households in its sample on the basis of the number of people in a household who were enrolled in a program and the average cost per enrollee. The number of people enrolled in a program is based on survey responses (adjusted for known issues of misreporting, when possible); the average cost per enrollee is based on the enrollee's age and disability status. That average does not reflect the actual cost of providing health care to any particular person in 2006. Furthermore, CBO allocated all federal spending on health care transfers to enrollees in the programs even though health care providers also benefit from that spending. That approach is analogous to the treatment of spending on cash and near-cash transfers: For example, CBO allocated all spending on SNAP to participants in the program. None was allocated to caseworkers or to the stores that sell food to SNAP beneficiaries.

The amounts allocated to households represent the cost to the government of providing those transfers—which, in nearly all cases, includes a program's administrative costs.[9] CBO did not attempt to estimate the value that households place on those transfers, which may be more or less than the actual cost to the government of providing the benefits. For instance, sick people who are enrolled in federal health care programs are likely to value those programs' benefits more than the average cost of providing the benefits to all enrollees.

8. For this analysis, CBO categorized the refundable portions of the earned income tax credit and the child tax credit—that is, the amounts that are paid to tax filers because they exceed the filers' tax liabilities—as spending, which is how they are recorded in the federal budget. In many previous analyses, CBO considered those amounts to be negative taxes.

9. Because the administrative costs for refundable tax credits are comingled with the costs of administering the entire U.S. tax system, CBO did not allocate those administrative costs to households who received the credits. Instead, those costs were included in federal spending on other goods and services and allocated to all U.S. households. For a detailed discussion of such credits, see Congressional Budget Office, *Refundable Tax Credits* (January 2013), www.cbo.gov/publication/43767.

Allocation of Spending on Other Goods and Services

Most of the things other than transfers that the federal government spends money on can be considered "public goods." Public goods have two traits: consumption of them by one person does not reduce the amount or quality available to other people, and it is very difficult to exclude people from consuming them once they are available. National defense, for example, provides benefits to all U.S. residents equally and without exclusion. For that reason, it is widely considered a public good. Spending on national defense accounts for over half of the spending in the "other goods and services" category.

Other programs or activities included in this category may not satisfy the narrow definition of a public good, but many of them resemble public goods in that they benefit much, if not all, of the population. Examples include federal spending on education, transportation, international relations, environmental protection, and basic scientific research.

CBO allocated the spending in this category to all households rather than only to households who were participating in a given program. No agreed-upon method exists, however, for distributing such spending among households. For illustrative purposes, CBO allocated that spending to households using two methods:

- In proportion to each household's share of the population (that is, with spending divided equally among everyone in the United States) and

- In proportion to each household's share of total market income.[10]

In both of those methods, the amount of spending on other goods and services that is allocated to households equals the total cost to the government of providing those goods and services. As with spending on transfers, however, that cost may or may not equal the value that households place on those goods and services. For instance, low-income households—many of whom may struggle to acquire basic necessities, such as food and shelter—may place a lower value on national defense than their share of the cost of providing that service.

Allocating spending on other goods and services in proportion to the number of people in each household yields an estimate of the average cost to the government of providing those goods and services to households. Underlying that method is the assumption that all people, regardless of their income or household characteristics, derive the same benefit from those goods and services, which is unlikely.

Allocating that spending according to each household's share of total market income produces estimates that may more closely represent what people are willing to pay for those other goods and services. However, that allocation method is not consistent with the average-cost-to-the-government framework used elsewhere in this report. Underlying that method is the assumption that households with higher income derive more benefit from those other goods and services than lower-income households do.

Unallocated Spending

Three types of federal spending—which totaled about $310 billion in 2006—were not allocated to households in this analysis:

- Federal interest payments on debt held by the public,
- Federal transfers to residents of long-term care institutions, and
- Federal transfers to people living outside the United States (including in U.S. territories, such as Puerto Rico).

Interest payments on Treasury debt sold to the public were the largest component of unallocated spending, amounting to approximately $215 billion—about 70 percent of unallocated spending and 8 percent of total federal spending. CBO excluded them because the interest payments that the government made in 2006 on accumulated debt were mostly costs that were associated with spending in excess of revenues in previous years.

CBO's analysis focuses on federal spending to provide goods and services to noninstitutionalized U.S. residents—the population covered by the data used for this report.[11] Spending on transfers for people living in long-term care institutions or outside the United States amounted to about $95 billion in 2006—or about 30 percent of the federal spending not allocated to households in this analysis and 4 percent of total federal spending.[12]

Allocation of Taxes

CBO estimated the distribution of nearly all federal revenues among households of various types. Individual income taxes, the largest source of federal revenues, were allocated to the households who paid them. Although corporations pay corporate income taxes on their profits, the cost of those taxes is ultimately borne by people through lower returns on their investments or lower real (inflation-adjusted) wages than would otherwise be the case. CBO allocated three-quarters of corporate income taxes to owners of capital, in proportion to their capital income, and one-quarter to workers, in proportion to their labor income. Payroll taxes, also known as social insurance taxes, were allocated to employees (including the share paid by

10. Other researchers who have examined the distribution of federal spending have treated spending on public goods in a variety of ways. Many have omitted such spending from their analyses because of the difficulty of knowing how to allocate it to households; others have made different choices about how to treat that spending than CBO did in this analysis. For instance, because market income may not be the best indicator of the value that households place on other goods and services, several other researchers have used different measures of income to allocate the value of public goods to households, including measures of total income, disposable income, or capital income. For more discussion, see the appendix.

11. Those data exclude people in correctional institutions as well as people in long-term care institutions. However, federal spending on residents of correctional institutions is included in the "other goods and services" category because it provides benefits to the entire U.S. population.

12. Excluding transfers to people in long-term care institutions reduces spending for Medicaid in 2006 by $33 billion, spending for Medicare by $32 billion, and spending for Social Security by $14 billion.

employers). Federal excise taxes and customs duties were allocated to households on the basis of their estimated consumption of the taxed goods, and estate and gift taxes were allocated according to estimates of households' taxable wealth. (For more details about those allocation methods, see the appendix.)

Miscellaneous receipts, which accounted for 2 percent of federal revenues in 2006, were not allocated to households. The majority of those receipts were remittances from the Federal Reserve to the Treasury, which were intragovernmental payments. A small portion of the miscellaneous receipts were receipts from various government fines and fees, which were not large enough to justify the difficulty of allocating them to specific types of households.

Future Costs of Federal Borrowing

In calendar year 2006, the federal government borrowed $0.2 trillion (by selling Treasury securities to investors) to cover spending that exceeded revenues. The cost of that borrowing was not allocated to households in this analysis. That cost—both the amount borrowed and the interest expenses associated with it—may be paid by households in future years in the form of higher taxes or lower federal spending than would otherwise be the case.

Besides the direct costs associated with the added debt that the government incurred in 2006, households could also be worse off in the future because of the economic effects of that borrowing. The distributional impact on future households will depend on whether and how the 2006 deficit is paid for and on the economic consequences of the increased federal debt; that impact is very uncertain and is outside the scope of this report.[13]

Average Transfers Minus Taxes and Average Spending Minus Taxes

To examine how federal spending and tax policies reallocate resources among different types of households and different income groups, CBO calculated two measures that compare average government spending per household with average taxes paid per household:

- *Average transfers minus taxes*—The average, for a particular group of households, of federal spending on cash, near-cash, and health care transfers minus the average amount of taxes paid by those households.

- *Average spending minus taxes*—Similar to the previous measure except that spending for a particular group of households includes federal spending on other goods and services as well as federal spending on transfers.

Average transfers minus taxes is a commonly calculated measure, both because of the availability of data and because it provides some indication of how federal spending and taxes directly affect the financial resources available to households. However, that measure presents an unbalanced and incomplete picture of how federal spending and taxes affect households. The total transfers used in that measure (cash and near-cash transfers plus health care transfers) represent only 48 percent of federal spending, whereas the taxes used in that measure make up 98 percent of federal revenues.

The second measure is more comprehensive because it covers 88 percent of federal spending, but it is subject to the uncertainty that exists about the most appropriate way to allocate the $1.1 trillion in federal spending on other goods and services. CBO allocated that spending in two ways for illustrative purposes and calculated two versions of average spending minus taxes—with spending on other goods and services allocated to households in proportion to their share of either the population or total market income.

The averages included in the two measures mask considerable variation in the amounts of spending for and taxes paid by individual households of a given type or in a particular income group. For example, many people in a given type of household or income group received no benefits from specific government transfer programs or received benefits much greater than the average.

13. For examples of estimates of the distributional impact of federal deficits using various assumptions about how the debt is eventually paid, see Aspen Gorry and Matthew H. Jensen, "A Simple Measure of the Distributional Burden of Debt," *Tax Notes* (December 3, 2012), pp. 1113–1119, http://tinyurl.com/mgxu5gn; Douglas W. Elmendorf and others, *Distributional Effects of the 2001 and 2003 Tax Cuts: How Do Financing and Behavioral Responses Matter?* (Brookings Institution, June 2008), www.brookings.edu/research/papers/2008/06/taxcuts-gale; and William G. Gale, Peter R. Orszag, and Isaac Shapiro, "Distribution of the 2001 and 2003 Tax Cuts and Their Financing," *Tax Notes* (June 21, 2004), pp. 1539–1548, http://tinyurl.com/5a5ws (PDF, 298 KB).

Total Federal Spending and Revenues in 2006

The two exhibits that follow present a breakdown of all federal spending and revenues in calendar year 2006 (as opposed to the subsets of spending and taxes included in the later exhibits, which present distributions among households). This report focuses on 2006 because that was the most recent year for which all of the necessary data were publicly available when CBO began the analysis. Thus, the analysis does not reflect the government's responses to the severe recession that started at the end of 2007 or the economy's slow recovery from that downturn. Partly because of the effects of the recession, federal spending was much higher last year than it was in 2006 (although revenues were only slightly higher).

For this analysis, CBO divided federal spending into four categories:

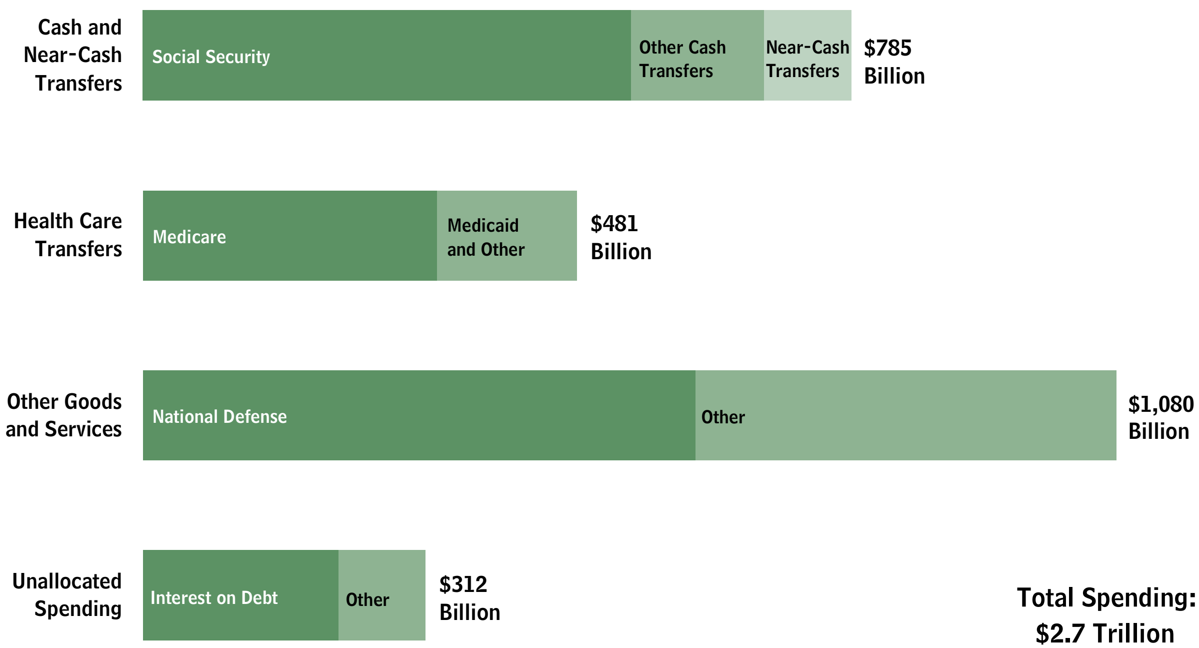
- *Cash and near-cash transfers*—Spending on Social Security (including Disability Insurance payments), the refundable portions of the earned income tax credit and the child tax credit, Supplemental Security Income, unemployment insurance, the Supplemental Nutrition Assistance Program, housing assistance, and financial assistance for students (primarily Pell grants), among other programs;
- *Health care transfers*—Spending on Medicare, Medicaid, the Children's Health Insurance Program, and health care benefits for veterans with limited income and assets;
- *Other goods and services*—Everything else the government spends money on that CBO allocated to households, such as national defense (defined, for the purposes of this analysis, as spending on the Department of Defense's military programs, the Department of Homeland Security, and other defense programs) and the activities of many other departments and agencies (listed in Table A-2 on page 45); and
- *Unallocated spending*—Interest payments on federal debt held by the public and spending on transfers to people living in institutions or outside the United States (including in U.S. territories).

Federal revenues were divided into five categories:

- *Individual income taxes*;
- *Payroll taxes* (also called social insurance taxes)—Mainly taxes to fund Social Security, Medicare, and unemployment insurance;
- *Corporate income taxes*;
- *Other taxes and revenues*—Excise taxes, estate and gift taxes, and customs duties; and
- *Unallocated revenues*—Interest earnings of the Federal Reserve that are remitted to the Treasury and receipts from a variety of federal fees and fines.

Exhibit 1.

Federal Spending, 2006



Sources: Department of the Treasury, *Monthly Treasury Statements;* Congressional Budget Office.

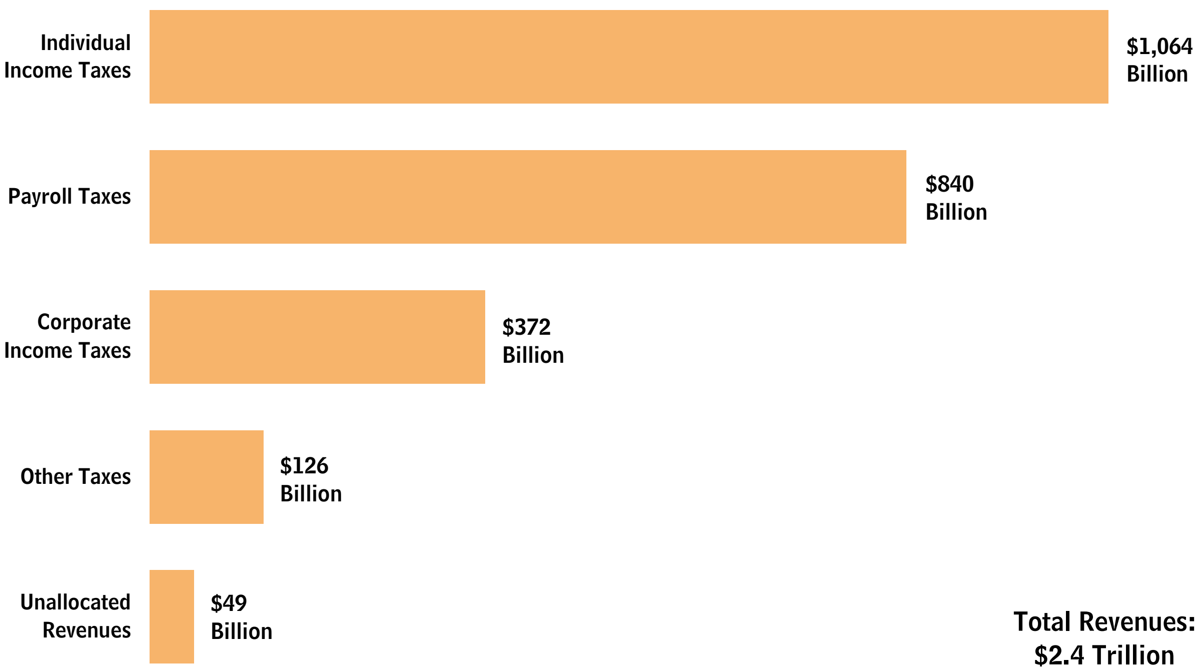
Note: "Other cash transfers" include, for example, federal spending on refundable tax credits, Supplemental Security Income, and unemployment insurance. "Near-cash transfers" include, for example, federal spending on the Supplemental Nutrition Assistance Program and housing assistance. "Other" health care transfers consist of federal spending on the Children's Health Insurance Program and on health care for veterans who have limited income and assets. Spending on "other goods and services" consists of spending on virtually all other programs and activities of the federal government (such as national defense, education, transportation, and agriculture). "Other" unallocated spending comprises transfers that go to people living in long-term care institutions or to people living outside the United States. (For more details about the components of each category, see the appendix.)

The federal government spent $2.7 trillion in calendar year 2006 (including spending that CBO did not allocate to households in this analysis). Of the $0.8 trillion in spending on cash and near-cash transfers, nearly 70 percent consisted of spending on Social Security (including Disability Insurance payments). Some $0.5 trillion in federal spending went for health care transfers, over two-thirds of which was spending on Medicare. Spending on other goods and services accounted for about $1.1 trillion in 2006, making it the largest spending category in this analysis. More than half of that category was spending on national defense.

About $0.3 trillion (or 12 percent) of federal spending in 2006 was not included in the distributional analysis in this report. Some 70 percent of that unallocated spending was interest payments on federal debt held by the public. The remaining 30 percent (or 4 percent of total federal spending) was spending on transfers for people living in long-term care institutions or outside the United States. ◆

Exhibit 2.

Federal Revenues, 2006



Sources: Department of the Treasury, *Monthly Treasury Statements;* Congressional Budget Office.

Note: Payroll taxes include taxes for Social Security, Medicare, and unemployment insurance. "Other taxes" consist of excise taxes, estate and gift taxes, and customs duties. "Unallocated revenues" consist of remittances to the Treasury from the Federal Reserve System and other miscellaneous receipts.

The federal government collected $2.4 trillion in taxes and other revenues in calendar year 2006. The three largest revenue sources—individual income taxes ($1.1 trillion), payroll taxes ($0.8 trillion), and corporate income taxes ($0.4 trillion)—accounted for 93 percent of federal revenues in 2006. The remaining revenue sources allocated to households in this analysis were federal excise taxes ($73 billion), estate and gift taxes ($28 billion), and customs duties ($25 billion), which together accounted for 5 percent of revenues. Approximately 2 percent of federal revenues—mainly remittances to the Treasury from the Federal Reserve, which were intragovernmental payments—were not allocated to households in this analysis. ◆

Federal Spending and Taxes, by Type of Household

The exhibits that follow—3 through 13—show the distribution of different types of federal spending and taxes (which include customs duties but exclude unallocated revenues) among people living in three types of households:

- Elderly households—whose members make up 15 percent of the U.S. population—consist of people who share a residence in which the "householder" is age 65 or older.[14]

- Nonelderly households with children—whose members constitute 53 percent of the population—are people who share a housing unit in which the householder is younger than age 65 and at least one person living in the household is under age 18.

- Nonelderly households without children—the other 32 percent of the population—consist of people sharing a residence in which the householder is younger than age 65 and no member of the household is under age 18.

Exhibits 3 through 6 summarize, by type of household, the distribution of federal spending on cash and near-cash transfers and on health care transfers, as well as the distribution of federal tax payments. The distribution of federal spending on other goods and services is shown later, in Exhibit 11, as a prelude to a discussion of how average total spending per household compares with average tax payments per household.

Exhibits 7 through 10 focus on the first of two average measures that CBO calculated for this analysis: *average transfers minus taxes* per household represents spending on cash and near-cash transfers, plus spending on health care transfers, minus taxes, all divided by the number of households in each household category (or, later in the report, income category). That measure incorporates just 48 percent of federal spending in 2006 but 98 percent of federal revenues.

Exhibits 12 and 13 focus on a broader measure: *average spending minus taxes,* which consists of spending on cash, near-cash, and health care transfers, plus spending on other goods and services, minus taxes, all divided by the number of households in each category. Average spending minus taxes incorporates 88 percent of federal spending and 98 percent of federal revenues in 2006.

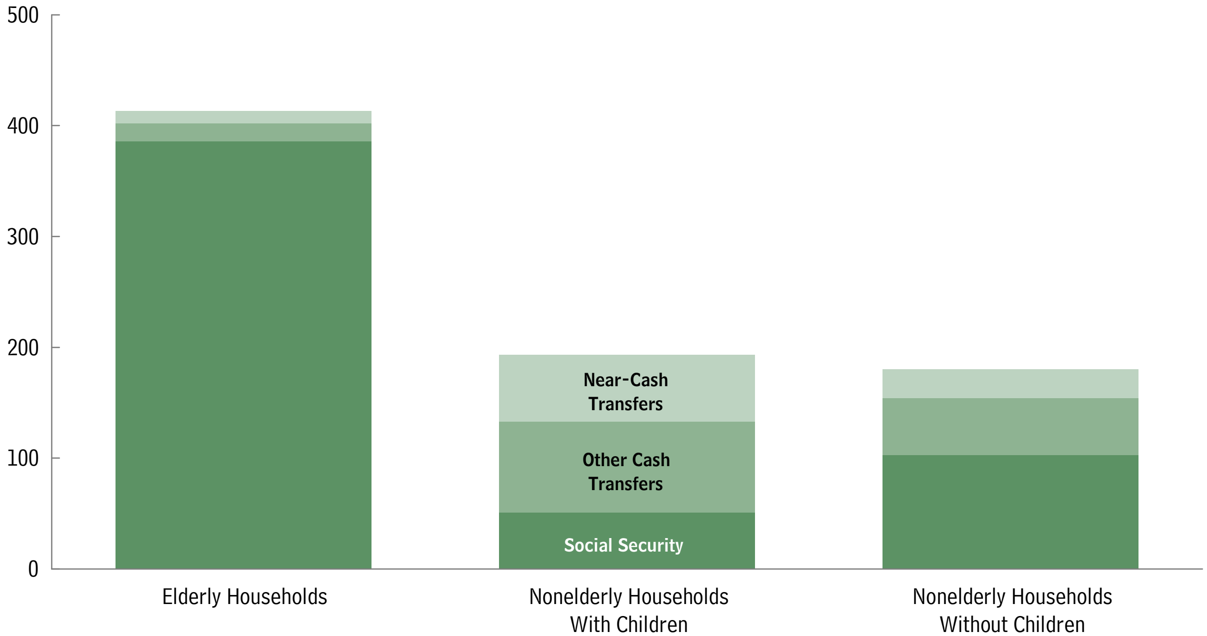
The distributions of federal spending and taxes in recent years probably differed from the 2006 distributions presented here. In calendar year 2012, federal spending was about $0.9 trillion higher than in 2006; some of that additional spending went to households affected by the 2007–2009 recession. Total revenues were similar in 2006 and 2012 ($2.4 trillion and $2.5 trillion, respectively), but the distribution of taxes among types of households probably differed because of changes in tax laws and in the distribution of income.

14. The householder is the person who owns or rents the housing unit for which the data used in this analysis are collected. If the housing unit is owned or rented jointly, either person may be the householder. The age of the householder is the characteristic used to classify households as elderly or nonelderly, but elderly households may have younger people in them, and nonelderly households may include people over age 65.

Exhibit 3.

Federal Spending on Cash and Near-Cash Transfers, by Type of Household, 2006

(Billions of dollars)



Source: Congressional Budget Office.

Note: "Other cash transfers" include, for example, federal spending on refundable tax credits, Supplemental Security Income, and unemployment insurance. "Near-cash transfers" include, for example, federal spending on the Supplemental Nutrition Assistance Program and housing assistance. (For more details about the components of each category, see the appendix.)

Of the $785 billion in spending on cash and near-cash transfers that CBO allocated to households in this analysis, about $415 billion—or more than half—went to the 15 percent of people living in elderly households in 2006. Although 53 percent of people lived in nonelderly households with children and 32 percent lived in nonelderly households without children, nearly equal amounts of spending on cash and near-cash transfers went to those two types of households (about $195 billion and $180 billion, respectively).

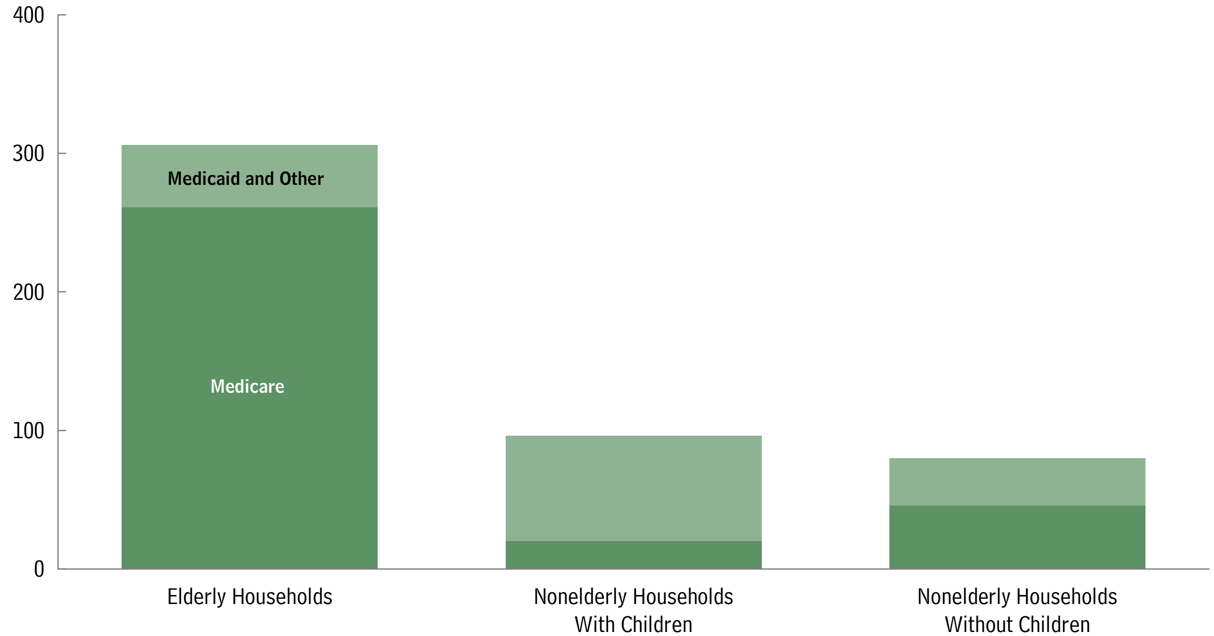
Spending on Social Security—which includes retirement, survivors', and disability benefits—was a major component of spending for all three types of households. Social Security accounted for almost 95 percent (over $385 billion) of spending on cash and near-cash transfers for elderly households, more than 25 percent (about $50 billion) for nonelderly households with children, and more than 55 percent (about $105 billion) for nonelderly households without children.

After Social Security, the largest cash or near-cash transfers for nonelderly households with children were the refundable portions of the earned income and child tax credits ($40 billion combined); the largest for nonelderly households without children was Supplemental Security Income ($20 billion). (Supplemental data for this report available at www.cbo.gov/publication/44698 show spending for each of the transfer programs included in this analysis.) ◆

Exhibit 4.

Federal Spending on Health Care Transfers, by Type of Household, 2006

(Billions of dollars)



Source: Congressional Budget Office.

Note: "Other" health care transfers consist of federal spending on the Children's Health Insurance Program and on health care for veterans who have limited income and assets. (For more details about the components of each category, see the appendix.)

Of the $480 billion in federal spending on health care transfers that CBO allocated to households in this analysis, about $305 billion—or almost two-thirds—went to people living in elderly households. Medicare (net of premiums paid by enrollees) accounted for about $260 billion, or 85 percent, of such spending for elderly households.

Spending on health care transfers was much smaller for nonelderly households: about $95 billion for those with children and about $80 billion for those without children. Medicaid was the predominant health care program for nonelderly households with children, accounting for three-quarters of their federal health care transfers (or about $70 billion). Low-income families must generally have a child to be eligible for Medicaid.

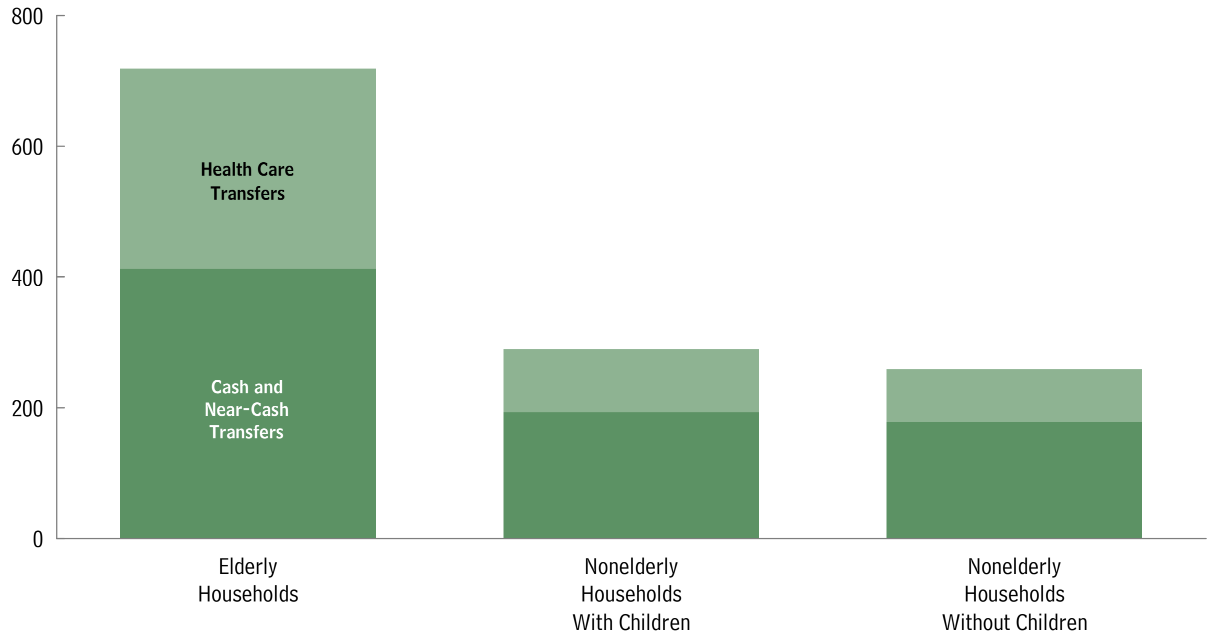
For nonelderly households without children, Medicare was a larger source of federal health care spending than Medicaid was (accounting for 58 percent of that spending versus 36 percent from Medicaid). People in nonelderly households may qualify for Medicare because they are 65 or older (but not the householder), because they receive Disability Insurance benefits from Social Security, or because they have end-stage renal disease. (In general, DI beneficiaries become eligible for Medicare, regardless of their age, after a two-year waiting period.)

The federal spending on transfers examined here excludes transfers for people in long-term care institutions. In 2006, about 10 percent of Medicare spending and about 20 percent of Medicaid spending was for residents in long-term care institutions. ◆

Exhibit 5.

Federal Spending on Transfers, by Type of Household, 2006

(Billions of dollars)



Source: Congressional Budget Office.

Note: "Cash and near-cash transfers" include, for example, federal spending on Social Security, refundable tax credits, Supplemental Security Income, unemployment insurance, the Supplemental Nutrition Assistance Program, and housing assistance. "Health care transfers" consist of federal spending on Medicare, Medicaid, the Children's Health Insurance Program, and health care programs for veterans who have limited income and assets. (These transfers encompass most, but not all, of the transfers in the federal budget. For more details about the components of each category, see the appendix.)

In 2006, the federal government spent a total of almost $1.3 trillion on the transfers examined in this report—$785 billion on cash and near-cash transfers and about $480 billion on health care transfers.

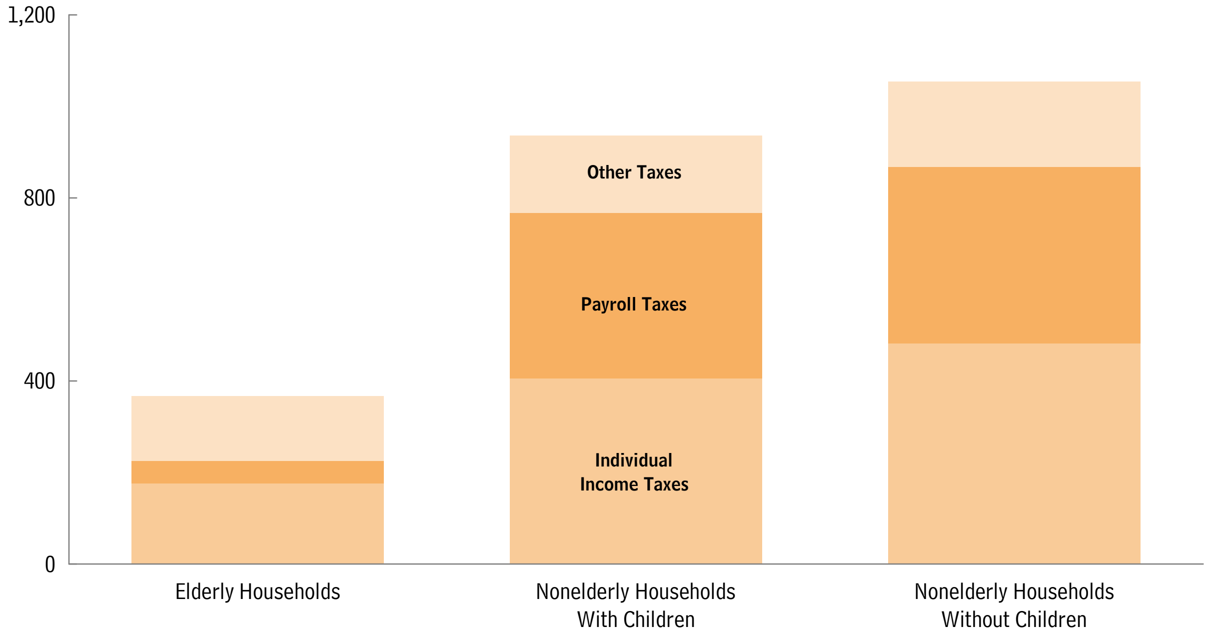
More than half of the total spending on transfers (about $720 billion) went to the 15 percent of people living in elderly households. Many members of those households are retired and receive benefits from Social Security and Medicare—the government's two largest transfer programs, which together accounted for about a third of all federal spending in 2006.

As a whole, nonelderly households with children and nonelderly households without children received roughly equal amounts of transfers (about $290 billion and $260 billion, respectively). Cash and near-cash transfers made up a greater proportion of total transfers for nonelderly households (68 percent) than for elderly households (57 percent). ◆

Exhibit 6.

Federal Taxes, by Type of Household, 2006

(Billions of dollars)



Source: Congressional Budget Office.

Note: Payroll taxes include taxes for Social Security, Medicare, and unemployment insurance. "Other taxes" consist of corporate income taxes, excise taxes, estate and gift taxes, and customs duties.

Each category of households accounted for a share of total revenues in 2006 that was roughly equal to that category's share of the total market income earned in that year. People in elderly households paid taxes that accounted for 15 percent of revenues in 2006—about $370 billion—and earned 15 percent of market income. People in nonelderly households with children paid taxes that accounted for 39 percent of revenues—$955 billion—and earned 41 percent of market income. And people in nonelderly households without children paid taxes that accounted for 44 percent of revenues—$1.1 trillion—and earned 44 percent of market income.

Individual income taxes were the largest category of taxes for elderly households, as they were for all types of households. Payroll taxes were the smallest category for elderly households because many people in such households were retired. Nevertheless, some members of elderly households paid individual income and payroll taxes because they were still working or, in the case of retired people with high income, were paying individual income taxes on part of their Social Security benefits.

For nonelderly households, individual income taxes and payroll taxes together accounted for over 80 percent of the taxes they paid. The rest consisted of corporate income taxes, excise taxes, estate and gift taxes, and customs duties. (For details about how CBO allocated revenue sources to households, see the appendix.) ◆

Exhibit 7.

Average Transfers and Taxes per Household, by Type of Household, 2006

(Dollars per household)

	Elderly Households	Nonelderly Households With Children	Nonelderly Households Without Children
Transfers			
Cash and near-cash transfers			
Social Security	15,500	1,300	2,000
Other cash transfers	600	2,100	1,000
Near-cash transfers	400	1,500	500
Subtotal	16,500	4,900	3,500
Health care transfers			
Medicare	10,400	500	900
Medicaid and other	1,800	1,900	700
Subtotal	12,200	2,400	1,500
Total Transfers	28,800	7,300	5,000
Taxes	14,800	24,200	20,800
Transfers Minus Taxes			
In dollars	13,900	-16,900	-15,800
As a percentage of market income	25	-17	-20
Memorandum:			
Average Market Income	56,200	100,100	80,300
Average Market Income Plus Transfers Minus Taxes	70,200	83,200	64,600
Median Market Income[a]	23,200	64,800	52,200

Source: Congressional Budget Office.

Notes: "Other cash transfers" include, for example, federal spending on refundable tax credits, Supplemental Security Income, and unemployment insurance. "Near-cash transfers" include, for example, federal spending on the Supplemental Nutrition Assistance Program and housing assistance. "Other" health care transfers consist of federal spending on the Children's Health Insurance Program and on health care for veterans who have limited income and assets. "Taxes" include customs duties. (For more details about the components of each category, see the appendix.) Market income consists of labor income, business income, capital gains, capital income (excluding capital gains), and other nontransfer income.

All dollar amounts are rounded to the nearest $100.

a. For a discussion of how median market income relates to average market income, see the appendix.

Average federal spending for cash and near-cash transfers was substantially larger for elderly households ($16,500) than for non-elderly households with children ($4,900) or without children ($3,500). That difference occurred mainly because average spending on Social Security for elderly households far exceeded average spending on all cash and near-cash transfers (including Social Security) for other types of households.

Federal spending on health care transfers was also much greater for elderly households (an average of $12,200) than for nonelderly households with or without children ($2,400 and $1,500, respectively). As with Social Security, average Medicare spending for elderly households surpassed average spending on all of the health care transfers examined here (including Medicare) for nonelderly households.

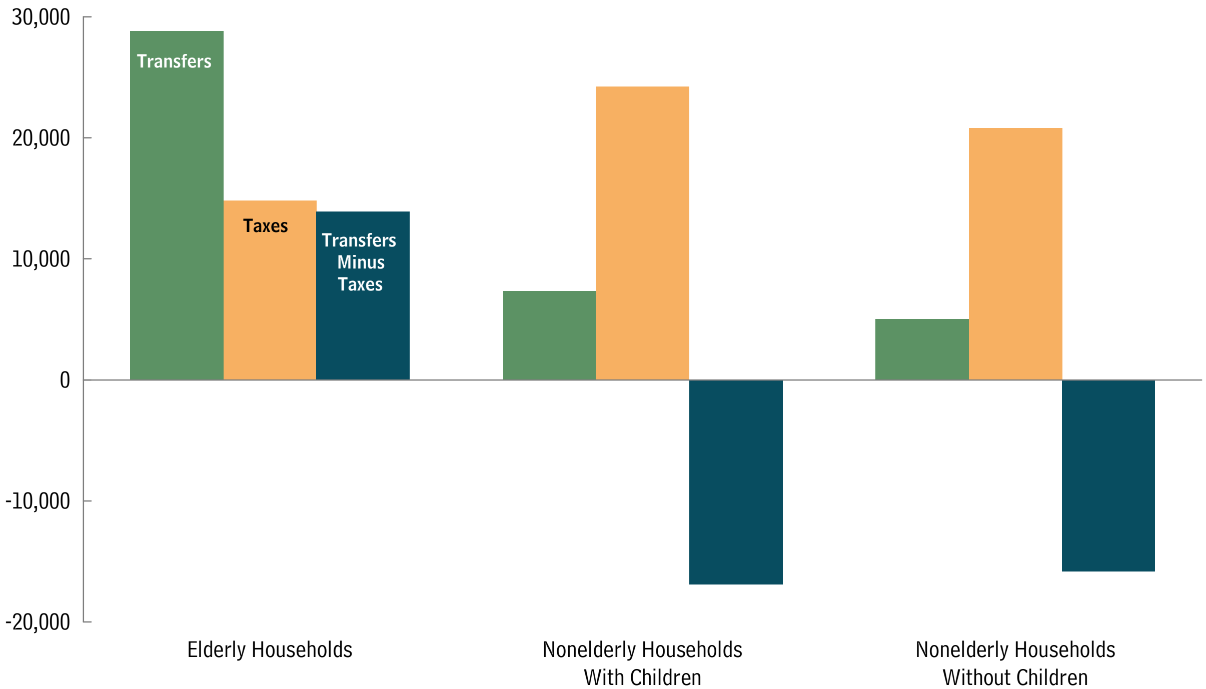
The situation was reversed with regard to taxes: On average, nonelderly households paid more in federal taxes than elderly households did, in part because their average annual market income was higher than that of elderly households, many of whose members were retired. (Those tax figures do not account for the refundable portions of the earned income and child tax credits, which are included in spending on cash transfers.)

The spending on transfers included here constituted 48 percent of federal spending in 2006, and the taxes examined here represented 98 percent of federal revenues in that year. ◆

Exhibit 8.

Average Transfers, Taxes, and Transfers Minus Taxes per Household, by Type of Household, 2006

(Dollars per household)



Source: Congressional Budget Office.

Note: Transfers are cash and near-cash transfers plus health care transfers, which together accounted for 48 percent of federal spending in 2006. Taxes, which include customs duties, made up 98 percent of federal revenues in that year. (For more details about the components of those categories, see the appendix.)

Transfers increase the resources available to households, whereas taxes decrease them. The combined effect of federal spending on transfers (cash, near-cash, and health care) and of taxes was to shift resources from people living in nonelderly households to people living in elderly households.

Elderly households were the only type of household that received more in federal transfers in 2006, on average, than they paid in federal taxes. For those households, transfers averaged about $29,000, and federal tax payments averaged about $15,000. Consequently, average transfers minus taxes for those households amounted to roughly $14,000.

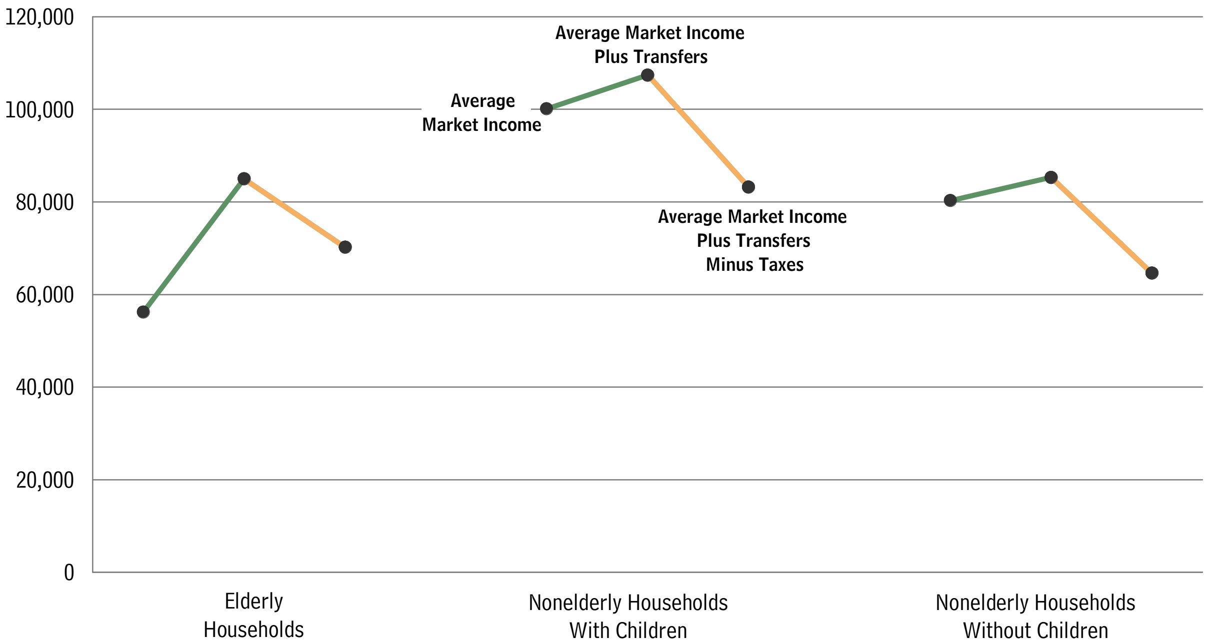
In contrast, federal transfers for nonelderly households were less, on average, than the federal taxes paid by those households. For instance, nonelderly households with children received an average of about $7,000 in transfers and paid an average of about $24,000 in taxes; thus, average federal taxes paid exceeded average federal transfers by about $17,000 for those households. For nonelderly households without children, federal transfers averaged about $5,000 and federal tax payments averaged about $21,000, so average taxes paid exceeded transfers by about $16,000.

The average difference between transfers and taxes for people over their lifetime is likely to be smaller than the average differences that are shown here for elderly and nonelderly households in a particular year, partly because people move between categories of households during their lifetime. ◆

Exhibit 9.

Average Market Income Plus Transfers Minus Taxes, by Type of Household, 2006

(Dollars per household)



Source: Congressional Budget Office.

Note: Market income consists of labor income, business income, capital gains, capital income (excluding capital gains), and other nontransfer income. Transfers are cash and near-cash transfers plus health care transfers, which together accounted for 48 percent of federal spending in 2006. Taxes, which include customs duties, made up 98 percent of federal revenues in that year. (For more details about the components of those categories, see the appendix.)

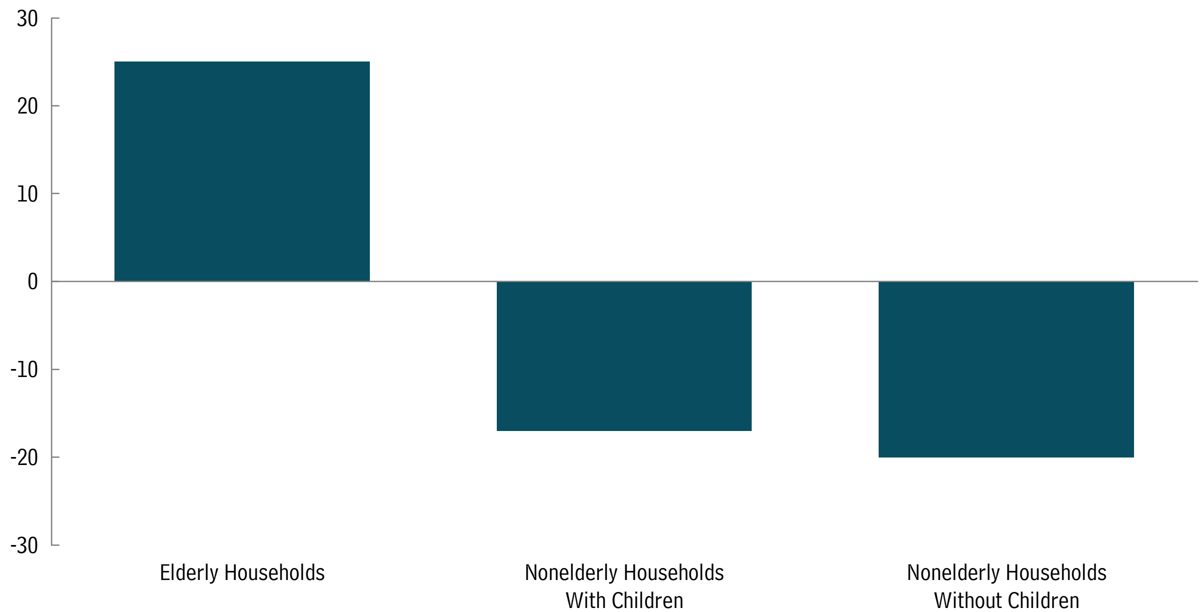
Among the three categories of households, elderly households had the lowest average market income in 2006—about $56,000—in part because many members of those households were retired. On average, elderly households received almost $14,000 more in federal transfers than they paid in federal taxes. As a result, their average income after taking transfers and taxes into account—about $70,000—was higher than their market income and also higher than the average income after transfers and taxes of nonelderly households without children.

Nonelderly households with children had the highest average market income in 2006—about $100,000. Part of the reason is that many of those households contain people in the peak earning years of their careers or contain two wage earners. Those households paid nearly $17,000 more in federal taxes than they received in cash, near-cash, and health care transfers, so their income after transfers and taxes averaged about $83,000, also the highest of the three groups.

Nonelderly households without children had average market income of approximately $80,000 in 2006. Their income after taking transfers and taxes into account was nearly $16,000 lower, or approximately $65,000. ◆

Exhibit 10.

Average Transfers Minus Taxes as a Percentage of Market Income, by Type of Household, 2006



Source: Congressional Budget Office.

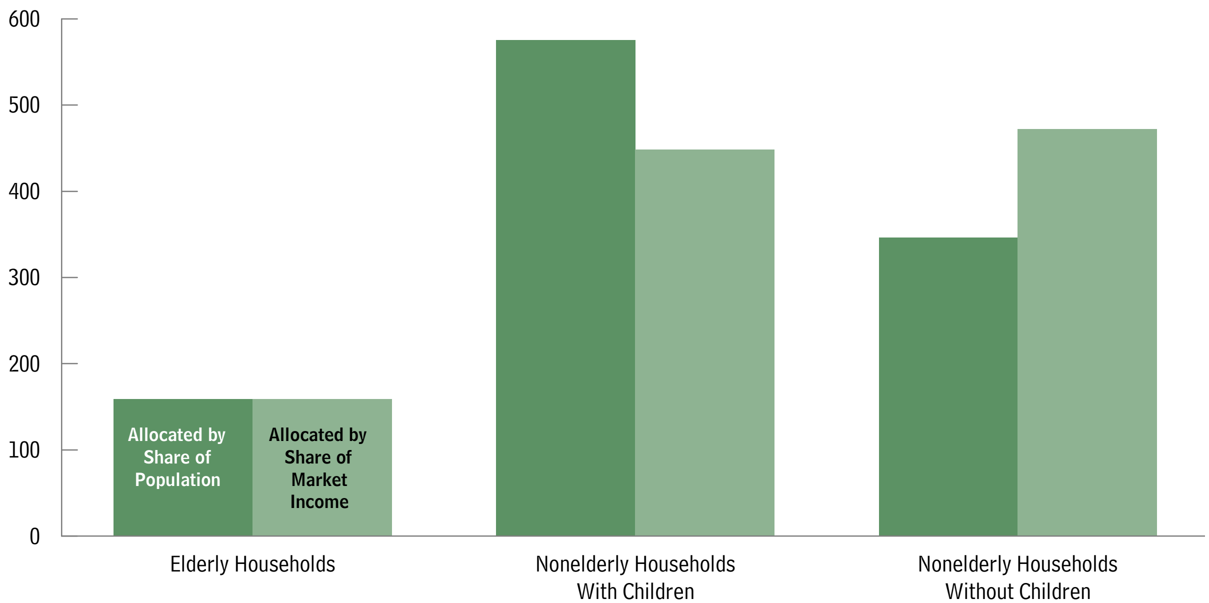
Note: Market income consists of labor income, business income, capital gains, capital income (excluding capital gains), and other nontransfer income. Transfers are cash and near-cash transfers plus health care transfers, which together accounted for 48 percent of federal spending in 2006. Taxes, which include customs duties, made up 98 percent of federal revenues in that year. (For more details about the components of those categories, see the appendix.)

On average, the combined effect of federal transfers and taxes was to raise the income of elderly households (who had the lowest average market income) and to reduce the income of nonelderly households, whether with or without children. Federal transfers and taxes increased the average income of elderly households by 25 percent in 2006. For nonelderly households, by contrast, federal transfers and taxes had the combined effect of reducing average household income: by 17 percent for households with children and by 20 percent for households without children. ◆

Exhibit 11.

Federal Spending on Other Goods and Services, by Type of Household, 2006

(Billions of dollars)



Source: Congressional Budget Office.

Note: Spending on "other goods and services" consists of spending on all programs and activities of the federal government other than cash, near-cash, and health care transfers and interest on federal debt held by the public (such things as national defense, education, transportation, and agriculture). (For more details about the components of that category, see the appendix.) Market income consists of labor income, business income, capital gains, capital income (excluding capital gains), and other nontransfer income.

The government spent $1.1 trillion in 2006 on things other than cash, near-cash, and health care transfers and interest payments on federal debt held by the public. Those other goods and services consist of national defense ($0.6 trillion) and a wide variety of additional activities, many of which provide benefits to broad segments of the population. CBO allocated spending for other goods and services to all households rather than specifically to households who participated in particular programs. Because of uncertainty about how best to do that, CBO allocated such spending in two ways: in proportion to each household's share of the population (so everyone was treated as receiving an equal share of the spending) and in proportion to each household's share of total market income.

With the first approach, the share of spending on other goods and services allocated to each category of household matched that category's percentage of the population: 15 percent to elderly households, 53 percent to nonelderly households with children, and 32 percent to nonelderly households without children.

The amount of spending on other goods and services allocated to elderly households was about the same under the second approach (reflecting a household's share of total market income) because elderly households account for 15 percent of both the population and market income. The amount allocated to nonelderly households with children was smaller under that approach (41 percent), whereas the amount allocated to nonelderly households without children was larger (44 percent). ◆

Exhibit 12.

Average Spending and Taxes per Household, by Type of Household, 2006

(Dollars per household)

	Elderly Households	Nonelderly Households With Children	Nonelderly Households Without Children
With Spending on Other Goods and Services Allocated by Share of Population			
Spending			
Transfers	28,800	7,300	5,000
Other goods and services	6,400	14,600	6,700
Total	35,200	21,900	11,700
Taxes	14,800	24,200	20,800
Spending Minus Taxes	20,300	-2,300	-9,100
With Spending on Other Goods and Services Allocated by Share of Market Income			
Spending			
Transfers	28,800	7,300	5,000
Other goods and services	6,400	11,400	9,100
Total	35,200	18,700	14,100
Taxes	14,800	24,200	20,800
Spending Minus Taxes	20,300	-5,500	-6,600

Source: Congressional Budget Office.

Notes: Transfers are cash and near-cash transfers plus health care transfers. Spending on "other goods and services" consists of spending on all programs and activities of the federal government other than cash, near-cash, and health care transfers and interest on federal debt held by the public (such things as national defense, education, transportation, and agriculture). "Taxes" include customs duties. (For more details about the components of each category, see the appendix.) Market income consists of labor income, business income, capital gains, capital income (excluding capital gains), and other nontransfer income.

All amounts are rounded to the nearest $100.

Because CBO allocated spending on other goods and services in two alternative ways, it produced two estimates of average combined spending on transfers and other goods and services per household and two estimates of average spending minus taxes per household.

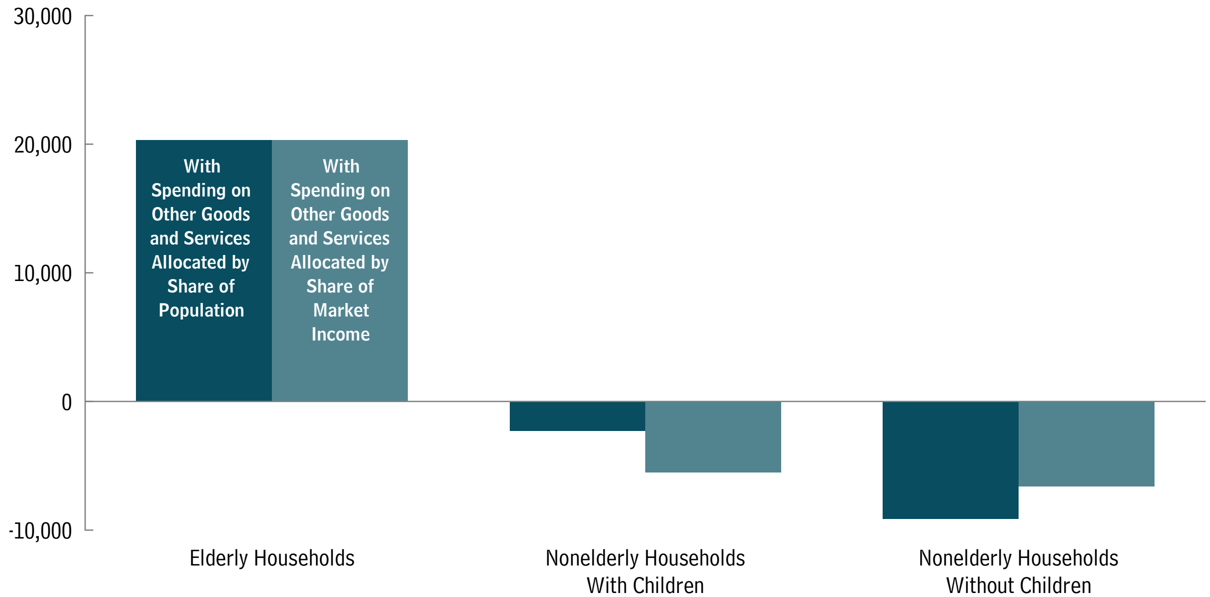
With spending on other goods and services allocated in proportion to a household's share of the population, federal spending on transfers and other goods and services averaged $35,200 for elderly households, $21,900 for nonelderly households with children, and $11,700 for nonelderly households without children. With spending on other goods and services allocated in proportion to a household's share of market income, average spending on transfers and other goods and services was the same for elderly households, lower for nonelderly households with children ($18,700), and higher for nonelderly households without children ($14,100).

In both cases, that spending represented 88 percent of all federal spending in 2006. By comparison, the taxes allocated to households in this analysis constituted 98 percent of all federal taxes paid in 2006.◆

Exhibit 13.

Average Spending Minus Taxes per Household, by Type of Household, 2006

(Dollars per household)



Source: Congressional Budget Office.

Note: Average spending refers to federal spending on cash, near-cash, and health care transfers plus federal spending on all other goods and services (all of the spending allocated to households in this analysis), which together accounted for 88 percent of federal spending in 2006. Taxes, which include customs duties, made up 98 percent of federal revenues in that year. (For more details about the components of those categories, see the appendix.) Market income consists of labor income, business income, capital gains, capital income (excluding capital gains), and other nontransfer income.

The overall effect of the federal spending and taxes considered in this analysis was to shift resources from nonelderly households (with or without children) to elderly ones. Regardless of which way CBO allocated spending on other goods and services, average federal spending minus taxes for elderly households amounted to about $20,000 in 2006. Those households were the only type for which federal spending was greater than tax payments, on average.

Among nonelderly households, federal taxes exceeded federal spending—by more for households without children than for those with children. Depending on how spending on other goods and services was allocated, average federal taxes surpassed federal spending by about $2,000 or $6,000 for nonelderly households with children and by about $9,000 or $7,000 for nonelderly households without children. Nonelderly households that included children tended to fare better by this measure than their counterparts without children—even though they paid more in taxes, on average—because many of the federal government's transfer programs are designed specifically to assist families who have minor children. ◆

Federal Spending and Taxes for Nonelderly Households, by Income Group

The exhibits that follow—14 through 24—show how the $1.5 trillion of federal spending that went to nonelderly households in 2006 and the $2.0 trillion of federal taxes paid by those households were distributed among households at different income levels. CBO divided people living in nonelderly households into five groups of approximately equal size (called quintiles) on the basis of their household's annual market income, adjusted for the size of the household. (That adjustment was made by dividing a household's income by the square root of the number of members of the household.)

Elderly households were omitted from the income distribution because annual market income is generally not a good measure of the resources available to them. Many people who live in elderly households no longer work and thus have low market income; they rely instead on Social Security benefits or savings for support.

Households could be ranked by other possible measures of resources, such as consumption, wealth, or income measured over a longer period than one year. Ranking households by any of those measures would result in different distributions of federal spending and taxes than the ones presented here. Because of data limitations, however, those other measures were not used in this analysis.

Exhibits 14 through 17 summarize, by income quintiles among nonelderly households, the distribution of federal spending on cash and near-cash transfers and on health care transfers, as well as the distribution of federal tax payments. The distribution of federal spending on other goods and services is shown later, in Exhibit 22, before the discussion of how average total spending per nonelderly household compares with average tax payments by those households.

Exhibits 18 through 21 focus on a measure of *average transfers minus taxes* per nonelderly household, which consists of spending on cash, near-cash, and health care transfers, minus taxes, all divided by the number of households in each quintile. That measure, for nonelderly households, accounts for 21 percent of all federal spending and 83 percent of all federal revenues in 2006.

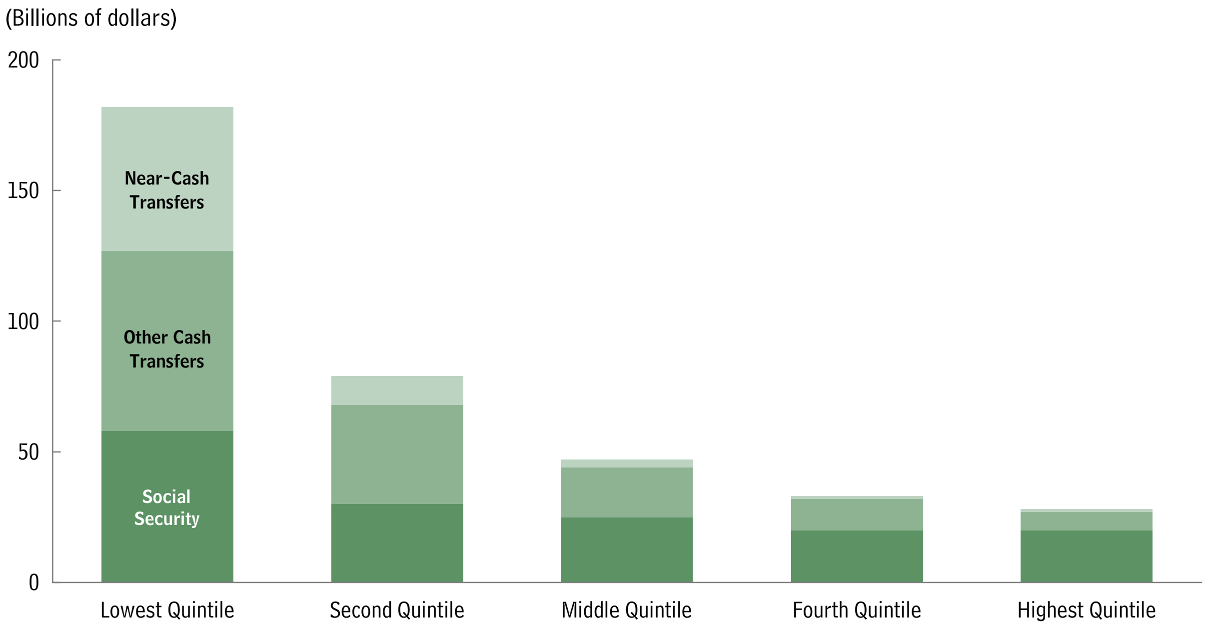
Exhibits 23 and 24 focus on *average spending minus taxes* per nonelderly household, a broader measure that includes spending on other goods and services as well as spending on transfers. That measure, for nonelderly households, accounts for 55 percent of all federal spending and 83 percent of all federal revenues in 2006.[15]

The distributions of federal spending and taxes among income groups in recent years probably differed from the 2006 distributions shown here, largely because the effects of the economic downturn that began in 2007 and the government's responses to that downturn are not reflected in the 2006 data. In addition, the distributions of income and taxes presented in this section differ from those in previous CBO reports because those reports focused on the distributions of income and taxes among all types of households, including elderly households.

15. Of the remaining 45 percent of federal spending and 17 percent of federal revenues in 2006, not all was attributable to elderly households. Twelve percent of spending and 2 percent of revenues were not allocated to households in this analysis, as explained in the appendix.

Exhibit 14.

Federal Spending on Cash and Near-Cash Transfers for Nonelderly Households, by Income Group, 2006



Source: Congressional Budget Office.

Notes: "Other cash transfers" include, for example, federal spending on refundable tax credits, Supplemental Security Income, and unemployment insurance. "Near-cash transfers" include, for example, federal spending on the Supplemental Nutrition Assistance Program and housing assistance. (For more details about the components of each category, see the appendix.)

Nonelderly households are ranked by their annual market income, which was adjusted for household size by dividing income by the square root of the number of people in the household. (Elderly households are not included here.) Market income consists of labor income, business income, capital gains, capital income (excluding capital gains), and other nontransfer income.

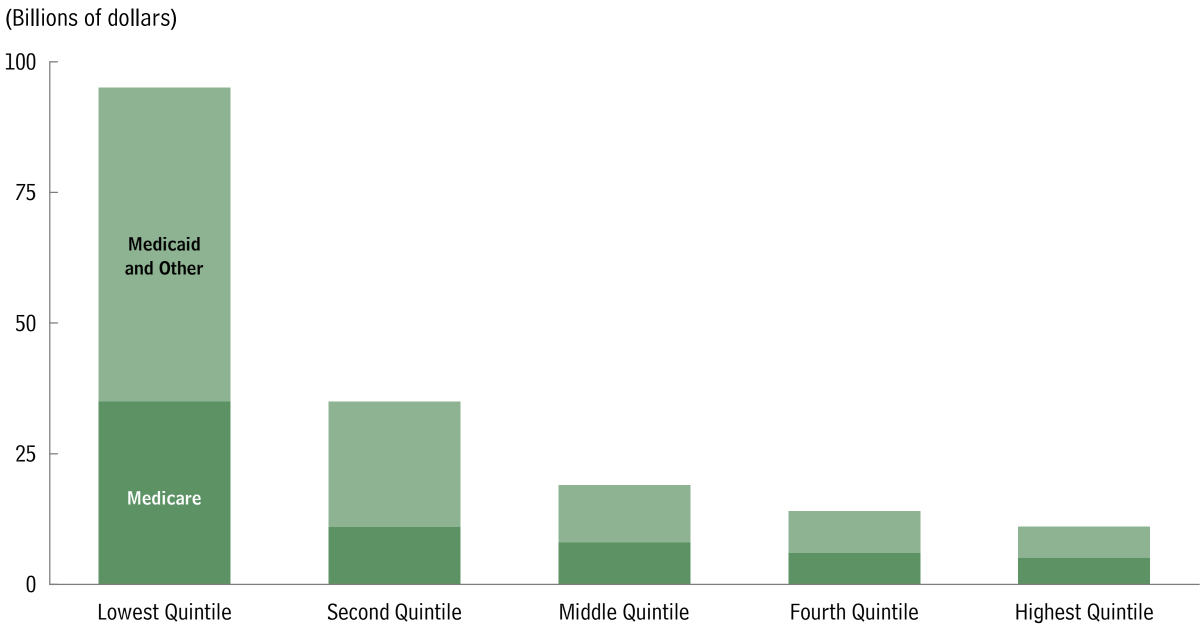
Of the almost $375 billion in spending on cash and near-cash transfers that CBO allocated to nonelderly households in this analysis, approximately $180 billion—or nearly half—went to the 20 percent of people living in households with the lowest income (adjusted for household size). About $80 billion went to the next-lowest income group. Thus, the 40 percent of households in the two lowest quintiles together received more than two-thirds of the federal spending on cash and near-cash transfers for nonelderly households. Conversely, the 20 percent of nonelderly households in the highest income quintile received less than 10 percent of such spending, or about $30 billion.

Social Security was the largest cash or near-cash transfer for each of the income groups. For people in nonelderly households, the government's spending on Social Security was primarily for disability benefits, retirement benefits claimed before age 65, or retirement benefits for people age 65 or older living in nonelderly households.

For nonelderly households in the lowest income quintile, spending on Social Security amounted to nearly $60 billion; spending on the Supplemental Nutrition Assistance Program, Supplemental Security Income, refundable tax credits, and housing assistance was more than $15 billion per program. For the second quintile, spending on Social Security totaled $30 billion, followed by $19 billion in spending on refundable tax credits. (Supplemental data for this report available at www.cbo.gov/publication/44698 show spending for each of the transfer programs included in this analysis.) ◆

Exhibit 15.

Federal Spending on Health Care Transfers for Nonelderly Households, by Income Group, 2006



Source: Congressional Budget Office.

Notes: "Other" health care transfers consist of federal spending on the Children's Health Insurance Program and on health care for veterans who have limited income and assets. (For more details about the components of each category, see the appendix.)

Nonelderly households are ranked by their annual market income, which was adjusted for household size by dividing income by the square root of the number of people in the household. (Elderly households are not included here.) Market income consists of labor income, business income, capital gains, capital income (excluding capital gains), and other nontransfer income.

Of the roughly $175 billion in federal spending on health care transfers allocated to nonelderly households in this analysis, about $95 billion—or more than half—went to the 20 percent of people in such households with the lowest income (adjusted for household size). Medicare accounted for about a third of that spending, and Medicaid and other health care transfers (the Children's Health Insurance Program and health care for veterans with limited income and assets) accounted for the rest.

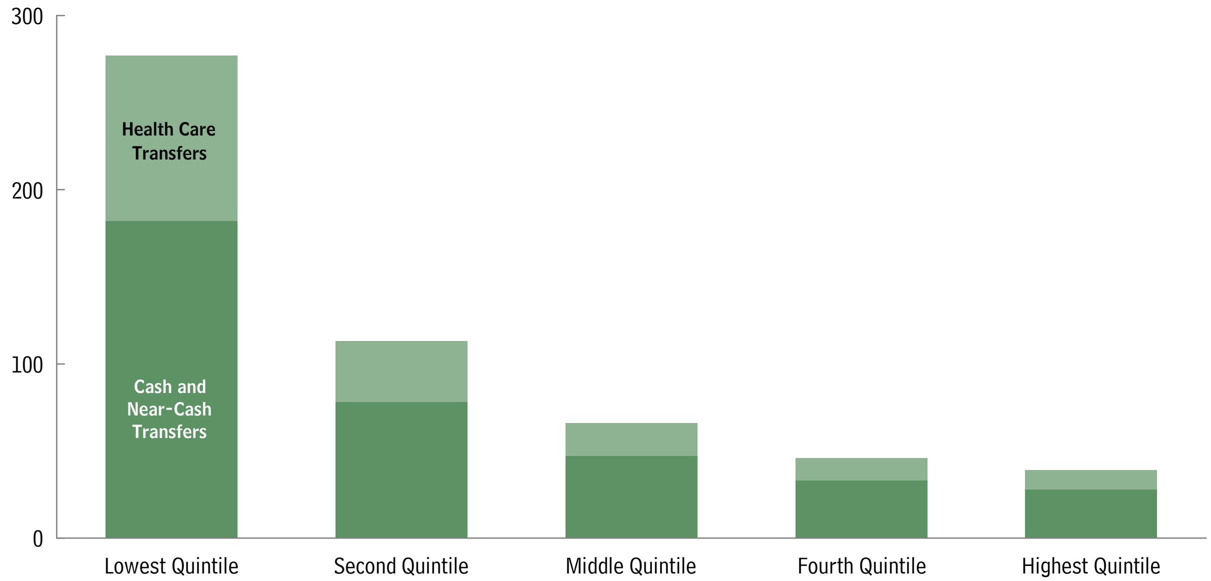
More than half of Medicare spending for nonelderly households went to households in the lowest income group. Spending on Medicare for nonelderly households is generally attributable to people who are eligible for the Disability Insurance program—and thus for Medicare after a two-year waiting period. Because people who receive DI benefits work very little, many live in households with relatively low market income.

Although Medicaid, CHIP, and health care for veterans with limited income and assets are designed to assist low-income people, for a few reasons the data indicate that some federal spending on those programs went to high-income households. Some people have income that varies during the year, and they qualify for benefits when their monthly income is low even though their annual income is high. In addition, some people who qualify for benefits on the basis of their own low income live in high-income households. However, a portion of the spending attributed to higher-income households probably reflects some misreporting of income, program participation, and benefit amounts in the survey data. ◆

Exhibit 16.

Federal Spending on Transfers for Nonelderly Households, by Income Group, 2006

(Billions of dollars)



Source: Congressional Budget Office.

Notes: "Cash and near-cash transfers" include, for example, federal spending on Social Security, refundable tax credits, Supplemental Security Income, unemployment insurance, the Supplemental Nutrition Assistance Program, and housing assistance. "Health care transfers" consist of federal spending on Medicare, Medicaid, the Children's Health Insurance Program, and health care programs for veterans who have limited income and assets. (These transfers encompass most, but not all, of the transfers in the federal budget. For more details about the components of each category, see the appendix.)

Nonelderly households are ranked by their annual market income, which was adjusted for household size by dividing income by the square root of the number of people in the household. (Elderly households are not included here.) Market income consists of labor income, business income, capital gains, capital income (excluding capital gains), and other nontransfer income.

In 2006, nonelderly households received approximately $550 billion of the federal transfers examined in this analysis—nearly $375 billion in cash and near-cash transfers and about $175 billion in health care transfers. Half of that transfer spending was for nonelderly households in the lowest 20 percent of the income distribution.

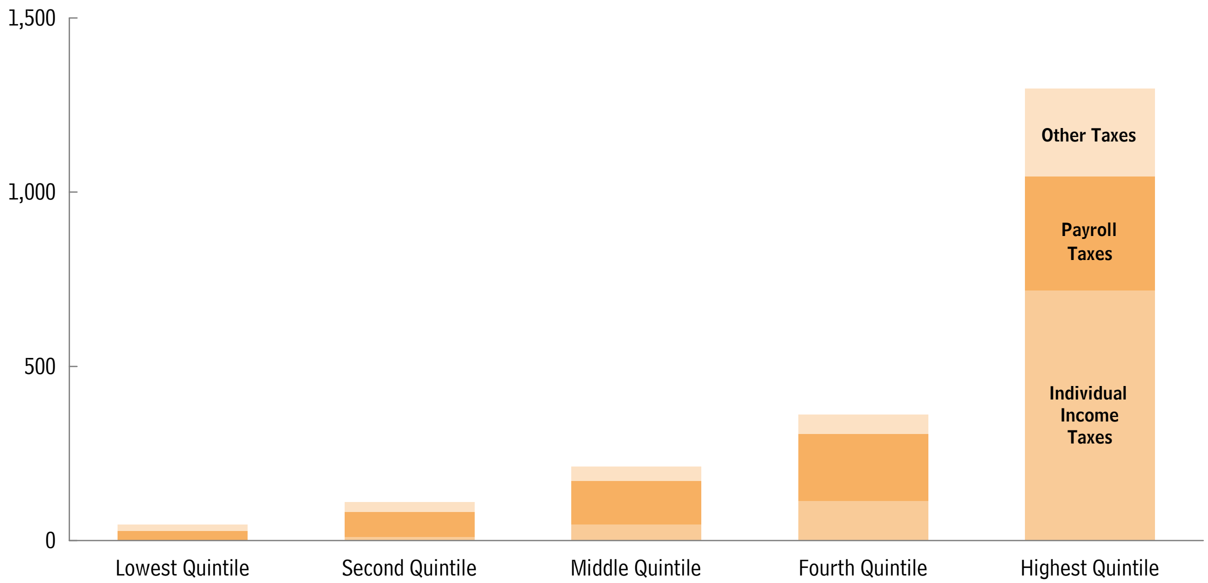
In total, 71 percent of the transfers went to households in the two lowest quintiles, whereas 16 percent went to households in the two highest quintiles.

Health care transfers made up a progressively smaller share of total transfers for each quintile of nonelderly households, ranging from 34 percent for the lowest quintile to 27 percent for the highest quintile. ◆

Exhibit 17.

Federal Taxes Paid by Nonelderly Households, by Income Group, 2006

(Billions of dollars)



Source: Congressional Budget Office.

Notes: Payroll taxes include taxes for Social Security, Medicare, and unemployment insurance. "Other taxes" consist of corporate income taxes, excise taxes, estate and gift taxes, and customs duties.

Nonelderly households are ranked by their annual market income, which was adjusted for household size by dividing income by the square root of the number of people in the household. (Elderly households are not included here.) Market income consists of labor income, business income, capital gains, capital income (excluding capital gains), and other nontransfer income.

Nonelderly households paid about $2 trillion in taxes in 2006, which amounted to 83 percent of the federal revenues collected in that year. Of that amount, roughly $50 billion, or 2 percent, was paid by the 20 percent of people living in nonelderly households with the lowest income (adjusted for household size). In contrast, the 20 percent of people living in nonelderly households with the highest income paid $1.3 trillion, or roughly 65 percent, of those federal taxes. That percentage exceeded the share of market income earned by those high-income households, which was roughly 55 percent. Nonelderly households in the other four quintiles, by contrast, paid slightly lower shares of taxes than their shares of total market income. ◆

Exhibit 18.

Average Transfers and Taxes per Nonelderly Household, by Income Group, 2006

(Dollars per household)

	Lowest Quintile	Second Quintile	Middle Quintile	Fourth Quintile	Highest Quintile
Transfers					
Cash and near-cash transfers					
Social Security	3,200	1,700	1,400	1,100	1,100
Other cash transfers	3,800	2,200	1,100	600	400
Near-cash transfers	3,000	600	200	100	*
Subtotal	10,000	4,600	2,600	1,800	1,500
Health care transfers					
Medicare	1,900	700	400	300	200
Medicaid and other	3,300	1,400	600	400	300
Subtotal	5,200	2,000	1,100	700	600
Total Transfers	15,200	6,600	3,700	2,600	2,000
Taxes	2,600	6,500	11,800	19,700	68,100
Transfers Minus Taxes					
In dollars	12,600	100	-8,100	-17,200	-66,000
As a percentage of market income	101	**	-14	-19	-27
Memorandum:					
Average Market Income	12,600	36,100	59,500	89,900	240,800
Average Market Income Plus Transfers Minus Taxes	25,200	36,300	51,400	72,700	174,800
Median Market Income[a]	9,900	31,600	55,300	86,000	150,800

Source: Congressional Budget Office.

Notes: "Other cash transfers" include, for example, federal spending on refundable tax credits, Supplemental Security Income, and unemployment insurance. "Near-cash transfers" include, for example, federal spending on the Supplemental Nutrition Assistance Program and housing assistance. "Other" health care transfers consist of federal spending on the Children's Health Insurance Program and on health care for veterans who have limited income and assets. "Taxes" include customs duties. (For more details about the components of each category, see the appendix.)

Nonelderly households are ranked by their annual market income, which was adjusted for household size by dividing income by the square root of the number of people in the household. (Elderly households are not included here.) Market income consists of labor income, business income, capital gains, capital income (excluding capital gains), and other nontransfer income.

All dollar amounts are rounded to the nearest $100. * = between zero and $50; ** = between zero and 0.5 percent.

a. For a discussion of how median market income relates to average market income, see the appendix.

The federal government spent an average of $10,000 per household to provide cash and near-cash transfers to the lowest-income nonelderly households in 2006 and $1,500 per household to provide those transfers to the highest-income nonelderly households. For the lowest quintile, spending on Social Security averaged $3,200 per household, and spending on the next-largest program, SNAP, averaged $1,500 per household. For the highest quintile, spending per household on Social Security was more than four times spending on the next-largest program, unemployment insurance.

Providing health care transfers (primarily Medicaid and CHIP) for the lowest quintile of nonelderly households cost the federal government an average of $5,200 per household. The analogous figure for the highest quintile was $600 per household.

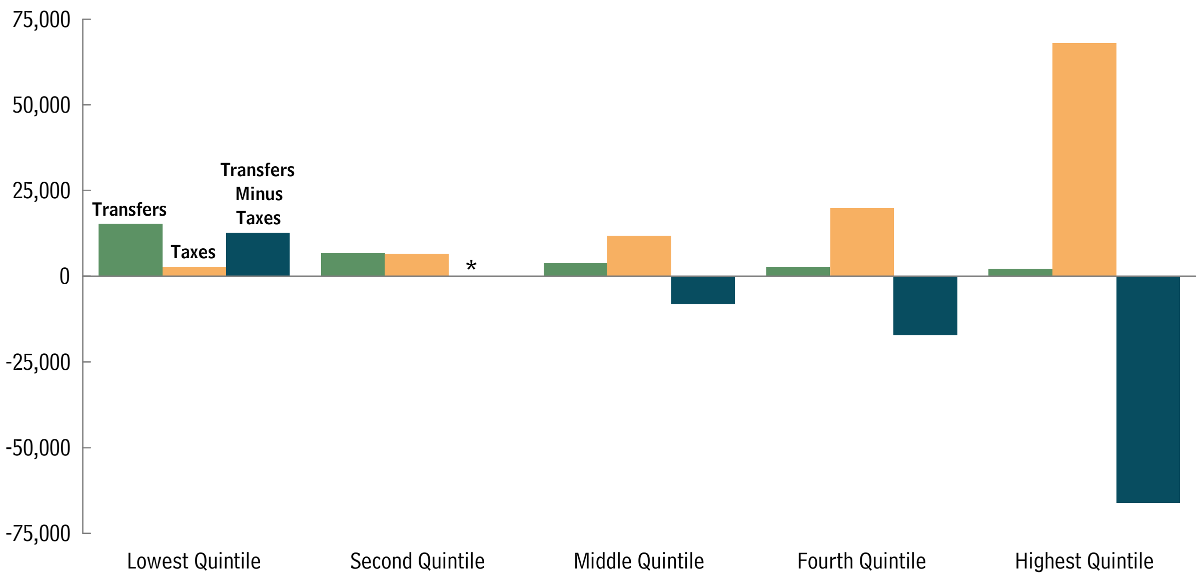
Total spending on transfers ranged from an average of $15,200 for the lowest-income nonelderly households to $2,000 for the highest-income nonelderly households. Federal taxes paid by nonelderly households spanned a wider range: from $2,600 in the lowest quintile to $68,100 in the highest quintile, on average. (Those tax figures do not account for the refundable portions of the earned income and child tax credits, which are included in spending on cash transfers.)

Spending on transfers for nonelderly households made up 21 percent of federal spending in 2006. Taxes paid by those households made up 83 percent of federal revenues. ◆

Exhibit 19.

Average Transfers, Taxes, and Transfers Minus Taxes for Nonelderly Households, by Income Group, 2006

(Dollars per household)



Source: Congressional Budget Office.

Notes: Transfers are cash, near-cash, and health care transfers for nonelderly households, which together accounted for 21 percent of federal spending in 2006. Taxes, which include customs duties, made up 83 percent of federal revenues in that year. (For more details about the components of those categories, see the appendix.)

Nonelderly households are ranked by their annual market income, which was adjusted for household size by dividing income by the square root of the number of people in the household. (Elderly households are not included here.) Market income consists of labor income, business income, capital gains, capital income (excluding capital gains), and other nontransfer income.

* = between zero and $500.

For nonelderly households, federal spending on transfers and federal taxes had the combined effect of shifting resources from higher-income households to lower-income ones. Households at the lower end of the income scale received more in federal transfers and paid less in federal taxes than their higher-income counterparts did.

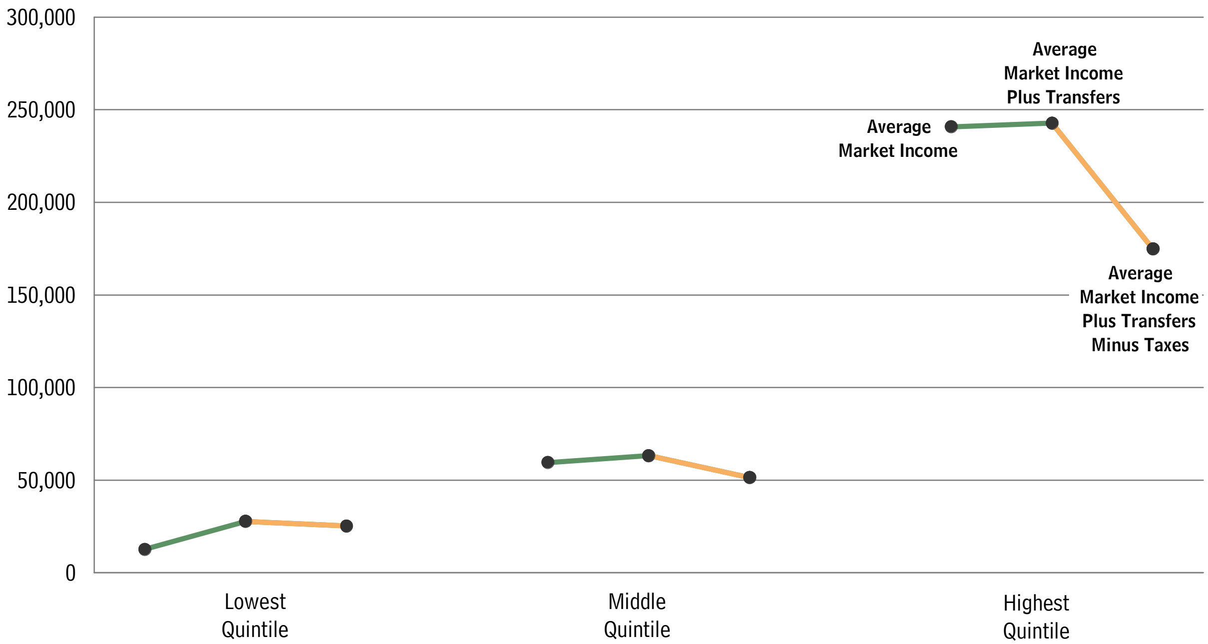
For nonelderly households in the lowest quintile, average transfers exceeded average tax payments by almost $13,000 (about $15,000 in transfer spending minus less than $3,000 in taxes). For those in the second quintile, average transfer spending and taxes per household roughly balanced each other out. For households in the rest of the quintiles, average taxes were greater than transfers: In the case of the highest quintile, for example, average taxes per household exceeded transfers by $66,000 ($2,000 in transfer spending minus about $68,000 in taxes).

The average difference between transfers and taxes for people over their lifetime is likely to be smaller than the average differences that are shown here for income quintiles in a particular year, partly because people move between income groups during their lifetime. ◆

Exhibit 20.

Average Market Income Plus Transfers Minus Taxes for Nonelderly Households, by Income Group, 2006

(Dollars per household)



Source: Congressional Budget Office.

Notes: Market income consists of labor income, business income, capital gains, capital income (excluding capital gains), and other nontransfer income. Transfers are cash, near-cash, and health care transfers for nonelderly households, which together accounted for 21 percent of federal spending in 2006. Taxes, which include customs duties, made up 83 percent of federal revenues in that year. (For more details about the components of those categories, see the appendix.)

Nonelderly households are ranked by their annual market income, which was adjusted for household size by dividing income by the square root of the number of people in the household. (Elderly households are not included here.)

In 2006, average market income was four times higher for nonelderly households in the highest income quintile than for households in the middle quintile and almost 20 times higher than for households in the lowest quintile.

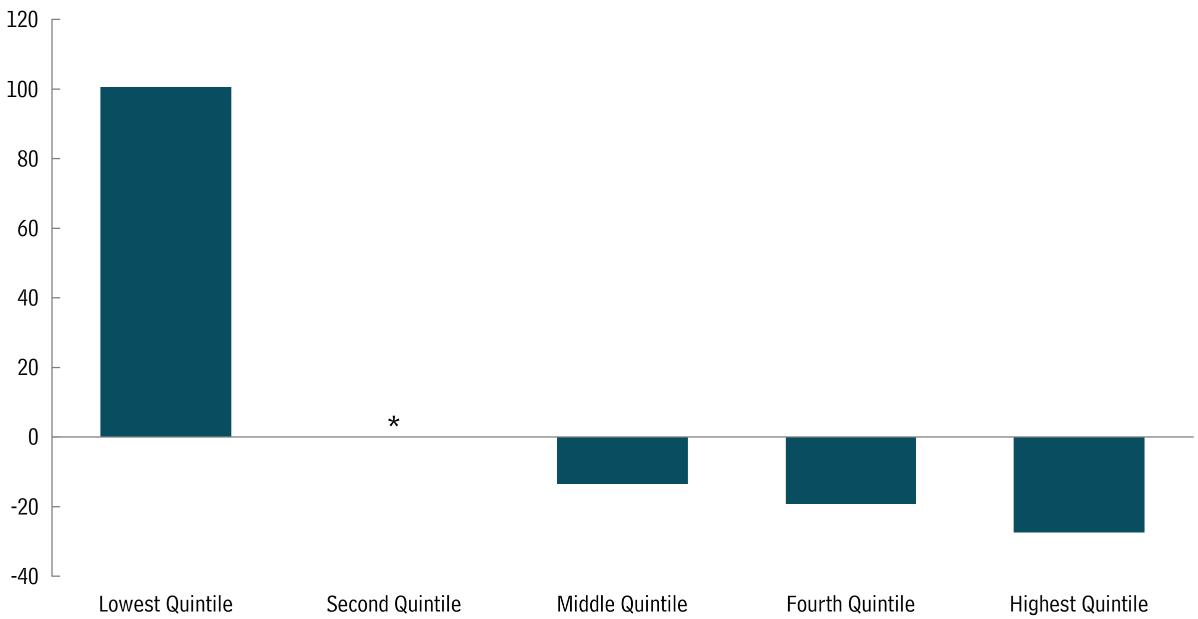
On average, nonelderly households in the lowest quintile received more in transfers (about $15,000) than their market income (about $13,000) and paid the least in federal taxes (less than $3,000). As a result, their average income after federal transfers and taxes was about $25,000—twice as large as their average market income, though less than half of the average income of the middle quintile (either before or after accounting for transfers and taxes).

Conversely, nonelderly households in the middle quintile received less in federal transfers (about $4,000) than they paid in federal taxes (about $12,000), which had the result of reducing their average income by approximately $8,000, to $51,000.

The highest quintile of nonelderly households received relatively few federal transfers but paid a substantial amount of federal taxes, on average. The combined effect of those transfers and taxes was to reduce such households' average income by about $66,000 (from $241,000 to $175,000). Even after transfers and taxes, the average income of households in the highest quintile was more than three times that of households in the middle quintile. ◆

Exhibit 21.

Average Transfers Minus Taxes as a Percentage of Market Income for Nonelderly Households, by Income Group, 2006



Source: Congressional Budget Office.

Notes: Market income consists of labor income, business income, capital gains, capital income (excluding capital gains), and other nontransfer income. Transfers are cash, near-cash, and health care transfers for nonelderly households, which together accounted for 21 percent of federal spending in 2006. Taxes, which include customs duties, made up 83 percent of federal revenues in that year. (For more details about the components of those categories, see the appendix.)

Nonelderly households are ranked by their annual market income, which was adjusted for household size by dividing income by the square root of the number of people in the household. (Elderly households are not included here.)

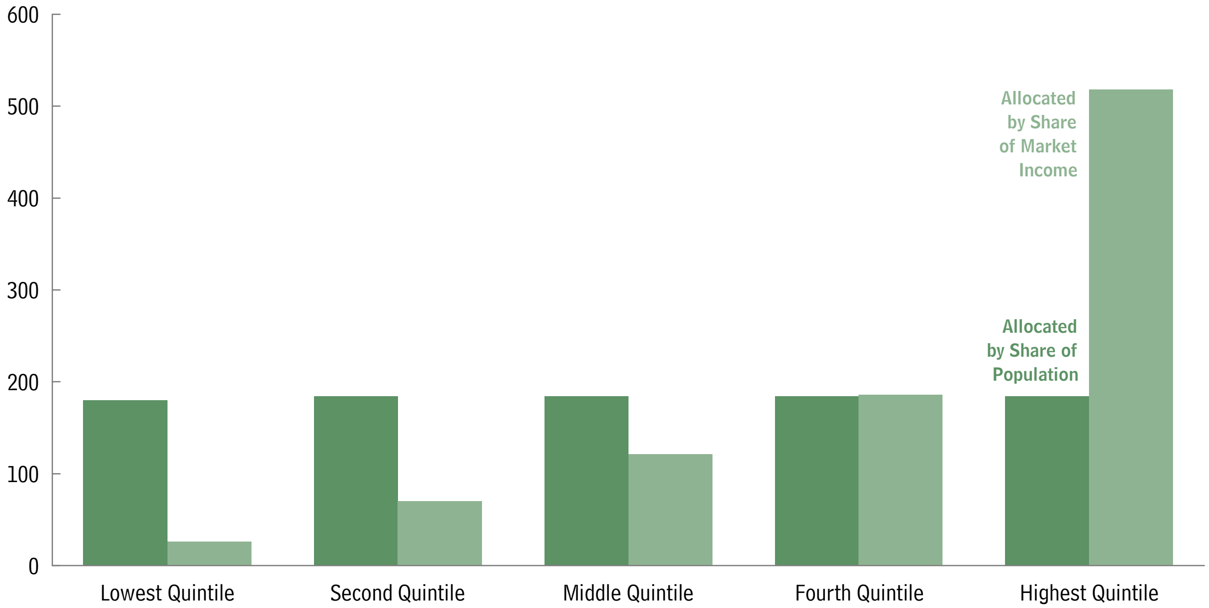
* = between zero and 0.5 percent.

As a percentage of income, federal spending on transfers and federal taxes in 2006 had the largest net impact on nonelderly households in the lowest income quintile, essentially doubling their average income. Transfers and taxes had little net effect on the income of the second quintile of nonelderly households and a progressively more negative effect on the income of households in higher quintiles. For nonelderly households in the highest income group, transfers and taxes combined to reduce average income by 27 percent. ◆

Exhibit 22.

Federal Spending on Other Goods and Services for Nonelderly Households, by Income Group, 2006

(Billions of dollars)



Source: Congressional Budget Office.

Notes: Spending on "other goods and services" consists of spending on all programs and activities of the federal government other than cash, near-cash, and health care transfers and interest on federal debt held by the public (such things as national defense, education, transportation, and agriculture). (For more details about the components of that category, see the appendix.)

Nonelderly households are ranked by their annual market income, which was adjusted for household size by dividing income by the square root of the number of people in the household. (Elderly households are not included here.) Market income consists of labor income, business income, capital gains, capital income (excluding capital gains), and other nontransfer income.

Of the federal government's $1.1 trillion in spending on other goods and services in 2006, $0.9 trillion is allocable to nonelderly households (regardless of which method CBO used to apportion that spending). CBO allocated spending on other goods and services to households in different income groups in two ways: in proportion to a household's share of the population and in proportion to a household's share of total market income. In the first approach, spending on other goods and services for nonelderly households was allocated equally to each person. Because the quintiles contain roughly equal numbers of people, that approach meant that such spending was evenly distributed among the income quintiles (at approximately $185 billion each).

In the second approach, 3 percent of spending on other goods and services for nonelderly households (or about $25 billion) was allocated to the lowest quintile, compared with 56 percent of such spending (or $520 billion) to the highest quintile. ◆

Exhibit 23.

Average Spending and Taxes per Nonelderly Household, by Income Group, 2006

(Dollars per household)

	Lowest Quintile	Second Quintile	Middle Quintile	Fourth Quintile	Highest Quintile
With Spending on Other Goods and Services Allocated by Share of Population					
Spending					
Transfers	15,200	6,600	3,700	2,600	2,000
Other goods and services[a]	9,800	10,800	10,300	10,100	9,700
Total	25,000	17,400	14,000	12,600	11,700
Taxes	2,600	6,500	11,800	19,700	68,100
Spending Minus Taxes	22,500	10,900	2,200	-7,100	-56,400
With Spending on Other Goods and Services Allocated by Share of Market Income					
Spending					
Transfers	15,200	6,600	3,700	2,600	2,000
Other goods and services	1,400	4,100	6,700	10,100	27,200
Total	16,600	10,700	10,400	12,700	29,200
Taxes	2,600	6,500	11,800	19,700	68,100
Spending Minus Taxes	14,000	4,200	-1,300	-7,000	-38,800

Source: Congressional Budget Office.

Notes: Transfers are cash and near-cash transfers plus health care transfers. Spending on "other goods and services" consists of spending on all programs and activities of the federal government other than cash, near-cash, and health care transfers and interest on federal debt held by the public (such things as national defense, education, transportation, and agriculture). "Taxes" include customs duties. (For more details about the components of each category, see the appendix.)

Nonelderly households are ranked by their annual market income, which was adjusted for household size by dividing income by the square root of the number of people in the household. (Elderly households are not included here.) Market income consists of labor income, business income, capital gains, capital income (excluding capital gains), and other nontransfer income.

All amounts are rounded to the nearest $100.

a. When allocated by the share of the population in each quintile, average spending per household on other goods and services varies among quintiles because the number of households in each quintile differs.

With spending on other goods and services allocated in proportion to each household's share of the population, average federal spending (on transfers plus other goods and services) was more than twice as large for the lowest income quintile of nonelderly households ($25,000) as for the highest quintile ($11,700).

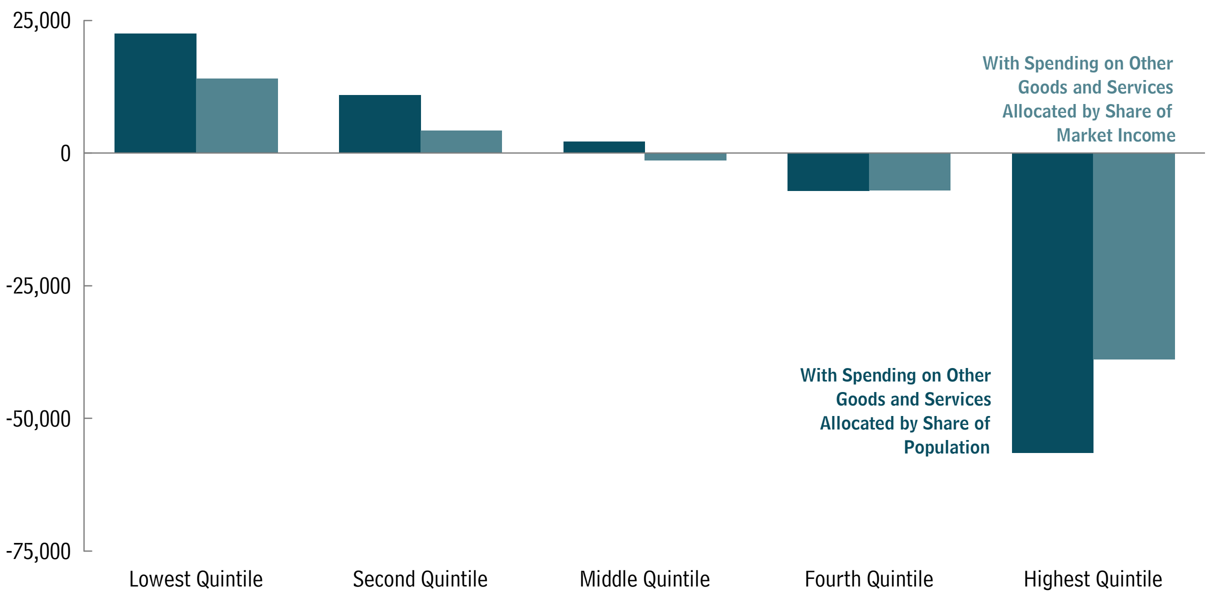
Allocating spending on other goods and services in proportion to market income changes the distribution of federal spending dramatically. With spending on other goods and services allocated in proportion to each household's share of total market income, average federal spending was almost twice as large for the highest quintile of nonelderly households ($29,200) as for the lowest quintile ($16,600).

Federal spending on transfers and other goods and services for nonelderly households made up 55 percent of all federal spending in 2006. Taxes paid by those households constituted 83 percent of all federal revenues in that year. ◆

Exhibit 24.

Average Spending Minus Taxes for Nonelderly Households, by Income Group, 2006

(Dollars per household)



Source: Congressional Budget Office.

Notes: Average spending refers to federal spending on cash, near-cash, and health care transfers plus federal spending on all other goods and services (all of the spending allocated to nonelderly households in this analysis), which together accounted for 55 percent of federal spending in 2006. Taxes, which include customs duties, made up 83 percent of federal revenues in that year. (For more details about the components of those categories, see the appendix.)

Nonelderly households are ranked by their annual market income, which was adjusted for household size by dividing income by the square root of the number of people in the household. (Elderly households are not included here.) Market income consists of labor income, business income, capital gains, capital income (excluding capital gains), and other nontransfer income.

Among nonelderly households, federal spending and taxes in 2006 combined to shift resources away from people in higher-income households to those in lower-income households. For nonelderly households in the lowest quintile, average spending on transfers and other goods and services, minus average taxes paid, amounted to about $22,000 per household when spending on other goods and services was allocated according to each household's share of the population and to $14,000 per household when that other spending was allocated by a household's share of market income.

For nonelderly households in the highest quintile, by contrast, average taxes paid exceeded federal spending by about $56,000 when spending on other goods and services was allocated in proportion to shares of the population and by about $39,000 when other spending was allocated in proportion to shares of total market income.

On average, federal spending exceeded taxes paid for households in the second quintile, was less than taxes paid for households in the fourth quintile, and was close in size to taxes paid for households in the middle quintile. ◆

Appendix: Data and Methods Used in This Analysis

In estimating the distribution of federal spending and taxes, the Congressional Budget Office (CBO) drew on data from various sources and made judgments about the best way to use those data. This appendix describes the data and methods used to produce the estimates presented in this report. Those methods and data sources are largely similar to the ones that CBO employed in previous analyses of the distribution of household income and taxes. They differ, however, from the data and methods used in previous CBO analyses in some important ways, which are described at the end of this appendix.

Sources of Data

For this analysis, CBO relied on two primary sources of information about households' income, federal transfer payments received, and federal taxes paid: the Internal Revenue Service's Statistics of Income (SOI) Public Use Tax File for 2006 and the Census Bureau's Current Population Survey (CPS) for March 2007. The SOI file is a nationally representative sample of individual income tax returns.[1] The Annual Social and Economic Supplement to the CPS contains detailed information for a large sample of households about their demographic characteristics at the time of the survey and the income they received in the previous calendar year.[2]

Both the SOI and the CPS lack important information needed for allocating federal spending and taxes among households. The SOI contains information about people's receipt of only a few kinds of transfer payments and benefits (such as Social Security, unemployment compensation, and refundable tax credits), and it does not include information about the income of families who do not file federal tax returns. For its part, the CPS lacks representative data for high-income households, does not report capital gains, significantly underreports other income from capital, and lacks information about the deductions and adjustments necessary to compute taxes. Furthermore, although the CPS contains more information about the demographic characteristics of households than the SOI data do, the CPS data may not reflect a household's tax-filing status and composition during the tax year.

To partially overcome the limitations of both data sources, CBO matched each record in the SOI data with a corresponding CPS record on the basis of their demographic characteristics and income. Each pairing resulted in a new record that reflected the demographic characteristics in the CPS record and the income reported in the SOI record. However, individuals and couples who are not required to file tax returns do not appear in the SOI data. Therefore, after all SOI records were matched to CPS records, CBO classified the remaining CPS records as representing households who did not file an income tax return; the income values for those households were taken directly from the CPS. CBO then adjusted the federal spending and taxes in the matched SOI-CPS database to equal budgetary totals reported in the Treasury Department's *Monthly Treasury Statements* (MTS).[3]

1. For the Public Use Tax File, the Internal Revenue Service removes tax filers' identifying information and applies statistical blurring techniques to the values reported for various components of income and taxes in order to protect the confidentiality of tax filers.

2. The income information in the March 2007 CPS covers the same period as the 2006 SOI data: calendar year 2006.

3. Along with this report, CBO has published a supplemental table that contains estimates of federal spending in calendar year 2006 for all the budgetary programs in the MTS and classifies them into three categories—allocated to households, allocated as spending for other goods and services, or unallocated. That table is available at www.cbo.gov/publication/44698.

Household Types and Income Groups

CBO grouped people into three types of households that were based on the composition of a household and the ages of its members. (A household consists of people who share a housing unit, regardless of their relationships.) In elderly households, the "householder" is age 65 or older, and children may or may not be present.[4] In nonelderly households with children, the householder is younger than age 65, and at least one person living in the household is under age 18. In nonelderly households without children, the householder is younger than age 65, and no member is under age 18.

People living in nonelderly households were further divided into five groups of approximately equal size ("quintiles") on the basis of their household's market income. CBO excluded elderly households from the analysis based on those income groups because annual market income is not a good measure of economic well-being for those households. Many elderly people rely on sources of income that are not included in the measure of market income used here, such as Social Security benefits.

Nonelderly households who have identical income may differ in ways that affect their economic status. For example, a household with more people in it needs more income to support a given standard of living than a smaller household does. But because some types of spending, such as for housing, involve economies of scale, two people generally do not need twice the income to live as well as an individual living alone. Thus, in order to rank households by their relative levels of economic well-being, it is appropriate to divide household income by an adjustment factor that is between 1 (which would leave household income unadjusted for the size of households) and the number of people in the household (which would result in a measure of household income per capita but would not capture the benefits of shared spending). To account for the effect of household size on economic well-being, the measure of household market income that CBO used to rank households was divided by the square root of the number of people in the household, counting adults and children equally.[5]

When determining the income thresholds that separate quintiles, CBO used an approach that results in an equal number of people—though slightly different numbers of households (because household sizes vary)—in four of the five quintiles.[6] The bottom quintile has slightly fewer people because CBO excluded households with negative income, who would otherwise be part of that quintile, from the income groups. Such households are likely to contain self-employed people with business losses or people with large investment losses, whose patterns of income, taxes, and receipt of government transfers differ significantly from those of other low-income households. (Households with negative income are, however, included in the totals.)

Household Income

The measure of household income used in this analysis is market income, which has the following components:

- Labor income—cash wages and salaries, including those allocated by employees to 401(k) plans; health insurance premiums paid by employers; employers' share of payroll taxes for Social Security, Medicare, and federal

4. A householder is the person who owns or rents the housing unit for which the data used in this analysis are collected. If the housing unit is jointly owned or rented by a married couple, the householder may be either spouse. The age of the householder is the primary characteristic used to define the type of household, but elderly households may have children in them, and nonelderly households may include people over age 65.

5. That adjustment implies that each additional person increases a household's needs but does so at a decreasing rate. For example, a household consisting of a couple with two children and market income of $80,000 would have an adjusted income of $40,000 ($80,000 divided by the square root of 4) and would occupy the same position in an income distribution as a single person with income of $40,000 or a childless couple with income of about $56,600 ($56,600 divided by the square root of 2 is approximately $40,000). For a detailed discussion of various approaches to adjusting for household size, see Constance F. Citro and Robert T. Michael, eds., *Measuring Poverty: A New Approach* (National Academy Press, 1995), pp. 159–182, http://tinyurl.com/mdhqjb4.

6. The person weight used to define the quintile thresholds is not the individual-level March Supplement weight ("marsupwt") variable found in the Annual Social and Economic Supplement to the CPS data. Instead, it is a calculated weight equal to the household weight times the number of people in the household. That weight, therefore, does not include the stratified adjustments made to hit overall population targets by age, sex, and race that the CPS March Supplement weight includes: Every person in each household is given the same weight regardless of his or her demographic characteristics. For all other distributional tables and figures presented in this report, CBO used the CPS's household weights.

unemployment insurance; and the share of corporate income taxes borne by workers.

- Business income—net income from businesses and farms operated solely by their owners, partnership income, and income from S corporations.
- Capital gains—profits realized from the sale of assets (which excludes increases in the value of assets that have not been realized through sales).
- Capital income (excluding capital gains)—taxable and tax-exempt interest, dividends paid by corporations (other than S corporations, whose dividends are included in business income), positive rental income, and the share of corporate income taxes borne by owners of capital.
- Other income—pension income, service-connected veterans' benefits, and any other sources of nontransfer income.

When presenting income measures at the household level, two statistics are commonly calculated to indicate the central or representative income of a given group: average (or mean) income and median income. The average income for a group of households is the sum of all of the households' incomes, divided by the number of households in the group. The median income for a group of households represents the actual center of a distribution: If all of the households in the group are ranked from lowest to highest income, the median income of the group is the value at the midpoint of the ranking. By definition, half of the households in the group will have incomes below the median, and the other half will have incomes above the median. Average income is a more dollar-oriented measure of a distribution of income, whereas median income is a more household-oriented measure of that distribution.

Using a single statistic to represent the distribution of income within a group of households has inherent shortcomings, because it is difficult for one measure to capture the range of the distribution and the evenness with which incomes are spread across that range. Although this analysis focuses on average income—the most common measure used to represent a distribution of income for a set of households—an average can be misleading if the distribution of income within a group is particularly uneven or if the group contains a few households whose incomes are significantly higher or lower than those of other households in the group. If such "outlier" households are included when calculating average income for the group, the average may be very different than it would be with such households excluded. Depending on how much the outliers' incomes differ from those of other households and how big the group is, it is possible for even a single household to significantly raise or lower the calculated average value for the group.

Among the three types of households examined in this report, average and median income differ the most (in percentage terms) for elderly households, because the distribution of income for those households is relatively uneven. Although many elderly households have low market income, because their members are retired, some elderly households have high enough market income to produce an average value that is more than twice the median value (see Table A-1).

Among the income quintiles of nonelderly households, the difference between average and median market income is most noticeable for households in the highest quintile. The income distribution for that group is sufficiently skewed toward the high end to make their average market income more than 50 percent higher than their median income. For the other quintiles—whose income ranges are bounded by the upper and lower limits for each quintile—the difference between average and median market income is much smaller.

Federal Spending on Cash, Near-Cash, and Health Care Transfers

Many federal programs involve the transfer of resources to households. In this analysis, CBO explicitly allocated federal spending for a number of those programs to households.[7] The programs were grouped into the categories "cash and

7. Many other federal programs provide direct assistance to households—for example, agriculture subsidies, assistance from the Federal Emergency Management Agency, and Stafford loans. However, data limitations meant that CBO could allocate federal spending directly to households only for the set of programs for which distributional information was available in the SOI-CPS database. Spending on other federal programs that provide direct assistance to households was included in federal spending for other goods and services and was allocated broadly to households using two alternative methods (as described below).

near-cash transfers" and "health care transfers" as follows:

Cash and Near-Cash Transfers

- Social Security (Old-Age and Survivors' Insurance and Disability Insurance);
- Refundable tax credits (the refundable portions of the earned income tax credit and the child tax credit);
- Supplemental Security Income (SSI);
- Unemployment insurance;
- The Supplemental Nutrition Assistance Program (SNAP), formerly known as the Food Stamp program;
- Housing assistance programs;
- Temporary Assistance for Needy Families (TANF);
- Student financial assistance (primarily the Federal Pell Grant Program);
- Child nutrition programs;
- The Special Supplemental Nutrition Program for Women, Infants, and Children (also known as WIC);
- Means-tested pension benefits for veterans;
- The Low Income Home Energy Assistance Program; and
- Black Lung benefits.

Table A-1.

Average and Median Market Income for Various Groups of Households, 2006

(Dollars per household)

	Average Market Income	Median Market Income
Households, by Type		
Elderly	56,200	23,200
Nonelderly with children	100,100	64,800
Nonelderly without children	80,300	52,200
Nonelderly Households, by Income Group[a]		
Lowest quintile	12,600	9,900
Second quintile	36,100	31,600
Middle quintile	59,500	55,300
Fourth quintile	89,900	86,000
Highest quintile	240,800	150,800

Source: Congressional Budget Office.

Note: Market income consists of labor income, business income, capital gains, capital income (excluding capital gains), and other income. Average (or mean) market income represents total market income for a particular group of households, divided by the number of households in the group. Median market income represents the midpoint of all of the incomes of a particular group of households arranged in numeric order.

a. Nonelderly households are ranked by their average market income, which was adjusted for household size by dividing income by the square root of the number of people in the household. (Elderly households are not included in that analysis.)

Health Care Transfers

- Medicare,
- Medicaid and the Children's Health Insurance Program, and
- Means-tested health benefits for veterans.

For most of those programs, the amounts of federal spending that CBO allocated to households reflect the full, direct costs to the government of providing benefits to households; thus, those amounts include programs' administrative costs.[8] In cases in which the *Monthly Treasury Statements* identify a program's administrative costs separately, those costs were allocated evenly among households who

8. The one exception is refundable tax credits. The cost of administering those credits is embedded in the costs associated with administering the entire tax system, so that cost is not identified separately and allocated to recipients of the credits.

received benefits from the program. For programs whose administrative costs are not identified separately in the MTS, CBO adjusted the reported benefit amounts so that the sum of benefit amounts for all households equaled the aggregate amounts in the MTS. That allocation method resulted in administrative costs' being allocated in proportion to the program-specific benefits received.

For many of the cash and near-cash programs, CBO allocated federal spending to households on the basis of the amount of federal benefits that CPS respondents reported receiving.[9] Those data, however, generally underreport the amount of federal benefits that households receive relative to the spending totals included in the MTS. For this analysis, CBO corrected for the undercount in the CPS by adjusting the benefits reported in those survey data to equal the MTS total for each program. In most cases, that adjustment did not materially alter the distribution of spending among households; it simply increased the dollar amounts. The adjustment factors that CBO used do not distinguish between correcting for an undercount or overcount of recipients or for underreporting or overreporting of benefit amounts.

9. Several types of federal benefits—such as Social Security benefits, unemployment benefits, and refundable tax credits—are reported on income tax returns. CBO allocated spending for those benefits to households on the basis of amounts reported in the SOI data (for tax filers) rather than in the CPS data.

For a few federal programs, CBO made more detailed adjustments in allocating spending to households. Specifically, CBO estimated the distribution of Social Security survivor's benefits going to minors, participation and benefits for SNAP, housing assistance benefits, student financial assistance (primarily Pell grants), average Medicare benefits, and participation and average benefits for Medicaid.

Social Security

In 2006, approximately $14 billion in Social Security benefits were paid to children under the age of 15. Because data on benefits to children are not available in either the SOI or the CPS, CBO estimated the allocation of those benefits using data from its long-term model, called CBOLT, which relies on individual-level data from the Social Security Administration's Continuous Work History Sample.[10]

Supplemental Nutrition Assistance Program

To correct for the undercount of recipients and benefits in the CPS, CBO developed a microsimulation model of eligibility for SNAP, which accounts for variation in eligibility rules among states, and a calculator of SNAP benefits, which is based on family size and income. The microsimulation model estimated spending on SNAP benefits at $29 billion. The MTS reported that total spending on SNAP (including administrative costs) was $34 billion in 2006. CBO proportionally increased the amount of SNAP spending allocated to each type of household and each income group such that those amounts (when summed across all households) would add up to the spending total in the MTS—which means that administrative costs for the program were allocated to households in proportion to the benefits they received.

10. For more information about the model and those data, see Congressional Budget Office, *CBO's Long-Term Model: An Overview* (June 2009), www.cbo.gov/publication/20807.

Housing Assistance

In the CPS, respondents are asked whether they live in public housing and whether they receive any assistance paying their rent. If someone reports receiving either form of housing assistance, the Census Bureau estimates a housing assistance benefit for the respondent. CBO adjusted the distribution of federal housing assistance reported in the CPS to match the distribution in the 2005 Housing and Urban Development (HUD) Research Cadre data file. The measure of income used to align the CPS data with the HUD data included all components of market income plus Social Security benefits, unemployment insurance, workers' compensation, veterans' benefits, TANF benefits, state general assistance payments, and SSI benefits. That measure of income is similar to the measure used to determine eligibility for most federal housing programs. After adjusting the distribution of housing assistance in the CPS to match the distribution in the HUD data, CBO proportionally adjusted benefits to match the $28 billion in comparable spending on housing assistance reported in the *Monthly Treasury Statements*.

Student Financial Assistance

In the MTS, student financial assistance consists mainly of spending on Pell grants but also includes spending on smaller student aid programs, such as federal work-study and the Federal Perkins Loan Program. It is not possible to accurately identify spending on student financial assistance from the CPS because of the ambiguity of the survey questions. Therefore, CBO imputed the allocation of spending on that assistance to all people who had a high school degree but not a college degree using administrative data from the Department of Education about the distribution of average Pell grants by recipients' age, family income, and dependency status. (Students who are older than 22, are married, have a dependent child, or are veterans are considered "independent" students; all others are considered "dependent" students.)

That approach produced an allocation of spending on student financial assistance among types of households and income quintiles (for nonelderly households) that matched the distribution observed in the administrative data. Once the distribution of student aid in the CPS was aligned with the distribution in the administrative data, benefits were proportionally adjusted to match the $15 billion in total spending on student financial assistance reported in the MTS.

Medicare

For this analysis, CBO estimated average Medicare spending per enrollee—known as the market value of Medicare—using data from the Medicare Current Beneficiary Survey (MCBS) for 2006. The MCBS is a detailed survey of a representative sample of Medicare enrollees collected by the Centers for Medicare & Medicaid Services. Average Medicare spending per enrollee in the MCBS was calculated by age category (65 and over, or 64 and under) for nine geographic census divisions.[11] Those estimated average amounts were assigned to CPS respondents who reported having Medicare coverage, on the basis of a respondent's age category and geographic division. As it did with other programs, CBO used Medicare spending for calendar year 2006 as reported in the MTS as the basis for the spending targets with which the CPS data were aligned. Although the MTS reports all Medicare spending (including spending on benefits for people living in long-term care institutions or outside the United States), the CPS surveys only the noninstitutionalized U.S. population. Before adjusting the average Medicare spending assigned to CPS respondents to match the total amounts reported in the MTS, CBO removed Medicare spending for enrollees in long-term care institutions or outside the United States from the MTS total.[12]

In addition, CBO removed spending for the low-income subsidy (LIS) component of the Medicare prescription drug program (Part D) from the MTS totals and allocated that spending to households separately.[13] The Medicare Part D program was implemented in January 2006. Medicare enrollees who were eligible for both Medicare and Medicaid ("dual-eligible beneficiaries") were automatically enrolled in the LIS component of Part D. Other Medicare enrollees could voluntarily enroll in Part D, and low-income people who were not automatically enrolled in the LIS program could apply for subsidies during the open-enrollment period, which ended in May 2006. For this report, CBO allocated federal spending on the LIS component of Part D to households in proportion to the distribution of estimated dual-eligible beneficiaries in the CPS.[14]

CBO adjusted the average Medicare spending per enrollee calculated from the MCBS data and assigned to Medicare enrollees in the CPS so that the total net Medicare spending (gross benefits

11. CBO classifies Medicare enrollees under age 65 in the MCBS and in the CPS as disabled.

12. To identify Medicare spending for the institutionalized population, CBO used a methodology based on one employed in Gretchen Jacobson, Tricia Neuman, and Anthony Damico, *Medicare Spending and Use of Medical Services for Beneficiaries in Nursing Homes and Other Long-Term Care Facilities: A Potential for Achieving Medicare Savings and Improving the Quality of Care* (Kaiser Family Foundation, October 2010), http://kff.org/health-costs/report/medicare-spending-and-use-of-medical-services/. Although Medicare pays only a very small fraction of the costs associated with residents in long-term care institutions, many of those people incur significant medical expenditures leading up to institutionalization, which Medicare pays for. CBO removed those expenditures from its calculations of average spending per enrollee and from the MTS spending totals to be allocated to U.S. households.

13. The Medicare Part D LIS spending allocated to households was for the noninstitutionalized population only.

14. Any CPS respondent who reported having Medicare coverage and receiving either Medicaid, SNAP, or SSI benefits was considered a dual-eligible beneficiary for the purposes of allocating LIS benefits.

minus premiums) allocated to the noninstitutionalized U.S. population matched the MTS total of $308 billion.[15] As a last step, CBO allocated approximately $5 billion in administrative costs for Medicare equally among households with Medicare enrollees.

Medicaid

CBO also estimated the market value of Medicaid benefits for this analysis. Much as it did with Medicare, CBO removed Medicaid spending for people living abroad or in long-term care institutions from the spending totals for Medicaid in the MTS.[16] After removing those expenditures, CBO calculated average Medicaid spending for four eligibility categories—elderly people, blind or disabled people, children, and nonelderly, nondisabled adults—on the basis of data from the Medicaid Statistical Information System (MSIS), which contains administrative data that state Medicaid programs report to the federal government.

Unlike with Medicare, however, CBO adjusted the CPS data on receipt of Medicaid benefits before it assigned values for average Medicaid spending by eligibility category to survey respondents. The miscount of Medicaid enrollees in the CPS is well documented, and researchers at the State Health Access Data Assistance Center (SHADAC) have done extensive work to partially correct for it. In analyses that have linked CPS data with administrative data from Medicaid, those researchers have identified survey respondents who do not report being enrolled in Medicaid but appear from the administrative data to be enrolled (leading to an undercount of recipients) and survey respondents who report being enrolled in Medicaid but do not appear from the administrative data to be enrolled (leading to an overcount of recipients).[17] CBO used updated regression coefficients to correct for both the undercount and overcount of Medicaid enrollees in the CPS.[18] After making those adjustments to Medicaid participation, CBO assigned each enrollee the average Medicaid benefit per enrollee for the eligibility category to which the person belonged.

As it did with the other spending programs in this analysis, CBO adjusted the Medicaid spending allocated to households in the SOI-CPS database so that the total amount of that spending equaled $120 billion, the amount that CBO estimates was spent on full Medicaid benefits in 2006. In addition, about $9 billion in administrative costs and $6 billion in partial Medicaid benefits were allocated evenly among households with Medicaid enrollees.[19]

Federal Spending on Other Goods and Services

The largest category of spending allocated to households in this report consists of federal spending for a wide range of goods and services, most of which can be classified as public goods. In the economics literature, a public good is narrowly

15. Starting in 2007, Medicare premiums for high-income households were higher than Medicare premiums for all other households. In this analysis, CBO aligned average *gross* Medicare benefits per enrollee with average *net* Medicare benefits (gross benefits minus premiums). That alignment does not alter the distribution of Medicare spending because Medicare premiums did not vary by income in 2006.

16. That removal means that virtually all federal spending for residents in long-term care institutions was not allocated to households.

17. See Michael Davern and others, "A Partially Corrected Estimate of Medicaid Enrollment and Uninsurance: Results From an Imputational Model Developed off Linked Survey and Administrative Data," *Journal of Economic and Social Measurement,* vol. 34, no. 4 (2009), pp. 219–240, http://dx.doi.org/10.3233/JEM-2009-0324.

18. Coefficient estimates that were used in the report State Health Access Data Assistance Center, *Phase V Research Results: Extending the Phase II Analysis of Discrepancies Between the National Medicaid Statistical Information System (MSIS) and the Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC) from Calendar Years 2000–2001 to Calendar Years 2002–2005* (January 4, 2010), www.shadac.org/publications/snacc-phase-v-report, but not published in that report, were sent to CBO by the authors and used in CBO's imputation.

19. Total Medicaid spending reported in the MTS for calendar year 2006 was about $180 billion. CBO classified that spending as $120 billion in full benefits, which were allocated to Medicaid enrollees on the basis of average cost per eligibility category; $15 billion in partial benefits and administrative costs, which were allocated equally to all households with Medicaid enrollees; and $11 billion in Medicaid spending for disproportionate-share hospital payments and the Vaccines for Children program, which was included in federal spending on other goods and services. CBO estimates that the remaining $34 billion in Medicaid spending in 2006 went to people living in long-term care institutions or outside the United States; that spending was not allocated to U.S. households in this report.

defined as a good or service with the following traits: Consumption of the good or service by one person does not reduce the availability or quality of the good or service for others, and it is very difficult to exclude people from consuming the good or service once it is made available. Few categories of federal spending fall within that narrow definition. The one that comes closest is national defense, which provides benefits to all people equally and without exclusion. Spending on national defense makes up more than 50 percent of the spending on other goods and services in this analysis (see Table A-2).

Unlike federal spending on cash and near-cash transfers and health care transfers, spending on other goods and services produces benefits that are not easily attributable to specific households. Furthermore, there is no consensus among researchers about the most appropriate method for allocating to households the benefits derived from those federal expenditures. As a result, CBO allocated federal spending on other goods and services in two alternative ways: in proportion to each household's share of the noninstitutionalized U.S. population and in proportion to each household's share of total market income.[20] In the latter case, no information is available about what measure of income best approximates how households value the goods and services included in this category. For that reason, several other analysts have used different measures of income—such as total

20. The allocation based on each household's share of total market income excluded households with negative market income.

Table A-2.

Federal Spending on Other Goods and Services, 2006

	Billions of Dollars	Percentage of Total Spending on Other Goods and Services
National Defense		
Department of Defense—military programs	512	47
Department of Homeland Security	55	5
Other defense—civil programs[a]	46	4
Subtotal	613	57
Department of Health and Human Services	82	8
Department of Education	79	7
Office of Personnel Management	63	6
Department of Transportation	61	6
Department of Veterans Affairs	50	5
Department of Agriculture	38	4
Department of Justice	23	2
Department of Energy	20	2
Other[b]	50	5
Total	**1,080**	**100**

Sources: Department of the Treasury, *Monthly Treasury Statements;* Congressional Budget Office.

a. Includes certain payments to cover retirement benefits and health care for military retirees and education benefits for military personnel. Also includes spending on U.S. battle monuments and military cemeteries, conservation efforts on military land, and the Selective Service System.

b. The three largest components of spending in this category are spending for the Department of Housing and Urban Development ($16 billion), the National Aeronautics and Space Administration ($15 billion), and the Department of State ($13 billion). This category also includes spending for the legislative branch, the judicial branch, the Executive Office of the President, the Environmental Protection Agency, international assistance programs, and the National Science Foundation, among other entities. In addition, it includes $255 billion in undistributed offsetting receipts, which are recorded in the budget as offsets to spending; about two-thirds of that amount represents interest credited to various government trust funds.

income, disposable income, or capital income—to allocate the value of public goods to households.[21]

In addition, other researchers who have examined the distribution of federal spending have treated spending on public goods (or on goods and services that resemble public goods) in a variety of ways.[22] For instance, some researchers have allocated federal spending on transportation to households partly on the basis of each household's share of total gasoline purchases.[23] In this analysis, by contrast, CBO used the two allocation methods described above for federal spending on transportation, just as it did for federal spending on national defense and the rest of the "other goods and services" category. Some other researchers have dealt with the uncertainty about how to allocate spending on public goods to specific households by not including such spending in their analyses.[24] Doing that, however, produces an incomplete picture of the government's total expenditures.

21. See, for example, W. Irwin Gillespie, "The Effect of Public Expenditures on the Distribution of Income: An Empirical Investigation," in Richard A. Musgrave, ed., *Essays in Fiscal Federalism* (Brookings Institution, 1965), pp. 122–186; and Patricia Ruggles and Michael O'Higgins, "The Distribution of Public Expenditure Among Households in the United States," *Review of Income and Wealth*, vol. 27, no. 2 (1981), pp.137–164, http://dx.doi.org/10.1111/j.1475-4991.1981.tb00207.x.

22. For a review of analyses that examine the distribution of government spending and taxes, see Robert Rector and Christine Kim, "How the Wealth Is Spread: The Distribution of Government Benefits, Services, and Taxes by Income Quintile in the United States" (paper prepared for the Fall 2008 Conference of the Association of Public Policy Analysis and Management, November 7, 2008), http://tinyurl.com/k9bjtk4.

23. See, for example, Andrew Chamberlin and Gerald Prante, *Who Pays Taxes and Who Receives Government Spending? An Analysis of Federal, State, and Local Tax and Spending Distributions, 1991–2004,* Working Paper 1 (Tax Foundation, March 2007), http://tinyurl.com/lxzt6x6.

24. For examples of distributional analyses of government spending that exclude spending on public goods, see Andrew Barnard, *The Effects of Taxes and Benefits on Household Income, 2008/09* (Office of National Statistics, United Kingdom, June 10, 2010), http://tinyurl.com/lcoh7t2; HM Treasury, *Spending Review 2010* (October 20, 2010), www.gov.uk/government/publications/spending-review-2010; Australian Bureau of Statistics, *Government Benefits, Taxes and Household Income, Australia, 1998-99* (August 15, 2001), http://tinyurl.com/mmt5ozo; Robert Rector and Christine Kim, "How the Wealth Is Spread: The Distribution of Government Benefits, Services, and Taxes by Income Quintile in the United States" (paper prepared for the Fall 2008 Conference of the Association of Public Policy Analysis and Management, November 7, 2008), http://tinyurl.com/k9bjtk4; and Edward N. Wolff and others, *A Comparison of Inequality and Living Standards in Canada and the United States Using an Expanded Measure of Economic Well-Being,* Working Paper 703 (Levy Economics Institute of Bard College, January 2012), www.levyinstitute.org/pubs/wp_703.pdf (597 KB).

Unallocated Federal Spending

CBO omitted three categories of federal spending from its distributional analysis: interest payments on federal debt held by the public, transfer payments to people in long-term care institutions, and transfer payments to U.S. citizens living outside the United States (including in U.S. territories). Together, those categories of federal spending totaled about $310 billion in 2006 (see Table A-3).

The largest component of unallocated spending—approximately $215 billion, or about 70 percent of that spending—was interest payments on debt held by the public. Such interest payments made in 2006 were mostly costs resulting from spending that exceeded revenues in previous years.

The data on which this distributional analysis is based do not include the institutionalized population, so CBO excluded federal spending on benefits for people in long-term care institutions by the three largest spending programs—Social Security, Medicare, and Medicaid—as well as veterans' health benefits for those people.[25] In 2006, CBO estimates, the federal government spent about $85 billion on benefits for elderly or disabled people living in long-term care institutions, including $14 billion in Social Security benefits, $33 billion in Medicaid expenditures, and $32 billion in Medicare expenditures.

The data on which this analysis is based also do not include U.S. citizens living outside the United States. The federal transfer program with the largest spending on that population in 2006 was Social Security. In all, about $9 billion in Social Security

25. The institutionalized population that is excluded from the CPS sample includes people living in long-term care institutions or correctional facilities. However, spending on correctional facilities provides benefits to people other than the residents, so CBO included that spending in the "other goods and services" category allocated to households in this analysis.

benefits that year went to recipients living abroad, including $5.5 billion to people in Puerto Rico and $3.4 billion to people living elsewhere.

Federal Taxes

For this analysis, federal taxes consist of individual income taxes, payroll taxes (also called social insurance taxes), corporate income taxes, excise taxes, estate and gift taxes, and customs duties (all of which are referred to here as taxes for simplicity). Those taxes accounted for about 98 percent of federal revenues in 2006.

Individual income taxes and the employee's share of payroll taxes were allocated to the households who paid them. CBO assumed—as do most economists—that employers pass on their share of payroll taxes to employees by paying lower wages than they would otherwise. Therefore, CBO included the employer's share of payroll taxes in households' market income and taxes.

Payroll taxes include taxes dedicated to funding retirement, disability, and unemployment insurance trust funds.[26] The unemployment insurance (UI) portion of payroll taxes includes both the federal and state shares of the UI tax.[27]

Table A-3.

Unallocated Federal Spending, 2006

	Billions of Dollars	Percentage of Total Unallocated Federal Spending
Interest on Federal Debt Held by the Public	217	69
Transfers for People in Long-Term Care Institutions		
Medicaid	33	11
Medicare	32	10
Social Security	14	5
Veterans' health care	4	1
Subtotal	83	27
Transfers for People Living Outside the United States[a]		
Medicaid	*	**
Medicare	3	1
Social Security	9	3
Subtotal	12	4
Total	**312**	**100**

Sources: Department of the Treasury, *Monthly Treasury Statements;* Congressional Budget Office.

Note: * = between zero and $500 million; ** = between zero and 0.5 percent.

a. Including people living in U.S. territories, such as Puerto Rico.

Unemployment insurance is a federally mandated program administered by the states with state-specific trust funds. The government collects revenues from two separate sources to finance those trust funds. The federal portion—known as the Federal Unemployment Tax Act (or FUTA) tax—is intended to cover the federal government's share of administrative costs for the UI program. The state portion—known as the State Unemployment Tax Act (or SUTA) tax—is intended to fund the benefits paid to UI recipients. Like the federal portion, the state portion appears in the federal budget in the form of receipts to trust funds. CBO's allocation of unemployment insurance receipts collected by the states accounted for the variation in wage bases and tax rates among states.

Corporate income taxes were attributed to households in two parts: 75 percent of those taxes were allocated to owners of capital in proportion to their income from interest, dividends, adjusted capital gains, and rents; the rest of those taxes

26. Retirement and unemployment insurance taxes for railroad workers were allocated to households in proportion to the share of federal payroll taxes paid by each type of household or each income group among nonelderly households. In previous CBO reports, those taxes were not allocated to households.

27. In previous CBO reports on the distribution of household income and federal taxes, only the federal portion of the unemployment insurance tax was included.

were allocated to workers in proportion to their labor income. That allocation is the same as the one used in the most recent CBO report on the distribution of household income and federal taxes.[28]

The amount of taxes that households owe for a calendar year can differ from the amount of taxes they pay during that year. In the case of individual income taxes, for example, households typically have taxes withheld during the calendar year but reconcile that amount with what they owe when they file their tax return in the following year and either make an additional payment or receive a refund. CBO's distribution of taxes among households is based on estimates of the amount of taxes they owed for calendar year 2006.

To put federal taxes on a basis consistent with federal spending in this analysis, CBO adjusted the total amount of each type of tax owed for 2006 to match the total amount paid in that year. The vast majority of tax payments in 2006 were for liabilities that were incurred in 2005 and 2006. Because relatively few changes were made to the tax code in those years and the distribution of income stayed fairly stable, the distribution of taxes owed for 2006 is likely to be a good proxy for the distribution of taxes paid in 2006.

Excise taxes on goods such as tobacco and alcohol were allocated to households in proportion to their consumption of the taxed goods. Excise taxes on intermediate goods, which are paid by businesses, were attributed to households in proportion to a household's overall consumption. Information about the consumption of taxed goods and overall consumption came from the Bureau of Labor Statistics' Consumer Expenditure Survey. CBO assumed that households in the SOI-CPS database had consumption patterns similar to those of households in the Consumer Expenditure Survey with comparable income and household composition. Consumption patterns from those data were matched to households in the SOI-CPS database used for this analysis on the basis of income and household composition.

Estate and gift taxes and customs duties were also allocated to households in this analysis, unlike in previous CBO reports. In all, those revenue sources accounted for about 2 percent of federal revenues in 2006. CBO allocated receipts from estate and gift taxes on the basis of imputations of each household type's and income group's share of taxable wealth, as reported in the 2007 Survey of Consumer Finances. That survey contains detailed information about households' income and wealth. Customs duties were allocated according to the distribution of total consumption expenditures as reported in the 2006 Consumer Expenditure Survey.

Miscellaneous receipts were excluded from the distributional analysis. Those receipts amounted to about $44 billion—or about 2 percent of federal revenues—in 2006. The largest source of receipts included in that amount was payments to the Treasury for interest earned on securities held by the Federal Reserve System. Also excluded from the distributional analysis was about $4 billion in social insurance and retirement receipts, which consisted mainly of contributions by federal employees to their retirement plans.

Differences From Previous CBO Analyses

Although this is CBO's first comprehensive analysis of the distribution of federal spending, the agency has released periodic reports on the distribution of household income and federal taxes for more than a decade.[29] By and large, the methods used in this analysis are similar to the ones used in those previous CBO reports. However, this analysis differs from those reports in four fundamental ways—involving household types, income groups, adjustments to data, and the year focused on—as well as in a number of smaller ways.

Classification of Household Types

Earlier CBO analyses divided the U.S. population into three groups of households that were based primarily on whether they contained members under age 18:

- Households with children (regardless of the age of the householder),
- Elderly childless households, and
- Nonelderly childless households.

28. For a more detailed discussion of those assumptions, see Congressional Budget Office, *The Distribution of Household Income and Federal Taxes, 2008 and 2009* (July 2012), pp. 16–18, www.cbo.gov/publication/43373.

29. For a comprehensive list of that research, see Congressional Budget Office, "Distribution of Federal Taxes Publications From CBO," www.cbo.gov/browse/publications/208.

That classification made sense when focusing on the distribution of income and taxes because differences in the federal tax treatment of households with and without children are much more pronounced than differences in the treatment of elderly and nonelderly households. However, because this analysis also includes federal spending—a significant portion of which is targeted toward older people—CBO used a slightly different grouping of households that was based primarily on the age of the householder:

- Elderly households (with or without children),
- Nonelderly households with children, and
- Nonelderly households without children.

Income Groups

CBO used annual market income as the measure by which to rank households for this analysis. Because market income is an especially poor proxy for economic well-being for older people, CBO excluded elderly households when examining the distributional effects of government spending and taxes on different income groups. By contrast, previous CBO analyses included the full population when examining the distribution of household income and taxes by income group and, in some cases, used an income measure that included both market income and government transfer payments.

Adjustments to Data to Match Budgetary Totals

This analysis is intended to present as comprehensive a picture as possible of the distributional effects of federal spending and taxes on households, so CBO adjusted the amounts of federal spending and taxes observed in the matched SOI-CPS database to equal budgetary totals as reported in the *Monthly Treasury Statements*. Although prior CBO reports included federal transfer payments in household income, those payments were not aligned with spending totals.

In addition, in this analysis, CBO adjusted federal taxes in the SOI data to match total tax collections for the calendar year as reported in the MTS. Previous CBO reports presented the distribution of taxes on a liability basis—the amount of taxes that households owe on the basis of their income and economic circumstances in a given year, without regard to when the tax payments are actually made. This report presents the distribution of taxes on a cash-flow basis—the amount of taxes that households pay in a specific year, regardless of when the liability for those taxes was incurred.

Year of the Analysis

This report uses data for 2006, the most recent year for which the relevant tax information was publicly available when CBO began the analysis. That year is also the last year before the severe economic downturn that began at the end of 2007, so the results do not reflect changes in market income caused by the recession, the federal spending and tax policies implemented in response to that downturn, or the ways in which spending and taxes automatically change during a recession.

Other Differences

Besides those four overarching differences from previous CBO reports, several others are worth noting:[30]

- Social Security benefits allocated to households now include estimates of benefits going to children under age 15, which previous CBO reports did not include in their allocations.
- Spending on the Supplemental Nutrition Assistance Program is allocated to households on the basis of CBO's estimates rather than figures reported in data from the Current Population Survey.
- In addition to aligning the amount of housing assistance with budgetary totals, CBO adjusted the underlying distribution of housing assistance to match the distribution by income groups found in administrative data from the Department of Housing and Urban Development.
- Spending on the Federal Pell Grant Program is allocated to households on the basis of CBO's estimates (which are derived from data from the Department of Education) rather than figures reported in CPS data.

30. The most recent CBO study on the distribution of income and taxes—*The Distribution of Household Income and Federal Taxes, 2008 and 2009* (July 2012), www.cbo.gov/publication/43373—included two methodological changes from earlier CBO analyses: the allocation assumptions used for the incidence of the corporate income tax and a change to the value of Medicare and Medicaid benefits being allocated to households. This report uses the same incidence assumptions for the corporate income tax as that study. Although both reports allocate the "market value" of Medicare and Medicaid to households, the data sources and methodology used to do so differ.

- The amount of Medicare spending going to households is a CBO estimate based on the Medicare Current Beneficiary Survey rather than a Census Bureau estimate included in the CPS, which was the source used in previous CBO reports.[31]

- The distribution of Medicaid enrollees is adjusted for reporting errors in the CPS, and benefit amounts are based on CBO's estimates. Previous CBO reports used both participation and benefit estimates that were based on the Census Bureau's methods and reported in CPS data.

- The refundable portions of the earned income and child tax credits are counted on the spending side of the federal budget in this analysis. In earlier CBO analyses, those credits were counted on the revenue side of the budget as negative tax liabilities. (In this report, the nonrefundable portions of the credits—the amounts that go toward reducing various tax liabilities—are still included on the revenue side of the budget.)

- Several smaller sources of revenues—deposits by states for unemployment insurance, estate and gift taxes, customs duties, and retirement and unemployment insurance taxes for railroad workers—are included in the distribution of federal revenues in this report, whereas they were not in previous CBO reports.

- The measure of market income used here differs slightly from that used in prior CBO analyses of the distribution of household income and taxes. In this analysis, payments made to veterans regardless of their income or assets—referred to as non-means-tested or service-connected benefits—are included in market income. The value of those benefits is obtained from a question in the CPS about whether recipients of veterans' payments must fill out an annual income questionnaire in order to receive their benefits. If veterans who receive payments from the Department of Veterans Affairs respond that they do not have to fill out such a questionnaire, the value of their benefits reported in the CPS is counted as part of market income. CBO views those payments as other income resulting from their status as a veteran. Previously, all payments to veterans were included in government transfer payments. In this report, only the means-tested portion of veterans' benefits is included in government transfer payments. The non-means-tested or service-connected benefits are included in spending on other goods and services.

31. The Census Bureau assigns to each CPS respondent who is enrolled in Medicare a value that represents the average cost of providing Medicare benefits (which varies by state, age, and disability status), as estimated by the Census Bureau using administrative data from the Centers for Medicare & Medicaid Services.

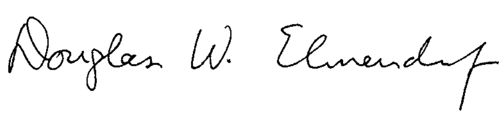
About This Document

This Congressional Budget Office (CBO) report was prepared at the request of the Chairman of the House Committee on the Budget and the Ranking Member of the Senate Committee on the Budget. In keeping with CBO's mandate to provide objective, impartial analysis, the report makes no recommendations.

The analysis was conducted by Molly Dahl of CBO's Microeconomic Studies Division and Kevin Perese of CBO's Tax Analysis Division with guidance from Frank Sammartino (formerly of CBO) and David Weiner. Edward Harris, Jamease Miles, Shannon Mok, Robert Stewart, and Julie Topoleski assisted with the estimates. Nabeel Alsalam, Elizabeth Bass, Linda Bilheimer, Chad Chirico, Kathleen FitzGerald, Holly Harvey, Jean Hearne, Janet Holtzblatt, Heidi Golding, Vi Nguyen, Shinichi Nishiyama, Sam Papenfuss, Jonathan A. Schwabish, and Rebecca Yip provided helpful comments.

J.D. Foster of the Heritage Foundation, David Johnson of the Census Bureau, James X. Sullivan of the University of Notre Dame, and Paul N. Van de Water of the Center on Budget and Policy Priorities also reviewed the report. The assistance of external reviewers implies no responsibility for the final product, which rests solely with CBO.

Christian Howlett edited the report, and Maureen Costantino prepared it for publication. The report is available on CBO's website (www.cbo.gov/publication/44698).



Douglas W. Elmendorf
Director

November 2013