DISTRIBUTIONAL IMPLICATIONS OF REPEAL OR DELAY OF INCOME TAX INDEXATION

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Repeal or delay of indexation of the individual income tax personal exemption and tax rate brackets would increase federal revenues, but would also change the distribution of tax liabilities scheduled to obtain under current law. This memorandum explains the current law, discusses some policy options with respect to indexation, and shows how this redistribution would occur and what its magnitude would be for taxpayers at various income levels.

CURRENT LAW

The Economic Recovery Tax Act of 1981 (ERTA) mandated the indexation of the personal exemptions and tax rate brackets (including the zero bracket amount or standard deduction) in the individual income tax effective January 1, 1985. The price index to be used is the consumer price index for all urban consumers (CPI-U). (Note that as of January 1, 1983, the home purchase component of the CPI-U was replaced by a rental equivalence measure of the cost of home ownership, making the CPI-U a better measure of actual inflation.) For every year starting in 1985, the personal exemption and rate brackets in the current law are to be increased by the ratio of the CPI-U for the immediately preceding fiscal year (for example, in the case of tax year 1985 the immediately preceding fiscal year is fiscal year 1984, which runs from October 1983 through September of 1984) to the CPI-U of fiscal year 1983 (which runs from October 1982 through September 1983).

The timing of the indexation provision means that the adjustment for inflation lags the inflation itself by more than one year. (This is necessary to allow time for the preparation of tax forms, and to avoid last-minute uncertainty on the part of taxpayers.) Thus, 1985 tax brackets will not be adjusted for the inflation that occurred in 1985, but rather for the inflation of fiscal year 1984, that is, from between 15 months and 3 months before the start of calendar 1985. Real tax liabilities on constant real incomes will therefore not be held precisely constant from one year to the next under indexation. If inflation were to be slower in 1985 than in fiscal 1984, indexation would cause a real tax cut in 1985 compared to calendar 1984; if inflation were faster, there would be a real tax increase. Thus, indexation would hold real tax liabilities constant only on average over the long run, not in each individual year. This phenomenon will be evident in the examples provided later in this memorandum.

POLICY OPTIONS

A number of policy advantages of indexation were mentioned in the course of the debate over ERTA. Indexation prevents taxpayers from having to pay higher real taxes just because their incomes keep pace with inflation. Indexation also holds the growth of government revenues close to the rate of growth of incomes in the economy (in contrast to the faster growth of revenues without indexation), thus putting a brake on what otherwise might be an inducement to excessive government spending.

More recent concern with indexation has arisen because of the forecasts of large budget deficits over the entire forecast and projection period. Indexation reduces nominal tax revenues (compared to an unchanging tax law) because it increases the personal exemption and the size of the tax rate brackets; repealing indexing would therefore increase revenues and narrow the budget gap.

Another approach to the budget problem would be to postpone rather than repeal indexation, which would postpone and reduce, rather than eliminate, the revenue loss. This approach might be advocated by those who acknowledge the beneficial aspects of indexation, but believe that delaying indexation is the least bad way to narrow the budget gap. Another argument for delaying indexation could be that the decline in inflation since the passage of the tax rate cuts in ERTA has made those rate cuts more generous in real terms than was originally intended. At the time of ERTA's passage, cumulative inflation from October 1, 1981 (the effective date of the first of the rate cuts) was expected to erode the tax rate cuts by $108 billion over fiscal 1983-84; but the slowdown of inflation has reduced this estimate of bracket creep to $49 billion.[1] Some people therefore might argue that inflation should be allowed to erode the tax rate cuts to the real size that was previously anticipated before indexation is put into effect. (It should also be noted that the aggregate dollar amount of the real tax cuts, as well as the bracket creep, is lower

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1. CBO, Reducing the Deficit: Spending and Revenue Options, February 1983, pp. 236-238.

than was anticipated in 1981, because lower-than-anticipated real economic growth has been accompanied by lower increases in real incomes.)

A complication is that repeal or delay of indexation would affect different taxpayers in different ways. Repealing indexation of the personal exemption would affect low-income taxpayers most in the sense that their exemptions shield the largest proportion of their income from taxation; in dollar terms, however, it would affect the highest-income taxpayers most, because it would increase the amount of their taxable income in the highest tax rate bracket. Repealing indexation of the tax rate brackets would have varying effects up and down the income scale, partly because of the effect of the unique zero bracket, and partly because of the varying widths of the tax rate brackets at different income levels.

The decision of whether to repeal, postpone, or retain indexation thus has many dimensions. Two very broad issues, the need for additional revenue and the desirability of indexation per se, are beyond the scope of this memorandum. The final section will analyze the distributional effects of repeal and three postponement options, to shed some light on the desirability of retaining or changing the indexing provision.

DISTRIBUTIONAL EFFECTS OF REPEAL OR POSTPONEMENT OF INDEXATION

This section quantifies the effects of repeal and postponement of indexation on taxpayers at different income levels. One-, two-, and three-year postponements are considered as options. Postponement of indexation is construed here as

postponement of all of the dates in the indexation law (for example, in the case of a one-year postponement, changing the base period CPI-U from fiscal year 1983 to fiscal year 1984; alternatively, the changing of the tax brackets could be postponed to 1986, but the base year of fiscal 1983 retained) as well as the effective date of indexation. The inflation assumptions underlying the estimates in this section are from the CBO baseline economic projections.

CBO BASELINE INFLATION PROJECTIONS
(Calendar Years 1983-1988)

	1983	1984	1985	1986	1987	1988
CPI-U (percent change)	4.5	5.0	4.7	4.1	3.9	3.7

The revenue changes estimated for each of these options are shown in Table 1. Outright repeal obviously yields the greatest increase in revenue, while the postponement options have identical effects during the postponement period and smaller revenue gains later. The one-year postponement option clearly shows a continuing and slowly growing revenue gain even after indexation does take effect. This is because the personal exemption and rate bracket limits are proportionately smaller by one year's inflation rate in each succeeding year, thereby pushing taxpayers' last dollars of taxable income into higher tax rate brackets than if indexation had not been postponed.

Table 2 shows the tax increases by income group at 1981 income levels if indexing were repealed. (Modifying this model to use 1985 income levels would produce unreliable results.) The distributional effects of the tax increases are difficult to characterize; which income group fares worst is determined by the measure chosen. In terms of the number of dollars per taxpayer in increased taxes, repeal of indexation falls most heavily on upper-income returns. Table 2 shows that taxpayers in the $10,000-$20,000 income class would pay on average $48 more in taxes in 1985 if indexation were repealed or postponed, while those with over $200,000 of income would pay on average $870 more. However, the relatively small number of dollars for those in the $10,000-$20,000 income group is a 3.9 percent increase in tax liabilities, while the larger dollar increase for those with over $200,000 of income is only 0.6 percent of tax liabilities on average. But by a third measure, the percentage decrease in after-tax income due to repeal or delay of indexation, the middle-income groups fare worse than either the top or the bottom of the income scale. Taxpayers in the $75,000-$100,000 income group would lose 0.7 percent of their after-tax income in 1985 if indexing were repealed or postponed, while those in the $10,000-$20,000 income group would lose only 0.4 percent, and those with over $200,000 of income would lose only 0.3 percent.

This dispersion of results in measures of the distributional effects of repeal of indexation is caused partly by the current distribution of the tax burden, and partly by the nature of indexation itself. Upper-income taxpayers would lose the most dollars if indexation were repealed because a smaller personal exemption

would add to their taxable income in the highest tax rate brackets, and because indexation would change tax liabilities at every tax rate bracket boundary. (Because those boundaries would be increased by indexation, and taxpayers with the highest incomes would cross every rate bracket boundary, they would suffer all of the increases if indexation were repealed.) In contrast, low-income taxpayers would have more taxable income because of the smaller personal exemption only in the low tax rate brackets, and would cross few tax rate bracket boundaries, and so their tax dollar loss from repealing indexation would be less.

In terms of the percentage of total tax lost because of repeal, however, the results are just the reverse. Upper-income tax increases if indexation were repealed would be only a small fraction of liabilities under current law. This is because the tax saving due to indexation of the personal exemptions does not increase with income once the taxpayer is in the highest tax bracket, and because the tax saving due to indexation of the tax rate bracket boundaries also stops increasing once the taxpayer crosses the last bracket boundary. Thus, the slowly-growing dollar tax cost of repeal is a falling percentage of tax liability as income rises. In contrast, the percentage increase in tax liability for a low-income taxpayer could be enormous if indexation were repealed. For example, a taxpayer whose income is less than the sum of his indexed personal exemptions and zero bracket amount, but greater than the sum of those values if they were not indexed, would pay tax only if indexation were repealed and would thus face an infinite percentage increase in tax. For taxpayers who would be taxable in small amounts even if the system were indexed,

the percentage tax increases if indexation were repealed would be finite but very large.

The third measure of the tax increases due to repeal or postponement of indexation, the percentage change in after-tax income, is in effect a synthesis of the first two; it takes the dollar change in tax liability and expresses it as a percentage of the taxpayers' after-tax incomes. This measure shows the middle-income taxpayers as the worst affected, not the upper- or lower-income groups. The lower-income taxpayers' large percentage increases in tax are small relative to their after-tax incomes, because the tax increases and total taxes themselves are small relative to their incomes. The personal exemptions and zero bracket amounts shield most of their incomes from tax, and what income is taxed faces only the lowest marginal rates. Therefore, repeal of indexation would have only a small percentage effect on low-income taxpayers' after-tax incomes. As income increases into the middle-income range, two things happen: first, whether the tax law is indexed or not, tax liabilities become a larger share of total income; and second, if the tax system is indexed, the tax savings increase in dollar terms. Therefore, repealing indexation adds a larger amount to a tax liability which is a larger percentage of income, and so the percentage reduction in after-tax income increases. Beyond the middle-income level, however, the dollar tax increase due to repeal of indexation increases only slowly, and the percentage tax increase declines; and so the percentage decrease in after-tax income turns around and begins to fall.

This analysis, based on the repeal or postponement of indexation in 1985, suggests that a characterization of its effects depends crucially on the perspective employed. Upper-income taxpayers would lose the most dollars if indexation were repealed, but those dollars would be a relatively small share of either current law tax liability or after-tax income; it is unlikely, therefore, that this group would be characterized as the biggest losers if indexation were repealed or delayed. Lower-income taxpayers would have their taxes increased the most in percentage terms, but those increases would be small both in absolute size and as a share of after-tax income; middle-income taxpayers would face the largest percentage bite from their after-tax budgets.

Another perspective on the effects of repeal or postponement is the effect on typical taxpayers at different income levels. Table 3 summarizes the effects of repeal or postponement of indexation in 1985 on families of four persons. (Similar tables for childless couples and single persons have also been computed and are available on request; they mirror the results in Table 3.) The results generally confirm the aggregates in Table 2, while updating them to current levels of income. It can be seen that the dollar amount of the tax increase due to repeal or postponement generally rises with income, as in Table 2, but that at the highest income levels it increases very slowly. As a percentage of tax liability the tax increases are by far the largest at the lowest income level, but again the percentage reduction in after-tax income rises and then falls with income, peaking at the $50,000-$100,000 income level. Unlike the average data for the entire population in

Table 2, the figures for typical taxpayers in Table 3 do not show perfectly uniform trends as income changes. This is because taxpayers who are very close to or far away from tax rate bracket boundaries, or in larger or smaller tax rate brackets, can face somewhat different changes in tax liabilities under indexation; and also because the rates of indexation are somewhat greater than the rates of growth of nominal income, as explained at the beginning of this memorandum.

Because 1985 is the first year in which indexation would occur, the results in Tables 2 and 3 do not change whether indexation were to be repealed or postponed one, two, or three years. To differentiate among these options it is necessary to look at a later year. Tables 4, 5, 6, and 7 show the effects of repeal, one-year, two-year, and three-year postponements of indexation, respectively, in the year 1988. At that time, some indexation will have occurred in all of the postponement options, with one year of indexation having occurred under the three year postponement, two years of indexation under the two year postponement, and three years of indexation under the one-year option. As in Table 3, the tax returns represent four-person families; equivalent tables for couples and single persons are available on request.

For each individual policy option, the 1988 results coincide with those for 1985. The dollar amount of tax increase generally rises with income; the percentage amount of tax increase generally falls; and the percentage reduction of after-tax income peaks in the middle-income range. The key figures for all of the individual indexation options are summarized in Table 8, to enable a comparison of the tax

costs at each income level. This comparison shows that each one-year postponement of indexation would cost a household with a 1983 income of $10,000 about $50 in 1988; for a household with $20,000 in 1983, the cost for each year of postponement would be about $60; for a $50,000 family, the cost would be about $300. These figures are tax increases for 1988 only; Table 3 indicates that the cost of repeal or postponement in 1985 for these same families would be $45, $52, and $279 respectively.

TABLE 1. REVENUE EFFECTS OF INDEXATION OPTIONS, FISCAL YEARS 1985-1988, IN BILLIONS OF CURRENT DOLLARS

Year	Repeal	Postpone: One Year	Postpone: Two Years	Postpone: Three Years
1985	6	6	6	6
1986	17	10	17	17
1987	28	11	22	28
1988	40	12	24	34

SOURCE: Joint Committee on Taxation.

TABLE 2. THREE MEASURES OF THE CHANGE IN TAX LIABILITIES IN CALENDAR YEAR 1985 DUE TO REPEAL OF INDEXATION, AT 1981 INCOME LEVELS

Adjusted Gross Income (Thousands)	Aggregate Tax Increase (Billions)	Tax Increase Per Return (Dollars)	Tax Increase (Percent)	Decrease in After-Tax Income (Percent)
Under 10	0.4	23	9.7	0.3
10 - 20	1.2	48	3.9	0.4
20 - 30	1.5	89	3.4	0.4
30 - 40	1.3	143	3.4	0.5
40 - 50	0.9	216	3.4	0.6
50 - 75	0.8	316	3.2	0.6
75 - 100	0.3	462	2.6	0.7
100 - 200	0.4	645	1.8	0.6
Over 200	0.1	870	0.6	0.3
Total or Average	6.9[a]	90	3.1	0.4

SOURCE: Joint Committee on Taxation.

a. Differs from estimate in Table 1 because it is based on a calendar rather than a fiscal year.

TABLE 3. THREE MEASURES OF THE TAX INCREASE FOR TYPICAL FOUR-PERSON FAMILIES IN 1985 DUE TO REPEAL OR POSTPONEMENT OF INDEXATION[a]

1983 Income (Dollars)	1985 Income (Dollars)	1985 Tax With Indexation (Dollars)	1985 Tax Without Indexation (Dollars)	Tax Increase (Dollars)	Tax Increase (Percent)	Decrease in After-Tax Income (Percent)
5,000	5,496	0	0	0	0	0
10,000	10,993	365	410	45	12.3	0.4
15,000	16,489	1,079	1,117	38	3.5	0.2
20,000	21,986	1,748	1,800	52	3.0	0.3
30,000	32,979	3,404	3,513	109	3.3	0.4
50,000	54,965	8,148	8,427	279	3.4	0.6
100,000	109,930	24,751	25,267	516	2.1	0.6
500,000	549,648	191,765	192,715	950	0.5	0.3

SOURCE: Congressional Budget Office.

a. Assumes all income is from wages and salaries earned by one spouse; deductions are the greater of the zero bracket amount or 23 percent of income; and income increases equal the rate of inflation. Earned income tax credit is omitted. Inflation projections are from the CBO economic projections (see text).

TABLE 4. THREE MEASURES OF THE TAX INCREASE FOR TYPICAL FOUR-PERSON FAMILIES IN 1988 DUE TO REPEAL OF INDEXATION[a]

1983 Income (Dollars)	1988 Income (Dollars)	1988 Tax With Full Indexation (Dollars)	1988 Tax Without Indexation (Dollars)	Tax Increase (Dollars)	Tax Increase (Percent)	Decrease in After-Tax Income (Percent)
5,000	6,164	0	0	0	0	0
10,000	12,327	397	585	188	47.4	1.6
15,000	18,491	1,202	1,363	161	13.4	0.9
20,000	24,654	1,948	2,170	222	11.4	1.0
30,000	36,981	3,789	4,284	495	13.1	1.5
50,000	61,635	9,062	10,174	1,112	12.3	2.1
100,000	123,270	27,614	29,843	2,229	8.1	2.3
500,000	616,350	214,777	218,395	3,618	1.7	0.9

SOURCE: Congressional Budget Office.

a. Assumes all income is from wages and salaries earned by one spouse; deductions are the greater of the zero bracket amount or 23 percent of income; and income increases equal the rate of inflation. Earned income tax credit is omitted. Inflation projections are from the CBO economic projections (see text).

TABLE 5. THREE MEASURES OF THE TAX INCREASE FOR TYPICAL FOUR-PERSON FAMILIES IN 1988 DUE TO ONE-YEAR POSTPONEMENT OF INDEXATION[a]

1983 Income (Dollars)	1988 Income (Dollars)	1988 Tax With Full Indexation (Dollars)	1988 Tax With One-Year Postponement of Indexation (Dollars)	Tax Increase (Dollars)	Tax Increase (Percent)	Decrease in After-Tax Income (Percent)
5,000	6,164	0	0	0	0	0
10,000	12,327	397	450	53	13.4	0.4
15,000	18,491	1,202	1,243	41	3.4	0.2
20,000	24,654	1,948	2,006	58	3.0	0.3
30,000	36,981	3,789	3,910	121	3.2	0.4
50,000	61,635	9,062	9,383	321	3.5	0.6
100,000	123,270	27,614	28,206	592	2.1	0.6
500,000	616,350	214,777	215,862	1,085	0.5	0.3

SOURCE: Congressional Budget Office.

a. Assumes all income is from wages and salaries earned by one spouse; deductions are the greater of the zero bracket amount or 23 percent of income; and income increases equal the rate of inflation. Earned income tax credit is omitted. Inflation projections are from the CBO economic projections (see text).

TABLE 6. THREE MEASURES OF THE TAX INCREASE FOR TYPICAL FOUR-PERSON FAMILIES IN 1988 DUE TO TWO-YEAR POSTPONEMENT OF INDEXATION[a]

1983 Income (Dollars)	1988 Income (Dollars)	1988 Tax With Full Indexation (Dollars)	1988 Tax With Two-Year Postponement of Indexation (Dollars)	Tax Increase (Dollars)	Tax Increase (Percent)	Decrease in After-Tax Income (Percent)
5,000	6,164	0	0	0	0	0
10,000	12,327	397	496	99	24.9	0.8
15,000	18,491	1,202	1,289	87	7.2	0.5
20,000	24,654	1,948	2,068	120	6.2	0.5
30,000	36,981	3,789	4,051	262	6.9	0.8
50,000	61,635	9,062	9,665	603	6.7	1.1
100,000	123,270	27,614	28,778	1,164	4.2	1.2
500,000	616,350	214,777	216,829	2,052	1.0	0.5

SOURCE: Congressional Budget Office.

a. Assumes all income is from wages and salaries earned by one spouse; deductions are the greater of the zero bracket amount or 23 percent of income; and income increases equal the rate of inflation. Earned income tax credit is omitted. Inflation projections are from the CBO economic projections (see text).

TABLE 7. THREE MEASURES OF THE TAX INCREASE FOR TYPICAL FOUR-PERSON FAMILIES IN 1988 DUE TO THREE-YEAR POSTPONEMENT OF INDEXATION[a]

1983 Income (Dollars)	1988 Income (Dollars)	1988 Tax With Full Indexation (Dollars)	1988 Tax With Three-Year Postponement of Indexation (Dollars)	Tax Increase (Dollars)	Tax Increase (Percent)	Decrease in After-Tax Income (Percent)
5,000	6,164	0	0	0	0	0
10,000	12,327	397	540	143	36.0	1.2
15,000	18,491	1,202	1,326	124	10.3	0.7
20,000	24,654	1,948	2,120	172	8.8	0.8
30,000	36,981	3,789	4,171	382	10.1	1.2
50,000	61,635	9,062	9,903	841	9.3	1.6
100,000	123,270	27,614	29,337	1,723	6.2	1.8
500,000	616,350	214,777	217,652	2,875	1.3	0.7

SOURCE: Congressional Budget Office.

a. Assumes all income is from wages and salaries earned by one spouse; deductions are the greater of the zero bracket amount or 23 percent of income; and income increases equal the rate of inflation. Earned income tax credit is omitted. Inflation projections are from the CBO economic projections (see text).

TABLE 8. THREE MEASURES OF THE TAX INCREASES FOR TYPICAL FOUR-PERSON FAMILIES IN 1988 DUE TO REPEAL OR POSTPONEMENT OF INDEXATION[a]

1983 Income (Dollars)	1988 Income (Dollars)	Indexation Option (Repeal or Delay)	Tax Increase (Dollars)	Tax Increase (Percent)	Decrease in After-Tax Income (Percent)
5,000	6,164	Repeal	0	0	0
		One Year	0	0	0
		Two Years	0	0	0
		Three Years	0	0	0
10,000	12,327	Repeal	188	47.4	1.6
		One Year	53	13.4	0.4
		Two Years	99	24.9	0.8
		Three Years	143	36.0	1.2
15,000	18,491	Repeal	161	13.4	0.9
		One Year	41	3.4	0.2
		Two Years	87	7.2	0.5
		Three Years	124	10.3	0.7
20,000	24,654	Repeal	222	11.4	1.0
		One Year	58	3.0	0.3
		Two Years	120	6.2	0.5
		Three Years	172	8.8	0.8
30,000	36,981	Repeal	495	13.1	1.5
		One Year	121	3.2	0.4
		Two Years	262	6.9	0.8
		Three Years	382	10.1	1.2
50,000	61,635	Repeal	1,112	12.3	2.1
		One Year	321	3.5	0.6
		Two Years	603	6.7	1.1
		Three Years	841	9.3	1.6
100,000	123,270	Repeal	2,229	8.1	2.3
		One Year	592	2.1	0.6
		Two Years	1,164	4.2	1.2
		Three Years	1,723	6.2	1.8
500,000	616,350	Repeal	3,618	1.7	0.9
		One Year	1,085	0.5	0.3
		Two Years	2,052	1.0	0.5
		Three Years	2,875	1.3	0.7

SOURCE: Congressional Budget Office.

a. Assumes all income is from wages and salaries earned by one spouse; deductions are the greater of the zero bracket amount or 23 percent of income; and income increases equal the rate of inflation. Earned income tax credit is omitted. Inflation projections are from the CBO economic projections (see text).