

Research Department
Federal Reserve
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April 30, 1982

Indexation and Bracket Creep

Section 104 of the Economic Recovery Tax Act of 1981, with its description of income-tax indexation, is one of the more crucial sections of that key piece of legislation. However, that section does not become effective until 1985, when settlement for 1984 tax liabilities must be made. The drafters of the legislation chose that date because 1984 would be the first year under the new tax structure—that is, the first year following the completion of the 1981-83 income-tax reductions.

The Federal Government in recent years has come to use indexation for a number of programs, such as social security and other income-maintenance programs, as well as Federal wages and retirement benefits. Indeed, the government now adjusts upwards of two-thirds of all Federal payments to individuals for increases in the cost of living. Until the 1981 legislation, however, the Federal Government did nothing to eliminate the effects of "bracket creep" on income-tax payments.

The states have led the way in this area; for example, California voters this June will have the chance to make a measure of this type (now temporary) a permanent part of the state's tax code. Yet in view of the serious impact of indexation on tax revenues, and thereby on the Federal deficit, many Congressional leaders are now questioning the wisdom of allowing the indexation procedure to take effect in 1985, as scheduled.

Bracket creep

In drawing up the income-tax laws, Congress has defined the limits of individual income-tax brackets in terms of current (nominal) dollars. Moreover, it has determined that the income-tax structure should be progressive, with a rise in marginal tax applicable to individual income brackets as taxable income falls into higher brackets. Considerations of equity, based upon the ability to pay, have

accounted for this progressive nature of the tax structure.

In a period of inflation, such as the 1970's, wages and income follow prices upward, but with a certain time lag. With the tax structure specified in terms of nominal dollars, inflation-boosted incomes push the taxpayer into higher brackets, with progressively higher marginal-bracket rates. The personal exemption, also specified in nominal dollars, at the same time becomes progressively smaller. The taxpayer thus pays a higher average tax, because his or her income becomes exposed to higher bracket rates because of inflation.

Bracket creep, by imposing a steeply-progressive tax structure on individuals, also hands the Treasury a windfall gain. According to Congressional Budget Office calculations, bracket creep alone without legislation could have led to a \$115 billion cumulative increase in income-tax payments between 1979 and 1985. Thus, the combination of sustained inflation and a progressive tax structure can result in a sharp increase in tax liabilities without legislative action.

Adjusting for bracket creep

To adjust for this impact of inflation upon personal income-tax revenues, Congress adjusted the bracket ranges to which the marginal tax rates apply. However, it did not change the marginal tax rates themselves. In the 1983 tax schedule, for example, a joint return with taxable income of \$23,000 would fall into a bracket with limits of \$20,200 to \$24,600 and a marginal tax rate of 25 percent would be applied to the excess over the lower limit. A five percent inflation rate would then dictate an increase in the bracket limits to \$21,210 to \$25,830, still with a 25 percent marginal rate. (The preceding year's inflation rate would be used for indexation because taxes would be settled on the basis of the preceding year's income.) The same cost-of-living adjustment (COLA) would be applied to the personal exemption.

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Under the new legislation, the Secretary of the Treasury describes the adjustment tables (inflation factors) to be applied to income brackets and the personal exemption no later than December 15 of 1984 and each year following. The annual cost adjustment would be "the percentage (if any) by which the consumer price index for the preceding calendar year exceeds the price index for the calendar year 1983" —the first full year of implementation of the tax structure resulting from the 1981 tax legislation. (However, the law defines the calendar year in terms of the Federal fiscal year ending September 30.) The adjustment for inflation would be calculated each year from the 1983 base figure (1983=100). Incidentally, the Bureau of Labor Statistics, in an attempt to improve the statistical reliability of the price yardstick for this indexation purpose, has announced plans to revise the CPI in order to reduce the importance of the volatile home-purchase and mortgage-interest components of the index.

According to projections published by the Office of Management and Budget, the consumer price index would increase 5.2 percent between 1983 and 1984. This 5.2-percent factor thus would be applied to the top and bottom limits of each income bracket for 1984, and also to the personal exemption of \$1,000. In addition, the increase would apply to the "basic" tax—the cumulative tax liabilities due on taxable income starting from the lowest income bracket, as described below.

Example of adjustment

For the lowest taxable bracket, \$3,400 to \$5,500, a tax rate of 11 percent on the excess over the \$3,400 figure would yield a tax of \$231 for a taxpayer at the top of the bracket. For the next bracket, \$5,500 to \$7,600, the tax would be \$231 plus 12 percent of the excess over \$5,500. The increment of \$252 for a taxpayer at the top of that bracket would be added to \$231 to serve as the baseline tax liability for the next income brackets. With the application of the index to the bracket ranges, the basic tax would increase as the

(unchanged) marginal tax rate became applied to the inflation-adjusted brackets. With 5.2-percent inflation, the lowest taxable bracket would be between \$3,580 and \$5,790. The difference between the two ends of the bracket, when multiplied by 11 percent, would be \$243 rather than the original \$231 before adjustment.

Consider the case of a family of four (four personal exemptions) with taxable income of \$28,000 in 1984. Without indexation, that family would fall into the bracket between \$24,600 and \$29,900, and would pay a marginal tax rate of 25 percent. Its computed tax liability, therefore, would amount to \$4,315 (see table).

With indexation, the family's taxable income would decline because of the increase in personal exemptions by the inflation factor. Specifically, the sum of the personal exemptions would increase from \$4,000 to \$4,208, leading to a reduction in taxable income to \$27,792. The top and bottom of the bracket for that family would also rise by 5.2 percent, so that the adjusted brackets would cover from \$25,880 to \$31,460, again with a marginal tax rate of 25 percent. The "basic" tax meanwhile would increase from \$3,465 to \$3,643, rising along with the changes in the brackets. Thus, the total tax liability would be \$4,121, representing a \$194 reduction due to indexation.

The reduced tax liability would not be considered a tax cut, but rather would represent tax increases that did not happen because of indexation. The total tax would be lower because a smaller portion of taxable income under indexation would be exposed to the marginal tax rate, reflecting the increase in the bottom limit of the bracket. And in some cases, of course, the taxpayer would drop back into a lower bracket with a lower marginal rate because of the indexation procedure.

Future for indexation

The indexation approach recently has come under attack because of its contribution to the

massive Federal budget deficits projected for the next several years. According to the Congressional Budget Office, the cumulative deficit for the 1983-87 period could exceed \$1 trillion under current tax and spending legislation. Some Congressional leaders, therefore, have suggested eliminating the indexation provision—which would increase revenues by \$12 billion in fiscal year 1985 and \$51 billion in 1987 on the basis of CBO inflation assumptions. Supporters of indexation, however, argue that bracket creep would reoccur if indexation procedures were

not put into place following the final stage of the 1981-83 tax cuts.

The importance of indexation cannot be overestimated in a period of high inflation. After the severe inflation of the 1970's, the average tax paid has risen to a degree not foreseen by the drafters of the original tax legislation. In effect, inflation set the tax rate during that period, and not at all to the advantage of the average taxpayer.

Herbert Runyon

EXAMPLE OF INDEXATION

Family of four
 Taxable income of \$28,500
 Inflation rate of 5.2% (1983-84)

Taxes not indexed	Taxes indexed
Income bracket: \$24,600 to \$29,900	Income bracket: \$25,880 to \$31,460
Tax:	Tax:
\$28,000	\$27,792*
- 24,600	- 25,880
3,400	1,912
× .25	× .25
850	478
+ 3,465	+ 3,643
4,315	4,121

*Taxable income adjusted for indexation of personal exemptions

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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT
(Dollar amounts in millions)

Selected Assets and Liabilities	Amount Outstanding 4/14/82	Change from 4/7/82	Change from year ago	
			Dollar	Percent
Large Commercial Banks				
Loans (gross, adjusted) and investments*	158,151	124	11,063	7.5
Loans (gross, adjusted) — total #	137,060	108	12,314	9.9
Commercial and industrial	42,587	- 259	5,939	16.2
Real estate	56,659	85	4,859	9.4
Loans to individuals	23,322	61	506	2.2
Securities loans	2,026	34	681	50.6
U.S. Treasury securities*	6,332	53	- 287	- 4.3
Other securities*	14,759	- 37	- 943	- 6.0
Demand deposits — total#	40,999	- 503	- 4,749	- 10.4
Demand deposits — adjusted	28,379	- 654	- 3,278	- 10.4
Savings deposits — total	31,672	- 152	160	0.5
Time deposits — total#	90,285	265	14,785	19.6
Individuals, part. & corp.	80,850	57	14,133	21.2
(Large negotiable CD's)	33,188	88	4,302	14.9
Weekly Averages of Daily Figures	Week ended 4/14/82	Week ended 4/7/82	Comparable year-ago period	
Member Bank Reserve Position				
Excess Reserves (+)/Deficiency (-)	81	40		57
Borrowings	31	95		39
Net free reserves (+)/Net borrowed(-)	50	- 56		18

* Excludes trading account securities.

Includes items not shown separately.

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