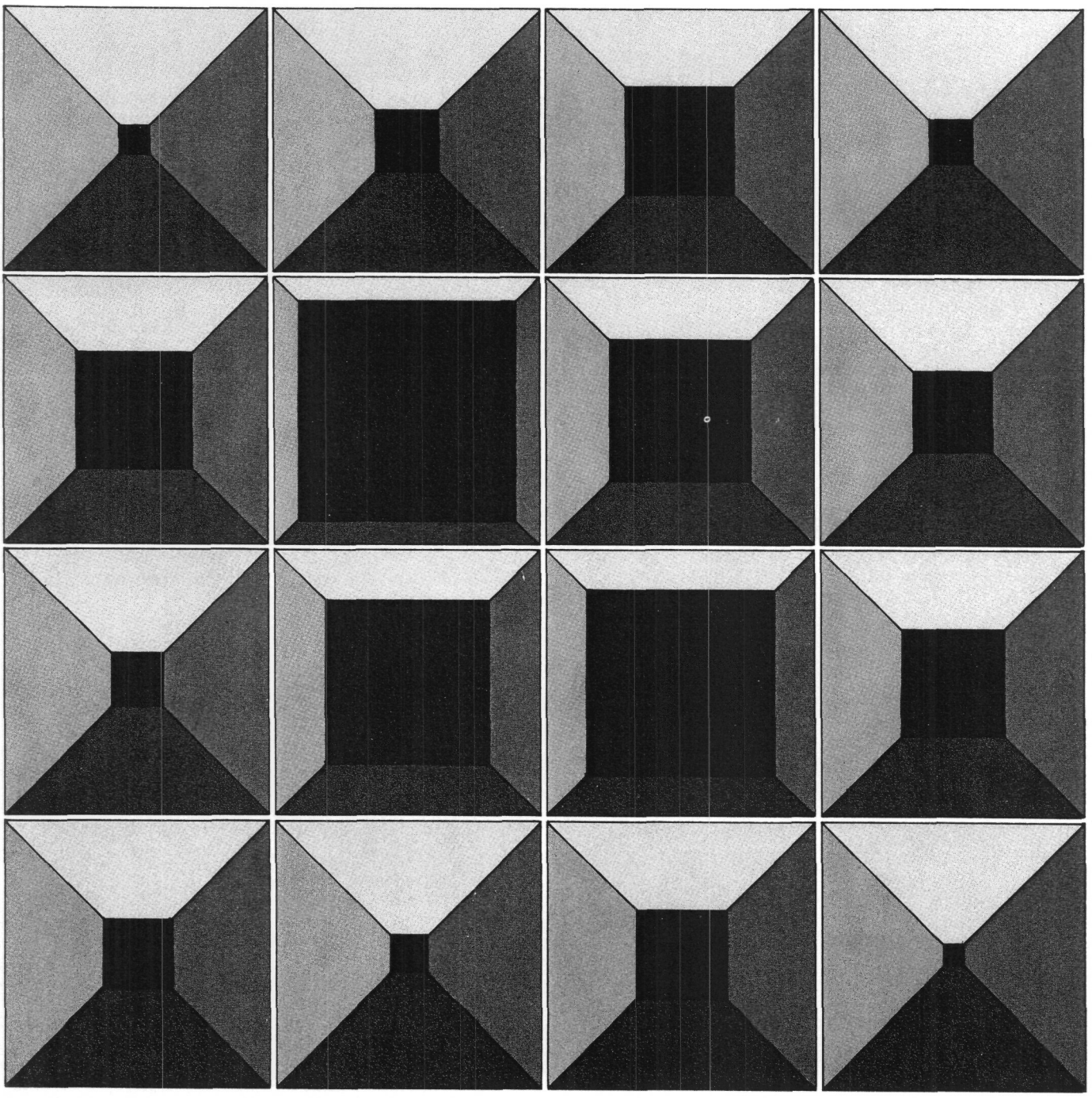
BACKGROUND
PAPER

Indexing the Individual Income Tax for Inflation

September 1980

Congress of the United States
Congressional Budget Office



INDEXING THE INDIVIDUAL INCOME TAX FOR INFLATION

The Congress of the United States

Congressional Budget Office

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PREFACE

High rates of inflation and the current tax system can cause many taxpayers to pay an increasing share of their incomes in federal income taxes. This paper, requested by the Senate Budget Committee in January 1980, analyzes one proposal often suggested to remedy this situation: indexing the individual income tax for inflation. In keeping with CBO's mandate to provide objective and nonpartisan analysis, the paper makes no recommendations.

Indexing the Individual Income Tax for Inflation was written by Hyman Sanders and Joshua Greene of CBO's Tax Analysis Division, under the supervision of James M. Verdier. Many persons within CBO, including James Capra, Lawrence DeMilner, Cynthia Gensheimer, Jane Gilbert, George Iden, Peter Karpoff, and Marvin Phaup, reviewed the manuscript and offered helpful comments; Howard Wial provided fact-checking assistance. Francis Pierce edited the paper, and Linda Brockman and Shirley Hornbuckle typed the many drafts.

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Alice M. Rivlin
Director

September 1980

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SUMMARY

During much of the past decade, many taxpayers have found themselves paying larger fractions of their incomes to the federal government in income taxes, even though no legislated rise in income taxes has occurred. Two factors are responsible for this: inflation and the rate structure of the federal income tax. The money incomes of most taxpayers increase with inflation, while the progressive structure of the federal income tax causes higher money incomes to be taxed at higher rates.

The Congress has responded in a general way to this situation by enacting income tax cuts in 1969, 1971, 1975, 1976, 1977, and 1978. Because each tax cut has offset the effects of inflation on tax liabilities for only a short time, however, many legislators have called for a more permanent response to the problem. One idea often suggested is to adjust the individual income tax automatically to offset the effects of inflation on tax rates. This approach, which is commonly called "indexing" the individual income tax for inflation, has already been adopted in a number of other countries and in some states of the United States.

EFFECTS OF INFLATION ON THE INDIVIDUAL INCOME TAX

Inflation has three main effects on the individual income tax. First, as individual money incomes rise during periods of inflation overall tax rates increase, because higher money incomes are taxed at higher marginal rates. Thus, the overall share of aggregate income received by the federal government rises. Second, during periods of inflation the distribution of tax liabilities across income groups changes. This is true not only because of the nominally progressive structure of the income tax, but also because the money incomes earned from different sources may rise at different rates during inflationary periods. Third, inflation erodes the value of many tax provisions, such as the personal exemption, that are intended to distinguish among individuals on the basis of their ability to pay.

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CBO estimates that inflation will increase federal tax revenues by over $22 billion in fiscal year 1981. For individual taxpayers, the increase in tax liabilities will differ depending on household income and economic circumstances. If taxpayers at all income levels experience about the same percentage rise in money incomes, inflation will raise tax liabilities proportionately more for low- and moderate-income taxpayers than for others. Middle- and upper-income taxpayers, however, will generally experience larger percentage reductions in after-tax income.

INDEXING AS A REMEDY FOR THE EFFECTS OF INFLATION ON TAX LIABILITIES

Indexing the income tax rate structure represents one way to offset the inflation-induced increase in real tax liabilities. Tax provisions such as the zero bracket amount (formerly called the "standard deduction"), personal exemptions, and the widths of the various tax brackets would be adjusted automatically according to some measure of inflation. This measure would probably be the increase in some index such as the Consumer Price Index or the GNP deflator.

Whether to index the tax code raises a basic issue that the Congress must resolve: should the effects of inflation on tax liabilities be handled automatically, according to some predetermined rule, or should they be adjusted by periodic, discretionary tax cuts? Current policy is to use discretionary tax cuts, with the important issues at the time of enactment determining their size and shape. Indexing would replace this approach with adjustments determined basically by rule.

MAJOR ARGUMENTS FOR INDEXING

Two major arguments have been made in favor of indexing. The first is that it would end the unlegislated increases in overall tax rates that now occur during periods of inflation. The other is that it would eliminate an upward influence on federal spending by curbing the automatic rise in federal revenues during inflationary periods.

Advocates point out that indexing would offset most of the unlegislated tax increases that now occur during periods of inflation if enough key provisions were adjusted. Discretionary

tax cuts could also achieve this result, but the adjustments would be assured and automatic with indexing. Indexing probably could not offset the entire increase in tax rates caused by inflation, because no accurate measure of how inflation affects taxpayer incomes is available and because tax tables cannot be revised often enough. The resulting differences from a full offset would probably be small, however.

Advocates also contend that indexing could curb federal spending, because attaining a particular federal budget deficit or surplus target with lower revenues would in turn require lower spending. In the current budget process, the Congress focuses closely on the size of the budget deficit. Thus, a higher initial level of federal revenues may make it easier for the Congress to fund new or increased spending programs, or to postpone the difficult job of reviewing benefit levels for existing entitlement programs. Over the last 10 years, however, the federal income tax has on average claimed about the same percentage of personal income as an indexed individual income tax would have. Thus, it appears that most of the extra revenue that might have been available for extra spending has been returned eventually in the form of ad hoc tax cuts, although in particular years federal revenues and spending may have been higher than under indexing.

MAJOR ARGUMENTS AGAINST INDEXING

Three key arguments have been made against indexing. One is that it would complicate the development of budgetary policy. The second is that indexing would destabilize the economy by eliminating some stabilizing properties in the current tax code, and that it would also contribute directly to inflation. The third argument is that it would make the tax structure more rigid.

Opponents claim that indexing would make budgetary policy harder to develop during inflationary periods by eliminating several revenue options the Congress might wish to exercise. Because a large part of all federal outlays now results from mandatory programs, much of the Congress's discretion in developing budgetary policy involves the tax area. Indexing would reduce the Congress's ability to adjust federal revenues, because the automatic rise in taxes now generated during periods of inflation would be reduced. To restrain budgetary policy under indexing, the Congress would have to rely much more on spending cuts or legislated tax increases.

A second argument made by indexing opponents is that indexing would destabilize the economy and would itself be inflationary. The present income tax is often said to stabilize the economy during periods of inflation, because after-tax incomes rise less quickly than total incomes. This property of the tax code tends to inhibit inflation by curbing consumer demand. Indexing, by reducing the rise in overall tax rates during periods of inflation, would weaken this effect. Recent studies have shown, however, that the impact of the tax code on disposable income is too small to have much influence on inflation, and that the effect generally comes only after a substantial lag. In addition, the very properties of the tax code that serve to stabilize economic activity during traditional demand-induced inflation can destabilize the economy when other forces, such as higher oil prices, come into play. At such times, the rise in the price level tends to reduce consumer spending, since price increases generally exceed the rise in consumers' money incomes. The tendency for overall tax rates to increase during inflationary periods thus exacerbates the decline in economic activity generated by inflation of this sort. During these periods, indexing would actually help to stabilize--rather than destabilize--the economy, since it would lessen the rise in overall tax rates.

Opponents also claim that indexing would itself generate inflation. Under indexing, disposable incomes--and, thus, consumer demand--would be higher than under the present system when the Congress does not cut taxes. To that extent, indexing could bring about higher prices. Econometric simulations performed for CBO, however, indicate that any such effect would be small. Indexing could also be inflationary if it were interpreted as a sign of government acquiescence to inflation, or if it weakened public support for government anti-inflation policies by insulating taxpayers from some of inflation's adverse effects. On the other hand, indexing could result in lower price levels if workers set their bargaining goals on the basis of after-tax income and if indexing were seen as reducing the spread between gross and net pay. Workers in Europe appear to bargain in this way, although studies of wage trends in the United States have thus far found no relationship between tax rates and wage levels. Current econometric models do not permit the relative weights of these different factors to be assessed. Thus, the net inflationary impact of indexing is hard to predict.

A third argument made by indexing opponents is that it would rigidify the individual income tax system. Under current practice, inflation-induced revenue increases allow the Congress to

revise the income tax by enacting tax cuts in which some taxpayers receive larger reductions than others. Since, under this approach, every taxpayer can be said to receive at least a nominal reduction in tax liabilities, current practice facilitates the review of existing tax expenditures and relative tax burdens. With indexing, tax changes would probably require either spending cuts, a higher budget deficit, or outright tax increases for some taxpayers, because federal revenues would not be as high initially.

There is, however, no clear evidence to suggest that structural tax change has been easier to accomplish during inflationary periods than otherwise. Extensive tax reform has occurred both during the present round of inflation (1967 to date) and during the previous period of greater price stability (1954-1966). Moreover, evidence from foreign countries with indexed tax systems suggests that ad hoc tax changes can still occur under indexing. Even if indexing does reduce the opportunities for revision of the tax code, this is not necessarily a disadvantage. Many would prefer a more stable and predictable tax code, given the inevitable difficulties in making adjustments.

OPTIONS IN DESIGNING AN AUTOMATIC RATE STRUCTURE INDEXING SYSTEM

If the Congress decides to index the rate structure of the individual income tax, the change could take many forms. Among the more important issues to consider are:

- Which index to use in measuring inflation;
- Which tax provisions to adjust;
- When to apply the indexing mechanism; and
- How much of the effects of inflation to offset.

Countries that have adopted indexing measures have made a variety of choices on these issues.

Choice of an Index

Which index to use in adjusting the income tax for inflation depends partly on administrative concerns and partly on the objective indexing is to achieve. If the goal is to offset the effects

of higher taxes on taxpayers' purchasing power, some measure of price increases would be most effective. To prevent inflation from increasing the share of total personal income absorbed by income taxes, some measures of the effects of inflation on personal incomes would be more appropriate.

The CPI, which is well-known and administratively convenient, or an index comparable to it such as the Personal Consumption Expenditure (PCE) deflator, would be appropriate if indexing is intended to maintain taxpayers' standard of living during periods of inflation. Most countries with indexed tax systems have used an index of this sort. To prevent inflation from increasing the share of total personal income claimed by taxes, however, either the GNP deflator or National Income (NI) deflator—the indexes used to calculate inflationary changes in GNP and National Income, respectively--would be more desirable. These two measures and the PCE differ from the CPI in a number of respects, one of which is that they exclude the effects of higher import prices. Thus, they would bring about smaller tax adjustments during periods of inflation like the present, when higher prices for oil are responsible for a significant part of the inflation in the United States.

Choice of Tax Provisions

The number and choice of tax provisions to be indexed also depends both on objectives and on administrative concerns. Adjusting more provisions, for example, increases the size of revenue reductions and improves the ability to preserve both the distribution of tax liabilities and the fraction of total personal income paid in tax during periods of inflation. It also adds to the complexity of administering the income tax, however. The choice of tax provisions to adjust can affect the distribution of tax liabilities across taxpayers at different income levels. Low- and moderate-income taxpayers, for example, would benefit more from the indexing of personal exemptions, the zero bracket amount (the "standard deduction"), and the earned income credit than they would from the indexing of tax bracket widths. Middle- and upper-income taxpayers, by contrast, would receive greater savings from the indexing of bracket widths.

CBO estimates that nearly 70 percent of the rise in tax liabilities attributable to inflation under the current income tax would be offset by indexing two key tax provisions--the zero bracket amount and the widths of the tax rate brackets. If

indexing took effect on January 1, 1981, indexing these two provisions would reduce federal income tax revenues by about $10 billion in fiscal year 1981. Adding the personal exemption and the earned income credit in addition would allow almost all the inflation-induced tax increase to be offset and increase the revenue loss to about $15 billion.[1]

Options for Limited Indexing

If the Congress wishes to implement indexing while maintaining some of the features of the present tax system, several more limited indexing mechanisms are also available. For example, to provide adjustments only during periods of rapid inflation, indexing could be limited to years in which the rise in the inflation index exceeds a minimum amount. This approach, which could be called "triggered" indexing, would reduce the number of tax code adjustments during periods of moderate price increases. Similarly, the Congress could limit inflation adjustments to a portion of the rise in the inflation index. Finally, to obtain maximum flexibility in budgetary and fiscal policymaking, indexing could be adopted as a standby mechanism requiring Congressional approval to take effect in any given year. This step would allow the Congress to avoid indexing in a particular year without having to vote to override a scheduled indexing adjustment. However, it could also lead to recurring controversy, since the need to authorize indexing each year might give rise to repeated efforts to change the indexing mechanism.

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1. This figure represents the revenue deduction from 9 months of indexing. If indexing were in effect for the full fiscal year, the tax reduction would amount to roughly $22 billion.

CHAPTER I. INTRODUCTION

During much of the past decade, many taxpayers have found themselves paying larger fractions of their incomes to the federal government in income taxes, even though no legislated rise in income taxes has occurred. Two factors are responsible for this: inflation and the rate structure of the federal income tax. Inflation has raised the money incomes of most taxpayers, while the current structure of the federal income tax causes higher money incomes to be taxed at higher rates.

The Congress has responded in a general way to this situation by enacting income tax cuts in 1969, 1971, 1975, 1976, 1977, and 1978. Because each tax cut has offset the effects of inflation on tax liabilities for only a short time, however, many legislators have called for a more permanent response to the problem. One idea often suggested is to "index" the individual income tax for inflation. This approach, which would automatically adjust key provisions in the tax code during periods of inflation, has already been adopted in a number of other countries and in some states of the United States.

Indexing the income tax could largely eliminate the need for discretionary tax cuts to offset the rise in overall tax rates--the fraction of individual incomes paid in income taxes--that now occurs during periods of inflation. Indexing, though, could have important repercussions for tax policy, budget policy, and the level and stability of the national economy. For example, indexing might make it more difficult to follow a policy of fiscal restraint, since instead of merely postponing a tax cut, the Congress would have to enact an explicit tax increase or reduction in spending, both of which are difficult to achieve. On the other hand, indexing could help to restrain federal spending, by reducing the automatic rise in federal revenues during periods of inflation, if the Congress pays close attention to the federal budget deficit in setting expenditure levels.

Two Types of Inflation Indexing

There are two basic types of inflation indexing. The first and more familiar type--called "rate structure" indexing--would automatically adjust key features of the income tax structure in

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accordance with increases in some measure of inflation.[1] Among the provisions most commonly mentioned for indexing are the widths of the marginal rate brackets, the size of personal exemptions, and the value of the "zero bracket amount" (or standard deduction), although other fixed-dollar provisions such as the earned income credit could also be included.[2] Indexing systems in other countries employ a variety of rules for this purpose, and they differ both in the number of fixed-dollar provisions indexed and in the amount of adjustment provided. As of 1980, some form of rate structure indexing was in effect in 15 countries--Argentina, Australia, Brazil, Canada, Chile, Denmark, France, Iceland, Israel, Luxembourg, the Netherlands, Peru, Sweden, the United Kingdom, and several cantons of Switzerland.[3]

The second type of indexing--called "tax base" indexing--would seek to adjust for the inflation-induced distortions in the measurement of income from assets.[4] When assets increase in value over time, for example, only part of the increase may represent a rise in real value. The rest merely compensates owners for increases in the general price level. One proposal often suggested for tax base indexing is to increase the basis of an asset (the value used for determining gains and losses on

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1. This kind of adjustment has also been called "Type 1 Indexing." See, e.g., "Description of S. 2738 Relating to Adjusting the Income, Estate, and Gift Taxes for Inflation," prepared for the use of the Senate Finance Committee by the staff of the Joint Committee on Taxation, April 21, 1978.

2. For a full list of the fixed-dollar provisions in the individual income tax, see Appendix A.

3. For a brief description of the indexing systems in these countries, see Appendix C. In addition, the state income taxes in eight states of the United States--Arizona, California, Colorado, Iowa, Minnesota, Oregon, South Carolina, and Wisconsin--are indexed. For a description of their indexing systems, see Advisory Commission on Intergovernmental Relations, The Inflation Tax: The Case for Indexing Federal and State Income Taxes (1980), pp. 21-24.

4. This type of indexing has sometimes been called "Type 2" indexing. See "Description of S. 2738 Relating to Adjusting the Income, Estate, and Gift Taxes for Inflation."

disposition of an asset for tax purposes) by the amount of inflation before calculating any taxable gain or loss. This approach is used in figuring the gain from sales of certain real property in Sweden and Argentina, and a proposal to apply this rule to some capital gains income in the United States was approved by the House of Representatives in its initial version of the Revenue Act of 1978.[5] More complete tax base indexing would also involve adjusting the measurement of business depreciation and inventories and reducing the level of interest income and interest deductions to take into account the effects of inflation. Since there is considerable disagreement among tax authorities over the appropriate way of accomplishing tax base indexing, this kind of indexing is discussed only briefly in this paper.[6]

Brief Outline of the Paper

Chapter II of the paper describes the effects of inflation on the rate structure of the individual income tax. Included are estimates of the effects of inflation on aggregate tax receipts and of how inflation affects taxpayers at different income levels. In addition, it is shown that inflation tends to raise overall tax rates more for low- and moderate-income groups than for others, although higher-income taxpayers experience greater dollar reductions in real after-tax income.

In Chapter III, the principal arguments for and against indexing the rate structure of the individual income tax are discussed. This chapter addresses such issues as the effect indexing might have on inflation and on the stability of economic activity; the implications of indexing for the ability of the Congress periodically to review and to modify the income tax; and the possible ramifications of indexing for federal spending and the design of budgetary policy.

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5. See H.R. 13511, Sec. 404, Revenue Act of 1978, Report of the House Committee on Ways and Means on H.R. 13511, August 4, 1978, as passed by the House of Representatives, 95th Cong., 2nd Sess. (1978).

6. For further discussion of tax base indexing, see Appendix D of this paper and Henry J. Aaron, ed., Inflation and the Income Tax (The Brookings Institution, 1976), esp. chs. 1-3.

If the Congress decides to index the tax rate structure for inflation, there are many ways to go about it. Some of the alternatives are reviewed in Chapter IV. Among the options discussed are which index to use in measuring inflation, which tax items to index, how often indexing should occur, and whether full or only partial adjustments of the tax code should be adopted. Chapter IV also analyzes the effects of several alternative indexing measures and presents estimates of the revenue reductions resulting from them. Finally, the possibilities of "triggered" indexing--adjusting the tax code only when an inflation index has risen by a specified amount--are discussed.

Following Chapter IV are five appendixes, each addressing a different issue relevant to indexing. Appendix A contains a comprehensive list of fixed-dollar items in the federal income tax that might be indexed. Appendix B discusses the recent Canadian experience with an indexed income tax. Appendix C summarizes the indexing systems now in effect in other countries, while Appendix D analyzes the effects of inflation on the tax treatment of asset incomes--the problems addressed by tax-base indexing. Appendix E then provides a brief overview of the various indexing bills introduced in the 96th Congress.

CHAPTER II. THE EFFECTS OF INFLATION ON THE INDIVIDUAL INCOME TAX

Inflation has three principal effects on the rate structure of the income tax.

One effect is that taxpayers may pay a larger share of their incomes to the federal government unless tax rates are cut periodically through formal legislation.[1] This occurs because, as money incomes rise, a larger portion of taxpayers' incomes is subject to higher tax rates. A taxpayer with two dependents, for example, earning $15,000 and filing a joint return, would pay $294 more in federal income taxes--a 23.8 percent rise in tax liabilities--if the family's adjusted gross income and itemized deductions both rose by 13.3 percent (see Table 1). Moreover, this taxpayer's overall tax rate--the percentage of income paid in federal income taxes--would rise from 8.2 to 9.0 percent. The share of total personal incomes absorbed by federal taxes thus increases, causing federal revenues to grow automatically as a percentage of national income.

A second effect of inflation on the income tax is that it changes the distribution of the tax burden among taxpayers in different income groups. Larger fractions of cost-of-living increases, for example, will generally be taxed away from middle- and higher-income persons than from others. In addition, the tax law treats differently incomes earned from different sources. Only 40 percent of capital gains income is taxed, for example, while income from state and local bond interest and Social Security is not taxed at all. These sources of income are not evenly distributed among all taxpayers, and inflation may affect

1. This problem arises only to the extent that taxpayers' incomes are adjusted upward to keep pace with price increases. Taxpayers whose incomes do not rise will experience a reduction in their real purchasing power, but will not face any tax increase. A recent review of median earnings levels for U.S. workers between 1967 and 1978 found that median earnings kept pace with inflation during this period. See Janice N. Hedges and Earl F. Mellor, "Weekly and Hourly Earnings of U.S. Workers, 1967-1978," Monthly Labor Review, August 1979, pp. 31-41.

TABLE 1. THE EFFECTS OF INFLATION ON THE TAX LIABILITY OF PERSONS IN DIFFERENT ECONOMIC CIRCUMSTANCES, 1980 (Income and tax liabilities in dollars)

Adjusted Gross Income	Current Tax (1)	Tax After 13.3% Inflation[c] (2)	Amount of Tax Increase (3)	Increase As a Percent of Original Tax Liability (4)	Percent Decrease in Real After-Tax Income[d] (5)
Single Person Without Dependents					
$ 5,000	250	362	112	44.8	1.5
10,000	1,177	1,392	215	18.3	0.6
15,000	2,047	2,445	398	19.4	0.9
25,000	4,364	5,234	870	19.9	1.2
50,000	12,559	15,273	2,714	21.6	2.5
100,000[a]	31,424	36,442	5,018	16.0	1.1
Joint Return Without Dependents					
$ 5,000	0	37	37	*	0.7
10,000	702	941	239	34.0	1.4
15,000	1,624	1,947	323	19.9	0.7
25,000	3,399	4,116	717	21.1	1.1
50,000	10,183	12,385	2,202	21.6	1.9
100,000[a]	28,694	33,712	5,018	17.5	1.5
Joint Return With 2 Dependents					
$ 5,000[b]	-500	-500	0	0.0	1.1
10,000	374	587	213	57.0	1.5
15,000	1,233	1,527	294	23.8	0.8
25,000	2,901	3,556	655	22.6	1.1
50,000	9,323	11,525	2,202	23.6	2.1
100,000[a]	27,714	32,732	5,018	18.1	1.6

NOTE: For taxpayers who itemize, deductions are assumed equal to 23 percent of their income.

* Greater than 100 percent

a. All income is assumed to be earned income, subject to a maximum marginal tax rate of 50 percent.

b. Qualifies for the maximum amount of the earned income credit.

c. Assumes incomes increase as much as the rate of inflation.

d. Decrease in real after-tax income after prices and incomes increase by 13.3 percent.

some of these sources more than others--further altering the distribution of the tax burden.

The third major effect of inflation on the income tax is that it makes the tax code less able to distinguish, for tax purposes, among persons with similar incomes but different economic or personal circumstances. For example, inflation causes the personnal exemption to shield a smaller percentage of income from tax. Thus tax liabilities grow relatively faster for taxpayers with more dependents (see column 4). This consequence of inflation also affects the distribution of tax liabilities among taxpayers at different income levels, since a change in the personal exemption has a relatively larger proportional effect on tax liabilities for low-income taxpayers than for taxpayers with higher incomes.[2]

The various effects of inflation on the individual income tax occur for two basic reasons. First, different types and levels of income are not all taxed at the same rate; and second, the tax code relies heavily on fixed-dollar tax provisions. If the income tax were proportional rather than progressive, if all types of income were treated alike and if the percentage of income subject to tax were the same for all taxpayers, inflation would have no effect in real terms on individual tax liabilities.

SIZE OF THE EFFECTS

Estimates of the Effects of Inflation on the Tax Liabilities of Persons at Different Income Levels

Table 1 shows how taxpayers in different types of households and at different income levels would fare under the current tax system if prices and incomes were to increase by 13.3 percent during 1980. In general, although most taxpayers would not actually be pushed into higher marginal brackets by rising incomes, the share of their income collected in taxes would increase. This occurs primarily because a greater fraction of

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2. In this sense, the interaction of inflation and the tax structure also affects individuals whose money incomes have not risen during inflation, since the tax system neither recognizes nor makes adjustments for the fact that the after-tax purchasing power of these taxpayers has declined.

their income would be taxed at the highest marginal rate to which they are subject.

All but one of the cases depicted in Table 1 would experience tax increases that exceed the rate of inflation (column 4), and all would have lower real after-tax incomes (column 5). The actual tax increase in dollars attributable to inflation grows rapidly in absolute dollar terms as income increases (column 3) but is fairly constant as a percent of current tax liability for taxpayers with adjusted gross incomes of $15,000 to $50,000. Single taxpayers with adjusted gross incomes of $5,000 and joint return filers with adjusted gross incomes of $10,000 experience the largest relative increases in tax liability—increases of 34 to 57 percent (column 4). Taxpayers with adjusted gross incomes of $50,000, by contrast, appear to experience the greatest loss in real, after-tax income: a decline of 1.9 to 2.5 percent (column 5).

Table 1 also highlights another important effect of inflation on tax liabilities: inflation makes the personal exemption less effective at shielding income from tax. This aspect of inflation can be seen by examining column (4) or column (5). Taxpayers claiming a greater number of exemptions experience larger percentage increases in tax liability during inflationary periods and have somewhat larger reductions in their after-tax incomes. For example, a household with two dependents and an income of $15,000 pays 23.8 percent more in federal income taxes during inflation, while for a two-person household at that income level the increase is 19.9 percent--nearly 4 percentage points less. When measured in terms of after-tax income, the taxpayer with dependents suffers a loss of 0.8 percent; the taxpayer without dependents, a loss in real after-tax income of 0.7 percent.

The Effects of Inflation on the Distribution of Total Income Tax Liabilities

Inflation can also change the distribution of total tax liabilities across income groups, again because of the structure of the tax code. This is illustrated in Table 2. If prices and incomes rose on average by 13.3 percent during 1980, without any change in the tax law taxpayers at the bottom of the income scale would face the largest relative tax increase from inflation, with the percentage of the increase generally falling as expanded

income[3] increased (column 3).[4] On average, taxpayers with expanded incomes below $5,000 would face the largest relative tax increase, although the actual amounts involved would also average only a few dollars (see columns 2 and 3). Taxpayers in the $5,000 to $10,000 category would receive the next largest relative increase, about 17 percent. Among taxpayers for whom the change in after-tax incomes can be calculated, the greatest reduction in after-tax income, about 2.5 percent, would be incurred by those with incomes of $50,000 to $100,000.[5] Their average tax increase would be only 7.5 percent, however, while persons with expanded incomes of $100,000 or more would have tax liability increases, on average, of 4 percent or less.

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3. Expanded income is a broader definition of taxpayer income than adjusted gross income. In addition to adjusted gross income, it includes the excluded part of capital gains, percentage depletion in excess of cost depletion, and other tax preferences subject to the minimum tax. At the same time, it excludes the deduction of investment interest to the extent it exceeds investment income.

4. An agreed-upon method for measuring the impact of increasing prices on incomes and in turn on income tax liabilities does not exist. As a rough way of approximating these effects, four of the major income tax provisions--the zero bracket amount, the bracket widths, the personal exemptions, and the earned income credit--were each lowered by 13.3 percent, the projected rate of increase in the CPI for calendar year 1980 as embodied in the first concurrent resolution on the budget for fiscal year 1981. The difference between tax liabilities under these conditions and under current law was then used as the measure of how inflation affects individuals' tax liabilities. This method, however, excludes the effects that inflation-induced distortions in the measurement of capital gains income may have on tax liabilities. In addition, many analysts believe that using the CPI may overstate the size of the income tax revenue change due to inflation. For a further discussion of this issue, see Chapter 4.

5. The change in average after-tax incomes for taxpayers with expanded incomes below $10,000 cannot be accurately estimated, because there is no readily available information on the before-tax incomes of persons and families who would have to file returns when their money incomes increase.

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TABLE 2. EFFECT OF A 13.3 PERCENT INFLATION RATE ON INDIVIDUAL INCOME TAX LIABILITY BY EXPANDED INCOME CLASS, 1980[a]

Expanded Income Class (in dollars)	Average Tax Liability Before Inflation (in dollars) (1)	Average Increase in Tax Liability Due to Inflation[b] (in dollars) (2)	Percent Increase in Average Tax Liability Due to Inflation (3)	Percent Change in After-Tax Income Due to Inflation (4)
Below 5,000	-54	69	c	d
5,000- 10,000	475	82	17.2	d
10,000- 15,000	1,226	130	10.6	-1.9
15,000- 20,000	2,054	194	9.4	-1.4
20,000- 30,000	3,350	291	8.7	-1.6
30,000- 50,000	6,365	573	9.0	-2.0
50,000-100,000	15,509	1,164	7.5	-2.5
100,000-200,000	41,122	1,753	4.3	-2.2
200,000 and over	171,849	2,006	1.2	-1.1
All Incomes	2,995	135	4.5	d

SOURCE: Treasury tax model, 1979 law at 1979 income levels.

a. For an explanation of procedures, see description in text footnote 4. Figures may not add to indicated totals because of rounding.
b. Assumes incomes increase by the rate of inflation.
c. Over 100 percent, because average tax liability becomes positive.
d. Cannot be accurately estimated, because data are not available on the before-tax incomes of previous nonfilers who would now have to file returns.

Estimates of the Effect of Inflation on Aggregate Income Tax Revenues

CBO estimates that the rise in tax revenues caused by inflation will generate additional individual income tax receipts of about $22 billion in fiscal year 1981, if the inflation rate is

13.3 percent.[6] This $22 billion estimate hinges on assumptions about the rate of inflation during 1980 and about the "elasticity" of income tax revenue with respect to money incomes--the ratio of the percentage change in income tax revenue to a percentage change in income. The elasticity of income tax revenue with respect to money incomes depends on how much of the increase in money incomes results from inflation and how much from real economic growth; the elasticity with respect to inflation is thought to be higher than that for real growth. Tax revenues should thus increase more if inflation accounts for most of the higher income than if most of it results from real growth.[7]

Studies have shown that aggregate income tax revenues will grow by about one and a half percentage points for every one percent increase in annual incomes,[8] given recent combinations of inflation and real growth. An increase in the inflation rate would cause a rise in the overall elasticity figure, since inflation would be responsible for more of the increase in money incomes. This, in turn, would mean an even greater rise in tax revenues.

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6. This is the rate of increase embodied in the First Concurrent Resolution for Fiscal Year 1981. See Conference Report On First Concurrent Resolution on the Budget, Fiscal Year 1981, H. Rept. 96-1051, 96:2 (1980).

7. The basic reason is that inflation historically has tended to raise the incomes of persons already employed, while the rise in incomes from real growth has generally included a significant amount of income from the newly employed, whose wages tend, on average, to be about the same as those who were already working. See John Bossons and Thomas A. Wilson, "Adjusting Tax Rates for Inflation," Canadian Tax Journal, vol. 21 (May-June 1973), pp. 185-199.

8. Estimates for the elasticity range from 1.3 to 1.9. See, for example, David Greytak and Richard McHugh, "Inflation and the Individual Income Tax," Southern Economic Journal, vol. 45 (July 1978), pp. 168-180; and George M. Von Furstenburg, "Individual Income Taxation and Inflation," National Tax Journal, vol. 28 (March 1975), pp. 117-125.

CHAPTER III. MAJOR ARGUMENTS FOR AND AGAINST INDEXING

Indexing is only one way to handle the effects of inflation on tax liabilities. Another is to continue making occasional discretionary tax cuts, as the Congress has done in past years. Many arguments have been offered in favor of each approach.

MAJOR ARGUMENTS IN FAVOR OF INDEXING

Proponents of indexing maintain that it would offset the effects of inflation in several ways. First, it would hold constant the share of personal incomes collected in income taxes by the federal government. At the same time, it would assure that the distribution of the federal tax burden did not change because of inflation--that some taxpayers did not, as they have in recent years, incur relatively higher tax burdens than others because of inflation. Furthermore, federal spending as a fraction of total GNP would rise less rapidly than now during periods of inflation, provided the Congress did not permit the federal deficit to grow.

Indexing Would Eliminate Unlegislated Increases in Overall Tax Rates

Many believe that overall tax rates should not be allowed to rise without explicit Congressional action. Unlegislated increases in effective tax rates now occur during inflationary periods, however, because the tax code has progressive marginal tax rates, and most of its provisions--such as the zero bracket amount (the standard deduction) and personal exemptions--are specified in fixed-dollar terms. Advocates of indexing point out that it would adjust these fixed-dollar amounts automatically to keep pace with inflation.[1] Discretionary tax cuts could also

1. Advocates do not claim that it would preserve the average taxpayer's real after-tax income, because the incomes of some taxpayers may rise more slowly than the measure of inflation used to index the income tax. Indexing can, however, largely prevent taxpayers whose real incomes did not rise during periods of inflation from paying a higher proportion of their incomes in federal income taxes.

bring about these changes, but they would not be guaranteed. In addition, the time needed to make the adjustments would probably be greater under current law than under indexing.

In practice, indexing could come close to eliminating the inflation-caused rise in tax rates. It would not fully do so, however. To accomplish this objective would require both an accurate measure of the effect of inflation on tax liabilities and a procedure for adjusting all fixed-dollar provisions of the tax code almost instantaneously to offset the increase in liabilities--neither of which is available. First, there is no precise index of the impact of inflation on tax liabilities, and it would be difficult, perhaps impossible, to develop one. Such an index would have to be approximated with some general measure of increases in prices or in incomes. Nor could the tax code be adjusted whenever there was an increase in liabilities. Administrative considerations would probably hold the frequency of adjustment to once each year. These limitations could cause indexing to fall short of offsetting all of the inflation-generated rise in tax liabilities. The net shortfall would normally be small, however.

Indexing could fall still further short of providing full inflation adjustment if it was restricted to only some of the basic fixed-dollar tax provisions, or if only partial automatic adjustments were made. If only some of the basic fixed-dollar tax items were indexed, many taxpayers could still incur higher real tax liabilities, because the real value of non-indexed tax provisions would decline. CBO's estimates indicate that failing to index the personal exemption, for example, would preserve about $6.7 billion, or almost 25 percent, of the disproportionate rise in total liabilities in fiscal year 1981. Taxpayers would also face higher tax rates if indexing was restricted to years in which the inflation rate exceeded some minimum amount, or if the rate of automatic adjustment was set at less than the full increase in the official inflation index. Both of these limitations have been adopted in some other national indexing systems.[2]

The record of tax changes enacted since the beginning of more rapid inflation in the United States during 1967 indicates that, at least in aggregate terms, the Congress has come close to offsetting the effect of inflation on overall tax rates over a period

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2. For a further discussion, see Chapter IV and Appendix C of this report.

of several years. Table 3 shows that, between 1967 and 1979, the overall tax rate remained on average within 0.4 percentage points of what it would have been under a prototype indexing scheme, although during particular years the difference in overall tax rates was considerably larger.[3] As compared to an indexed law, however, many individual taxpayers experienced a rise in overall tax rates (see Table 4), because the tax cuts enacted during this period were targeted primarily on lower-income groups.[4]

Indexing Would Eliminate an Upward Influence on Government Spending

A second argument often raised in favor of indexing is that the present tax structure tends to cause federal government spending to increase in real terms with inflation, because the more-than-proportionate growth in tax revenues allows the Congress to increase spending without either explicitly raising tax rates or increasing the federal budget deficit. Indexing could eliminate most of the automatic, disproportionate growth in revenues. This effect, in turn, could help to restrain federal spending.

While indexing would reduce federal revenues below what they would otherwise be, this effect need not bring about either a balanced budget or even a decrease in total expenditures. It would depend on many factors, such as general economic conditions and the willingness of the Congress and the public to tolerate deficit spending. If unemployment were to increase sharply, for example, the Congress might decide to increase spending and endure

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3. The increased liabilities caused by inflation in 1978 were offset by the Revenue Act of 1978, which became effective in the 1979 taxation year.

4. Most of the tax changes enacted between 1967 and 1977 involved increasing personal exemptions and the standard deduction or zero bracket amount. These changes had the greatest relative effect on the tax burdens of low- and moderate-income taxpayers. These kinds of changes were excluded from the indexing simulation used here, although the Congress could also have enacted similar distributional changes under indexing. For a further discussion of tax changes during this period, see Benjamin A. Okner, "Distributional Aspects of Tax Reform During the Past Fifteen Years," National Tax Journal, vol. 32 (March 1979), pp. 11-27.

TABLE 3. INDIVIDUAL INCOME TAX LIABILITIES AND OVERALL TAX RATES UNDER ACTUAL LAW AND UNDER SIMULATED AUTOMATIC ANNUAL INDEXING, 1967-1979

	Actual Law		Prototype Indexed Law[b]	
Year	Income Tax Liabilities ($ billions)	Overall Tax Rate[a] (%)	Income Tax Liabilities[c] ($ billions)	Overall Tax Rate[a] (%)
1967	62.9	11.0	62.9	11.0
1968	76.6	12.3	69.8	11.2
1969	86.6	12.8	77.0	11.4
1970	83.9	11.7	81.6	11.4
1971	85.4	11.2	86.9	11.4
1972	93.6	11.3	97.4	11.7
1973	108.1	11.7	110.8	12.0
1974	123.6	12.3	119.3	11.9
1975	124.5	11.7	124.3	11.7
1976	141.8	12.2	138.4	11.9
1977[d]	159.8	12.4	155.8	12.1
1978[d]	188.6	12.9	178.4	12.2
1979[e]	217.8	13.4	200.1	12.3
Average Overall Tax Rate		12.1		11.7

SOURCE: Emil M. Sunley and Joseph A. Pechman, "Inflation Adjustment for the Individual Income Tax," in Henry F. Aaron, ed., Inflation and the Income Tax (Brookings Institution, 1976); Internal Revenue Service, Statistics of Income: Individual Income Tax Returns; and U.S. Department of Commerce, Survey of Current Business, selected issues.

a. Calculated as a percentage of adjusted personal income (personal income less transfer payments and other untaxed labor income, plus employee contributions for social insurance).
b. Indexed law assumes annual indexing of aggregate revenues by the annual change in the Consumer Price Index, rather than specific changes in individual tax law provisions. It thus differs from the indexed 1967 law used in Table 4, which assumes specific tax changes.
c. A tax elasticity with respect to income of 1.5 is assumed.
d. Preliminary
e. Extrapolated from 1979 returns processed through July 1980.

TABLE 4. COMPARISON OF INCOME TAX LIABILITIES AT 1978 INCOME LEVELS UNDER CURRENT LAW AND UNDER AN AUTOMATICALLY INDEXED VERSION OF THE 1967 TAX CODE PROVISIONS, BY EXPANDED INCOME CLASS

Expanded Income Class[a] (dollars)	Percent of All Returns by Income Class[b]	Liability Under Current Law (dollars)	Average Tax Liability Under Indexed 1967 Law[c] (dollars)	Average Tax Increase (+) or Savings (-) if Current Law were Replaced by Indexed 1967 Law[d] (dollars)	Tax Increase (+) or Tax Savings (-) Under Indexing as a Percentage of Current Tax Liability
Below 5,000	26.2	-59	122	+181	f
$ 5,000- 10,000	21.7	458	606	+148	+32.2
10,000- 15,000	16.0	1,171	1,202	+31	+2.7
15,000- 20,000	13.1	1,972	1,824	-147	-7.5
20,000- 30,000	14.6	3,262	2,812	-450	-13.8
30,000- 50,000	6.5	6,437	5,021	-1,417	-22.0
50,000- 100,000	1.5	16,778	12,013	-4,765	-28.4
100,000- 200,000	0.3	45,892	36,357	-9,536	-20.8
Above 200,000	e	184,965	169,826	-15,138	-8.2

SOURCE: Department of Treasury tax model, 1979 law at 1978 income levels.

a. For a definition of expanded income, see Chapter II, p. 9, footnote 3.
b. Totals may not sum to 100 percent because of rounding.
c. Indexed law is defined as the 1967 tax code with bracket widths, the standard deduction (now the "zero bracket amount") and personal exemptions indexed by the cumulative rise in the Consumer Price Index between 1967 and 1978.
d. The data base utilized to generate these figures is based solely upon the current population of taxpayers. Since 1964, large increases in the standard deduction and personal exemption have reduced the number of low-income persons who must file an income tax return. Thus, average tax savings for persons with expanded incomes below $15,000 may be significantly higher than the figure reported here, even after taking into account effects of the earned income credit on the number of low-income households filing tax returns.
e. Less than 0.1 percent.
f. Greater than 100 percent.

a temporarily large deficit. Thus, indexing would not guarantee lower expenditures.

The Canadian experience with indexing suggests that indexing could reduce spending, but not under all circumstances. Between 1974, when indexing was enacted in Canada, and 1977, Canadian federal expenditures actually increased sharply, in large part because of government policies designed to combat a dramatic rise in unemployment beginning in 1974 (see Appendix B). With the recovery of the Canadian economy in 1977-1978, however, the growth in Canadian federal expenditures began to decrease significantly. Some Canadian observers believe that this decrease can be attributed, at least in part, to the restraining effect of indexing on federal revenues and its implications for the size of the federal deficit.[5] Recent pronouncements by Canadian officials, however, suggest that legislators may be unwilling to curb the growth in Canadian spending still further--in which case the deficit could continue to rise unless steps are taken to increase revenues.[6]

MAJOR ARGUMENTS AGAINST INDEXING

Opponents of indexing, for their part, have made several arguments. First, they contend, any kind of automatic adjustment, whether in outlays or in revenues, would impair the Congress's flexibility in determining the federal budget. Second, indexing would tend to magnify the effects of business cycle changes on the economy by weakening the stabilizing function of the income tax structure--perhaps even to the point of being itself inflationary. Finally, the tighter control of aggregate federal revenues under indexing would limit opportunities to review and revise the tax code.

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5. See, e.g., statements by Canadian leaders cited in Jerry Edgerton, "The Tax Reform You May Need Most," Money, vol. 7 (June 1978), pp. 48-51. Between 1974 and 1978, the Canadian federal budget moved from a surplus of $1.1 billion to a deficit of $11.4 billion.

6. See testimony of Deputy Minister of Finance Dr. Ian Stewart before the Standing Canadian Senate Committee on National Finance (May 27, 1980), p. 26.

Indexing Would Reduce the Federal Government's Flexibility in Setting Budgetary Policy During Periods of Inflation

Opponents of indexing contend that the more-than-proportionate rise in tax revenues that now occurs during inflationary periods eases the task of setting budgetary policy. If restraint is needed, it can be supplied simply by not enacting a tax cut, since without a tax cut revenues tend to rise more quickly than expenditures for current programs.[7] If, on the other hand, more stimulus is thought necessary, taxes can be cut or spending increased.

The ability to set policy simply through tax cuts, spending increases, and deferrals of tax cuts would be significantly reduced under indexing. Thus, indexing would complicate the development of a budget much as the indexing of certain outlays, such as Social Security, already has. Under indexing, if fiscal restraint were needed, the Congress would have to reduce spending or increase tax rates explicitly. Spending, though, is difficult to reduce.[8] Moreover, legislated tax rate increases have occurred recently only during periods of national emergency (for example, the 1968-69 Vietnam War tax surcharge).

Indexing advocates might agree with this conclusion but would contend that the present system's flexibility also has drawbacks. For example, the automatic rise in federal revenues that now

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7. CBO has estimated that in the absence of changes in current policies, federal revenues will grow about 15 percent annually between 1980 and 1985, about 6 percent faster than federal outlays. See Five-Year Budget Projections, Fiscal Years 1981-1985: A Report to the Senate and House Committees on the Budget--Part II (February 1980), Summary Tables 1 and 2.

8. Spending cuts are difficult for two reasons. One is that most spending programs affect well-defined groups that will resist any decrease in their benefits. In addition, however, there are few discretionary spending programs. According to Administration estimates, over 75 percent of all federal outlays in fiscal years 1980 and 1981 are relatively "uncontrollable" in the short term, in the sense that these expenditures result from programs such as Social Security or from contracts mandated by existing law. Without changing current legislation, these expenditures would continue. See Budget of the United States Government, Fiscal Year 1981 (January 1980), Table 17.

occurs during inflationary periods may allow more federal spending at a given federal budget deficit. Under an indexed system, either a higher budget deficit or an outright increase in tax rates would be needed to accommodate the same level of expenditures. Since both these steps appear difficult to undertake, the present tax system--which requires neither--may promote higher federal spending during periods of inflation.

Experience from 1967, when the rate of inflation first began to accelerate, until 1977, indicates that overall tax rates during this period were roughly equal, in the aggregate, to what they would have been under indexing (see Table 3). In particular years, however, overall tax rates differed from what they probably would have been under indexing. This record suggests that the Congress may have periodically used the flexibility created by the tax code and inflation to fashion its budgetary policies. Thus, at times taxes were reduced more than enough to offset the effects of inflation on tax revenues; at other times the automatic rise in revenues served to fund new spending programs or to expand existing ones without increasing the federal deficit.

Indexing May Weaken the Ability of the Tax System to Stabilize the Economy During Periods of Inflation and May Itself Be Inflationary

It is often said that the current federal tax system tends to stabilize the economy during periods of inflation, because the rise in demand generated by higher money incomes is checked by the higher tax rates that apply to these incomes. Indexing could be seen as weakening or eliminating this tendency of the tax system. By helping to maintain the demand for goods and services, indexing could weaken some downward influences on prices that might otherwise occur.

While there is much theoretical appeal to the argument that the current tax system stabilizes the economy during inflationary periods, recent studies suggest that this property is slight at best. One macroeconomic simulation of the Canadian income tax system, which resembles that of the United States, has shown it to have had relatively little ability to stabilize the Canadian economy before indexing was adopted, because inflation-caused tax increases tended to lag behind the beginning of a demand-induced surge in inflation. In addition, Canada's unindexed system was found to have a destabilizing influence once the initial surge in demand tapered off, because money incomes--and, thus, overall tax

rates--continued to rise even after real incomes leveled off.[9] Another study, which simulated the macroeconomic effects of indexing the income tax in the United States, found that the resulting changes in tax liabilities had almost no effect on the economy's response to large inflationary shocks. The reason was that the magnitudes of the tax changes were very small relative to the overall demand consequences of these shocks.[10] Thus, this study suggests that whether or not the tax code is indexed may not have much overall macroeconomic significance. Both studies tend to weaken the argument that indexing would destabilize the economy by reducing the automatic rise in tax rates caused by inflation.

Proponents of indexing also contend that some of the arguments against indexing may be relevant only during a traditional inflation characterized by excess demand. They point out that when unexpected cost increases, such as a rise in oil prices, are responsible for inflation, an unindexed tax system tends to destabilize economic activity. When inflation of this sort occurs, economic activity tends to diminish because price increases outpace the rise in consumer money incomes. If the cost increases are reflected in higher incomes, the resulting increase in tax rates prevents after-tax income from "catching up" with higher prices. Indexing, by largely eliminating the increase in overall tax rates during periods of inflation, could neutralize this negative impact of the tax structure on economic activity.

Opponents of indexing also say it could generate inflation. Indexing could cause higher prices, for example, by allowing higher levels of consumer demand during periods of inflation. Indexing could also generate inflation if it were interpreted as a sign of government acquiescence to inflation, or as an admission of inability to cure it. Moreover, indexing might weaken popular support for price-restraint measures by insulating households from some of inflation's adverse consequences.

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9. See John Bossons and Thomas A. Wilson, "Adjusting Tax Rates for Inflation," Canadian Tax Journal, vol. 21 (May-June 1973), pp. 185-199.

10. See James A. Pierce and Jared J. Enzler, "The Implications for Economic Stability of Indexing the Individual Income Tax," in Henry J. Aaron, ed., Inflation and the Income Tax (Brookings, 1976), pp. 173-194.

Advocates argue, however, that indexing could also have some anti-inflationary consequences. For one thing, it might help to restrain government spending by restricting the amount of available revenues in a given year, if the Congress wishes to limit the federal budget deficit. Moreover, if the income tax were indexed, workers might be willing to accept smaller money wage increases because they would know that the tax system would absorb much less of these increases. This reduction in wage demands appears to occur in Europe,[11] although the major studies of wage changes in the United States have not shown this to be true here.[12] With the persistence of inflation, however, workers in the United States may also come to require wage adjustments specifically to offset the tax effects of inflation. If this occurs, indexing could serve as a moderating influence. In that case, indexing could actually be, on balance, noninflationary or even anti-inflationary.

Econometric studies suggest that any inflationary consequences of indexing would be fairly small. Simulations performed for CBO on the Data Resources, Inc. (DRI) quarterly model and on the Wharton Econometric Forecasting Associates (Wharton) annual model found that over a period of three years, from 1979 to 1981, between 0.2 and 0.4 percentage points of the projected increase in

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11. See D.A.L. Auld, "Taxation and Inflation: A Survey of Recent Theory and Empirical Evidence," Public Finance Quarterly, vol. 5 (October 1977), pp. 403-418.

12. See, for example, Robert J. Gordon, "Can the Inflation of the 1970s Be Explained?" Brookings Papers on Economic Activity, 1977:1, pp. 253-277, in which tax rates were found to have no statistically significant effect on the rate of wage inflation.

the Consumer Price Index could be traced to indexing.[13] These and other results can be criticized, however, because the available models do not incorporate any of the possible psychological effects of indexing on price or wage levels cited earlier. Thus, without more evidence, the net effect of indexing on inflation cannot be predicted.

Indexing Will Tend to "Lock In" the Existing Distribution of Tax Liabilities and Impede Other Tax Changes

A third argument often made against indexing is that the current tax system, with its automatic, disproportionate rise in tax revenues during inflationary periods, tends to promote Congressional review of the tax code by forcing tax cuts onto the Congressional agenda every two or three years, and by allowing adjustments to be made without the need for offsetting tax rate increases, spending cuts, or increases in the budget deficit. With tax revenues rising automatically, the Congress can alter tax expenditures and shift the distribution of tax burdens across income groups simply by enacting tax cuts in which some taxpayers receive larger reductions than others. Moreover, by failing to adjust a particular fixed-dollar tax provision during an inflationary period, the Congress implicitly allows the amount of taxable income shielded by the provision to decline. Thus, the present unindexed tax code tends to facilitate regular reviews of the various tax provisions.

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13. To simulate indexing, overall income tax rates were decreased during the first quarter of the year, beginning in 1979, by the average annual change in the Consumer Price Index for the previous calendar year. DRI control simulations then assumed a $15 billion tax cut during the first quarter of 1981, including a personal tax cut of $7 billion, a $3 billion corporate tax cut, and a $5 billion decrease in Social Security taxes. The indexing simulation omitted the $7 billion cut in individual income taxes. The Wharton annual control solution included a $12.6 billion cut in personal and corporate taxes effective January 1980, of which $7.7 billion represented a reduction in personal income taxes. In addition, Wharton assumed the Social Security tax rate to remain at its 1979 value and the earnings base to rise by 7 percent per annum. The indexing simulation removed the $7.7 billion cut in personal taxes.

Indexing, by reducing the automatic rise in tax liabilities during inflationary periods, would limit the opportunities for this kind of informal review. Changes in the tax code might be less likely if tax reductions for some groups had to be offset by outright tax increases, rather than smaller money tax cuts, for others--again because of Congressional desires to limit the budget deficit. In addition, with no major tax cut legislation on the agenda, proponents of tax changes would lack a good vehicle for their proposals.

At the same time, these opportunities to review the tax system are, in a sense, a mixed blessing. With less need for ad hoc adjustments to keep up with inflation, legislators might have more time for other issues. Indexing might also reduce the instability and unpredictability involved in subjecting the tax code to broad-scale review every two or three years. Moreover, some would argue that many of the changes resulting from ad hoc reviews of the tax system may be undesirable. Ad hoc tax cuts, for example, can be used as vehicles for special interest tax changes that lack sufficient support to be enacted on their own.

The experience of several other countries with indexing systems shows that discretionary tax changes can still occur under indexing. Canada, Denmark, and the Netherlands have continued to make ad hoc changes after indexing.[14] It is noteworthy that the Congress has undertaken major structural reviews of the tax code during comparatively noninflationary periods (1954 and 1964, for example) when the automatic rise in overall tax rates from inflation was much smaller. In both 1954 and 1964, however, enactment of major tax changes was facilitated by economic growth, which allowed the Congress to reduce nearly everyone's tax liability.

It is not clear what impact indexing might have on tax expenditures by reducing the frequency of ad hoc tax cuts. Between 1967 and 1977, ad hoc tax changes tended to benefit low-income taxpayers relatively more, resulting in higher marginal tax rates for middle- and upper-income persons. For example, in 1967

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14. For details, see the discussion on "Adjusting Personal Income Taxes: The Foreign Experience," in Henry J. Aaron, ed., Inflation and the Income Tax, p. 227. Critics of this view might argue, though, that Denmark and the Netherlands only partially index their tax systems and thus have more need to review their tax codes periodically.

less than one percent of all taxable returns had income taxed at the 40 percent marginal rate or above (see column 1 of Table 5). CBO estimates that in 1979 this figure climbed to nearly 6 percent (see column 3).[15] Taxpayers facing marginal rates such as these have made increasing use of specialized tax provisions originally expected to be used only by a few taxpayers in unusual circumstances.[16] Although adjustments were made in the rate structure in 1978, indexing the present system would still leave marginal rates at fairly high levels, thus preserving significant incentives to use tax expenditures. The revenue constraints imposed by indexing, however, might limit the creation of further tax expenditures, since under a constant budget deficit the money needed to fund these items would have to come from offsetting tax increases or reductions in existing spending programs.

SUMMARY OF THE ARGUMENTS FOR AND AGAINST INDEXING

It is difficult to make a final assessment of the arguments reviewed above. Too little evidence exists to support either a positive or a negative case for indexing. Thus, predictions can only be based on uncertain assumptions regarding future behavior.

Proponents of indexing argue that it would prevent most of the unlegislated tax increases that occur during periods of inflation, and help to hold down government spending. In practice, however, the Congress has adjusted tax rates so that aggregate tax levels between 1967 and 1979 have been close to what they would have been under indexing.

Opponents of indexing hold that it might stimulate inflation, eliminate some options in deciding the shape of tax cuts and in

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15. These figures are similar to those presented in Donald W. Kiefer, "Inflation and the Federal Individual Income Tax," Inflation in 1980: A Survey of Selected Economic Issues, Congressional Research Service, Rept. No. 80-59E (April 9, 1980), p. 122.

16. The increased use of these provisions may also have had some adverse effect on savings and work incentives. For a further discussion of these issues, see Congressional Budget Office, An Analysis of the Roth-Kemp Tax Cut Proposal (October 1978), pp. 11-21.

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TABLE 5. TAX RETURNS CLASSIFIED BY HIGHEST MARGINAL RATE AT WHICH TAX WAS COMPUTED, 1967 AND 1979 (ESTIMATED)

Marginal Tax Rate	1967 Percent of Taxable Returns (1)	1967 Cumulative Percent (2)	1979 (Estimated) Percent of Taxable Returns (3)	1979 (Estimated) Cumulative Percent (4)
14	10.80	10.8	10.1	10.1
15-16	20.10	30.9	8.4	18.5
17-18	11.10	42.0	16.3	34.8
19-20	33.90	75.9	5.0	39.8
21-24	14.70	90.6	28.7	68.5
25-29	6.90	97.5	10.9	79.4
30-39	1.60	99.1	15.0	94.4
40-49	0.46	99.6	4.2	98.6
50-59	0.37	99.9	1.0	99.6
60-70	0.07	100.0	0.4	100.0
Total	100.00		100.0	

SOURCE: Internal Revenue Service, Statistics of Income--1967 Individual Income Tax Returns (July 1969), p. 85; and Treasury Tax Calculator, 1979 income levels.

developing budgetary policy during periods of inflation, and make it harder to enact tax changes. But again, strong evidence for these propositions is hard to find.

Would indexing have a destabilizing influence on the economy? Most of the evidence suggests that marginal changes in the tax system, such as those created by indexing, would not have much impact on the overall level of economic activity. Because the evidence regarding the probable effects of indexing is so limited, the weight of the various arguments will depend largely on personal opinions about such issues as the appropriate level of federal spending, the equity of the present income tax, and the importance of Congressional flexibility in setting tax and budgetary policy. The force of the arguments also depends on whether one believes the Congress should prevent overall tax rates from rising and will

act on its own to do so. None of these questions has an obvious answer.

CHAPTER IV. DESIGNING AN AUTOMATIC RATE STRUCTURE INDEXING SYSTEM: ISSUES AND OPTIONS

If the Congress decides to index the rate structure of the individual income tax, many ways for doing so are available. Countries that have adopted indexing have made different decisions about which tax code provisions to index, how much of the inflationary tax increases to offset automatically, and so on.[1] This chapter sets out some of the issues that would have to be decided and describes several of the options that are available. Among the issues covered are: which index to use in measuring inflation; which tax provisions to adjust; when to apply the indexing mechanism; and how much of the effects of inflation to offset.

INCOME- VERSUS COST-OF-LIVING-BASED INDEXES

Perhaps the first issue that must be resolved is what kind of index to use for measuring inflation. If the goal is to prevent the share of total personal income absorbed by taxes from rising solely as the result of inflation, some measure of the effects of inflation on incomes would seem most appropriate. If, on the other hand, the goal is to offset the effects of higher prices on taxpayers' real incomes, some measure of price increases or increases in the cost of living would be more effective.

An indexing plan may have both of these goals, of course, so the distinction is not as clear-cut as this analysis implies. In addition, the choice of an index is likely to turn to a large extent on such practical questions as the public's familiarity with a given index, the time required to compile it, and whether the index is revised retroactively. It may be helpful in making the choice, nonetheless, to consider briefly the differences between income- and cost-of-living-based indexes, and why one might be preferred to the other.

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1. For a brief account of indexing systems in other countries, see Appendix C. These systems all provide tax adjustments only when prices increase--not in the event of a deflation.

Inflation is generally accompanied by higher money incomes. As prices rise, wages and salaries tend to be adjusted to keep up; but the process is not automatic, and not all incomes rise at exactly the rate of inflation. Looking only at the domestic economy, however, all increases in price show up in the form of higher incomes for someone, so the total of all incomes tends to rise at about the same rate as the total of all prices.[2] Thus, if the goal is to prevent the share of total incomes paid to the government in taxes from rising solely as the result of inflation, an index measuring the inflation-induced increase in total incomes would be appropriate.

The effect of inflation on the cost of living is more direct. Thus, if the goal is to maintain taxpayers' real, after-tax incomes, some measure of the effects of inflation on the prices most taxpayers pay would be the best index. This kind of cost-of-living "market basket" index could cover a narrower range of prices, however, than an income-based index.

Most countries that have indexed their tax systems have adopted a cost-of-living measure such as the Consumer Price Index (CPI) as their index of inflation.[3] This may have been dictated in part by convenience, because cost-of-living indexes typically are available and well known to most taxpayers. In addition, they have the advantage of already being in place and of being often used to make adjustments in income transfer programs.

If indexing is intended to prevent the ratio of income taxes to the nation's total income from rising, however, the use of

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2. All income is not taxable, however, so broadly-based income indexes may overstate the effects of inflation on taxable income. In addition, not all taxable income is earned by U.S. taxpayers. A large portion of income from energy resources, for example, is received by foreign governments and individuals.

3. Detailed discussions of the foreign experience appear in Amalio H. Petrei, "Inflation Adjustment Schemes under the Personal Income Tax," International Monetary Fund Staff Papers, vol. 22 (July 1975), pp. 539-64; Vito Tanzi, Inflation and the Personal Income Tax: An International Perspective (Cambridge University Press, 1980), pp. 23-40; and Studies on International Fiscal Law: Inflation and Taxation, International Fiscal Association (Vienna, 1977).

cost-of-living measures may not be desirable for a number of reasons. First, this sort of index measures changes in the prices of goods and services consumed by households. While this covers about two-thirds of GNP, it does not directly reflect inflationary increases in wages, salaries, or other sources of income. In addition, some indexes like the CPI may not measure increases in the cost of living correctly, thus making it even more inaccurate as a measure of income increases. The CPI, for example, is adjusted only infrequently for changes in consumption patterns. It therefore probably overestimates the effects of energy price increases, since consumers are now reducing their consumption of energy in response to higher prices. The housing price component of the CPI is also distorted for a number of technical reasons during periods when prices escalate rapidly.[4] Finally, and perhaps most important over the long run, the CPI takes account of import price increases, which may be reflected only to a limited extent in domestic incomes. If indexing is intended only to keep overall tax rates from rising, including these price rises in the inflation index may cause an overadjustment of tax rates.

Several alternative measures have been proposed for indexing the income tax: the implicit price deflators[5] for gross national product (GNP), personal consumption expenditures (PCE), and national income (NI).[6] Like the CPI, these are available every quarter. Unlike the CPI, however, none of these takes account of the effects of imports on the U.S. economy. The GNP deflator registers the changes in the market value of all goods and services produced domestically or, equivalently, changes in the

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4. For example, when housing prices escalate, current owners can use the increase to finance additional consumption by selling their homes and moving to less expensive units. Higher prices can thus reduce living expenses for some households. The CPI, however, counts all price increases as an increase in the cost of living.

5. Implicit price deflators are a family of price indexes for GNP and a number of its components. This kind of index is computed by taking the ratio of GNP (or a specific component) in current prices to GNP (or the specific component) valued in prices of a base year, currently 1972.

6. For an extensive discussion, see Edward F. Denison, "Price Series for Indexing the Income Tax System" in Henry J. Aaron, ed., Inflation and the Income Tax, pp. 232-269.

income derived from their production. The PCE deflator is similar to the CPI in that it is intended to measure changes in purchasing power of consumers. However, it avoids measuring imports and uses a current market basket to define consumption. The NI deflator, which measures inflationary (and deflationary) movements in total national income, is adjusted in a number of ways--for example, a deduction is made for indirect business taxes such as sales and property taxes--that allow it to approximate the income tax base more closely.[7]

Table 6 shows the annual rates of increase of the CPI since 1968 and compares these increases with those in the GNP, PCE, and NI deflators. In general, the average percentage rise in the CPI has exceeded that for the deflators by 0.3 to 0.7 percentage points each year, although for the more recent period since 1975 when housing and energy prices have risen rapidly the differences have been greater. Because the CPI has generally exceeded the rise in incomes during the present period of large increases in oil prices, using the CPI to index individual income taxes could actually reduce the percentage of total personal income paid in taxes, because tax provisions would be adjusted downward by more than the rise in taxable incomes. Thus, the PCE or the NI deflator might be a better indexing measure for keeping overall tax rates constant. The same general effect could be achieved by using the more widely-known GNP deflator, however, because the average increase in the GNP deflator has in the past several years been very similar to that for the other two deflators.

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7. Many analysts prefer using a national income deflator to the GNP deflator for indexing an income tax because they contend that indexing should not be expected to offset legislated increases in indirect business (sales, property, and gross receipts) taxes. Under a system that adopted either the CPI or GNP deflator as an index, taxpayers would be compensated for such increases. It is largely for this reason that the government of the Netherlands chose an index equivalent to a national income deflator as part of its indexing procedure. The Dutch may also have chosen this index, however, to avoid incorporating the effects of higher import prices into their tax adjustment mechanism.

TABLE 6. ANNUAL PERCENTAGE CHANGES IN VARIOUS PRICE INDEXES, 1968-1979

Year	Consumer Price Index	Gross National Product Deflator	Personal Consumption Expenditure Deflator	National Income Deflator
1968	4.2	4.5	4.1	4.0
1969	5.4	5.0	4.6	4.6
1970	5.9	5.4	4.5	5.5
1971	4.3	5.1	4.4	5.0
1972	3.3	4.1	3.5	4.9
1973	6.2	5.8	5.5	6.5
1974	11.0	9.7	10.8	9.1
1975	9.1	9.6	8.1	9.3
1976	5.8	5.2	5.1	5.5
1977	6.5	6.0	5.7	6.3
1978	7.7	7.3	6.8	7.6
1979	11.3	8.8	8.9	9.1
Average				
1968-1979	6.7	6.4	6.0	6.4
1974-1979	8.6	7.8	7.6	7.8

One problem with using either the GNP deflator or one of its related indexes is that these measures are retroactively revised over a period of up to three years by the Commerce Department.[8] The size of any revision is usually small--under one percent--but with higher rates of inflation, the revisions could become larger. If this proved to be a problem, one solution might be to use the most current figure available at the time withholding tables had to be prepared, and then reflect any subsequent revision in the next year's adjustment. Alternatively, subsequent revisions could simply be ignored for purposes of the indexing system.

8. These revisions appear annually in the July issue of the Survey of Current Business published by the Commerce Department.

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ONE INDEX VERSUS A SET OF MORE SPECIFIC INDEXES

A second issue posed by indexing is whether to use separate indexes for taxpayers in different income classes and/or in different parts of the country. In the past, the tax system has not generally been used to make adjustments for economic differences such as these. Indeed, current U.S. tax law ignores price differences, whether based on geography or income, in determining tax liability. Other countries that have introduced indexing have adopted a uniform measure for all taxpayers.

Separate indexes might be more effective at incorporating the different effects of inflation on different groups of taxpayers. Using more than one index, though, could create a number of serious administrative and political problems. First, the appropriate number and composition of income classes and geographic regions to use is not obvious. Second, the development of separate indexes would be hampered by the absence of data. For example, the lack of detailed price data for many local areas would complicate the job of developing separate regional indexes. Third, taxpayers may move from one region or income class to another during a year, so that a complex rule might be needed to permit the averaging of indexing adjustments across regions or income levels. Finally, even if the technical problems with separate indexes could be overcome, the inequities that such indexes would seek to remedy might still remain, since living costs can also vary considerably within such regions and income classes.[9]

THE PROPER TIME INTERVAL FOR MEASURING INFLATION

A third issue raised by indexing is the proper time interval to use for measuring inflation adjustments and incorporating them into the tax code. Since the federal income tax operates on an annual basis, an obvious choice for the time interval would be the entire calendar year. This approach has the advantage of including all or nearly all inflation-based changes in income items over the tax year. A shorter time interval--six months or less, for example--runs the risk of measuring only temporary price movements. In addition, updating withholding tables and other tax

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9. See David Greytak and Richard McHugh, "Inflation and the Individual Income Tax," Southern Economic Journal, vol. 45 (July 1978), pp. 168-180.

provisions more than once a year could create severe administrative problems.

As a practical matter, under a 12-month base period figures released in September might be the last set of changes that could be incorporated into the index for use in new tax forms and withholding tables. This, essentially, is how the federal government indexes Old Age and Survivors Insurance (OASI) benefits for Social Security. It is also the cutoff date that Canada has used in developing its indexing system.

HOW EXTENSIVELY TO INDEX

If indexing is adopted, the Congress must also decide how extensively to index the tax code. The large number of fixed-dollar tax provisions leaves many possibilities to consider. One of the simplest possible rate structure indexing proposals would be to index only bracket widths and the zero bracket amount. If effective January 1, 1981, this proposal would reduce federal revenues by about $10 billion in fiscal year 1981, using the CPI as a measure of inflation.[10] Low- and moderate-income taxpayers would receive proportionately greater decreases in tax liabilities under this form of indexing than would higher-income taxpayers (see Table 7). However, under this option the real value of the various dollar-denominated exemptions and credits in the code would continue to decrease over time. Some low-income persons who previously did not have to pay taxes might thus begin to have positive tax liabilities, while the differences in liabilities between large and small families with similar incomes would decrease, after correcting for inflation.

Indexing the personal exemption in addition to the bracket widths and the zero bracket amount would increase the aggregate

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10. This figure and the subsequent estimates indicate the effects of implementing the various proposals on January 1, 1981. They are based on simulations with the Treasury Department's Tax Calculator using the CPI as an index and applying 1979 law at 1979 income levels. Table 7 also reports estimates using the GNP deflator as an alternative measure of inflation. In addition, estimates of the full fiscal year effect--the effect if these proposals were implemented October 1, 1980--are presented.

TABLE 7. REDUCTIONS IN AVERAGE TAX LIABILITY UNDER THREE INDEXING PROPOSALS, BY EXPANDED INCOME CLASS, ASSUMING A 13.3 PERCENT INCREASE IN THE CONSUMER PRICE INDEX

Expanded Income Class[a] (in dollars)	Indexing the Zero Bracket Amount (ZBA) and Bracket Widths (percent)	Indexing the ZBA, Bracket Widths, & Personal Exemption (percent)	Indexing the ZBA, Bracket Widths, Personal Exemption, & Earned Income Credit (percent)
Below 10,000	10.2	14.0	22.7
10,000 - 15,000	6.7	10.1	10.3
15,000 - 20,000	5.8	8.9	8.9
20,000 - 30,000	5.6	8.4	8.4
30,000 - 50,000	6.3	8.4	8.4
50,000 -100,000	6.3	7.6	7.6
100,000 -200,000	3.9	4.5	4.5
200,000 and over	1.2	1.4	1.4
Revenue Reduction in Fiscal Year 1981 (in billions of dollars)			
If effective January 1, 1981			
Using CPI	10.3	14.2	14.6
Using GNP deflator[b]	7.3	10.0	10.2
If effective October 1, 1980 (full fiscal year effect)			
Using CPI	15.7	21.8	22.4
Using GNP deflator[b]	11.1	15.4	15.8

SOURCE: Department of Treasury tax model, 1979 tax code at 1979 income levels.

a. For a definition of expanded income, see Chapter II, p. 9, footnote 3.

b. Assumes the GNP deflator increases 9.1 percent during 1980.

revenue loss in fiscal year 1981 by over $14 billion.[11] Adjusting the earned income credit (EIC) as well would cost an additional $400 million.[12] Both of these proposals would provide even greater relative savings to low- and moderate-income taxpayers (see Table 7). For example, CBO estimates that indexing the bracket widths, zero bracket amount, and personal exemption in 1981 would result in an average decrease in total tax liability of $55 for taxpayers with adjusted gross incomes below $15,000--about an 8 percent reduction. Persons with incomes of $50,000 or more would receive a greater absolute reduction in tax, about $1,313, but a smaller relative decrease (about 5 percent).

Indexing all fixed-dollar items would be more effective than less extensive indexing proposals in maintaining the present distribution of federal income tax liabilities, because many more of the liability measurement aspects of the tax code would be preserved. The distribution of tax liabilities could still change, however, because rate structure indexing would not adjust the measurement of income and expenses from such items as mortgage interest payments or capital gains. Moreover, many of the items that would be indexed under this proposal, such as the child-care credit or the dollar limits on tax-deferred pension contributions, seem less fundamental to the basic structure of the tax code than are the bracket widths, personal exemptions, and the zero bracket amount.[13] Thus, a decision to index all or most of current fixed-dollar tax provisions could be viewed as a decision to maintain the real value of many specialized tax provisions. Legislators wanting to reduce or eliminate certain tax expenditures over

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11. The Canadian indexing mechanism most closely resembles this proposal. See Appendix B for a discussion of the Canadian experience with inflation indexing.

12. The EIC provides low- and moderate-income taxpayers with a refundable tax credit equal to 10 percent of the first $5,000 of earnings, with the credit declining as earnings rise and terminating when earnings reach $10,000. Indexing the EIC would raise the income level below which the maximum 10 percent rebate would apply and also increase the earnings level at which a credit could still be claimed.

13. For a comprehensive listing of fixed-dollar provisions in the individual income tax code that could be indexed, see Appendix A.

time might, therefore, find this type of indexing proposal unattractive.[14]

OPTIONS FOR MORE LIMITED INDEXING

Besides the full, annual indexing proposals considered thus far, many other options are available. For example, the Congress could limit indexing only to periods of significant inflation. Alternatively, the Congress could opt for annual indexing but limit the adjustment to some fraction of the observed rate of inflation. Third, the Congress could decide to adopt indexing only as a standby measure requiring a formal vote to activate. Another option would be simply to require that new tax legislation be introduced whenever the inflation rate exceeded a minimum level.

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14. Two other general indexing options have also been suggested: indexing only the statutory rates appearing in the tax rate schedule, and indexing just the taxpayer's total tax due. Both of these options, however, would more than offset the effects of inflation on tax liabilities for middle- and upper-income taxpayers but would allow the real tax burdens of low-income individuals to rise. Indexing only the rate schedule would concentrate the tax savings on taxpayers in higher brackets, since all statutory tax rates would be reduced by the same percentage. A 10 percent decrease in the top marginal rate of 70 percent, for example, would reduce it by 7 percentage points, while a 10 percent reduction in the lowest marginal rate (14 percent) would lower it by only 1.4 percentage points. Indexing total tax due--computing tax liabilities as under current law and then dividing by an index--would have similar effects. Both of these proposals would also leave more low-income persons with positive tax liabilities, because the rise in nominal incomes during inflation would move more low-income people into the taxable income range. In addition, both measures could mean more work for taxpayers and the Internal Revenue Service, since failing to index the zero bracket amount would make it advantageous for more taxpayers to itemize their deductions rather than claim the standard deduction.

Triggered Indexing

A key issue in developing an indexing proposal is how often indexing adjustments should be incorporated in the tax code. Most of the indexing proposals would index the tax schedule each year, the approach used in the Canadian system and in many private-sector cost-of-living agreements here in the United States. Some proponents of indexing argue that less frequent adjustments would allow the government to benefit more from the increase in revenues caused by inflation. Others contend, however, that during periods of lower inflation the various costs resulting from annual indexing may outweigh the benefits provided to taxpayers in the form of guaranteed tax reductions.

One option that would allow for indexing but satisfy those objecting to automatic annual adjustments would be to index tax provisions only when the inflation rate exceeded some minimum level--what might be called "triggered" indexing. This approach is now used to index Social Security benefits, and three countries--Brazil, France, and Luxembourg--have incorporated it into their tax indexing systems. Indexing only when the inflation rate exceeds a predetermined level would have the possible disadvantage of leaving tax burdens temporarily higher than under annual indexing. On the other hand, it would allow the tax code to be adjusted less frequently during periods of relative price stability, such as that experienced in the United States between 1954 and 1966.[15]

Indexing the income tax only when a minimum inflation level is surpassed could take several different forms, two of which are considered here. First, the tax code could be adjusted by the cumulative amount of inflation since the previous application of indexing, with indexing triggered by an increase of a certain amount (such as 8 percent) in the index. Luxembourg, for example, has used this form of indexing since 1968. Under this option, the tax code would be adjusted fully whenever the cumulative rise in the inflation index reached a certain amount.

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15. Triggered indexing would also be more in keeping with the Administration's view that automatic indexing is needed only if price increases are sufficiently large. See Deputy Assistant Secretary of the Treasury Sunley's testimony at Hearings on Indexation of Certain Provisions of the Tax Laws, Senate Finance Committee, April 1978.

Another option would be to trigger indexing whenever an annual increase in the inflation index exceeded a certain minimum amount, with the adjustment equalling that year's rate of inflation. The French tax system, for example, is indexed in this fashion. When the annual inflation rate exceeds 5 percent, the French government must propose adjustments in that country's tax system. This option would lead to still smaller and less frequent adjustments in the tax code.

Table 8 contrasts the amount of adjustment each of these alternatives would have produced had it been in effect between 1968 and 1979. Column 1 in the table presents the historical rate of inflation over the 1968-1979 period, as measured by changes in the CPI. Column 2 indicates the adjustments that would have occurred under automatic annual indexing, while the third column indicates the adjustments that would have taken place under an indexing rule that provided full cumulative adjustments whenever the cumulative rise in the CPI exceeded 6 percent. As the figures indicate, this option would have provided for somewhat larger but less frequent adjustments--a characteristic of the present, ad hoc indexing process. In contrast to current tax policy, however, this kind of indexing might produce tax changes with undesirable consequences. For example, large tax reductions might be triggered at the very time economic restraint is desired.

The last column in the table indicates the adjustments that would have occurred if adjustments were limited to the annual increase in the CPI whenever the annual inflation rate exceeded 6 percent. The figures indicate that this rule would have led to still fewer inflation adjustments, the cumulative effect of which would have been only half as large as those of the other indexing schemes. Since tax rates would not be adjusted when the inflation rate fell below the trigger point, this approach would leave the Congress with more flexibility on the revenue side of the budget than would automatic annual indexing during periods of relatively mild inflation.[16]

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16. The different outcomes between the various options result largely from the size of the minimum inflation rate at which adjustments are made. With a 5 percent inflation "trigger," for example, the differences between the effects of the various options are smaller. At a 3 percent trigger the differences disappear altogether, since the inflation rate has exceeded 3 percent every year since 1968.

TABLE 8. INFLATION ADJUSTMENTS IN THE INCOME TAX UNDER AUTOMATIC ANNUAL AND TRIGGERED INDEXING PROPOSALS, 1968-1979

Year	Annual Rate of Inflation, as Measured by the Consumer Price Index (percent)	Percentage Adjustments in the Tax Code		
		Annual Indexing[a]	Triggered Cumulative Indexing[b]	Triggered Annual Indexing[c]
1968	4.2	4.2	0	0
1969	5.4	5.4	9.8	0
1970	5.9	5.9	0	0
1971	4.3	4.3	10.5	0
1972	3.3	3.3	0	0
1973	6.2	6.2	9.7	6.2
1974	11.0	11.0	11.0	11.0
1975	9.1	9.1	9.1	9.1
1976	5.8	5.8	0	0
1977	6.5	6.5	12.6	6.5
1978	7.7	7.7	7.7	7.7
1979	11.3	11.3	11.3	11.3

a. Automatic annual adjustment in the tax code by the rate of change in the CPI.

b. Indexing by the cumulative rate of inflation once prices have increased by 6 percent since tax rates were last indexed. Note that cumulative figures are greater than the sums of relevant annual adjustments because of compounding.

c. Indexing by the annual rate of inflation, but only when the annual change in the Consumer Price Index exceeds 6 percent.

Fractional Indexing

A second way for the Congress to enact a partial indexing system would be to limit the inflation adjustment to a fraction of the increase in the inflation index used for adjusting the tax

code. This alternative, which can be called "fractional" indexing, could be implemented in one of two ways. First, tax provisions could be adjusted by only a fixed proportion of the annual rate of inflation, such as two-thirds.[17] Alternatively, adjustments could be limited to a maximum level, such as 6 percent, even if the actual inflation rate is higher. In general, either option would lead to smaller tax adjustments than would any of the triggered indexing proposals discussed earlier, since the triggered proposals would usually adjust tax provisions by the full rise in the inflation index. Fractional indexing could, however, be combined with triggered indexing if the Congress wished to limit automatic adjustments still further.

Although fractional indexing would only partially adjust for inflation, it would leave more room for discretionary tax changes, because aggregate collections would not decline as quickly.[18] For the same reason, fractional indexing might be more effective than full indexing in providing business and labor with incentives for curbing inflation themselves. Thus, the federal government might be less open to the charge of "condoning inflation" if fractional indexing rather than full indexing were adopted. On the other hand, fractional indexing could be less effective than full indexing in preventing wage and price increases designed to offset future inflation, since the full effects of inflation on the rate structure of the individual income tax would not be offset.

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17. The tax system of the Netherlands, for example, allows that country's finance minister to limit the inflation adjustment to 80 percent of the rise in the relevant index when full adjustments are judged to generate excessive revenue shortfalls or undesirable macroeconomic consequences.

18. In any one year, fractional indexing would reduce aggregate tax collections roughly by the size of the indexing fraction, in comparison with full indexing. Over time, the differences could be larger because of compounding. The actual change in tax revenues would depend, of course, on the incentives to itemize that might arise from only partial adjustments. Thus, the decrease in revenues could well be larger than a simple proportional decline in the index if more taxpayers were led to itemize.

Standby and Open-Ended Indexing

If the Congress wants to ensure only that adjustments to the tax code are considered during inflationary periods, several other options are available. One, which could be called "standby" indexing, would establish a specific indexing proposal but require an explicit vote by the Congress to take effect in any year. Another, which might be called "open-ended" indexing, would require only that the President introduce new tax legislation whenever the inflation rate exceeded a certain level. This variant of triggered indexing has been adopted in France.

Standby and open-ended indexing each offer advantages and disadvantages. Standby indexing, for example, would allow the Congress to adopt a permanent indexing mechanism but avoid the politically difficult need to override indexing when adjustments were thought undesirable. The necessity to authorize indexing, however, could create problems of its own. For example, it could politicize the decision to index, with frequent attempts by dissatisfied legislators to change the indexing formula. Open-ended indexing, with its lack of structure, would provide still more flexibility in determining the size and shape of indexing adjustments. The requirement to introduce new tax legislation, though, could lead to more sweeping tax changes. Not all would welcome this possibility.

ADMINISTRATIVE DIFFICULTIES RESULTING FROM INDEXING

Few administrative problems would be caused by indexing the most basic components of the tax code--the rate brackets, the zero bracket amount, the personal exemption, or the EIC. In general, indexing that involved these items alone would require the IRS only to adjust withholding schedules and tax tables. Basic filing procedures would not have to be changed. In addition, by indexing the zero bracket amount, the real value of the standard deduction would be maintained. Thus, the percentage of taxpayers choosing to take the standard deduction rather than itemizing would be less likely to change.

Indexing all or even most of the fixed-dollar provisions in the tax code would pose more problems than less inclusive indexing options, since more tax items would be subject to change. Because the majority of these items cannot be directly adjusted by using the tax tables, comprehensive indexing would be likely to result

in more taxpayer errors and a greater administrative burden for the IRS.[19]

Limiting the frequency and scope of adjustments would have the advantage of reducing taxpayer confusion. Moreover, during periods of relatively stable prices, the savings to taxpayers from indexing might fall short of the correspondingly greater collection costs the IRS would bear because of indexing. These administrative considerations should be weighed against the benefits of more thorough indexing in developing a specific indexing proposal.

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19. IRS studies indicate that even minor changes in the income tax form can produce substantial taxpayer errors. For details, see Letter from Internal Revenue Commissioner Jerome Kurtz to John S. Nolan, December 27, 1977, distributed at the American Law Institute-American Bar Association Conference on Federal Income Tax Simplification (Warrenton, Virginia, January 4-7, 1978).

APPENDIXES

APPENDIX A. FIXED-DOLLAR PROVISIONS IN THE FEDERAL INCOME TAX

This appendix provides a complete list of federal income tax provisions containing fixed-dollar amounts. Each of these provisions would need adjustment if the rate structure of the individual income tax were to be fully indexed. Sections that contain law not applicable to taxable years after 1978 are not included in this list. The references are to sections of the Internal Revenue Code.

Section 1. Tax imposed (individual income tax rates)

3. Tax tables for individuals (ceiling on tables for married couples filing separate returns)

37. Credit for the elderly

41. Contributions to candidates for public office

43. Earned income credit

44A. Expenses for household and dependent care services necessary for gainful employment (credit for household and dependent care)

44C. Residential energy credit

46. Amount of the investment tax credit

48. Special rules for the investment tax credit

50A. Work incentive (WIN) tax credit (amount of the credit)

50B. Definition and special rules for work incentive program credits

51. New employment tax credit (amount of the credit)

52. Special rules for the new employment tax credit

Section	55.	Alternative minimum tax for taxpayers other than corporations
	56.	Add-on minimum tax for tax preferences
	57.	Items of tax preference (preference for capital gains on the sale of timber)
	58.	Rules for applying the minimum tax
	63.	Taxable income defined
	79.	Group-term life insurance purchased for employees
	85.	Unemployment compensation
	101.	Income tax exclusion of $5,000 of death benefits
	103.	Interest on certain governmental obligations (small issues of industrial development bonds)
	104.	Amounts received under accident and health plans (phase-out of benefits)
	116.	Partial exclusion of dividends received by individuals
	117.	Partial exclusion of fellowship grants received by a non-degree candidate
	121.	One-time exclusion of gain from sale or exchange of principal residence of individual who has attained age 55
	151.	Allowance of deductions for personal exemptions
	152.	Dependent defined (deduction where one parent has custody)
	162.	Trade or business expenses (expenses of a Member of Congress)
	163.	Interest (limitation on investment indebtedness and special rule where taxpayer owns more than half of the enterprise)

Section 165. Losses (floor on casualty loss deductions)

167. Depreciation (rehabilitation expenditures for low-income housing)

170. Charitable, etc., contributions and gifts (amounts paid to maintain certain students as members of the taxpayer's household)

175. Soil and water conservation expenditures

179. Additional first-year depreciation allowance for small business

182. Expenditures by farmers for clearing land

190. Expenditures to remove architectural and transportation barriers to the handicapped and elderly

213. Medical, dental, etc., expenses (medical insurance deduction)

217. Moving expenses

219. Retirement savings (individual retirement accounts [IRA's], etc.)

220. Retirement savings for certain married individuals (spousal IRA's)

264. Certain amounts paid in connection with insurance contracts

274. Disallowance of certain entertainment, etc., expenses (certain de minimus gifts)

401. Qualified pension, profit-sharing, and stock bonus plans (contributions for premiums on annuity, etc., contracts)

402. Taxability of beneficiary of employee's trust (lump-sum distributions, minimum distribution allowance)

Section 404. Deduction for contributions of an employer to an employee's trust or annuity plan and compensation under a deferred-payment plan (special limitation for self-employed persons)

408. Individual retirement accounts

409. Retirement bonds

415. Limitations on benefits and contribution under qualified plans

443. Adjustment in exclusion for minimum tax computation

453. Installment method

457. Deferred compensation plans with respect to service for state and local governments

466. Qualified discount coupons redeemed after close of taxable year

481. Adjustments required by changes in method of accounting

483. Interest on certain deferred payments

667. Treatment of amounts deemed distributed by trust in preceding years

911. Earned income from sources without the United States

999. International boycott determinations

1211. Limitation on capital losses

1244. Losses on small business stock

1250. Gain from dispositions of certain depreciable realty (recapture on disposition of substantially improved business realty)

Section 1251. Gain from disposition of property used in farming where farm losses offset nonfarm income

1302. Income averaging: definition of averagable income and related definitions

1304. Special rules for income averaging

1341. Computation of tax where taxpayer restores substantial amount held under claim of right

6012. Persons required to make returns of income

6013. Joint returns of income tax by husband and wife

6014. Income tax return—tax not computed by taxpayer

6015. Declaration of estimated income tax by individuals

6096. Income tax payments designated to presidential election campaign fund

6102. Computation on returns or other documents (rounding to nearest $1)

6110. Public inspection of written determinations (civil remedies)

6323. Validity and priority against certain persons (tax liens)

6334. Property exempt from levy

6405. Reports of refunds and credits (Joint Committee approval of refunds over $200,000)

6657. Bad checks

6674. Fraudulent statement or failure to furnish statement to employee

6687. Failure to supply information with respect to place of residence

Section 6688. Assessable penalties with respect to information required to be furnished under section 7654 (U.S.-Guam income tax coordination)

7201-7217. Criminal penalties

7325. Personal property valued at $2,500 or less (seizure and forfeiture)

7654. Coordination of United States and Guam individual income taxes

APPENDIX B. THE CANADIAN EXPERIENCE WITH INDEXING

With the spread of worldwide inflation during the past decade, a growing number of governments have decided to adjust their income tax structures for the effects of inflation. Several have adopted automatic tax adjustment mechanisms to offset the inflation-induced increases in individual income tax burdens. Appendix C outlines the basic features of these systems.

The Canadian mechanism may be the one most relevant to the United States because of the similarity of Canada's economic and social structure to that of the United States. This appendix reviews the operation of the Canadian indexing system, which is far more comprehensive than most indexing systems adopted elsewhere. In addition, it describes the effects that indexing has had thus far on individual tax burdens and on certain measures of economic activity.

The Effects of Indexing on the Taxpayer

In 1973, the Canadian government amended Canada's tax code (Section 117.1 of the Income Tax Act) to index automatically certain provisions of its individual income tax.[1] These adjustments increase the amounts of the personal exemption, various deductions, and the income tax bracket widths by the annual rate of increase in Canada's Consumer Price Index (CPI) for the 12-month period ending on September 30 before the start of the tax year.[2] As shown in Table B-1, the resulting annual percentage increases, which amounted to a cumulative increase of about 66 percent by 1979, have raised the value of the personal exemption by over $1,000 since 1973 and widened most tax brackets by even greater amounts. In addition, a number of other provisions have

1. The indexing procedure applied only to individual taxes. The corporate income tax must still be adjusted by discretionary tax cuts to offset the effects of inflation on corporate tax liabilities.

2. In the event of a decline in the price level, these provisions would not be readjusted downward.

been indexed, including the deduction for blind or disabled persons.

TABLE B-1. CHANGES IN CANADIAN FEDERAL TAX PROVISIONS RESULTING FROM INDEXING, SELECTED YEARS

	1973	1974	1976	1979
Cumulative Percentages by Which Tax Provisions Have Been Indexed Since 1973	—	6.6	30.7	65.8
Value of Personal Exemption (in dollars)	1,600	1,706	2,091	2,650
Selected Marginal Tax Bracket Boundaries (in dollars)				
Lowest rate:[a] below	500	533	654	829
20 percent bracket:[b] below	2,000	2,132	2,614	3,316
25 percent bracket:[c] above	7,000	7,462	9,149	11,606
35 percent bracket:[d] above	14,000	14,924	18,298	23,212
47 percent bracket:[e] above	60,000	63,960	78,420	99,480

SOURCE: Canadian Department of Finance.

a. The lowest rate in 1973, 15 percent, was lowered in 1974 to 12 percent, in 1975 to 9 percent, and in 1976 to 6 percent.
b. In 1979, 18 percent bracket (see text footnote 3).
c. In 1979, 23 percent bracket (see text footnote 3).
d. In 1979, 32 percent bracket (see text footnote 3).
e. In 1979, 43 percent bracket (see text footnote 3).

Changes in Individual Tax Liabilities Since 1974

Despite the introduction of indexing, taxpayers at some income levels may be paying a larger share of their incomes in taxes. These increases are due in part to the exclusion of certain fixed-dollar provisions of the tax code from indexing (such as the exemption of the first $1,000 of pension income and the limited deduction of capital losses), and in part to the lack of

adjustment for the effects of inflation on the income tax base. Most taxpayers, though, have enjoyed a decrease in overall tax rates because of additional changes that reduce tax liabilities. For example, the tax rate applicable to the lowest marginal tax bracket declined from 15 percent in 1973 to 6 percent in 1976. All other tax brackets were similarly reduced, although by smaller amounts.[3] In addition, since 1972 the federal government has enacted on an annual basis a series of tax credits that reduce federal tax liabilities relatively more for low-income individuals than for other taxpayers.

Table B-2 presents estimates of the federal income tax liabilities experienced by taxpayers for several income groups in 1973, 1974, and 1976. These figures show an absolute decline in average tax liabilities over all income classes. Even so, aggregate federal income tax revenues rose during this period because the unindexed provisions of the income tax caused some individuals to move into higher income tax brackets and real economic growth caused newly employed individuals to incur positive tax liabilities. Thus, the average income tax payment in current dollars rose by 50 percent in the space of 3 years, from $1,040 to $1,568, although the overall tax rate fell from 18.7 percent to 17.8 percent.

The Aggregate Effects of Indexing

In the aggregate, indexing adjustments have amounted to large annual tax cuts. Table B-3 shows the historical rate of inflation experienced in Canada before and after the introduction of indexing (as measured by changes in the Canadian CPI). Shown in the adjacent columns are the corresponding indexing adjustments and tax reductions. For 1979, the reduction is expected to equal about $1.2 billion. These figures include both the effects of forestalling increases in the tax liabilities of current filers and the impact of preventing current low-income filers from incurring positive tax liability.

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3. In 1977 the federal government agreed to transfer a portion of its tax revenues to the provinces by lowering the marginal tax rates that apply at various income levels and permitting the provincial governments to raise theirs by corresponding amounts.

TABLE B-2. AVERAGE CANADIAN FEDERAL INCOME TAX LIABILITIES AND OVERALL RATES, BY INCOME CLASS, SELECTED YEARS

Income Class (in dollars)	Average Tax Liabilities (in dollars)			Overall Tax Rates[b] (in percent)		
	1973	1974	1976[a]	1973	1974	1976[a]
Below 5,000	140	85	43	3.6	2.1	2.8
5,000-10,000	687	590	466	9.2	7.8	11.1
10,000-15,000	1,547	1,434	1,236	12.9	11.8	15.5
15,000-25,000	2,855	2,695	2,419	15.7	14.8	18.5
25,000-50,000	6,562	6,165	5,221	20.0	19.0	22.3
Above 50,000	21,907	21,433	20,999	27.4	26.6	32.3
Average for All Taxpayers	1,040	1,189	1,568	18.7	18.3	17.8

SOURCE: Statistics Canada, Canada Year Book, 1976-77 (1977); and Revenue Canada--Taxation, Taxation Statistics (1978).

a. Includes a 10 percent surtax on liabilities in excess of $8,000 for 1976 only.
b. Canadian sources call these "effective tax rates on total income."

Together, automatic indexing and the discretionary tax changes enacted since 1974 have significantly reduced revenues from what they otherwise would have been. Aggregate revenue has risen more rapidly than changes in the price level, though, because of the incomplete coverage by the indexing mechanism and because of real economic growth. Table B-4 describes the growth in direct tax revenues, of which individual income taxes represent the largest component, and the proportion of personal income collected in Canadian federal direct taxes.[4] Since 1974, discretionary tax policy and automatic indexing have reduced the

4. Direct revenues consist of individual and corporate income tax receipts, contributions for unemployment insurance, and contributions for public pension plans, which are comparable to the U.S. Social Security system.

share of personal income paid in direct taxes by over two percentage points.

TABLE B-3. RATES OF INFLATION IN CANADA, INDEXING ADJUSTMENTS, AND RESULTING REVENUE REDUCTIONS, 1970-1979

	Annual Change in the CPI (percent)	Indexing Adjustment[a] (percent)	Annual Federal Revenue Reduction Due to Automatic Indexing (billions of dollars)
1970	3.3	NA	NA
1971	2.9	NA	NA
1972	4.8	NA	NA
1973	7.6	NA	NA
1974	10.9	6.6	-0.4
1975	10.8	10.1	-0.8
1976	7.5	11.3	-1.0
1977	8.0	8.6	-1.0
1978	8.9	7.2	-0.9
1979	9.1	9.0	-1.2[b]

SOURCE: Statistics Canada.
Note: NA = not applicable.

a. The adjustment is calculated as the average annual change in the CPI over the 12-month period ending in September prior to the taxation year.
b. Beginning in 1979, a refundable child tax credit was also indexed to the CPI. Of the $1.2 billion reduction from indexing in 1979, about $100 million resulted from this provision.

Effect On Budgetary Policy

Indexing is currently costing the Canadian federal government about $1 billion annually in tax revenues. Additional tax reductions in the 1979 budget, intended primarily to aid consumers and stimulate investment, amounted to about another $1 billion. This combination of indexing and further discretionary tax cuts has significantly reduced potential federal revenues, so that the

TABLE B-4. CANADIAN FEDERAL DIRECT TAX REVENUES AND PERSONAL INCOME, 1970-1978

Year	Federal Direct Tax Revenues[a] (billions of dollars)	Personal Income (billions of dollars)	Federal Direct Tax Revenues as a Percent of Personal Income
1970	7.4	66.6	11.1
1971	8.3	74.1	11.2
1972	9.3	83.8	11.1
1973	10.9	97.8	11.1
1974[b]	13.5	116.9	11.5
1975	15.2	136.2	11.2
1976	18.0	155.4	11.6
1977	17.7	171.2	10.3
1978[c]	17.3	189.0	9.2

SOURCE: Statistics Canada, National Income and Expenditure Accounts.

a. In addition to personal and corporate income taxes, this category includes contributions for unemployment insurance and for public pension plans.
b. Indexing first applies to the 1974 taxation year.
c. Estimated

Canadian budget deficit has grown to record levels.[5] Before indexing, revenue increases caused by inflation facilitated the introduction of new federal programs. The large increases in the deficit, however, appear to have prompted a serious review both of outlay programs and of indexing itself. For example, a leading

5. It is worth noting that indexing has not resulted in a decline in attempts to alter the Canadian tax code, as some commentators suggested it might. The U.S. experience, though, could differ if there is more concern in this country over the size of the federal deficit.

former Canadian tax official, John R. Allan, believes that the current budgetary climate, brought on largely by indexing, has led to a more careful evaluation of proposed programs before their adoption.[6] On the other hand, in recent testimony given before the Canadian Senate Finance Committee, Deputy Minister of Finance Dr. Ian Stewart raised the possibility of "de-indexing" to reduce the size of the federal deficit.[7]

In general, the reaction of Canadian officials to indexing has been mixed. Finance ministry officials have noted that politicians have received little credit for the tax saving generated by indexing. Moreover, the indexing statute makes no provision either for temporarily suspending the indexing mechanism or for placing a cap on the size of the tax cut created by indexing. The absence of such limitations has constrained the budgetary options available to Canadian legislators. Legislators have felt unable to adjust the impact of indexing to allow more flexibility because any limitation would amount to--and could be perceived as--a tax increase. Despite these misgivings, some officials interviewed by CBO report that many of the members of Parliament responsible for enactment of indexing contend that indexing offered the only way of stemming the sharp rise in tax burdens caused by inflation. In this regard, at least one former official has spoken positively about the long-term benefits indexing might have on the size of the federal budget.[8]

Changes in Spending, Revenues, and the Canadian Federal Deficit

The rate of growth of Canadian federal spending in real terms has fallen sharply since the introduction of indexing. Although real spending grew by almost 11 percent in 1975, the growth rate

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6. Telephone conversation with John R. Allan, former Director of the Tax Analysis and Commodity Tax Division of the Canadian Department of Finance, September 1979.

7. See Testimony of Deputy Minister of Finance before the Canadian Standing Senate Committee on National Finance (May 27, 1980), pp. 30-31.

8. See comments of John R. Allan in, "The Tax Reform You May Need Most," Money, June 1978, pp. 48-51.

of Canadian federal expenditures since then has dropped significantly--to an average real increase of 2 percent. This compares with an annual growth rate of 9 percent during the years before 1974 (see Table B-5).

TABLE B-5. CANADIAN FEDERAL GOVERNMENT REVENUES AND EXPENDITURES, 1970-1979

Year	Surplus or Deficit (billions of dollars)	Total Revenues (billions of dollars)	Total Expenditures (billions of dollars)	Annual Real Growth in Revenues (percent)[a]	Annual Real Growth in Expenditures (percent)[b]
1970	0.3	15.5	15.3	3.5	9.7
1971	-0.1	17.2	17.4	8.2	10.8
1972	-0.6	19.6	20.1	8.7	10.3
1973	0.4	22.8	22.4	8.0	3.6
1974	1.1	30.0	28.9	18.8	16.1
1975	-3.8	31.7	35.5	-4.6	10.8
1976	-3.4	35.4	38.8	3.9	2.0
1977	-7.7	36.1	43.8	-5.5	4.2
1978	-11.4	37.6	49.0	-4.4	2.9
1979	-9.2	43.3	52.4	5.1	-2.1

SOURCE: Statistics Canada, National Income and Expenditure Accounts.

a. Calculated as the difference between total revenues, deflated by the Canadian Consumer Price Index, in successive years.

b. Calculated as the difference between total expenditures, deflated the Canadian Consumer Price Index, in successive years.

While the growth rate of Canadian spending has slowed considerably since 1974, the real growth rate of Canadian federal revenues has come to a practical halt from the combined effects of indexing, discretionary tax cuts, and the general slowdown in economic activity. Because spending growth has outpaced the rise in revenues, annual federal deficits have increased substantially--from a surplus of $1 billion in 1974 to a deficit of $9

billion in 1979. Opposition to these deficits, and to the size of Canadian tax burdens,[9] has brought about efforts to curb the further growth of Canadian expenditures. Thus, in 1978 Canadian federal spending declined in real terms, in sharp contrast to the growth rates recorded before indexing was adopted in 1974. Recent testimony by the Canadian Deputy Minister of Finance, Dr. Ian Stewart, suggests that a further decline in real expenditures is unlikely.[10]

Effects on Inflation and Stabilization

The macroeconomic effects of indexing the Canadian income tax have been difficult to determine. Some opponents of indexing had argued that it would generate additional inflation, but the establishment of a price control program in 1975, limiting wage increases to 8 percent in its first year and 6 percent in the following two years, precludes an analysis of the inflationary impact of indexing then. The gradual removal of controls from sectors of the Canadian economy since 1978, though, may permit a later evaluation of this claim.

With regard to the stabilization properties of the indexing, Canadian officials have expressed considerable satisfaction.[11] They credit indexing with having moderated the effects of the severe recession experienced both in the United States and Canada during 1974-1975. These officials contend that the recent bouts of inflation have shown that discretionary tax policy, while more flexible than indexing, will rarely be as timely. They did voice some concern, however, about the potential effects of the lag in the indexing mechanism (discussed in Chapter IV of this report) on stability. Because indexing corrects for the rate of inflation experienced at least 15 months earlier, revenue losses have been

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9. See, for example, "Tax Cut Vs. Deficit Cut," The Financial Post (November 4, 1978), p. 1, for an analysis of the effects of the "taxpayer revolt" on Canadian budgetary policy.

10. See testimony of Deputy Minister of Finance Dr. Ian Stewart before the Canadian Standing Senate Committee on National Finance (May 27, 1980), p. 26.

11. Telephone conversations with several officials in the Canadian Department of Finance, September 1979.

larger than called for when inflation has decelerated and, conversely, smaller than necessary when the rate of inflation has risen. Although this impact may be potentially destabilizing in the long run, the amounts of revenue currently involved are too small to affect the price level more than marginally. It is unlikely that a discretionary tax policy would produce considerably different results, since most tax changes require time to pass through the legislature.

COMPARING THE UNITED STATES AND CANADIAN TAX SYSTEMS

While the Canadian experience with indexing may be a useful basis for predicting the effects of indexing in the United States, two differences between the income tax systems of the countries should be noted--although they may be of minor consequence for this purpose.

First, personal tax and nontax receipts--for the most part, income tax revenues--comprise a somewhat larger share of total federal revenues in the United States (47 percent) than in Canada (43 percent).[12] Thus, the likely impact of indexing on total revenues may be somewhat greater in the United States than in Canada.

Second, state revenues in the United States are not as closely linked to federal revenues as are provincial revenues in Canada. Under current tax collection agreements, most of the Canadian provinces have permitted the federal government to collect income taxes on their behalf, and have, in turn, agreed to structure their income taxes in accordance with the federal income tax law. These provinces thus suffered an initial decline in revenues as a result of indexing.[13] In the United States, the likely impact of indexing on the states is harder to predict.

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12. These figures are for the 1977 taxation year. See Canadian Department of Finance, The Tax Systems of Canada and the United States (November 1978), pp. 9-10.

13. Subsequent changes in the collection agreements between the federal and provincial governments in Canada increased the share of revenues assigned to the provinces. For further details, see footnote 3 of this appendix.

Some states may benefit from indexing, because they allow taxpayers to make deductions for federal tax payments and indexing will reduce these deductions. On the other hand, if, as in Canada, indexing restricted the further growth of federal spending, the responsibility for certain social programs would probably be transferred to the states. States would then be worse off under indexing because of the additional expenditures they might have to incur.

APPENDIX C. INDEXING SYSTEMS IN OTHER COUNTRIES

At least 16 countries have indexed their tax systems in one way or another during recent years, and 15 still do so.[1] In this appendix, the basic characteristics of these systems are discussed. A summary of each country's indexing system appears in Table C-1.

General Characteristics of Indexing Systems in Other Countries

None of the countries that have indexed their income tax systems has established a full automatic adjustment for inflation. In general, only the most important provisions of the tax schedule, such as the bracket widths and personal exemptions, are adjusted by means of an indexing formula. In a few countries, these adjustments are not fully automatic. Instead, they require the intervention of government officials who supervise the indexing mechanism. Several countries also have chosen measures other than the traditional indexes of price changes with which to adjust their tax systems.

Only a handful of the countries with indexing systems automatically adjust a set number of tax provisions for inflation in the way that proponents of indexing in the United States have often suggested. Of the three countries that have opted for a full inflation adjustment of their major fixed-dollar provisions (Canada, Argentina, and Uruguay), only Canada and Argentina still have indexing systems. Australia automatically adjusts its major fixed-dollar tax provisions, but only by half the rate of increase of its consumer price index. The typical indexing system provides some latitude to the central government in determining both the size of the inflation adjustment and the scope of tax provisions to be affected. In eight of the countries with indexing systems, the amount of adjustment is determined by the country's finance minister, although one of these countries (the Netherlands) prevents the minister from holding adjustments below a certain

1. Uruguay, which had an indexing system, suspended its income tax in 1974.

TABLE C-1. KEY FEATURES OF INCOME TAX INDEXING SYSTEMS IN OTHER COUNTRIES

Country	Description of Basic System	Degree of Adjustment to Inflation	Frequency of Adjustment	Tax Provisions Adjusted Automatically	Date of Introduction
Argentina	Automatic adjustment of exemptions, deductions, and bracket widths, based on rise in the cost-of-living index during the preceding fiscal year	Full, based on prior year's change in consumer price index	Annual	Exemptions, deductions, and bracket widths	1972; revised 1973, 1976
Australia	Automatic adjustment of tax brackets, allowances for dependents, most deductions, and certain rebates for rises in the consumer price index	Partial; proportional to half the rise in the average consumer price level during the year ending the March before the start of the current tax year (July 1) over the average price level during the previous March-to-March year	Annual, if budget legislation approves	Tax brackets, certain rebates, allowances for dependents, and most deductions	1976;[a] revised 1978, 1979; suspended in 1980; reintroduced for 1981
Brazil	Discretionary adjustment of income brackets whenever the general price index or the minimum wage rises by 10% in 1 year or 15% over 3 consecutive years	Discretionary with financial authorities	Whenever general price index rises by 10% in 1 year or 15% over 3 consecutive years	Bracket widths	1961; revised 1964, 1967

(Continued)

TABLE C-1. (Continued)

Country	Description of Basic System	Degree of Adjustment to Inflation	Frequency of Adjustment	Tax Provisions Adjusted Automatically	Date of Introduction
Canada	Automatic, annual adjustment of exemptions, income brackets, and some deductions based on the increase in the consumer price index	Full, based on ratio of average of CPI during 12 months ending the prior September to the average CPI during the period one year earlier	Annual	Exemptions, bracket widths, and some deductions	1974
Chile	Exemptions and bracket widths defined in terms of a basic tax unit to be determined by financial authorities	Discretionary with authorities; depends on definition of basic tax unit	Annual	Exemptions and bracket widths	1954; revised 1975
Denmark	Personal exemptions and income tax brackets adjusted automatically according to change in index of hourly earnings over the previous year; discretionary fixing of tax rates at a percentage or multiple of a basic legislated schedule	Full, automatic adjustment of personal exemptions and bracket widths; discretionary adjustment of basic tax rates	Annual	Exemptions and bracket widths	1969; revised 1974
France	Government must introduce proposals for changing tax rates and brackets whenever	Discretionary	Whenever the rise in prices during the previous year	None (proposals must have provisions for changing	1968

(Continued)

TABLE C-1. (Continued)

Country	Description of Basic System	Degree of Adjustment to Inflation	Frequency of Adjustment	Tax Provisions Adjusted Automatically	Date of Introduction
France (continued)	the annual inflation rate exceeds 5 percent		exceeds 5 percent	bracket widths and tax rates)	
Iceland	Discretionary adjustment of exemptions, income tax brackets, and some deductions in accordance with the rise in per capita income	Discretionary	Annual	Exemptions, bracket widths, some deductions	1966
Israel	Automatic adjustment of tax credits and deductions; discretionary adjustment of income tax brackets	Discretionary with finance minister for brackets only; fully automatic for credits and deductions	Annual	Credits, deductions	1975[b]
Luxembourg	Government must prepare changes in tax system if average price level during first 6 months of year exceeds the average price level during the comparable period one year earlier by 5 percent	Discretionary	Whenever the average price level during the first six months of a year exceeds the level for the comparable period in the previous year by 5 percent	Discretionary	1967
Netherlands	Income tax brackets, dependency allowances, and age and disability deductions adjusted auto-	Discretionary between 80 percent and 100 percent of scheduled automatic increase	Annual	Bracket widths, dependency allowances, and deductions	1971, effective 1972

(Continued)

TABLE C-1. (Continued)

Country	Description of Basic System	Degree of Adjustment to Inflation	Frequency of Adjustment	Tax Provisions Adjusted Automatically	Date of Introduction
Netherlands (continued)	matically for changes in previous period's cost-of-living index. Finance minister may reduce this adjustment by up to 20 percent			for age and disability	
Peru	Annual adjustment of exemptions by increase in minimum wage, which is itself indexed by the Peruvian CPI	Full	Annual	Personal exemptions and deductions	1972; effective 1973
Sweden	Annual adjustment of tax brackets by the rise in Swedish CPI between August of the previous year and August one year earlier	Full	Annual	Bracket widths	1977; effective 1979
Switzerland	Different rules in different cantons; most fix effective rates as a multiple or percentage of statutory tax rates	Varies	Varies	Varies	Varies; most cantons had indexing by 1975
United Kingdom	Annual adjustment of exemptions and deductions by the previous year's	Full	Annual	Exemptions and deductions	1977

(Continued)

TABLE C-1. (Continued)

Country	Description of Basic System	Degree of Adjustment to Inflation	Frequency of Adjustment	Tax Provisions Adjusted Automatically	Date of Introduction
United Kingdom (continued)	increase in the British retail price index				

SOURCES: Amalio H. Petrei, "Inflation Adjustment Schemes Under the Personal Income Tax," International Monetary Fund Staff Papers, vol. 22 (July 1975), pp. 539-564; Vito Tanzi, "Inflation and the Indexation of Personal Income Taxes in Theory and in Practice," Banca Nazionale del Lavoro Quarterly Review, no. 118 (September 1976), pp. 239-271; Tanzi, Inflation and the Personal Income Tax: An International Perspective (Cambridge University Press, 1980), pp. 23-40; and conversations with staff at the International Monetary Fund, Washington, D.C.

a. Under original indexing plan, full adjustment was made for changes in the CPI.
b. Date of implementation of new income tax. Previous tax law was also indexed.

percentage of the rise in the inflation index. Seven of the 16 countries (Brazil, Chile, Denmark, Israel, Peru, Sweden, and the United Kingdom) limit automatic inflation adjustments to only one or two types of fixed-dollar tax provisions--exemptions and deductions in the case of Peru, for example, and bracket widths in the case of Brazil. Two countries, France and Luxembourg, simply require that their governments introduce proposals for changing the tax structure whenever the designated inflation index rises by more than a certain amount (currently 5 percent). Brazil has a similar requirement specifically for adjusting its tax rate brackets.

While most countries have stopped short of developing a fully-indexed income tax, many have developed alternative procedures for allowing their tax systems to adjust when prices increase. Some countries, as noted earlier, require that new tax schedules be proposed whenever the inflation rate exceeds a minimum level. Other countries, such as Denmark, allow the government to vary tax rates by announcing each year the percentage at which official tax schedules will apply--for example, that the actual tax rates for the year will be 95 percent of the basic statutory rate. This allows tax rates for all taxpayers to be adjusted by the same percentage, thereby maintaining the relative values of legislative tax rates for taxpayers at different income levels. In addition to these two methods, several countries with indexing systems have resorted to ad hoc legislated changes when inflation grows so rapidly as to overwhelm the effects of indexing on total tax liabilities for their citizens. Argentina, for example, which until 1976 indexed only its exemptions and deductions, used ad hoc changes to adjust the tax brackets in its income tax until bracket width indexing was introduced. Some countries have used the discretion allowed by their indexing laws to make more fundamental changes in their tax systems. Brazil, for example, has used indexing to increase the progressivity of its income tax by expanding the bracket widths for low-income taxpayers much more than for taxpayers with higher incomes.

A final point worth considering is that not all countries that have indexed their tax systems have done so using a conventional measure of inflation. In Denmark, indexing is based on the index for average hourly earnings of industrial workers. In Iceland, the finance ministry has considerable discretion in determining the rate of adjustment, and in many years the adjustment has exceeded the rise in the cost of living. Both the Danish and the Icelandic approaches have allowed adjustments not

only for inflation but also for real growth, with the Danish system providing tax relief geared most closely to middle-income taxpayers.[2] In Chile, the minimum wage (which itself was usually adjusted for inflation) was used before 1975 as the basis for indexing the rate brackets of that country's global complementary tax, which applies to total income of Chilean taxpayers. In Brazil, the indexing statute allows the finance minister to use either the inflation index or the rate of increase in the minimum wage as the basis for determining changes in brackets.

2. See Vito Tanzi, Inflation and the Personal Income Tax.

APPENDIX D. THE EFFECT OF INFLATION ON THE INDIVIDUAL INCOME TAX BASE

Chapter II of this paper described how the interaction of inflation and the rate structure of the individual income tax causes individual tax liabilities to rise. A second way in which inflation affects the individual income tax is by increasing the nominal value of certain components of the tax base--in particular, the value of capital assets and interest income to which the tax is applied. Since the tax system does not distinguish between inflation and real gain as sources of growth of the income tax base, inflation causes the overall tax rate on a fixed real tax base to increase. The rise in tax rates may be responsible, in turn, for shifts in the allocation of capital among different sectors of the economy in ways that may not be economically efficient. Many analysts, for example, believe that inflation, coupled with the presence of many special tax subsidies for homeownership, has contributed to the current movement of capital assets from corporate stock into housing.

There is serious disagreement as to what remedies, if any, should be used to rectify the situation. Indexing the adjusted basis of an asset, for example, has often been suggested as an answer to the problems involving capital gains. However, some experts contend that this change would create major problems because of the opportunities to make a profit by borrowing money to finance assets on which capital gains are expected and deducting the full value of interest payments. To adjust for this effect, it might be necessary to reduce interest deductions or to tax part of the debt as income to the borrower, to take into account the fact that inflation allows debt to be repaid with cheaper dollars. Because no consensus exists on appropriate remedies in this area, the Congress may want to move slowly in considering possible tax changes that would involve tax base indexing. A brief description of how inflation affects the tax treatment of income from long-held assets and liabilities may help to illustrate some of the issues that are involved. Two effects with special importance for individuals are analyzed here: the effect of inflation on the taxation of capital gains, and the

effect of inflation on the tax treatment of interest income and expense.[1]

The Effect of Inflation on the Taxation of Capital Gains

Inflation tends to increase the tax on capital gains under the individual income tax, since the tax applies to all realized gains, whether real or illusory. The taxable gain is calculated as the difference between the sale price and the adjusted basis of the asset in nominal terms, without excluding increases that arise solely from inflation.[2] This definition of capital gains makes it possible for taxpayers to be taxed on nominal gains that, in fact, represent real losses, even though only 40 percent of nominal long-term gains is subject to tax.[3] The following example may help to illustrate this point.

Consider a taxpayer in the 49 percent marginal tax bracket ($48,600 to $60,000 in taxable income for joint filers) who sells for $10,000 after commissions some long-held stock with an adjusted basis of $5,000. In nominal terms, the taxpayer has realized a capital gain of 100 percent. Since the taxpayer's marginal rate is 49 percent and only 40 percent of the gain is subject to tax, the tax on the sale will be 19.6 percent of the

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1. For a discussion of the effects of inflation on depreciation, inventories, and other items of importance to business firms, see Henry J. Aaron, ed., Inflation and the Income Tax (The Brookings Institution, 1976), chapters 2, 3, 4, and 7; and Martin Feldstein, "Adjusting Depreciation in an Inflationary Economy: Indexing Versus Acceleration," National Bureau of Economic Research Working Paper No. 395 (October 1979).

2. The adjusted basis of an asset is its original purchase price minus adjustments for depreciation and certain other tax allowances. For a more detailed list of adjustments that are made in computing the adjusted basis of an asset, see Internal Revenue Code, sec. 1016.

3. Under the Revenue Act of 1978, 40 percent of realized net long-term capital gains is taxed. Before 1978, 50 percent of all realized long-term capital gains was subject to tax.

gain ($980), leaving the taxpayer with $4,020 in after-tax profit.[4]

If inflation is responsible for $4,000, or 80 percent, of the nominal gain, however, the taxpayer's real after-tax return will be only $20, since the real gain is only $1,000 and $980 of that is absorbed by federal income taxes. If the inflation factor is larger than 80 percent--a real possibility in the current period of rapid inflation and slow economic growth--the taxpayer's net gain in real terms after taxes could be negative.

In 1973, according to one study, the net effect of taxing nominal capital gains was to turn an apparent gain of $4.6 billion on stock market transactions by individuals into a net loss of $910 million, in real terms, after taxes.[5] In recent years, this net loss may have increased, because inflation rates continue to be higher than those experienced before the 1970s. The consequence of these effects may be a lower rate of saving, although most studies have not shown saving to be very sensitive to rates of return on investment.[6] Such a reduction, in turn, may have adverse effects on the rate of economic growth if it lowers the

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4. Since the tax = .49 x .40 x $5,000 or $980, after-tax profit = $5,000 - $980 or $4,020.

5. See Martin J. Feldstein and Joel F. Slemrod, "Inflation and the Excess Taxation of Capital Gains on Corporate Stock," National Tax Journal, vol. 31 (June 1978), pp. 107-118.

6. See, for example, Edward F. Denison, "A Note on Private Saving," Review of Economics and Statistics, vol. 40 (August 1958), pp. 261-268. Michael Boskin, in "Taxation, Saving, and the Rate of Interest," Journal of Political Economy, vol. 86 (April 1978), pp. S3-S28, estimates that a 1 percent decline in the real return to saving will reduce the saving rate by about 0.4 percent--an elasticity of 0.4. A number of economists, though, have criticized Boskin's work. See, for example, the discussion in Congressional Budget Office, An Analysis of the Roth-Kemp Tax Cut Proposal, Background Paper (October 1978), p. 18.

rate of investment in assets such as business plant and equipment.[7]

In addition to lowering after-tax rates of return on capital assets, inflation can lead to inequities in tax treatment between different groups of taxpayers with capital gains income. For example, taxpayers with the same real gains can have widely differing amounts of nominal gains, depending upon the amount of inflation experienced between dates of purchase and sale. Thus, taxpayers with the same real capital gains can have very different tax liabilities. For similar reasons, inflation may create inequities between taxpayers at different income levels if one group of taxpayers is better able than others to pick assets whose prices keep pace with inflation. Recent evidence suggests that wealthier taxpayers have been more successful in this regard.[8]

As a whole, however, affluent households are the ones most affected by the impact of inflation on the taxation of capital gains, since upper-income taxpayers receive a larger part of their incomes from capital gains than is true for other individuals.

The Effect of Inflation on the Tax Liabilities of Debtors and Creditors

A second way that inflation affects the tax base is through its effects on debtors and creditors. Unlike the impact of infla-

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7. Only about 29 percent of capital gains in 1973 were on corporate stock and other assets related closely to reinvestment in business plant and equipment. Many of the remaining transactions involved real estate and other areas largely unrelated to growth-producing business investment.

8. Feldstein and Slemrod, for example, report that in 1973 taxpayers with adjusted gross incomes below $20,000 suffered aggregate real losses on capital transactions of about $1.6 billion and paid about $19 million in income taxes, for a net tax rate on real gains of over 100 percent. By contrast, taxpayers with adjusted gross incomes over $50,000 experienced aggregate real gains on capital assets of over $2 billion, for which they paid federal income taxes of about $1 billion (an effective rate of 48 percent). See Feldstein and Slemrod, "Inflation and the Excess Taxation of Capital Gains on Corporate Stock."

tion on capital gains, which results in a net transfer of income from the private sector to the Treasury, the primary result of this effect is a redistribution of liabilities from one group of taxpayers to another.

When inflation occurs the value of a lender's capital may decrease, because borrowers can repay their loans in cheaper dollars. To offset this loss of capital, lenders may demand higher nominal interest rates. Thus, during periods of anticipated inflation, nominal interest rates generally rise, with a portion of nominal interest payments serving to make up for the erosion of loan principal.[9]

In the absence of taxes, interest rates can, at least in theory, adjust so that borrowers and lenders are left in the same position as they were before inflation. The same would be true under a proportional (flat-rate) tax system, since borrowers and lenders would face the same marginal tax rates. Under the current tax system, however, such adjustment is generally not possible, because taxpayers with different taxable incomes face different marginal tax rates. Those with higher marginal rates end up paying lower real interest or receiving lower real interest income after taxes. Thus, even if future rates of inflation are correctly anticipated by all taxpayers, one party or the other is likely to be penalized.

Where interest rates are subject to statutory ceilings, the combined effect of taxes and inflation clearly penalizes lenders and helps borrowers. This outcome can have important economic consequences. Homeowners, most of whom hold mortgages and thus are net debtors, benefit greatly from the full deductibility of mortgage interest and the variety of federal lending rules and practices that exert a downward influence on mortgage interest rates.[10] Taxpayers with large savings deposits, by comparison,

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9. At current interest rates, for example, over half of all interest payments may serve to replace the depreciated value of lenders' capital.

10. These, of course, are not the only benefits accorded homeowners under the tax law. Homeowners, for example, can also buy and sell homes with no tax liability if the adjusted basis of their new residence is at least as much as that of

are hurt during inflationary periods because income from interest is fully taxable while the Federal Reserve Board's Regulation Q currently limits the nominal interest rates that can be paid on savings accounts.[11] In general, the presence of barriers such as these makes it hard to eliminate the inequities created by the interaction of inflation and taxes on interest incomes.[12]

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their previous one and the new home is purchased within 18 months of the sale of the old.

11. These ceilings will be phased out by 1986, however, under the recently-passed Depository Institutions Deregulation and Monetary Control Act of 1980 (P.L. 96-221).

12. For a further discussion of the effects of inflation on the taxation of interest, see Vito Tanzi, "Inflation and the Incidence of Income Taxes on Interest Income: Some Results for the United States, 1972-74," International Monetary Fund Staff Papers, vol. 24 (July 1977), pp. 500-513.

APPENDIX E. INDEXING BILLS IN THE 96TH CONGRESS

Many indexing bills have been introduced in the 96th Congress. This appendix provides a summary of their contents, based on the descriptions in the Congressional bill digest, indicating how they address four key design issues discussed in Chapter IV:

- Which index to use in measuring inflation;
- Whether to use one or more indexes for adjustment;
- How many tax provisions to adjust; and
- Whether to limit adjustments.

Table E-1 lists the bill numbers and principal sponsors of all legislation introduced as of June 1980.

Which Index to Use

Almost every bill uses the Consumer Price Index as the inflation measure for indexing the tax code. The one exception is H.R. 7135, sponsored by Representative Aspin, which would develop a separate index for adjusting the tax code.

How Many Indexes

Most of the proposals would use only a single nationwide index for adjusting the tax code. Under two bills, however--H.R. 3455, introduced by Representative Young, and S. 698, introduced by Senator Stevens--tax adjustments would take into account local inflationary pressures as well.

Which Provisions to Adjust

Current proposals differ significantly in the choice of provisions to index, although some provisions would be indexed by most. Over half the bills would index the tax bracket widths, the zero bracket amount, and the personal exemption. Of these proposals, H.R. 365 (Gradison) and S. 12 (Dole) have the most co-sponsors. Some, however, would index only the bracket widths

(for example, H.R. 1606, and H.R. 6058). Some would accompany indexing with additional rate cuts (for example, H.R. 1598, and S. 33). Some would adjust still other provisions, including items that are more related to tax-base indexing (for example, deductions for depreciation).

TABLE E-1. INDEXING PROPOSALS IN THE 96TH CONGRESS

Legislation	Principal Sponsor
H.R. 172	Brown
205	Collins
213	P. Crane
365	Gradison
443	Hansen
517	Lagomarsino
618	O'Brien
686	Robinson
1000	Dornan
1204	Duncan
1598	Kemp
1606	Rousselot
1956	Hammerschmidt
2429	LaFalce
3455	Young
4366	Beard
5050	Conable
6058	McDade
6507	Harkin
6517	Patterson
6810	Fary
7135	Aspin
S. 12	Dole
33	Roth
211	Hart
698	Stevens
1974	Durenberger
2078	Heflin
2591	Mathias

Limitations

Two bills would provide only partial indexing adjustments. S. 2591, introduced by Senator Mathias, would provide adjustments only for taxpayers whose incomes rise less rapidly than the CPI, while H.R. 6810, introduced by Representative Fary, would allow adjustments only when the CPI rose by more than 10 percent and then only for individual taxpayers with incomes below specified levels.

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ERRATA

Indexing the Individual Income Tax for Inflation

The report should be changed to note that the Personal Consumption Expenditure (PCE) deflator includes the effects of imports on consumer prices. Thus,

Page xiv Summary, 2nd paragraph, 4th sentence (lines 10 and 11) should begin:

"These two measures differ from the CPI . . .."

Page 31 second paragraph, lines 5-6:

The sentence beginning "Unlike the CPI. . ." should be deleted.

Page 32 first paragraph:

Line 3: The sentence beginning "However, . . ." should read "However, it uses a current market basket to define consumption."

Line 9: The following sentence should be added at the end of the paragraph:

"In addition, the NI deflator, like the GNP deflator, is not directly affected by price changes for imported goods."