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REVENUE RESOURCES AND ECONOMIC COMMISSION

ON

INFLATION AND THE VIRGINIA INCOME TAX

TO

THE GOVERNOR

AND

THE GENERAL ASSEMBLY OF VIRGINIA

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Executive Summary

High rates of inflation are causing major changes in the Virginia personal income tax. There has been no legislated tax increase since 1972. But, inflation, by eroding the real value of exemptions and deductions and lowering real bracket boundaries, has caused an increase in effective tax rates. Inflation thus results in automatic, unlegislated tax increases.

Inflation also distorts income from capital gains and business enterprise. Capital gains are overstated because the original price of an asset is not adjusted to its value in current dollars. Depreciation based on historical cost understates replacement cost. When costs are understated, income is exaggerated, and taxes are higher.

"Indexation" is the term for a procedure used to neutralize the effect of inflation on an income tax structure. Six states and Canada now have some form of indexation and several more states are considering it.

This paper covers the following topics on indexation:

1. How indexation distorts the personal income tax structure.
2. The mechanics of indexation of the personal income tax.
3. The effect of indexation of the personal tax on tax burdens by income class.
4. How inflation reduces the progressivity of the personal income tax.
5. The revenue impact of indexing the personal income tax.
6. How inflation distorts the taxation of capital gains and business income.
7. A description of indexation in other states and Canada.
8. Pros and cons of indexation.

The major findings of the paper are summarized below:

. Indexing will not prevent dollar taxes from rising with inflation; it will merely remove the increase in effective tax rates due solely to inflationary pressures on income.

. Indexing lowers tax liabilities for all income classes but has the greatest relative impact for lower income classes.

. The progressivity of the Virginia personal income tax has been greatly reduced because of inflation. Indexation would eliminate future reduction due to this cause.

. Indexation would slow the growth in state personal income tax revenues. With indexation, growth would exceed the rate of inflation only if real personal income grew. Indexation would not keep state income tax revenue from growing with inflation, but from growing much faster than the price level as it currently does. Indexation would not remove the progressivity of the income tax; as real personal income increased, an indexed income tax system would take a larger and larger share of that income.

. If indexing were instituted beginning in the next fiscal year, the cost in terms of foregone revenue would be large because of present and forecast high rates of inflation. Crude estimates of the reduction are $46.8-106.2 million in 1980-81 and $91.8-198.7 million in 1981-82.

. Although it is easy to demonstrate how indexation would correct distortions in the taxation of capital gains and business income, the necessary information to compute the revenue impact is not available.

. The major arguments for indexation are: (1) it eliminates unlegislated tax increases due to inflation; (2) it promotes tax equity by removing

inflation as a factor in reducing progressivity; and (3) it serves as a brake on government expansion by causing a slowdown in the growth of revenues

. The major arguments against indexation are: (1) "we can't afford it;" (2) indexation would be expensive and complicated to implement; (3) the rapid growth of government costs requires the revenue stimulus provided by an unindexed system; and (4) the consumer price index (the most likely index that would be used to measure price changes) overstates inflation. Each of these arguments is rebutted.

RECOMMENDATIONS

Based on this study, the Revenue Resources and Economic Commission makes the following recommendations:

I. THE VIRGINIA INCOME TAX STRUCTURE SHOULD BE INDEXED IN ORDER TO ELIMINATE THE DETRIMENTAL EFFECTS OF INFLATION.

II. FULL INDEXATION, THAT IS, INDEXATION APPLIED TO MINIMUM AND MAXIMUM STANDARD DEDUCTIONS, EXEMPTIONS, AND TAX RATE BRACKETS, SHOULD BE INSTITUTED.

III. THE INDEX USED SHOULD BE THE AVERAGE ANNUAL CHANGE IN THE U.S. CONSUMER PRICE INDEX FOR THE TWELVE MONTHS ENDING IN MAY OF THE YEAR PRECEDING THE NEW TAX YEAR. THIS LAG WOULD FACILITATE ADMINISTRATION, ALLOWING TIME FOR PRINTING AND DISTRIBUTION OF WITHHOLDING SCHEDULES AND TAX FORMS.

INFLATION AND THE VIRGINIA INCOME TAX

Introduction

Since 1967 the United States has experienced persistent and often severe inflation; the consumer price index has more than doubled over the past twelve years. Among the many problems stemming from inflation is the detrimental effect it has on a progressive income tax. The severity of inflation's impact depends on the rate of inflation, the degree of progressivity of the income tax, and the proportion that income taxes constitute of state revenues. As noted, inflation has been high. At the same time, Virginia ranks midway among states in its degree of progressivity and high among states in the proportion of state revenues raised by the personal income tax.[1/] Thus inflation would be expected to have considerable impact on the Virginia taxpayer and an examination of the evidence shows that it has. Furthermore, if current widespread expectations about the tenacity of continued high inflation are correct, the Virginia personal income tax will become increasingly distorted unless it is modified to automatically adjust for inflation.

Inflation has already eroded the progressivity of the tax since 1972 (the last year in which major changes were made in the tax). This means that Virginia taxpayers have experienced increased real income tax rates without legislative action. A measure is available, however, which

1/ Advisory Commission on Intergovernmental Relations, The Inflation Tax: The Case for Indexing and State Income Taxes (Advance Copy) (Washington, D.C.: Advisory Commission on Intergovernmental Relations, October 1, 1979), p. 40.

would prevent these unlegislated tax increases while at the same time insuring a flow of revenue to the state that allows it to keep up with inflation. That measure is indexation of the income tax, and it is currently being used in six states and in Canada. The premise behind indexing is that, while it is acceptable to allow government to automatically keep up with inflation, it is not acceptable for government to increase effective tax rates without direct legislative action. This paper examines the impact of inflation on income tax burdens in Virginia and presents an alternative to the present system in the form of indexation.

Inflation acts in two basic ways to alter tax burdens. First, inflation interacts with the progressive personal income tax structure so as to increase real tax burdens as dollar incomes rise. When most Virginia tax provisions were enacted, inflation was not a major problem, and exemptions, standard deductions, bracket boundaries, et cetera, were specified in nominal dollar terms. Inflation has eroded the real (i.e., adjusted for inflation) value of exemptions and deductions and has lowered the real bracket boundaries, effectively increasing tax liability. Inflation thus results in "automatic" tax increases.

Second, inflation distorts income from capital gains and business enterprise. When a capital asset is sold, taxes must be paid on the nominal increase in value: the difference between the purchase price and the sale price. The difficulty here is that if the original purchase price is adjusted for inflation to reflect its value in current dollars, the "gain" will diminish and may disappear entirely. It is possible that an individual will be forced to pay income tax on a nominal capital

gain that is in fact a real capital loss. In a similar manner, business depreciation charges are based on the purchase price of the asset, not the price in current dollars. This tends to understate the real value of depreciation allowances, exaggerating taxable business profits.

These two inflation effects and possible remedies for them will be discussed in the following sections of this paper.

Indexing the Personal Income Tax

Effects of Inflation on Income Tax Burdens

Inflation affects personal income tax liability by (1) reducing the real value of exemptions and standard deduction limits, and (2) shifting inflated income to higher tax brackets. This section will examine each of these effects separately using slight variations of the actual Virginia tax structure shown in Table I.

The first effect has the heaviest impact on low income persons. As dollar income increases commensurate with inflation, exemptions and deductions expressed in nominal terms constitute a smaller part of total income; thus the portion of income that is taxable increases. Low income families are most heavily affected because, for them, these deductions constitute a larger portion of total income.

In order to examine this effect alone, assume for the moment that Virginia has a constant tax rate of two percent on all taxable income, but that the tax structure is otherwise the same as in Table I.

Table II contains examples of the effects of inflation on tax rates for two hypothetical couples with different incomes. In both cases the real income of a married couple filing jointly stays constant over three years; dollar income grows at exactly the rate of inflation. Couple A,

TABLE I

VIRGINIA PERSONAL INCOME TAX STRUCTURE

Exemptions:	$600 per person (taxpayer and dependents) plus $1,000 for persons 65 or over and $600 for blind persons	
Deductions:		
Single or married, joint	15 percent of federal adjusted gross income or $1,300, whichever is greater. Maximum: $2,000.	
Married, separate	15 percent of federal adjusted gross income or $650, whichever is greater. Maximum: $1,000.	
Tax rates:	Net Taxable Income	Rate
	$ 0 - $ 3,000	2%
	$ 3,001 - $ 5,000	3%
	$ 5,001 - $12,000	5%
	$12,000 and over	5.75%

the couple with the lower income, uses the minimum standard deduction of $1,300 in all three years, while for Couplé B, the 15 percent of adjusted gross income standard deduction is applicable. For Couple A the effective tax rate has grown .09 percentage points in year two and an additional .08 percentage points in year three. For Couple B there is a .02 percentage point increase in year two and again in year three. The effective tax rate increases in both cases, but more significantly as income is lower. Inflation coupled with the fixed exemptions and minimum standard deduction has increased real tax rates with no increase in real income. Taxes have increased at a faster rate than inflation, and more than in proportion to income.

TABLE II

EXEMPTION/DEDUCTION EFFECT OF INFLATION ON INCOME TAX LIABILITY, MARRIED COUPLE FILING JOINTLY, 10% INFLATION

Couple A: Real Income = $5,000 (in Year One dollars)

	Year One	Year Two	Year Three
Adjusted gross income (constant real income)	$5,000	$5,500	$ 6,050
Exemption (2 x $600)	1,200	1,200	1,200
Deduction (minimum)	1,300	1,300	1,300
Taxable income	2,500	3,000	3,550
	x 2%	x 2%	x 2%
Tax	$ 50	$ 60	$ 71
Effective tax rate[a/]	1.00%	1.09%	1.17%
Percentage point increase in tax rate between years		.09%	.08%

Couple B: Real Income = $10,000 (in Year One dollars)

Adjusted gross income (constant real income)	$10,000	$11,000	$12,100
Exemption (2 x $600)	1,200	1,200	1,200
Deduction (15% of adjusted gross income)	1,500	1,650	1,815
Taxable income	7,300	8,150	9,085
	X 2%	x 2%	x 2%
Tax	$ 146	$ 163	$181.70
Effective tax rate[a/]	1.46%	1.48%	1.50%
Percentage point increase in tax rate between years		.02%	.02%

a/ Effective tax rate = tax ÷ adjusted gross income. An increase in the effective tax rate shows that the percentage increase in taxes is greater than the percentage increase in income.

In addition to eroding the real value of exemptions and deductions, inflation also causes taxpayers with constant real income to be pushed into higher brackets. This second effect of inflation on tax burdens is illustrated in Table III. Couple A is again portrayed with an inflation rate of 10 percent but with the progressive rate structure restored. With a fixed real income of $5,000, Couple A's tax rate increases .09 percentage points in year two due entirely to the exemption/deduction effect as in Table II. In year three, however, it is pushed into a higher tax bracket and the effective rate grows by .15 percentage points (.08 percentage points are attributable to the exemption/deduction effect and .07 percentage points to the higher rate bracket).

TABLE III

BRACKET EFFECT OF INFLATION ON INCOME TAX LIABILITY: COUPLE A WITH $5,000 INCOME FILING JOINTLY, 10% INFLATION

	Year One	Year Two	Year Three
Adjusted gross income	$5,000	$5,500	$ 6,050
Exemption (2 x $600)	1,200	1,200	1,200
Deduction (minimum)	1,300	1,300	1,300
Taxable income	2,500	3,000	3,550
Tax[a/] at 2%	50.00	60.00	60.00
at 3%			16.50
Total	50.00	60.00	76.50
Effective tax rate[b/]	1.00%	1.09%	1.26%
Percentage point increase in tax rate between years		.09%	.15%

a/ See Table I for tax structure used.

b/ Effective tax rate = tax ÷ adjusted gross income.

This bracket effect can also increase the effective tax rate on an individual's income even though he is not actually pushed into a higher tax bracket. Inflation may cause a taxpayer's income to increase, but not enough to enter a new bracket. Table IV illustrates the case of Couple B whose $10,000 income is taxed at the first three bracket rates. The tax rate increases .17 percentage points in year two and an additional .16 percentage points in year three even though the couple's income remains in the first three brackets. The explanation for this increase in the effective tax rate is that the portion of income taxed at the highest applicable rate increases as income grows with inflation. (A small fraction of the increase in the effective tax rate is attributable to the exemption/deduction effect--see Table II.)

TABLE IV

BRACKET EFFECT OF INFLATION ON INCOME TAX LIABILITY: COUPLE B WITH $10,000 INCOME FILING JOINTLY, 10% INFLATION

	Year One	Year Two	Year Three
Adjusted gross income (constant real income)	$10,000	$11,000	$12,100
Exemption (2 X $600)	1,200	1,200	1,200
Deduction (15% of adjusted gross income	1,500	1,650	1,815
Taxable income	7,300	8,150	9,085
Tax a/ at 2%	60.00	60.00	60.00
at 3%	60.00	60.00	60.00
at 5%	115.00	157.50	204.25
Total	235.00	277.50	324.25
Effective tax rate b/	2.35%	2.52%	2.68%
Percentage point increase in tax rate between years		.17%	.16%

a/ See Table I for tax structure used.

b/ Effective tax rate = tax ÷ adjusted gross income

In summary, inflation increases the effective tax rate on personal income by increasing the portion of income that is taxed, and by either pushing a taxpayer's income into a higher bracket or increasing the portion of income taxed at the highest applicable rate. These two effects cause real taxes to grow when real income does not. Expressing the problem in a slightly different way, inflation coupled with fixed exemptions/deductions and a progressive rate structure causes dollar taxes to grow faster than dollar income.

Indexation and Personal Tax Burdens

Indexing the tax structure would increase the exemptions, minimum and maximum standard deductions, and rate bracket boundaries by the rate of inflation in each year. For example, with a rate of inflation of 10 percent, the $600 exemption would increase to $660 in one year and $726 in two years. The value of the exemptions measured in dollars of constant purchasing power would stay the same over time. In the same manner, deductions and rate bracket boundaries would also be adjusted for inflation.

An Example.--Table V shows the effect of indexing on three different hypothetical couples' incomes with a rate of inflation of 10 percent. In the case of Couple C, dollar income remains fixed, but the real value of the income falls over time due to inflation. Without indexing, the effective tax rate on Couple C's income remains the same. Indexation would allow the tax rate to fall as real income shrinks, consistent with the intent of a progressive tax structure.

The income of Couple D increases at the rate of inflation, which means that its real income remains constant. Without indexing, tax liability grows more than 10 percent, and the effective tax rate increases from 1.81 percent to 2.09 percent. With indexing, tax liability increases at the

TABLE V

EFFECT OF INFLATION ON PERSONAL INCOME TAX LIABILITY[a/]

Year One	Nominal Adjusted Gross Income	Percent Growth in Nominal AGI	Tax Liability: Without Indexing — Income Tax	Tax Liability: Without Indexing — Effective Rate	Tax Liability: Indexing — Income Tax	Tax Liability: Indexing — Effective Rate
Couples C, D, E	$8,000	- - -	$145	1.81%	- - -	- - -
Year Two						
Couple C - Fixed Income	$8,000	0%	$145	1.81%	$124.50	1.56%
Couple D - Income Increases with inflation (real income constant)	$8,800	10%	$184	2.09%	$159.50	1.81%
Couple E - Income increases more than inflation (real income grows)	$9,600	20%	$218	2.27%	$199.00	2.07%

a/ Married couple, 2 exemptions, standard deduction.

same rate as income and the effective rate stays at its level in year one. Indexing removes the disproportionate effect of inflation on tax liability; after indexing dollar taxes increase by 10 percent, keeping the real value of the taxes constant.

Family E's income has grown more than the rate of inflation; its real income has increased. Once more, indexation removes only the disproportionate increases in taxes due to inflation. After indexation, the effective tax rate is still higher than in year one, but not as high as it would be without indexation. Indexing retains the original progressivity of the tax structure, but eliminates the "extra" tax increase due solely to the effects of inflation on nominal income. Only the real increase in Family E's income is subjected to the higher tax rate.

It is important to note that indexing will not prevent dollar taxes from rising when there is inflation; it will merely remove the increase in effective tax rates due solely to inflationary pressures on income. With indexation, changes in tax rates are linked only to real changes in income as illustrated in the three examples above.

Simulation Results.--A joint study undertaken by the Advisory Commission on Intergovernmental Relations and the Virginia Department of Taxation[1/] and another by Robert T. Benton and Philip M. Gabel [2/] have simulated the effects of indexation on personal income tax burdens by income class and on total tax revenues using actual tax return data on file at the Virginia Department of

1/ Advisory Commission on Intergovernmental Relations, Inflation and Federal and State Income Taxes, A-63 (U.S. Government Printing Office, 1976), pp. 77-82.

2/ Robert T. Benton and Philip M. Gable, "Uses of State Income Tax Sampling Model in Virginia with Applications to Credits and Indexation," Revenue Administration, Proceedings of the 45th Annual Meeting of the National Association of Tax Administrators (1977), p. 168.

Taxation. The authors performed several simulations based on different forms of indexation concerning the items to be indexed and the index period. The form closest to the type of indexation discussed in this report involved indexing exemptions, standard deduction limits, and tax rate brackets by the change in the U.S. consumer price index (CPI) for the year preceding each tax year.

The CPI was used because it is a widely known index of inflation. Other price indexes that could have been used are the implicit price deflator for personal consumption expenditures (PCE) and the Tayloe Murphy Institute (TMI) consumer price index for Virginia metropolitan areas. The PCE figure is available quarterly and the TMI measure, which is based on a midsummer survey, is released annually. The results of the simulations using the CPI are summarized in Tables VI and IX.

If indexing had been adopted in 1972, the year in which the Virginia personal income tax structure was most recently changed, tax burdens by income class would have been significantly different by 1975 from the actual tax burdens that occurred in that year. The relative impact on tax liability is much greater for low income classes; note the difference between effective tax rates with and without indexation and the reduction in tax liability as a percentage of actual tax liability. Indexing thus increases the progressivity of the individual income tax. In interpreting Table VI, it should be noted that the reduction in tax liability because of indexing depends on when indexing begins. If data were presently available for a more recent year and if indexing had begun in 1972, the reduction in tax liability would be even larger than shown in Table VI.

TABLE VI

ACTUAL AND INDEXED 1975 VIRGINIA PERSONAL INCOME TAXES[a/]

AGI Class	Average Tax Liability		Reduction in Average Tax Liability		Effective Tax Rate	
	Actual	Indexation[b/]	Dollar	% of Actual Tax Liability	Actual	Indexation[b/]
0 - 2,999	4	2	2	50.00%	.30%	.17%
3,000 - 4,999	32	23	9	28.13	.81	.57
5,000 - 9,999	112	83	29	25.89	1.52	1.13
10,000 - 14,999	268	216	52	19.40	2.17	1.75
15,000 - 19,999	450	368	82	18.22	2.60	2.13
20,000 - 24,999	664	563	101	15.21	2.98	2.53
25,000 - 29,999	900	792	108	12.00	3.30	2.91
30,000 - 34,999	1,153	1,040	113	9.80	3.57	3.22
35,000 - 39,999	1,413	1,297	116	8.21	3.79	3.48
40,000 - 44,999	1,654	1,536	118	7.13	3.91	3.63
45,000 - 49,999	1,922	1,805	117	6.09	4.07	3.82
50,000 - 74,999	2,516	2,398	118	4.69	4.25	4.05
75,000 - 99,999	3,864	3,746	118	3.05	4.53	4.39
100,000 - over	8,901	8,783	118	1.33	4.79	4.73
Average	309	265	44	14.37%	2.64%	2.26%

Sources: Advisory Commission on Intergovernmental Relations, Inflation and Federal and State Income Taxes, (1976) A-63, (U.S. Government Printing Office: Washington, D.C.), p. 81; Robert T. Benton and Philip M. Gabel, "Uses of State Income Tax Sampling Model in Virginia with Applications to Credits and Indexation," Revenue Administration, Proceedings of the 45th Annual Meeting of the National Association of Tax Administrators (1977), pp. 168-169.

[a/] Computations assume indexing began in 1972 when the present income tax structure was instituted

[b/] Full indexation, no lag in CPI.

Indexing and Progressivity.--Many people consider the personal income tax fair and equitable since the progressive structure imposes a higher average tax rate on taxpayers with higher incomes. However, as already discussed, if a personal income tax is not indexed for inflation, then the progressivity of the tax will be greatly reduced.

To illustrate this point we use two hypothetical taxpayers, each representing a family of four. Taxpayer F has an income of $10,000 in 1972 and taxpayer G has an income of $16,000. We then assume their current dollar incomes increase at the rate of change in the U.S. consumer price index and compute their tax liability in each year from 1972 to 1979 without and with indexation. The indexation case is based on indexation of exemptions, deductions, and tax brackets using the change in the U.S. consumer price index for the previous calendar year.

Without indexing, taxpayer F's effective tax rate rises continuously from 1.75 percent in 1972 to 3.02 percent in 1979 and taxpayer G's effective tax rate rises continuously from 2.81 percent in 1972 to 4.04 percent in 1979 (see Table VII). A rough indicator of progressivity is the ratio of taxpayer G's effective tax rate to taxpayer F's effective tax rate. This relationship is also shown in Table VII. If progressivity stayed unchanged, the progressivity ratio would not change. As shown, without indexing, the ratio dropped from 1.61 to 1.34. With indexing, there was virtually no change over the seven-year period. (The slight drop was due to the use of a lagged CPI; if the adjustment had not involved a lag, there would have been no change in the progressivity ratio.)

TAX BURDENS WITHOUT AND WITH INDEXING FOR TAXPAYERS WITH INITIAL INCOMES OF $10,000 AND $16,000 FOR THE YEARS 1972 TO 1979

	Income[a]		% Change in CPI	Tax[b] (Effective Rate in Parentheses) Taxpayer F		Taxpayer G		Progressivity Ratio	
	Taxpayer F	Taxpayer G	in Preceding Calendar Year	Without Indexing	With[c] Indexing	Without Indexing	With[c] Indexing	Without Indexing	With[c] Indexing
1972	$10,000	$16,000		$175.00 (1.75%)		$450.00 (2.81%)		1.61	
1973	10,620	16,992	3.3%	201.35 (1.90%)	$193.10 (1.82%)	504.00 (2.97%)	$488.43 (2.87%)	1.56	1.58
1974	11,788	18,861	6.2	251.00 (2.13%)	226.79 (1.92%)	611.51 (3.24%)	581.19 (3.08%)	1.52	1.60
1975	12,861	20,577	11.0	296.60 (2.31%)	242.07 (1.88%)	710.18 (3.45%)	607.11 (2.95%)	1.49	1.57
1976	13,607	21,771	9.1	330.35 (2.43%)	246.19 (1.81%)	778.83 (3.58%)	623.59 (2.86%)	1.47	1.58
1977	14,491	23,186	5.8	374.55 (2.58%)	264.53 (1.83%)	860.20 (3.71%)	668.45 (2.88%)	1.44	1.57
1978	15,607	24,971	6.5	430.35 (2.76%)	289.09 (1.85%)	962.83 (3.86%)	727.80 (2.91%)	1.40	1.57
1979	17,324	27,718	7.7	523.13 (3.02%)	333.28 (1.92%)	1120.78 (4.04%)	831.32 (3.00%)	1.34	1.56

a/ Income was increased in each year by the rate of growth in the U.S. consumer price index.

b/ The tax was calculated assuming a married couple filing jointly with four exemptions and standard deduction.

c/ The Virginia personal income tax structure was indexed by the change in the CPI for the preceding year.

Revenue Impact of Indexation

Indexation would slow the growth in state personal income tax revenues. Under the present system, as inflation pushes up average dollar income, income taxes take a larger portion of income. With indexation, the growth in state personal income tax revenues would exceed the rate of inflation only if real personal income grew. Indexation would not keep state income tax revenues from growing with inflation, but from growing much faster than the price level as it currently does. Indexation would not remove the progressivity of the income tax; as real personal income increased, an indexed income tax system would take a larger share of that income.

If the Virginia personal income tax structure had been indexed since 1972, it would be quite different today. In Table VIII, the indexed structure of the personal income tax is shown, with exemptions, standard deduction limits and rate brackets increased each year by the change in the CPI for the preceding calendar year. A dependent exemption would now be valued at $967, the maximum standard deduction for a married couple would be $3,224, the 2% bracket would cover the first $4,837 of taxable income, and a taxpayer would have to receive over $19,347 of taxable income before the top 5 3/4% rate would apply. The revenue impact of indexation based on the tax structure (through 1974) shown in Table VIII was estimated in the simulation studies discussed previously. The results of the simulation are shown in Table IX. In 1973, actual revenues increased by $72.7 million or 19.9 percent. Indexed to allow for the moderate inflation of 3.3 percent in the preceding year the gain would have been $62.0 million or 16.9 percent. In the following year, actual collections rose by $74.4 million or 17.0 percent. After indexing for the higher 6.2 percent

TABLE VIII

PRESENT VIRGINIA PERSONAL INCOME TAX STRUCTURE COMPARED TO THE STRUCTURE IF IT HAD BEEN ADJUSTED FOR INFLATION BEGINNING IN 1972 ASSUMING A ONE YEAR LAG IN ADJUSTMENT FOR CPI CHANGES

	Actual	Inflation Adjusted					
	1972	1973	1974	1975	1976	1977	1978	1979
Exemptions:								
Personal, dependent, blind	$ 600	$ 620	$ 658	$ 731	$ 797	$ 843	$ 898	$ 967
65 or over	1000	1033	1097	1218	1329	1406	1497	1612
Standard Deductions:								
Percentage	15% of AGI	15% of AGI	15% of AGI	15% of AGI	15% of AGI	15% of AGI	15% of AGI	15% of AGI
Maximum:								
Married, joint or single	$2000	$2066	$2194	$2435	$2657	$2811	$2994	$3224
Married, separate	1000	1033	1097	1218	1329	1406	1497	1612
Minimum:								
Married, joint or single	$1300	$1343	$1426	$1583	$1727	$1827	$1946	$2096
Married, separate	650	671	713	792	864	914	973	1048
Net taxable income brackets:								
Rates: 2%	$ 0- 3000	$ 0- 3099	$ 0- 3291	$ 0- 3653	$ 0- 3986	$ 0- 4217	$ 0- 4491	$ 0- 4837
3%	$3001- 5000	$3100- 5165	$3292- 5485	$3654- 6089	$3987- 6643	$4218- 7028	$4492- 7485	$4838- 8061
5%	$5001-12000	$5166-12396	$5486-13165	$6090-14613	$6644-15942	$7029-16867	$7486-17963	$8062-19347
5.75%	Over $12000	Over $12396	Over $13165	Over $14613	Over $15942	Over $16867	Over $17963	Over $19347
Percentage change in consumer price index in preceding calendar year		3.3%	6.2%	11.0%	9.1%	5.8%	6.5%	7.7%

Source: Economic Indicators (August 1979), p. 23, and staff calculations.

TABLE IX

IMPACT OF INDEXATION ON VIRGINIA PERSONAL INCOME TAX COLLECTIONS,
TAX YEARS 1973 AND 1974

(Effective Tax Rate in Parentheses)

Tax Year	Rate of Inflation in Preceding Calendar Year	Adjusted Gross Income		Revenue				
				Actual		Indexed		Difference between Actual and Indexed Amounts ($ mil.)
		Amount ($ mil.)	% Change from Previous Year	Amount ($ mil.)	% Change from Previous Year	Amount ($ mil.)	% Change from Previous Year	
1972	4.3	15,828.4		366.0 (2.31%)			...	
1973	3.3	18,158.0	14.7	438.7 (2.42%)	19.9	428.0 (2.36%)	16.9	10.7
1974	6.2	20,248.1	11.5	513.1 (2.53%)	17.0	483.7 (2.39%)	13.0	29.4

Sources: Advisory Commission on Intergovernmental Relations, Inflation and Federal and State Income Taxes, A-36 (Washington, D.C.: U.S. Government Printing Office, 1976), p. 79; Virginia Department of Taxation, Annual Report, 1973-74 through 1975-76 editions.

inflation that occurred in the preceding year, the increase would have been $55.7 million or 13.0 percent. Thus, in terms of foregone revenue indexing would have cost $10.7 million in 1973 and $29.4 million in 1974. Note that both actual and indexed revenues grew faster than adjusted gross income. However, indexation causes revenues to move more closely with AGI.

The procedures used to estimate revenue impact in the simulation studies provide very precise historical estimates of the "cost" of indexation in the form of foregone revenue. This "cost" depends upon the magnitude of inflation, the amount of adjusted gross income, and the starting date for indexation. Projections of future revenue impact of indexation are more difficult to estimate precisely. However, we do know that because inflation is now quite high and is expected to remain that way, the impact will be substantial. Table X contains two estimates of revenue impact based on readily available aggregate data. If indexation were adopted in Virginia, a much more precise estimate of the revenue impact could be developed by the Virginia Department of Taxation by inserting forecast inflation factors in its sample taxpayer file. Estimate A constitutes a rough lower bound and Estimate B a rough upper bound on the change in revenue during the next biennium if indexation were imposed in fiscal year 1979-80. The reduction in revenue would be $46.8-106.2 million in the first year and $91.8-198.7 million in the second year.

TABLE X

ESTIMATED IMPACT OF INDEXATION ON VIRGINIA PERSONAL INCOME TAX COLLECTIONS, FISCAL YEARS, 1980-81 AND 1981-82

Fiscal Year	Inflation Rate in Preceding Fiscal Year (%)	Projected Revenue without Indexing[a] Amount ($ mil.)	% Change	Projected Revenue with Indexing: Estimate A[b] Amount ($ mil.)	% Change	Projected Revenue with Indexing: Estimate B[c] Amount ($ mil.)	% Change	Difference between Revenue Without and With Indexing: Estimate A	Difference between Revenue Without and With Indexing: Estimate B
1979-80	9.4	1,073.9							
1980-81	11.0[d]	1,232.7	14.8	1,185.9	10.4	1,126.5	4.9	46.8	106.2
1981-82	8.0[d]	1,368.0	11.0	1,276.2	7.6	1,169.3	3.8	91.8	198.7

a/ Department of Planning and Budget revenue projections.

b/ Projected by assuming that for every 1 percent increase in median family income the overall effective tax rate (tax revenue ÷ AGI) will rise 0.46 percent. AGI for 1980-81 and 1981-82 were imputed from the official revenue forecast and projections by the authors of the effective tax rate assuming no indexing. The effective rate was then recalculated assuming indexing lagged one fiscal year. A more detailed explanation is available upon request.

c/ Projected by assuming that revenue growth would be reduced by 0.9 percentage points for each 1.0 percent increase in the CPI for the preceding fiscal year. This relationship was derived from a crude simulation using tax year 1972 to 1977 data on amounts taxable at the various rates and on the value of standard deductions and exemptions. A more detailed explanation is available upon request.

d/ Projected by the authors.

Adjusting Capital Gains and Business Income for Inflation

In the above discussion of inflation and the personal income tax, distortions in tax liability were the result of a progressive tax structure expressed in nominal dollars. In this section, the analysis is focused on how inflation affects tax liability through its effect on income from capital gains and business income. It is not the tax structure, but the definition of income that causes distortions in tax liability.

Capital Gains

During a period of inflation, the prices of capital assets (industrial machinery, real estate, stocks) increase along with other goods. As it is currently determined, capital gains income consists of the difference between the purchase price and the sale price of the asset. As inflation pushes up capital asset prices, the difference between the current price and the purchase price widens. When the asset is sold, taxes must be paid on this difference, even though the real value of the asset may not have increased, but rather have stayed constant or even decreased after adjustment is made for changes in the price level.

If, for example, an asset were purchased in year one at a price of $10,000 and sold in year six for $15,000, the tax would be levied on the $5,000 "capital gain." At an annual rate of inflation of 10 percent, however, the year one purchase price in year six dollars would be $16,105. When the asset was sold in year six for $15,000, a real capital loss was incurred equal to $1,105 (the $16,105 purchase price in year six dollars less the $15,000 sale price in year six dollars). Taxing this real loss as a capital gain increases the loss to the taxpayer by the amount of the tax.

Adjustment for inflation would, at the least, reduce nominal capital gains income to real capital gains and could convert nominal gains into actual losses. The adjustment mechanism would be relatively straightforward; the purchase price of the asset would be "inflated" to current year dollars by a price level index prior to the calculation of any capital gain or loss. The tax would then be assessed only on real gains or losses, with any inflation effect eliminated.

Because of the unavailability of data, estimates of the revenue impact of indexing capital gains income cannot be calculated. The amount could be considerable, however, especially in times of severe inflation. Indexing capital asset purchase prices would encourage the turnover of capital assets and would help increase investment and direct capital to its most productive use. The present system discourages investment and turnover by imposing extremely high tax rates on real capital gains. Further study is necessary to determine the impact of this type of indexing on business and investment decision making as well as tax revenues.

Business Income: Depreciation and Inflation.--Income from business activity, whether corporate or otherwise, is also distorted by inflation. The depreciation that a business is allowed to deduct from gross income in the determination of taxable profits is based on the historical cost of the asset. Depreciation is supposed to represent the cost of the part of the capital good "used up" during the course of the year, and is thus deductible as part of the firm's production cost. As inflation pushes up the prices of capital goods, the historical cost of capital goods owned by a firm diverges from the "true" or replacement cost of the goods in current dollars. Depreciation based on historical cost does not, then, reflect the true cost of the capital used.

The firm's gross income will rise as it increases its prices to keep up with inflation. Expenses, with the exception of depreciation, will also rise with inflation. Since depreciation is based on historical costs it will not increase with the price level. Therefore, gross income will increase faster than expenses and taxable profits will be distorted upwards.

This effect of inflation on taxable business profits could be corrected by adjusting the purchase price of the asset by an inflation index to convert it to current dollars, then applying the original depreciation schedule to the price in current dollars. As an example, consider an asset purchased in year one for $5,000 with a useful life of five years and 10 percent annual inflation. Table XI illustrates this case assuming straight-line depreciation. In year one, depreciation is simply 20 percent of $5,000, the purchase price in year one dollars. For year two, the purchase price is increased by the inflation index (column 2). Depreciation is then 20 percent of $5,500, the purchase price in year two dollars. As with the purchase price, accumulated depreciation is increased by the inflation index. By allowing depreciation to increase with the rate of inflation, this procedure would result in a depreciation expense reflecting the real value of the assets used up in current dollars, eliminating the inflation distortion. The usual tax rate could then be applied to the appropriately adjusted taxable profits.

Unfortunately, the information necessary to determine the revenue impact of indexing depreciation is also unavailable. Because the present system penalizes capital intensive industries most heavily, indexing depreciation expenses would benefit those industries the most, stimulating capital investment and accumulation.

TABLE XI

AN ILLUSTRATION OF HOW DEPRECIATION CAN BE ADJUSTED FOR INFLATION[a/]

		Purchase Price		Depreciation Allowance		Accumulated Depreciation Allowance		Book Value	
Year	Inflation Index	Actual [Historical]	Adjusted [(3) x (2)]	Actual [20% of (3)]	Adjusted [20% of (4)]	Actual [(5) x no. of years in use]	Adjusted [(2) x (7)]	Actual [(3) - (7)]	Adjusted [(4) - (8)]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	1.000	$ 5,000	$ 5,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 4,000	$ 4,000
2	1.100	5,000	5,500	1,000	1,100	2,000	2,200	3,000	3,300
3	1.210	5,000	6,050	1,000	1,210	3,000	3,630	2,000	2,420
4	1.331	5,000	6,655	1,000	1,331	4,000	5,324	1,000	1,331
5	1.464	5,000	7,320	1,000	1,464	5,000	7,320	0	0

a/ Computations assume an asset purchased for $5,000 in year one with a five year useful life, straight line depreciation, and a 10% annual rate of inflation.

Indexing In Other States And Canada

Other States

Six states now have indexing. Arizona, California, and Colorado passed indexing bills in 1978 and Iowa, Minnesota, and Wisconsin followed them in 1979. The Montana legislature also passed an indexation measure in 1979, but the bill was vetoed.

The major features of the state laws are shown in Table XII. The following description of each state's indexing law is quoted from a recent Advisory Commission on Intergovernmental Relations study:

> California is implementing its 1978 indexation measure in two steps, and the 1979 legislature has amended the original law. Under the original measure, the income tax brackets were indexed, effective in 1978, by the change in the state CPI minus three percentage points, and beginning with 1979, the personal credits, standard deduction, and low income credits will be adjusted annually by the full change in the state CPI. Under the 1979 amendments, the tax brackets will also be indexed for tax years 1980 and 1981 by the change in the state CPI without the 3% deduction.
>
> The Colorado law also indexes the brackets, personal exemptions and standard deduction, but provides that the General Assembly shall set the annual inflation factor by which they are adjusted, rather than specifying in law that a particular index be used. The factor is to be based on the "best statistics available" regarding price changes in the previous year and was set at 6.0% for 1978 and 7.0% for 1979. The indexing law specifies that if the Assembly fails to establish a new inflation factor by May 1 each year, the department of revenue is to assume it is 6.0% and make the necessary adjustments in the tax tables.
>
> Two states with partial indexation--Wisconsin and Iowa--limit the inflation adjustment to the income brackets and leave the exemptions and deductions unchanged. The Wisconsin law, passed as part of a $940 million tax reform package, calls for indexation of the income brackets by the percentage change in the U.S. CPI up to a maximum of 10% in any one year. The act is effective with the 1980 tax year.
>
> The 1979 Iowa law is the most restrictive. Not only does it pertain to just the income brackets, but it is effective for the 1979 and 1980 tax years only, and the amount of the inflation adjustment is quite limited. The inflation factor applied to the brackets for 1979 is one-fourth of the percentage change in the U.S. CPI during calendar year 1978 (approximately about [sic] 2.0-2.25%); for 1980, the factor is one-half of the change in the CPI during 1979. The maximum federal retirement annuity excludable from taxable income will also be indexed by this factor. The law provides, however,

that indexing shall not take effect unless the unobligated general fund cash balance, as certified by the state comptroller, exceeds $60 million each year. An interim legislative committee will examine expanding this limited indexation to other parts of the income tax and extending it beyond 1980.

As originally enacted, the Arizona indexation law was effective for only the 1978 tax year; it was extended for an additional year by the 1979 legislature. Under the act, the personal exemption, standard deduction, and property tax and renters' credits, but not the income brackets, are indexed annually by the percentage change in the Phoenix area CPI, 10% in 1978. A special legislative session on tax reform, scheduled for the Fall of 1979, will address making indexation a permanent feature of the state tax code, and one state official has stated that because of the tax relief it provides, he has "no doubt" that indexing will be made permanent.

The vetoed Montana legislation would have indexed the personal exemptions, standard deduction, and income brackets by the annual change in the U.S. CPI. In his veto message, Governor Thomas Judge listed several objections to the bill including the fact that the revenue effects would be substantially more than contemplated because of a separate enactment increasing the personal exemption level. He also felt that indexing would make the tax structure more complicated, and since the measure would not have become fully effective until 1981, he considered it best that Montana learn from the experience of other states now implementing indexing laws and reconsider it at the next legislative session. The legislature's Revenue Oversight Committee will, as it did in 1978, study the feasibility of indexing, including the tax on such items as capital gains, interest expense, and business income. 1/

Indexing measures are also considered in Georgia, Illinois, Kansas, Kentucky, Maine, Missouri, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, South Carolina and Utah in 1979. Most would have provided for comprehensive indexation of exemptions, standard deductions, and rate brackets. 2/

1/ Advisory Commission on Intergovernmental Relations, The Inflation Tax: The Case for Indexing Federal and State Income Taxes (Advance Copy) (Washington, D.C.: Advisory Commission on Intergovernmental Relations, October, 1979), pp. 41-43.

2/ Ibid., p. 46.

TABLE XII

CHARACTERISTICS OF STATE INDEXING LAWS

	Arizona	California	Colorado	Iowa	Minnesota	Wisconsin
Features indexed	Personal exemption, standard deduction, and property tax and renter's credit.	Personal credits, standard deduction, income brackets, and low income credit.	Personal exemption, standard deduction, and income brackets.	Income brackets and maximum annuity excludable from taxable income.	Personal credits, standard deduction, income brackets, and low income allowance.	Income brackets.
Index used	Percent change in Phoenix area CPI from 2nd quarter 1977 to 2nd quarter of tax year.	Brackets indexed by change in state CPI from June to June minus 3% in 1978-79 and full change in CPI in 1980-81; other features indexed by full CPI change.	Set annually by the General Assembly based on various price data.	Percent change in U.S. CPI for previous calendar year divided by 4 for 1979 and divided by 2 for 1980.	Brackets indexed by 85% of the percent change in Minneapolis-St. Paul CPI from August to August; other features indexed by full CPI change.	Percent change in U.S. CPI from June to June, not to exceed 10% in a single year.
Effective date	1978 and 1979 tax years only.	Brackets indexed effective 1978 tax year; other features indexed beginning 1979 tax year. All indexed permanently.	1978 tax year and permanently thereafter.	1979 and 1980 tax years only if the June 30 general fund balance exceeds $60 million in each year.	Brackets indexed effective 1979 tax year; other features indexed beginning 1981 tax year. All indexed permanently.	1980 tax year and permanently thereafter.
Legal citation	Chapter 211, Arizona Laws of 1978 and S.B. 1145 as passed by 1979 Legislature.	Chapter 569, California Laws of 1978 and A.B. 276 as passed by 1979 Legislature.	Chapter 105, Colorado Laws of 1978.	S.F. 494 as passed by 1979 Legislature.	H.F. 1495 as passed by 1979 Legislature.	Chapter 1, Wisconsin Laws of 1979.

Source: Advisory Commission on Intergovernmental Relations, The Inflation Tax: The Case for Indexing Federal and State Income Taxes (Advance Copy) (Washington, D.C.: Advisory Commission on Intergovernmental Relations, October 1, 1979), p. 40.

Canada

There are several foreign countries that have indexed their personal income taxes. The list includes Australia, Denmark, the Netherlands, Brazil, Chile, and Canada.[1/]

Because Canada's personal income tax structure closely resembles the type used in the United States and because of that country's proximity and cultural similarity to this nation, the Canadian law is of special interest.

Canada adopted indexing in 1974. The personal exemption and tax brackets are adjusted annually using the change in the Canadian Consumer Price Index for the twelve months ending September 30 prior to the tax year. Since Canada has had a high rate of inflation, there has been a substantial increase in the current dollar value of exemptions and a widening of tax brackets.[2/]

According to Canadian tax analyst, Carl F. Steiss, "There is no doubt that indexing significantly reduces the rate of growth of direct personal tax revenues over the long term unless such reductions are offset by explicit increases in tax rate [sic]. Some would say, and I would agree, that out of this observation flows a still further advantage of indexing: Namely, indexing increases parliamentary and/or taxpayer/voter control over tax rates." [3/]

1/ Ibid., p. 46.

2/ Ibid., pp. 46-47.

3/ C. F. Steiss, "Indexation of Canada's Individual Income Tax Systems," Tax Review, Vol. XXXIX, No. 5 (May 1978), p. 22.

Steiss further observes that an explicit tax rate increase now would be politically unpopular, and that reducing the strength of the indexing law would become a matter of great controversy. On the other hand, expansion of indexing to cover capital gains and maximum deductions is unlikely under present circumstances. "Perhaps the chief hope of the government is that inflationary rates will abate and the impact of indexing diminish." 1/

Pros and Cons

There are, of course, two sides to the issue of whether or not state income tax structures should be indexed. The evidence in this study is strongly supportive of the major arguments in favor of indexation; fiscal accountability and tax equity. In addition, indexing the income tax would minimize the need for tax limitation measures currently under discussion in many states.

Arguments for Indexation

Fiscal Accountability.--Inflation induces increases in effective income tax rates. These increases occur with little or no public disclosure or debate. Inflation thus allows real tax increases with no legislative action, increases not readily perceived by taxpayers. Fiscal accountability requires complete disclosure by legislatures of any increase in tax rates, whether legislated, or automatic, inflation-induced increases.

Tax Equity.--The changes in the income tax structure brought by inflation tend to have the heaviest impact on lower income taxpayers. Real tax increases of this kind are not consistent with the intent of a progressive tax rate structure. Inflation also results in shifting of tax burdens dependent upon such characteristics as family size and source of income. These changes in income tax burdens are arbitrary and inequitable.

1/ Ibid., p. 22.

Tax Limitation.--Much attention has recently been given to the idea that the size of the government sector should be limited relative to the private sector. Indexation would slow the automatic growth in income tax revenues, making government expansion more difficult, and lessening the need for specific measures to limit the size of government. Nevertheless, if a constitutional tax limitation were adopted, indexation would be a useful tool to bring about the desired goal. Indexation is compatible with tax limitation.

Arguments against Indexation

The major arguments against indexation are (1) we can't afford it; (2) it would be expensive and complicated to implement; (3) the cost of providing government services has grown faster than the general price level; and (4) the consumer price index overstates inflation.

We Can't Afford It.--Indexation would cause revenue to grow at a slower rate than without it. If one feels that government is "entitled" to all future revenues that are projected based on the current structure and rates of the Virginia personal income tax, then indexation can be viewed as a very costly measure. On the other hand, if it is acknowledged that inflation causes an unlegislated increase in effective tax rates, then indexation removes an unwanted outcome of the current system.

As an alternative to indexation the legislature could make frequent adjustments to the personal income tax in the form of higher exemptions, higher maximum standard deduction limits, and broader tax brackets. This has been the practice at the federal level, although the legislative changes have not been as generous as indexation would have been. In contrast, the Virginia personal income tax has not been changed since 1972. As a result, the average effective rate on Virginia tax returns

has risen three times faster than the average effective rate on federal tax returns filed by Virginians (17.8% vs. 5.2%).[1/]

	Average Effective Rate in Tax Year (%)		
	1972	1976	% Change
Virginia tax	2.30	2.71	17.8
Federal tax	12.77	13.43	5.2

The cost of indexation in the form of foregone revenue, as estimated in Table X above, would fall between $46.8 and $106.2 million for fiscal year 1980-81 and $91.8 and $198.7 million for fiscal year 1981-82. The size of the revenue impact underlines the magnitude of the problem. Furthermore, if it is assumed that the present high rate of inflation will create strong political pressure for explicit tax cuts and/or tax limitation, the reductions in revenue are inevitable and the only question is, what form will they take.

Expensive and Complicated to Implement.--The added cost of collecting personal income taxes under indexation does not appear to be very significant. The income tax form, which is already redesigned each year, could be changed easily to incorporate new amounts for deductions, exemptions, and brackets. Individual income taxes would be calculated by taxpayers exactly as they have been in the past. Implementation of indexation of capital gains and business income would require more significant expenditures on tax forms and instructions for filing returns, and would necessitate somewhat higher administrative costs.

1/ The rate is shown is derived by dividing total income by adjusted gross income. Source: Virginia Department of Taxation, Annual Report, (1972-73 and 1977-78) and Internal Revenue Service, Statistics of Income, Individual Income Tax Returns, (1972 and 1976).

Revenue forecasting would be more difficult with indexation. Currently, although consideration is given to real growth of personal income and inflation, the final projections depend upon current dollar magnitudes. Indexing would require more sophisticated forecasting techniques. However, since it is likely that the index would be lagged by one year, it would not be necessary to forecast inflation for the full time span of the biennium.

Indexing would also require annual revision of employer tax withholding schedules and distribution of the new schedules to all employers. Currently, schedules are not revised annually and distribution is limited to new employers. The employer cost of adapting to newly indexed schedules would be modest since most payrolls are now automated.

Rapid Growth of Government Costs.--The costs faced by governments have increased faster than most broad price series in the economy.

	% Change, 1970-78
State and local government deflator	83.6
GNP deflator	66.4
Consumer price index	68.0

Source: Economic Indicators (September 1979), pp. 2, 23.

Nationally, the prices paid by state and local governments increased from 1970 to 1978 at a rate about one-fourth higher than the increase in the general price level as measured by the GNP deflator or the consumer price index.

The increasing income tax revenues induced by an unindexed personal income tax have helped to meet these costs in Virginia. In a period of changing relative costs between private sector and government sector services, however, it can be argued that taxpayers should be given the choice of higher taxes or fewer services, not be faced with automatic tax increases for the maintenance or expansion of existing services.

Consumer Price Index Overstates Inflation.--Indexing requires the use of a price index. Because of its widespread use as an inflation adjuster in private contracts, its timely availability, and its familiarity to the general public, the U.S. consumer price index would be a likely candidate. A possible application would be the average of the index for the twelve month period ending in May of the year preceding the new tax year. This would allow time for printing of new employer withholding schedules which would have to be distributed prior to the start of the tax year.

It is argued that a consumer price index based on a fixed market basket of goods and services overstates inflation because as relative prices change, consumers adjust the quantities they purchase away from relatively high priced goods and services to relatively low priced goods and services. This problem is most pronounced at very high rates of inflation such as the current double-digit rate. This is a valid argument, but to keep it in perspective, the distortion is small. This is shown by the following comparison of price increases using the implicit price deflator for personal consumption expenditures (PCE), which has moving weights, and the consumer price index (CPI), which has fixed weights.

Year	% Change from Preceding Year	
	PCE	CPI
1971	4.4	4.3
1972	3.5	3.3
1973	5.5	6.2
1974	10.8	11.0
1975	8.1	9.1
1976	5.1	5.8
1977	5.7	6.5
1978	6.8	7.7

Source: Economic Indicators, (September 1979), pp. 2, 23.

Although the CPI generally shows a higher rate of inflation than the PCE, the differences are not large and probably do not justify use of a less familiar index than the CPI.

Summary and Conclusions

Inflation distorts taxes by its interaction with the personal income tax structure and by its effect on capital gains and depreciation expenses. The first of the distortions can be corrected by indexing personal exemptions, standard deduction limits, and personal income tax rate brackets. The last two can be corrected by indexing capital asset purchase prices and depreciation to convert them to current dollars.

Indexation is not an untried theoretical concept. Six states and several nations, including Canada, have passed legislation indexing the personal income tax structure. None of the indexation laws in operation correct inflation-induced distortions in capital gains and business income.

Adjusting the personal income tax structure is conceptually straightforward, its effects are easily estimated and its implementation relatively simple. Indexation would eliminate unlegislated tax increases and inflation-caused tax burden shifts within the personal income tax structure.

The effects of inflation on business income taxes and taxes on capital gains, although more difficult to trace precisely, are no less important. Indexing the personal income tax without adjusting the business and capital gains taxes would make wage income relatively more attractive than business or capital income, thus tending to discourage new business and capital formation. Although businesses are not taxed progressively, inflation has a definite impact on the taxes they must pay, and this impact, no less than for personal income taxes, represents an unlegislated tax increase that merits remedial attention.

The progressivity of the personal income tax structure will deteriorate more rapidly without indexation. As the tax structure is distorted by inflation, all taxpayers will be faced with higher effective tax rates, but the greatest relative impact will fall on lower income taxpayers.

If inflation continues at its current rapid rate, indexation would be costly in terms of foregone revenues. It can be argued, however, that government is not entitled to these automatic, inflation-induced revenue gains, and that if indexation were not adopted, there would be strong political pressures for other revenue reducing measures.