

**THE COMBINED EFFECTS OF MAJOR CHANGES  
IN FEDERAL TAXES AND SPENDING PROGRAMS SINCE 1981**

**Staff Memorandum**

**April 1984**

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Human Resources and Community  
Development Division and  
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**Congressional Budget Office**

**Pursuant to the Request of**

**Senator Lawton Chiles  
Ranking Minority Member  
Senate Budget Committee**

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This memorandum supplements two recent Congressional Budget Office (CBO) memoranda describing the effects on households in different income groups of major changes in federal outlay programs and in federal taxes enacted in 1981 and 1982. The estimates presented here differ from the tax and benefit estimates presented in the earlier memoranda. The tax and benefit data have been adjusted to a different, common basis in order to sum the effects of federal policy changes on households for calendar years 1983-1985.

Estimates prepared for the two CBO studies differ in their scope and underlying assumptions and thus cannot be combined without adjustment of either one or both sets of figures. The most important differences concern the time periods examined and the definitions of the income categories used. The August 1983 CBO study, "Major Legislative Changes in Human Resource Programs Since January 1981," contained estimates of the distributional effects of certain benefit reductions in fiscal years 1982-1985. These estimates were developed by assuming that the share of households contained in each income group remained relatively constant throughout the 1982 to 1985 period. By contrast, the March 1984 CBO study, "Effects of Major Changes in Individual Income and Excise Taxes Enacted in 1981 and 1982 for Households in Different Income Categories," presents calendar year estimates of major tax changes by income group, and allows the proportion of households in each category to change over time in order to reflect the effects of inflation-induced bracket creep on tax liabilities.



Another difference is the inclusion of the Social Security Amendments of 1983 in the benefit changes analyzed but not in the tax changes. As discussed in the recent CBO memorandum describing the distributional effects of tax changes enacted during 1981 and 1982, CBO has not analyzed the effects of subsequent tax legislation such as that included in the Social Security Amendments. The amendments initiated taxation of Social Security benefits for individuals with adjusted gross incomes above \$25,000 (\$32,000 for couples) and increased revenues by between \$6 billion and \$7 billion over the 1984-1985 period. While nearly all of this tax increase will be felt by those in the middle- and high-income categories, its precise effects have not yet been determined. The August memorandum includes the impacts of most of the spending provisions of the Social Security Amendments. Consequently, the estimates presented here include the spending, but not the tax, provisions of that legislation.

#### Aspects of Earlier Studies Retained

The two recent studies are similar in many respects, and this analysis retains these aspects. First, only the policy changes analyzed in the earlier memoranda are included here. Each of the previous studies focused only on policies that directly affected individual households. Changes in defense-related programs or in business taxes, for example, that may ultimately benefit individuals by generating additional employment opportunities or by raising living standards were not considered.

Second, the individual estimates shown here do not take account of changes in individuals' behavior resulting from the benefit and tax changes as they affect



households themselves or the economy at large.<sup>1</sup> Data that would permit analysis of these benefits by income group do not exist. This study is subject to the same limitation.

Third, the tax changes analyzed here also omit the effects of many minor provisions of the Economic Recovery Tax Act of 1981 (ERTA) and of the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA), because data on their distributional consequences are unavailable. When taken together, the provisions on which the CBO estimates are based account for about 90 percent of the combined tax changes affecting individuals enacted during 1981 and 1982.

Finally, since the allocation of proposed changes in spending across income groups is a difficult and complex task, the results of this analysis should also be used with caution. One problem occurs because data on household income and benefit reciprocity are often derived from different sources--household surveys versus administrative records, for example--and are often based on different units of measure--such as households versus filing units. The distribution of expenditure and tax changes by income category may also be misleading in some respects. For example, average household size varies somewhat by income group, so that an analysis based on income categories cannot reflect differences in the relative needs of households of different sizes. Also, although the overall distribution of households by income group stays constant over time in this analysis, individual households may actually move between groups relatively frequently, because of events such as marriage, divorce,

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1. More detailed explanations of the assumptions underlying the estimates of the impacts of benefit and tax changes appear in the earlier CBO memoranda.





retirement, or leaving school. Moreover, the estimates presented here are average changes in benefits for all households in each income category, but only a few households are affected by any one benefit change. Thus, the impact on those who are affected is generally substantially greater than the average would indicate, but many households are not affected at all.

### Differences from 1982 CBO Studies

The two recent studies--and their combined results presented here--differ in several respects from earlier CBO studies completed in 1982.<sup>2</sup> First, the estimates are based on CBO's February 1983 economic projections, which are significantly lower than projections used in the 1982 studies of the combined effects of policy changes enacted since 1981. As a result, household incomes and tax liabilities are below the amounts forecast earlier, so current estimates of the impact of the tax changes are also lower.

Second, a byproduct of the economic conditions during 1982 was a decline in new household formation; therefore, the total number of households grew by only roughly one-half percent between 1982 and 1983. The earlier CBO studies assumed that the number of households would continue to grow at about 2.5 percent per year, the annual growth rate achieved over the previous decade. Thus, the total number of

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2. CBO studies include: "Effects of Tax And Benefit Reductions Enacted in 1981 for Households in Different Income Categories," Special Study (February 1982); and "Effects of Changes in Tax and Benefit Payments Enacted in Fiscal Year 1982 for Households in Different Income Categories," Special Study (November 1982).



households in each year of this analysis is less than the corresponding set of figures in the 1982 studies.

In addition, more recent U.S. Census data also indicate that year-over-year growth in the numbers of households between 1981 and 1982 varied among the different income groups.<sup>3</sup> Table 1 compares the previously projected distribution of households for 1982 with the actual distribution developed from U.S. Census Bureau data. Relative to the earlier CBO projections, the number of households in both the lowest and the highest income groups are higher than previously estimated, implying that per household estimates of the effects of some of the policy changes are likely to be lower for some groups and higher for others than previously reported.

Fourth, the tables presented here show only the effects of benefit and tax changes during the 1983-1985 period. Data for 1982 are omitted because of difficulty in converting fiscal year 1982 estimates of certain benefit changes into calendar year figures. Many provisions of the Omnibus Reconciliation Act of 1981 were phased in during 1982 to achieve certain fiscal year savings targets. Preparing estimates of their effect on a calendar year basis for calendar 1982 would require additional information about their timing on a monthly basis.

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3. CBO tabulations of March 1982 and March 1983 Current Population Survey data.



**TABLE 1. DISTRIBUTION OF HOUSEHOLDS IN 1982 BY INCOME CATEGORY**  
(In millions)

	All House- holds	Household Income <sup>a</sup>				\$80,000 and Over
		Less Than \$10,000	\$10,000- 20,000	\$20,000- 40,000	\$40,000- 80,000	
Earlier CBO Projections <sup>b</sup>	84.0	18.9	20.8	29.6	13.7	1.0
1982 Census Bureau Data	83.8	20.2	21.5	28.5	12.3	1.4

SOURCE: Congressional Budget Office.

NOTE: Details may not sum to totals because of rounding.

- a. The titles for the income categories reflect the 1982 distribution of income for households.
- b. Based on CBO's economic projections of February 1982.

#### Major Tax Changes During 1981 and 1982

The estimates of the tax legislation shown below incorporate the marginal tax rate reductions, the two-earner deduction, and the indexing provisions of ERTA and the tightening of the medical and casualty loss deductions and the cigarette, air travel, and telephone service excise taxes of TEFRA. Unlike estimates contained in the March CBO study ("Effects of the Major Changes in Individual Income and Excise Taxes Enacted in 1981 and 1982 for Households in Different Income Categories"), the estimates shown here are based on categories that maintain the same proportion of households in each year as in 1982. Thus, the share of households in the highest income group, for example, is assumed to be 1.7 percent in 1982 and not to change by



1985. This assumption is based on evidence that the before-tax income distribution in the United States has remained relatively stable in the past.<sup>4</sup>

The bulk of the net tax cuts from ERTA and TEFRA were received by those with incomes between \$20,000 and \$80,000 in 1982 (see Table 2). Households in this range received about 70 percent of the total reduction in 1982; this figure will rise to approximately 80 percent by 1985. This gain in the share of the overall reduction is offset by an equivalent decline in the share for those households with incomes above \$80,000. To a large degree, this result may be attributable to the ERTA cut in the highest marginal tax rate from 70 percent to 50 percent which affected only those households in the highest income group. This cut, effectuated in 1982, provided the highest income group with most of their tax reduction upfront, while the majority of households received their tax cut in stages over several years.

When measured on a per household basis, the effects of the net tax reductions are greatest for those in the highest income group (see Table 3). These cuts are much larger than for other household income categories in part because the largest tax change, the across-the-board rate reduction, cut all tax liabilities by roughly equal percentages and higher income households incur much larger tax liabilities. These reductions grow between 1982 and 1985 for two reasons. First, the rate cuts were phased in. Second, in any year, the reductions equal a set proportion of tax liabilities, and both tax liabilities and the incomes underlying them are assumed to grow over time according to CBO economic projections.

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4. U.S. Department of Commerce, Bureau of the Census, Money Income of Households, Families, and Persons in the United States: 1981, Table 17.





**TABLE 2. TAX CHANGES RESULTING FROM ERTA AND TEFRA BY INCOME CATEGORY, CALENDAR YEARS 1983-1985<sup>a</sup> (In billions of dollars)**

Calendar Year	All Households	Household Income <sup>b</sup>				
		Less Than \$10,000	\$10,000-20,000	\$20,000-40,000	\$40,000-80,000	\$80,000 and Over
1983	-68.0	-0.1	-4.9	-25.1	-27.8	-10.0
1984	-93.6	-0.4	-7.3	-35.0	-38.8	-12.1
1985	-115.9	-0.9	-9.8	-44.1	-47.9	-13.3

SOURCE: Congressional Budget Office. Based on CBO economic projections of February 1983.

- a. Individual income tax cuts from ERTA included in this table are the rate cuts, the deduction for two-earner married couples, and indexing. Individual income tax increases from TEFRA included are the tightening of the medical and casualty loss deductions. The effects of TEFRA increases in cigarette, air travel, and telephone service excise taxes are also included.
- b. The titles for the income categories reflect the 1982 income distribution of households.

**TABLE 3. TAX CHANGES RESULTING FROM ERTA AND TEFRA PER HOUSEHOLD BY INCOME CATEGORY, CALENDAR YEARS 1983-1985<sup>a</sup> (In dollars)**

Calendar Year	All Households	Household Income <sup>b</sup>				
		Less Than \$10,000	\$10,000-20,000	\$20,000-40,000	\$40,000-80,000	\$80,000 and Over
1983	-810	-10	-230	-880	-2,260	-7,140
1984	-1,090	-20	-330	-1,200	-3,080	-8,390
1985	-1,320	-40	-440	-1,480	-3,720	-9,070

SOURCE: Congressional Budget Office. Based on CBO economic projections of February 1983.

- a. Individual income tax cuts from ERTA included in this table are the rate cuts, the deduction for two-earner married couples, and indexing. Individual income tax increases from TEFRA included are the tightening of the medical and casualty loss deductions. The effects of TEFRA increases in cigarette, air travel, and telephone service excise taxes are also included.
- b. The titles for the income categories reflect the 1982 income distribution of households.



## The Combined Effects of Tax and Benefit Changes

The combined impact of the tax and benefit changes since 1981 is a net loss in income for those in the lowest category, and an increase for the other four groups.<sup>5</sup> Table 4, which shows the dollar amount of government outlay savings and tax reductions by income category, indicates that those in the lowest income category lose more in cash benefits than they gain from the tax changes in every year. Inclusion of the in-kind benefit reductions further increases the net loss experienced by this group. For the other four income categories, the total tax changes exceed the total benefit reductions by a growing amount each year; in the three highest income categories, the margin between the net tax cuts and the benefit reductions is large.

The average combined tax and benefit changes per household follow a similar pattern, as Table 5 shows. Households in the lowest income category lose, on average, about \$160 in cash in 1983, and about \$270 when in-kind benefits are included; in 1985, these losses are \$240 and \$440, respectively. For households with income in the \$10,000-\$20,000 range in 1982, the relatively small increase in after-tax cash income is largely offset by reductions in in-kind benefits. The net gains for households with incomes above \$20,000 are much higher, and they grow as income levels rise.

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5. For a discussion of the changes in benefits, see CBO's August 1983 study.



TABLE 4. TOTAL NET CHANGE IN BENEFITS AND TAXES BY INCOME CATEGORY, CALENDAR YEARS 1983-1985 (In billions of dollars)<sup>a</sup>

Calendar Year	Household Income <sup>b</sup>					
	All Households	Less Than \$10,000	\$10,000-20,000	\$20,000-40,000	\$40,000-80,000	\$80,000 and Over
<b>1983</b>						
Cash Benefits	-7.1	-3.4	-2.2	-1.2	-0.3	-0.1
Taxes	68.0	0.1	4.9	25.1	27.8	10.0
Net	60.9	-3.3	2.8	23.9	27.5	10.0
In-Kind						
Benefits	-5.6	-2.3	-1.3	-1.3	-0.7	c
Net, including in-kind benefits	55.2	-5.6	1.4	22.6	26.8	9.9
<b>1984</b>						
Cash Benefits	-14.9	-5.1	-4.6	-3.8	-1.2	-0.1
Taxes	93.6	0.4	7.3	35.0	38.8	12.1
Net	78.7	-4.7	2.7	31.3	37.6	11.9
In-Kind						
Benefits	-8.2	-3.4	-2.1	-1.7	-1.0	-0.1
Net, including in-kind benefits	70.5	-8.1	0.6	29.5	36.6	11.9
<b>1985</b>						
Cash Benefits	-16.3	-5.9	-5.4	-3.7	-1.1	-0.1
Taxes	115.9	0.9	9.8	44.1	47.9	13.3
Net	99.6	-5.0	4.5	40.3	46.7	13.2
In-Kind						
Benefits	-10.9	-4.3	-3.1	-2.2	-1.2	-0.1
Net, including in-kind benefits	88.7	-9.4	1.4	38.1	45.5	13.1

SOURCE: Congressional Budget Office. Based on CBO's economic projections of February 1983.

NOTE: Details may not add to totals because of rounding.

- a. In this table, benefit reductions are treated as reductions in household income and tax reductions are displayed as increases (because they increase after-tax income). Therefore, the tax changes have the opposite sign from those shown in Table 2.
- b. The titles for the income categories reflect the 1982 distribution of incomes for households.
- c. Less than \$50 million.



**TABLE 5. NET CHANGE IN TAXES AND BENEFITS PER HOUSEHOLD BY INCOME CATEGORY, CALENDAR YEARS 1983-1985 (In dollars)<sup>a</sup>**

Calendar Year	All Households	Household Income <sup>b</sup>				
		Less Than \$10,000	\$10,000-20,000	\$20,000-40,000	\$40,000-80,000	\$80,000 and Over
<b>1983</b>						
Cash Benefits	-80	-170	-100	-40	-20	-40
Taxes	810	10	230	880	2,260	7,140
Net	730	-160	130	840	2,240	7,100
In-Kind Benefits	-70	-110	-60	-40	-60	-30
Net, including in-kind benefits	660	-270	70	790	2,180	7,070
<b>1984</b>						
Cash Benefits	-170	-250	-210	-130	-90	-90
Taxes	1,090	20	330	1,200	3,080	8,390
Net	920	-230	120	1,070	2,990	8,300
In-Kind Benefits	-100	-160	-90	-60	-80	-40
Net, including in-kind benefits	820	-390	30	1,010	2,900	8,270
<b>1985</b>						
Cash Benefits	-190	-280	-240	-130	-90	-100
Taxes	1,320	40	440	1,480	3,720	9,070
Net	1,130	-240	200	1,350	3,630	8,970
In-Kind Benefits	-120	-200	-140	-70	-90	-40
Net, including in-kind benefits	1,010	-440	60	1,280	3,540	8,930

SOURCE: Congressional Budget Office. Based on CBO's economic projections of February 1983.

NOTE: Details may not add to totals because of rounding.

- a. In this table, benefit reductions are treated as reductions in household income and tax reductions are displayed as increases (because they increase after-tax income). Therefore, the tax changes have the opposite sign from those shown in Table 2.
- b. The titles for the income categories reflect the 1982 distribution of incomes for households.

