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ADJUSTING TAXES FOR INFLATION: THE IMPACT OF THE ECONOMIC RECOVERY TAX ACT

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The Economic Recovery Tax Act of 1981¹ (ERTA) introduced automatic indexing of the individual income tax structure beginning in 1985.² Although indexing was part of the 1979 Kemp-Roth tax cut proposal,³ neither the Reagan administration's original proposal nor the Congressional committees' reports provided for indexing.⁴ Unlike previous bills providing for major tax changes, little public debate occurred regarding the various factors involved in ERTA's indexing provisions.⁵ Congress, rather, incorporated this provision into ERTA in the final stages of debate.⁶ The indexing provision, coupled with ERTA's 1981-1984 individual tax cuts has been both portrayed and widely perceived as a device which would eliminate "bracket creep" caused by inflation.⁷ This perception which has led to wide public acceptance of indexing may, however, prove to be a cruel illusion to many American taxpayers. In fact, ERTA's provisions for altering the tax structure prior to indexation, and

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¹ Pub. L. No. 97-34, 95 Stat. 172 (1981).

² *Id.* at § 104; I.R.C. §§1 (f), 63(d), 151(f), 6012, 6013 (1981).

³ H.R. 1598, 96th Cong., 1st Sess. (1979); S. 33, 96th Cong., 1st Sess. (1979).

⁴ H. REP. NO. 201, 97th Cong., 1st Sess. (1981); S. REP. NO. 144, 97th Cong., 1st Sess. (1981).

⁵ See Field, *Some Reflections on the Reagan Tax Bill*, 13 TAX NOTES 317 (Aug. 3, 1981) ("In the past — most tax bills moved through Congress on a two-year schedule. This has permitted time for hearings on substantially all the major changes proposed in the bills." *Id.* at 318).

⁶ 13 TAX NOTES 237 (July 27, 1981) (The Senate approved the indexing amendment 57-40, and the Administration agreed to would "reluctantly" accept it as part of the Act.)

⁷ See, e.g., Budget Message to the Congress, President Ronald Reagan (February 8, 1982) [hereinafter cited as Reagan Budget Message] ("Bracket creep will never again systematically plunder the rewards for production and effort."). But see McKenzie, *An Introduction to the Personal Tax 'Cuts'*, Wall St. J., Jan. 8, 1982 at 22, col. 3; Field, *supra* note 5, at 320.

the extent of indexing to begin in 1985 will not fully compensate for the effects of inflation upon the income tax. Effective federal tax rates upon the same amount of income measured in "constant" dollars⁸ are likely, absent an amendment to ERTA increasing the rate reductions, to continue rising as a consequence of inflation, both before and after indexing takes effect in 1985. Nevertheless, during budget debates members of Congress from both parties have called for rolling back ERTA's rate reductions.⁹

Under an income tax system based on progressive tax rates, any increase in income increases a taxpayer's effective tax rate. Inflation reduces the real value of tax bracket steps by pushing an individual whose income in constant dollars remains unaltered into higher brackets.¹⁰ It also erodes the value of fixed nominal amounts present in the tax structure, such as exemptions, allowances and deductions.¹¹ An increase in adjusted gross income can represent either a real increase in constant dollars or a fictitious increase in nominal dollars caused by inflation.¹² Therefore, under a progressive rate schedule, a taxpayer's effective tax rate can rise while his income in constant dollars remains the same, or even decreases, unless the tax structure is adjusted to account for inflation.¹³ This result is the "bracket creep" at which indexing is directed.¹⁴ In the United States, an increase in adjusted gross income of 1 percent increases federal tax liability by approximately 1.5 percent.¹⁵ Because of this phenomenon, inflation effectively provides the government with an auto-

⁸ "Constant" dollars are dollars that have been deflated back to a base period to offset the effects of inflation on their nominal amounts that has occurred in the interim period. Such a fictitious increase could also be caused by currency devaluation.

⁹ See, e.g., Wall St. J., Mar. 1, 1982, at 3, col. 1 (Chairman of the Senate Finance Committee, Sen. Robert Dole, suggested abandoning the final 10 percent reduction in individual income tax reduction and beginning indexing in 1983 as a measure to increase revenue and decrease projected budget deficits). See also N.Y. Times, Feb. 12, 1982, at 35, col. 1 (Sen. Hollings proposed elimination of the 1982 tax cut of 10 percent and reduction of the 1983 tax cut of 10 percent to a cut of only 5 percent to reduce the projected budget deficits); N.Y. Times, Feb. 11, 1982, at 30, col. 1 (Sens. Gorton and Rudman consider a "reverse trigger" to eliminate the tax cuts in the face of adverse economic conditions).

¹⁰ See, Sunley, *Indexing the Income Tax for Inflation*, 32 NAT'L. TAX. J. 328 (1979); Thomas & Zimmerman, *Tax Division Backs Indexing*, THE TAX ADVISOR 428 (July 1981) [hereinafter cited as Thomas]; Ruppe, *General Report*, 62 STUD. ON INT'L FISCAL L. 89, 95 (1977) (IFA Conference Vienna).

¹¹ See, Sunley, *supra* note 10 at 328; Thomas, *supra* note 9, at 428; Ruppe, *supra* note 10, at 95.

¹² See Sunley, *supra* note 10, at 328-29.

¹³ See *id.* This increase in the effective tax rate due to inflation could not occur under a flat, or proportional, tax rate since this type of tax system would preserve the same ratio of total tax to total income. Kelley, Hall, Aronsohn, & Hickman, *Indexing for Inflation*, 31 TAX LAW. 17, 18 (1977) [hereinafter cited as Kelley]. Even under this proportional tax system, however, the minimal amount subject to taxation would have to be adjusted to account for inflation in order to eliminate its effects on the tax structure, unless all amounts, no matter how small, were subject to the tax.

¹⁴ See *infra* note 66 and accompanying text.

¹⁵ Furstenberg, *Individual Income Taxation and Inflation*, 28 NAT'L TAX J. 117, 119 (1975). See also CONGRESSIONAL BUDGET OFFICE, INDEXING THE INDIVIDUAL INCOME TAX FOR INFLATION, 11 n.8 (Government Printing Office 1980) [hereinafter cited as CBO STUDY]

matic tax increase, without any legislative consent.¹⁶ Government coffers benefit, while the taxpayer loses.

In deciding whether to adjust a tax system for inflation, several factors should be recognized and addressed. The initial factors include purely political considerations such as the desirability, ramifications, and goals of adjusting taxes. Beyond these considerations, relevant factors include the political and technical considerations concerning the components of the tax system to be adjusted and the appropriate type of adjustment to be undertaken. A decision to offset inflation's impact on a particular component of the tax system will affect all other inter-related components of the system. Thus, the impact of the decision to adjust one component cannot be fully understood without examining the inter-relation among components and analyzing the overall effect of the adjustment on the tax system.

In any tax system, the decision whether to adjust for inflation is primarily a political decision. Although not attempting to draw normative conclusions concerning the political considerations or goals of indexing, this article will identify factors that are relevant to any decision to inflation-adjust taxes and examine the ramifications of choosing particular methods to implement this decision. If decision-makers do not consider all of these factors in choosing whether to inflation-adjust taxes, as well as the impact of an adjustment on other components of the tax system, then the adjustments undertaken will not correctly compensate for the effect of inflation upon the overall tax system. In making the inflation adjustments contained in ERTA, Congress did not address many of the factors which affect any attempt to adjust a tax system to offset the impact of inflation. Hence, the adjustments contained in ERTA are defective in their attempt to compensate for the effect of inflation on our tax system.

The purpose of this article is to examine indexing and other inflation adjustments provided by ERTA. Section I includes an examination of factors relevant to any decision to adjust a tax system for inflation, including both practical choices and theoretical considerations. The section then addresses the options in designing an automatic indexing system, should the decision be made to adjust part or all of the tax system through indexation. In Section II, the article examines state tax indexing in effect prior to the enactment of

(estimates ranging from 1.3% to 1.9%); Sunley, *supra* note 10, at 328 (elasticity of income tax with respect to inflation is about 1.5); Thomas, *supra* note 10, at 428.

¹⁶ See Thomas, *supra* note 10, at 428; Note, *Inflation and the Federal Income Tax*, 82 YALE L.J. 716, 740 (1973); Kelley, *supra* note 13, at 18; Vukelich, *The Effect of Inflation on Real Tax Rates*, 20 CAN. TAX J. 327 (1972). After examining inflation's impact on individual income taxes in Canada before indexing adjustments to the tax system were reenacted, Vukelich concluded:

Thus, inflation may be viewed as a form of taxation which to the government has all the psychological benefits of being indirect. Without the necessity of winning parliamentary approval and without overtly raising nominal tax rates, the government can obtain a rising share of personal incomes so long as it maintains a steady rate of inflation.

Vukelich, *id.* at 342.

ERTA. Section III details discretionary adjustments to the United States tax system and their relation to inflation during the 1960's and 1970's in an attempt to provide a perspective from which to view the adjustments for inflation made in ERTA. This historical background includes adjustments to both the federal income tax and the social security tax. Section IV includes a description of indexing and other inflation adjustments as provided by ERTA. In Section V, the article critiques the effectiveness of ERTA's rate-cutting provisions prior to 1985 and its automatic indexing provisions for subsequent years as adjustments to offset inflation. This analysis reaches the conclusion that ERTA's overall provisions are insufficient to fully offset the effects of inflation on the individual taxpayer, and that the indexing measures adopted are poorly drafted and will result in effects not explicitly intended by advocates of indexation. Finally, Section VI contains proposals to amend ERTA that would improve the effectiveness of indexing in offsetting the impact of inflation upon America's taxpayers.

I. ADJUSTING FOR INFLATION: FACTORS TO CONSIDER

Any adjustments to a tax system to compensate for the effect of inflation will affect various factors within the system. Hence, prior to enactment of any such adjustments, choices regarding these factors should be addressed by the appropriate decision-making body. At the outset, the first choice is whether to make any adjustments whatsoever to the tax system to offset the effects of inflation on tax liabilities. If the decision is to adjust, other preliminary choices exist including whether to adjust the entire tax system to offset inflation and whether to undertake adjustments that are ad hoc and discretionary or scientific and automatic. If any part of the tax system is to be automatically adjusted, a secondary set of choices regarding specific factors in the design of an indexing system should be addressed. Such choices exist among the numerous options available to implement indexing, including which index to use and whether to adjust taxes for the entire change in the index. In addition, one must decide how often to index, and how much of a time lag to allow between index changes and tax adjustments. It is important to note that once an indexing provision is enacted at least an implicit decision is made to adopt certain options over others that might have been available. In effect, one cannot ignore an option by simply not including it in the adopted indexing provision. Thus, all choices must be considered in adopting any indexing provision.

A. *Preliminary Factors—Inflation's Impact on Taxes*

1. Whether to Adjust Taxes for Inflation

The initial choice is whether adjustments to the tax system to offset the impact of inflation are desired. Various factors must be examined before deciding to adjust a tax system on account of inflation. These factors involve political and psychological attitudes toward the tax system as much as, if not more than,

economic considerations. There are at least five crucial considerations to be addressed, some economic, some political and psychological, when determining whether taxation should be adjusted to account for inflation.¹⁷

The first consideration is the rate of inflation. As the level of inflation rises, its effect on taxation increases. Federal tax liabilities increase 1.5 times as fast as inflation.¹⁸ That is, each 1 percent rise in inflation increases tax liability by a corresponding 1.5 percent.¹⁹ If one goal of the tax system is to maintain tax liability as a fairly constant percentage of a given level of real income, absent a legislatively enacted tax increase, this effect of inflation must be offset. Therefore, where inflation is high, and is expected to remain high in the future, a strong argument can be made in favor of providing adjustments.²⁰ If the public accepts inflation as a fact of life and adjusts its expectations to account for inflation, perhaps the tax system also should be adjusted. At low levels of inflation, decision makers may not view the incremental increase in tax liabilities as necessitating adjustments to the tax system. At high levels of inflation, however, adjustments become necessary if the semblance of a constant level of taxation is to be maintained over time.

A second consideration is that in times of inflation, adjustments are necessary to maintain the current distribution of the tax burden among taxpayers at various income levels. If maintenance of the current distribution is one goal of the tax system, only such adjustments will allow the tax burden distribution to remain as the legislature intended in its earlier, or original, tax-rate-making decisions.²¹ Without adjustments inflation changes the distribution of the tax burden among taxpayers in different income groups.²² For example, on one hand, although larger percentages of cost-of-living increases will be taxed away from middle and upper-middle income persons than from low-income persons,²³ the personal exemption will shield lesser amounts of constant dollars, thus hurting low-income persons more than middle and upper level wage earners.²⁴ On the other hand, persons with very high income are least affected because exemptions do not shield much of their income and they already have most of their income taxed at the highest marginal rate, so they cannot be pushed into a higher bracket by inflation. The effect of inflation upon income from sources such as capital gain, municipal bond interest, and Social Security benefits also alters the distribution of the federal tax burden among different groups.²⁵ Since these sources are not evenly distributed among

¹⁷ Ruppe, *supra* note 10, at 96-98.

¹⁸ See *supra* note 15 and accompanying text.

¹⁹ *Id.*

²⁰ Ruppe, *supra* note 10, at 96.

²¹ *Id.*

²² CBO STUDY, *supra* note 15 at 5. See Vukelich, *supra* note 16, at 342. ("Surely inflation is a clumsy way of raising taxes, with surprising and unintended effects on burden distribution.").

²³ CBO STUDY, *supra* note 15, at 5.

²⁴ *Id.* at 7.

²⁵ *Id.* at 5-7.

taxpayers in the various groups, and inflation may affect some of these sources more than others, inflation will alter the distribution of the tax burden.²⁶ Thus, without adjustment, inflation will automatically change the original "burden structure," increasing and shifting the burden without specific legislative directions. The extent to which one considers this uncontrolled burden allocation desirable will dictate, in part, whether one considers indexing desirable.

A third consideration is macro-economic stabilization. Under classic Keynesian economic principles, inflation's impact on taxes is viewed as a stabilizer.²⁷ Because the elasticity of tax revenue is greater than one,²⁸ without adjustments to the tax system, inflation will cause concealed progression up the tax rate structure.²⁹ Traditionally, this consideration weighed against inflation adjustments because unadjusted taxes would rise more than proportionately in time of inflation leaving less money in the hands of the public, thus lowering aggregate demand. Therefore, concealed progression in times of inflation was seen as contributing to economic stabilization.³⁰ Indeed, where inflation is induced by excess demand, "demand-pull" inflation, the theory is that the unadjusted tax system will reduce inflation by lowering demand and thus stabilizing prices.³¹ Two simulation-studies — one of the Canadian and another of the American tax systems — however, have found that the failure to adjust a tax system for inflation provides little or no economic stabilization during inflationary periods.³² In the Canadian simulation the main reason was that "the inflation-caused tax increases tended to lag behind the beginning of a demand-induced surge in inflation."³³ In the American simulation "the reason was that the magnitudes of the changes were very small relative to the overall demand consequences of these shocks."³⁴ Even if concealed progression does provide some stabilization, at high rates of inflation it becomes questionable whether the greatly increased progression is desirable. Further, if inflation is induced by unexpected cost increases, "cost-push" inflation, classic Keynesian theory is not applicable.³⁵ A tax system that is not adjusted to offset

²⁶ *Id.*

²⁷ See M. L. HATTEN, *MACRO-ECONOMICS FOR MANAGEMENT* 215-16 (1981).

²⁸ Elasticity is a term used in economics to depict the change in one item when a second item increases or decreases. A positive elasticity indicates that an increase in the second item results in an increase in the first item. A negative elasticity indicates that an increase in the second item results in a decrease in the first item. The elasticity of the income tax liability with respect to inflation is about + 1.5, meaning that taxes rise by about 1.5% with every 1% of inflation, that is taxes rise one and one-half times the rate of inflation. Sunley, *supra* note 10, at 328. See *supra* text accompanying notes 15, 18, 19.

²⁹ See *infra* text accompanying notes 64-66.

³⁰ Ruppe, *supra* note 10, at 96-97. See *INFLATION AND THE INCOME TAX* 25 (H. Aaron ed. 1976). Macroeconomics textbooks refer to the unadjusted progressive income taxes as an automatic stabilizer. See, e.g., HATTEN, *supra* note 27, at 215-16.

³¹ CBO STUDY, *supra* note 15, at 20.

³² Bossons & Wilson, *Adjusting Tax Rates for Inflation*, 21 CAN. TAX J. 185, 190-93 (1973); *INFLATION AND THE INCOME TAX*, *supra* note 30, at 173-88.

³³ CBO STUDY, *supra* note 15, at 20.

³⁴ *Id.* at 21.

³⁵ HATTEN, *supra* note 27, at 226.

concealed progression caused by "cost-push" inflation produces further destabilization by not allowing after-tax income to "catch-up" with the higher prices.³⁶ Cost-push inflation is likely to be accompanied by a rise in unemployment, and such unemployment is likely to be aggravated by any drop in demand caused by an unadjusted tax system.³⁷ Thus both income and employment are destabilized by an unadjusted tax system. This contribution to destabilization could be substantially mitigated by automatically adjusting the tax system.³⁸ Moreover, secondary effects of concealed progression can include increased wage demands and higher pricing to offset both inflation and this added concealed progression, thus fueling additional inflation.³⁹ According to one view, once the system is indexed, concealed progression will not occur, and the public will no longer need to take it into consideration when negotiating wages or setting prices.⁴⁰ Thus, the elimination of this secondary effect of concealed progression would reduce inflationary pressures. In the 1970's, several countries including Denmark, Finland and the Netherlands enacted indexed inflation adjustments based, at least in part, on this premise in the hope that they would aid in stabilizing prices.⁴¹

The role and scope of the public sector is yet another consideration influencing whether inflation adjustments should be made. Concealed progression through inflation leads to increased wealth transfer from the private sector to the public sector.⁴² The more-than-proportionate growth in tax revenues due to inflation allows the government to increase spending without actually enacting higher tax rates or increasing deficit-spending.⁴³ If the tax system is adjusted for inflation, however, this hidden growth in government revenues will cease. Hence, corresponding reductions in the rate of increase in government spending must follow to avoid larger deficits.⁴⁴ On the one hand, those in favor of expanding the public sector often may be opposed to inflation adjustments, even if publicly they deplore the added tax burden on the poor and needy due to inflation, because of the pressure such adjustments would exert to reduce growth in government spending.⁴⁵ On the other hand, those favoring

³⁶ CBO STUDY *supra* note 15, at 21; See Bossons & Wilson, *supra* note 32, at 196-97, 199.

³⁷ HATTEN, *supra* note 27, at 228.

³⁸ Bosson & Wilson, *supra* note 32, at 199.

³⁹ Allan, Dodge & Poddar, *Indexing the Personal Income Tax: A Federal Perspective*, 22 CAN. TAX J. 355, 368-69 (1974) [hereinafter cited as Allan] (Allan refers to this secondary effect as "tax-push inflation."). Whether wage increases lead to increased inflation may depend in part on how the monetary authority, the Federal Reserve Board, alters the size of the supply of money in response to the increased demand for money.

⁴⁰ Ruppe, *supra* note 10, at 97. See Allan, *supra* note 39, at 369 (indexing should weaken this source of inflation).

⁴¹ Ruppe, *supra* note 10, at 97.

⁴² *Id.* at 97-98.

⁴³ CBO STUDY, *supra* note 15, at 15.

⁴⁴ See, e.g., Probyn, *What Indexing Income Taxes Produced for Canada*, N.Y. Times, Aug. 23, 1981, at F6; Gaffney, *A Time to Stop Bracket Creep*, N.Y. Times, Sept. 13, 1981, at F2.

⁴⁵ See V. TANZI, INFLATION AND THE PERSONAL INCOME TAX 143 (1980).

reduced government spending and the requirement of specific legislative authorization for expanding the role of government, usually favor some form of inflation adjustments to the tax system.⁴⁶

One final consideration is the psychological impact of adjusting the tax system to take account of inflation. Many people contend that such action in effect signals the admission that past economic and fiscal policy has been deficient, unable to reverse the inflationary trend.⁴⁷ This, in turn, is believed to be an indication that the outlook for the future is for continued inflation and that there is a lessened resolve on behalf of government to combat it.⁴⁸ Proponents of indexation of the tax system, however, contend that such automatic adjustments will make it easier for governments to pursue anti-inflationary policy.⁴⁹ Presumably, this view is based on several premises. Anti-inflationary policies are pursued at the risk of incurring the high costs, both human and monetary, associated with unemployment.⁵⁰ Thus, strong pressures often are exerted against such policies or in favor of slowing the implementation of such policies.⁵¹ The rationale holds that these pressures become so great the government will no longer be able to pursue effective anti-inflationary policies if it is free to continue to reap more-than-proportionate increases in tax revenues due to inflation.⁵² These increased revenues through governmental inaction in making discretionary adjustments could be used to fight unemployment.⁵³ Thus, if inflation-adjustments are left to discretion, the government could be pressured to reverse direction and stop pursuing anti-inflationary policy much more easily than if adjustments are automatically made.⁵⁴

Taken together, the above considerations indicate that a preliminary choice to inflation adjust the tax system is likely to be based on prevailing political beliefs and expectations rather than an exhaustive economic analysis.⁵⁵ The question of whether to adopt inflation adjustments is primarily a function of the political consideration of tax policy goals, public sector growth and the role of the legislature in increasing taxes.⁵⁶ On the one hand, reasons to support inflation-adjustment to taxes include: high expected inflation; the desire to maintain a constant percentage tax liability on constant real income; the desire to maintain the current "tax-burden" structure; the desire to constrain the growth and spending ability of the public sector; and the belief that

⁴⁶ See *id.* See also Allan, *supra* note 39, at 369 (A process of explicitly legislated tax increases is superior from the point of view of accountability to taxpayers than is the alternative of relying upon a hidden "inflation tax.").

⁴⁷ Ruppe, *supra* note 10, at 98.

⁴⁸ INFLATION AND THE INCOME TAX, *supra* note 30, at 26.

⁴⁹ TANZI, *supra* note 45, at 144.

⁵⁰ *Id.*

⁵¹ See *id.*

⁵² *Id.*

⁵³ See *id.*

⁵⁴ See *id.*

⁵⁵ See INFLATION AND THE INCOME TAX, *supra* note 30, at 27.

⁵⁶ Ruppe, *supra* note 10, at 99.

inflation-adjustment of taxes will reduce inflationary pressure on wages. On the other hand, reasons for opposition to inflation-adjustment include: low expected inflation; the desire to shift the current "tax burden" structure; the desire to expand the public sector; the belief that inflation-induced concealed progression contributes to economic stabilization; and the belief that adjustments indicate a lessened resolve on behalf of government to combat inflation. These expectations and political goals effect the initial determination of whether to make inflation adjustments. The remainder of this article is premised on the assumption that a decision has been made to adjust the tax system to offset inflation.

2. Types of Adjustment: Structure vs. Base

Two major types of inflation adjustment can be undertaken: adjustment of the tax structure and adjustment of the tax base.⁵⁷ In this context, the tax structure includes tax rates, brackets, deductions, exemptions, and all other nominal fixed-dollar amounts in the tax system.⁵⁸ Adjustments to the tax structure would effect only these components, they would not effect the components of the tax base. The tax base includes components in the system necessary for the measurement of taxable income derived from assets, such as depreciation and basis. Adjusting the tax base is more complex than adjusting the tax structure, and would have a more fundamental effect upon the tax system.⁵⁹ These two types of adjustments could be undertaken either together or independently.⁶⁰

The first major type of inflation adjustment, tax structure adjustment, is more familiar and has been undertaken in some form by over twenty countries.⁶¹ Tax structure adjustments are made in response to the concealed

⁵⁷ A third type of inflation adjustment, much less widely addressed than the two noted in the text, is adjustment to taxpayer liabilities and refunds. TANZI, *supra* note 45, at 7. These adjustments relate to the effect on revenue of lags in tax collection under inflation, since taxes paid later can be paid in money with a lower real or "constant" value. TANZI, *supra*, note 45, at 7, 74-84. Ruppe, *supra* note 10, at 95-96, 99. Such adjustments, however, are available in the presence, or absence, of either of the two types of adjustments noted in the text and, in comparison to them, represent more of a fine tuning of the desired system than a major adjustment to the system. See CBO STUDY, *supra* note 15, at 1-2.

⁵⁸ Kelley, *supra* note 13, at 20 (classified as Phase I adjustments); CBO STUDY, *supra* note 15, at 1-2 & n.1 (classified as Type I adjustments). In addressing adjustments to the tax structure, one commentator distinguished between adjustments to exemptions and adjustments to brackets. TANZI, *supra* note 45, at 6.

⁵⁹ Kelley, *supra* note 13, at 21 (classified as Phase II adjustments); See CBO STUDY, *supra* note 15, at 2 & n.4 (classified as Type II adjustments).

⁶⁰ Foreign experience provides examples of structural adjustments being undertaken independently. Ruppe, *supra* note 10, at 99.

⁶¹ By 1981, the following countries had undertaken various adjustments to their individual income tax structure which offset inflation: Argentina, Australia, Canada, Israel, and Uruguay (full, automatic, and annual adjustments based on a price index); Belgium, Brazil, Finland, France, Japan, Luxembourg, the Netherlands, Norway, Sweden, Switzerland, United Kingdom (regular adjustments entailing either partial indexing or considerable discretion as to the scope of the adjustment); Chile, Denmark, Iceland, Peru (regular adjustments based on an

progression caused by the impact of inflation upon the progressive tax rate.⁶² Such adjustments would be unnecessary if the income tax rate were strictly proportional and were levied on gross income without exemptions.⁶³ By reducing the real value of fixed-dollar amounts, including the Zero Bracket Amount and the tax brackets, inflation increases the progressivity of an already progressive rate structure because the taxpayer becomes subject to higher effective and marginal rates at a lower constant-dollar income.⁶⁴ This concealed progression due to inflation results in the phenomenon of "effective-rate creep" where a taxpayer's effective tax rate increases although income in constant dollars remains the same.⁶⁵ This can push a taxpayer into a higher tax bracket, although his income in constant dollars remains the same, resulting in the widely acclaimed "bracket-creep."⁶⁶

The second major type of inflation adjustment, tax base adjustments, are less familiar and have been undertaken to a limited extent in only a few countries.⁶⁷ As assets increase in value over time, part of the increase represents a rise in real value measured in constant dollars, while the remainder of the increase merely compensates owners for increases in the general price level due to inflation.⁶⁸ Inflation-adjustments to the tax base would include increasing the basis of assets by the amount of inflation before calculating taxable gain or loss, thereby basing taxes on real gain or loss in constant dollars.⁶⁹ Com-

index other than a price index). Other nations including Austria, Greece, Mexico, Spain, United States, and West Germany have occasionally undertaken discretionary adjustments which were not expressly intended to counter inflation. Ruppe, *supra* note 10, at 113-14; TANZI, *supra* note 45, at 150; CBO Study, *supra* note 15, at 2.

⁶² See TANZI, *supra* note 45, at 6.

⁶³ *Id.* & n.15.

⁶⁴ See *supra* notes 10-13 and accompanying text. This is true for all tax brackets below the top bracket. If a substantial portion of all taxpayers reach the top bracket, progressivity would be reduced.

⁶⁵ See Sunley, *supra* note 10, at 328. For example, assume the first \$10,000 is taxed at a rate of 10%, the second \$10,000 at 20%, and the third \$10,000 at 30%. If the taxpayer makes \$19,000 in year 1, his tax would be \$2800, representing an effective tax rate of 14.7%. After inflation of 10% in year 2, the taxpayer's income would remain the same in constant dollars if he made \$20,900. With an income of \$20,900, however, the taxpayer's marginal rate will increase to 30%. His tax liability will increase to \$3,270, representing an effective tax rate of 15.6%. While the before tax income remained the same in constant dollars, the real value of after-tax income has decreased due to the impact of inflation.

⁶⁶ Under a progressive rate structure, effective-rate creep will occur regardless of whether the taxpayer is pushed into a higher tax bracket; a larger amount of his income will be taxed at his marginal rate. For example, using the rates of taxation and inflation in note 65 *supra*, if income is \$18,000 in year 1, tax liability is \$2,600, representing an effective tax rate of 14.4%. If income remains the same in constant dollars in year 2 it will be \$19,800 and tax liability will be \$2,960, representing an effective tax rate of 14.9%. Thus, it is misleading to label the phenomenon "bracket creep"; "effective rate creep" is a more accurate description.

⁶⁷ Israel has indexed the basis of capital assets for capital gain taxation purposes since 1975. Rafael, *Tax Reform in Israel*, 11 IS. L. REV. 187, 202-07 (1976). By 1981, Sweden and Argentina had undertaken tax base adjustments in the measurement of gains from the sale of certain real property. CBO STUDY, *supra* note 15, at 2-3.

⁶⁸ CBO Study, *supra* note 15 at 2.

⁶⁹ See *id.* at 2-3.

prehensive tax base adjustment would take into account the effects of inflation by adjusting measurement of business depreciation and inventories, as well as by reducing interest income and interest deductions.⁷⁰ These tax base adjustments are more complex and involve more difficult problems than tax structure adjustments.⁷¹ The aim here should be to protect equity to the extent it is invested in erodable or non-protected assets.⁷² Tax base adjustments are made in response to inflation *per se*.⁷³ They would be required to adjust any tax system for the effect of inflation regardless of the progressivity or proportionality of taxes in that system, so long as inflation existed.⁷⁴

To offset the full impact of inflation on the tax system, both types of adjustment must be undertaken. The use of either type of adjustment independently will produce a result short of a complete inflation-offset, and some commentators have questioned the desirability of rate structure adjustments at any rate of inflation.⁷⁵ The application of either structure or base adjustments or both to various categories of income will produce different effects on the tax system. Particular categories of income may be fully "cleansed" of inflation's impact through different combinations of the two types of adjustments.

3. Whether to Adjust the Entire Tax System for Inflation

Once a decision has been made to make inflation adjustments to the tax system, attention must next focus on what components of the system to adjust. An examination of the various types of adjustments which could be made demonstrates that the decision to make any one adjustment will affect tax liabilities in other categories. In addition to the broad categories of individual and business income taxes, specific categories of income such as capital gain and interest income have been singled out for special tax policy treatment under current American law. These categories, along with all others, have been affected greatly by inflation. Thus, all of these tax categories are potential candidates for inflation adjustments. Most importantly, all of these categories are interrelated. An inflation adjustment to some of these categories, or to part of a category, will impact other categories, or other parts of the same category. If this interrelationship is not recognized, a decision to inflation-adjust any portion of the tax system may have unanticipated, or unwanted, effects on other portions of the system. Thus, the relative equities of the present tax systems as defined by Congress in the Internal Revenue Code may be altered by any decision to make adjustments for inflation. This unintended alteration of equities should be taken into account in making any decision concerning whether to

⁷⁰ *Id.* at 3.

⁷¹ TANZI, *supra* note 45, at 7; Kelly, *supra* note 13, at 21; See *Report of the Committee of Inquiry into Taxation Under Inflation* 10 (Ministry of Finance, Israel 1980) [hereinafter cited as *Taxation Under Inflation*].

⁷² See *infra* notes 91-99 and accompanying text.

⁷³ See TANZI, *supra* note 45, at 7.

⁷⁴ *Id.* at 7.

⁷⁵ INFLATION AND THE INCOME TAX, *supra* note 30, at 27.

make the adjustments throughout the tax system or only in parts of the system.

Tax treatment of individual income is distorted by inflation's impact on the tax structure as well as on the tax base. Inflation's impact on the individual tax structure results in, as noted, effective-rate creep, exacerbating the progressive nature of the tax rates.⁷⁶ All individual income, regardless of source, is subject to this phenomenon because of inflation. Individual income derived from the sale of assets,⁷⁷ or from interest,⁷⁸ is also distorted by inflation's impact not only on the tax structure but also on the tax base. Individuals are taxed on the entire nominal income from assets, not just on their real gain.⁷⁹ Many individuals, however, receive all, or a large part, of their income as earned income, derived from wages or salaries, and not from non-labor assets. To the extent that an individual's income represents earned income, inflation adjustments to the tax structure could offset the impact of inflation on his taxes. Therefore, inflation adjustments to the tax structure would alleviate the impact of inflation on individual income taxes to a greater extent than a similar adjustment to other categories of income derived more heavily from assets. Tax structure adjustments would go a long way toward eliminating the inequities caused solely by progressivity's interaction with inflation, or effective-rate creep.⁸⁰ Inequities caused by inflation's distortion of the tax base, however, would remain if base adjustments do not accompany the structure adjustments.⁸¹ On the one hand, inflation adjustments made to the tax structure would redistribute tax liabilities in favor of taxpayers who receive higher proportions of their income as earned income. On the other hand, inflation adjustments made to the tax base would redistribute tax liabilities in favor of taxpayers who receive higher proportions of investment income.

In contrast to most individual income, both structural and base adjustments are necessary to achieve any significant lessening of inflation's impact on business income. The category of business income is composed of income from unincorporated proprietorships, partnerships and corporations, while the first two types of income are taxed at individual rates, corporate tax rates reach their highest marginal rate at \$100,000.⁸² For most practical purposes, therefore, the corporate tax is a flat proportional tax, not a progressive tax. Although nominal amounts, including bracket amounts, are eroded by inflation, concealed progression is a relatively minor part of inflation's effect on business income. Thus, structural adjustments alone are insufficient to offset inflation's impact on business income. Adjustments to the tax base are re-

⁷⁶ See *supra* notes 64-65 and accompanying text. For additional discussion of inflation's impact on individual income see K. ROSENN, LAW AND INFLATION 301-03, 305-09 (1982) (received after preparation of this manuscript).

⁷⁷ See I.R.C. §§61(a)(3), 64, 1001(a) (1982).

⁷⁸ *Id.* at §61(a)(4).

⁷⁹ *Id.* at §§1001(a), 1011(a).

⁸⁰ See TANZI, *supra* note 45, at 148.

⁸¹ *Id.*

⁸² I.R.C. § 11(b) (1982).

quired to achieve any substantial offset of inflation's effect on business income. Inflation distorts both the balance sheet and the income statement because of their reliance on historical cost data to determine both depreciation deductions and income generated by inventory sales.⁸³ When depreciation is based on historical costs, and is deducted over a period determined to be an asset's useful life, business income is greatly overstated in an era of high inflation. During periods of high inflation, these depreciation deductions will not reflect the relevant cost of replacement, and business will be taxed on income required for replacement of worn-out assets.⁸⁴ In addition, calculating taxable gain on the sale of inventory items where basis of those items is tied to historical cost, whether determined according to FIFO or LIFO, produces a similar distortion in taxable income due to inflation.⁸⁵ If a goal of inflation adjusting the taxation of business income is to base taxes on real gain or real loss in constant dollars, assets and liabilities both require inflation adjustments to be corrected to reflect a real tax base instead of a nominal base. To the extent that nominal gains in business income calculations are based on historical depreciation and inventory costs, a tax on these nominal gains is really a tax on capital. Similarly, to the extent that deductions for payments on debt are calculated on a nominal basis, real gains may be reflected as losses.⁸⁶ Adjustments to the tax base would be required to eliminate these effects of inflation.

The accounting profession recently recognized the need to consider inflation's impact on business income in order to obtain genuine measurements of it by requiring large corporations to supplement traditional financial statements with inflation-adjusted information. In the United States, the Financial Accounting Standards Board Statement 33 (FASB 33) provides guidelines for

⁸³ TANZI, *supra* note 45, at 63. See Sunley, *supra* note 10, at 330. For additional discussion of inflation's impact on business income see ROSENN, *supra* note 76, at 296-300, 309-10.

⁸⁴ Thomas, *supra*, note 10, at 428. One study of 2977 corporate income tax returns in the United States concluded that due to inflation depreciation allowed on existing plant and equipment was understated by \$39.7 billion. *Id.* Inflation-induced fictitious profits due to this depreciation understatement alone resulted in tax payments of \$19 billion, representing almost one-third of the total corporate tax liability of \$59 billion in 1977. *Id.*

⁸⁵ The first-in, first-out (FIFO) method of accounting assumes that the oldest goods are sold first. See ANTHONY & REECE, ACCOUNTING TEXT AND CASES 184, 188. The last-in, first-out (LIFO) method of accounting bases the cost of goods sold figure on the most recent purchases of inventory items. *Id.* at 184, 187-88. In periods of inflation, LIFO results in higher cost of goods sold than FIFO, and therefore a lower measurement of taxable income. *Id.* Under inflation, proponents of LIFO argue that it makes little sense to state income at the current dollar value while stating expenses in terms of an older, more valuable dollar. *Id.* The use of LIFO rather than FIFO may result in a more meaningful income statement, but a less realistic balance sheet. *Id.* Although the use of LIFO results in the expense of cost of goods sold being valued in terms of the most recent purchases, inflation may distort this figure just as it does figures under FIFO where either a long period of time or a period of high inflation exists between the last purchase and the sale. In a period of inflation, FIFO results in a cost of goods sold figure well below the current price of inputs in the production process. *Id.* This difference increases the measurement of taxable income, because of the fictitious gain on the sale due to inflation. *Id.*

⁸⁶ See *infra* note 107 and accompanying text.

business by which to present inflation adjusted financial data.⁸⁷ FASB 33 requires businesses to calculate and report several categories of adjusted data, including: income adjusted for general inflation; purchasing power gain or loss; gain or loss on net monetary assets; and income, inventory, and property on a current cost basis.⁸⁸ To present this information, a business must measure the effects of changing prices on inventory, property, plant equipment, cost of goods sold, and depreciation expenses.⁸⁹ Furthermore, many large corporations required by the Financial Accounting Standards Board to provide inflation-adjusted information use this data internally to help them assess their financial status and set their future course.⁹⁰ As inflation adjustments achieve more universal acceptance by businesses and are reflected in their internal financial planning, the divergence between a business' financial statements and its income tax returns increases. If tax accounting, and ultimately tax liability, remain based on historical costs while financial accounting continues moving towards current costs in order to obtain a more accurate measurement of a business' income, the result will be taxation upon what would be viewed as fictitious income by accountants and businessmen. If a goal of the tax system is to tax businesses based on a numerical indication of financial gain or loss, and both businesses and investors view these adjusted figures as a more accurate picture of real economic performance, the argument is strengthened that tax accounting and liability also should be inflation adjusted.

Adjustments to the tax base are necessary to offset inflation's impact on business assets and liabilities. Inflation, however, effects different types of assets and liabilities in different ways. This fact must be taken into account in deciding what, if any adjustments should be undertaken. Assets can be divided into two categories to distinguish inflation's differing impact upon them: erodable and non-erodable assets. Erodable assets generally depreciate in value during periods of inflation and are realized or used up in the relatively short-run.⁹¹ Examples of erodable assets include: machinery, equipment, and other depreciable assets with a useful life less than ten years; inventories; cash; accounts receivable; tax-deductible prepaid expenses; and registered securities.⁹² Since inflation erodes the value of these assets, a tax base inflation-adjustment is necessary to protect their real value in periods of high inflation.⁹³ Non-erodable assets generally do not depreciate in value during periods of inflation

⁸⁷ SUMMARY STATEMENT OF FINANCIAL ACCOUNTING STANDARDS NO. 33 1 FINANCIAL ACCOUNTING STANDARDS BOARD, (Sept. 1979) [hereinafter cited as FASB 33]. See INFLATION AND THE INCOME TAX, *supra* note 30, at 81-114 (chapter 3: "Inflation Accounting: Implementation of the FASB Proposal").

⁸⁸ FASB 33, *supra* note 87, at 1.

⁸⁹ *Id.* at 2.

⁹⁰ Casey & Sandretto, *Internal Uses of Accounting for Inflation*, 59 HARV. BUS. REV. 149, 149 (Nov. 1981).

⁹¹ See Taxation Under Inflation, *supra* note 71, at 10, 12.

⁹² *Id.* at 24.

⁹³ See *id.* at 15.

and their value is usually realized in the long run.⁹⁴ Examples of non-erosible assets include immovables other than depreciable immovables with a useful life less than ten years and leasehold rights for more than ten years.⁹⁵ Beyond adjusting annual depreciation,⁹⁶ inflation adjustments need not be made regarding such assets.⁹⁷

A goal of many proponents of inflation-adjusting the business income category of the tax system is to protect erosible assets financed by owner's equity.⁹⁸ One method to achieve this goal would be to inflation-adjust the tax base by allowing a deduction equal to either erosible assets minus debt, or equity minus non-erosible assets.⁹⁹

Short of a comprehensive inflation adjustment, to the tax base for all erosible assets financed by equity, particular types of assets or liabilities could be protected from inflation. Such partial adjustments, however, would produce different results for different taxpayers. Adjusting the tax base of any single asset, or group of assets, would result in different treatment for businesses that hold large amounts of the protected assets as compared to those that hold large amounts of unprotected assets. For example, if cash were given protection, banks would be insulated from a large part of inflation's impact, while a business holding a large inventory of goods and little cash would not be much better off in terms of inflation's impact upon them than before such an adjustment. Adjusting the tax base of liabilities would also result in different treatment according to the amount of the particular liabilities held. For example, if debt instruments such as notes, bonds and debentures were protected, inflation adjustments for both creditors and debtors would benefit the former and hurt the latter — just the opposite of inflation's current impact.¹⁰⁰ Firms with higher amounts of debt capital would suffer compared to firms with lower amounts of debt capital. If such disparities are to be avoided, all assets and liabilities must be treated similarly under a comprehensive inflation adjustment.

⁹⁴ See *id.* at 25.

⁹⁵ *Id.*

⁹⁶ See *id.* at 14.

⁹⁷ See *id.* at 25 (so long as the increase in value is not taxed until realization, at which point the real component of capital gain should be taxed at ordinary rates and the inflationary gain should be exempt). See also *infra* note 121.

⁹⁸ See *Taxation Under Inflation*, *supra* note 71, at 8-9. See generally H.J. HOFSTRA, AN INFLATION-ADJUSTED TAX SYSTEM (Government Publishing Office, The Hague, 1978). For example, if erosible assets such as inventory are purchased using capital, rather than loan proceeds, upon the sale of the assets, tax will be levied on nominal gain, although inventory value has not kept pace with inflation. If, however, capital has been used to purchase a non-erosible asset such as land, whose value raises and maintains pace with inflation, no tax will be levied until realization upon which time value will have increased commensurate with inflation.

⁹⁹ See *id.* at 9 (proposed in Israel as part of a comprehensive "capital preservation scheme"); Bossons, *Implementing Capital Gains Tax Reform*, 27 CAN. TAX J. 145, 150-52 (1979) (proposal that allows cost base indexation to be applied only to the fraction of assets which are not financed by debt).

¹⁰⁰ See *infra* text accompanying notes 101-12.

In deciding what categories of income to adjust for inflation, attention should be paid to two specific components of the broad categories of individual and business income which are particularly prone to distortion due to inflation: interest and capital gains income. The interrelationships between these components and the broader categories of individual and business income must be recognized in order to evaluate what sort of inflation adjustments are desired. Both individual and business income include income derived from interest and the sale of capital assets. Any inflation adjustments made to either interest or capital gains would affect the broader categories of income, regardless of whether any adjustments were made to either broad category as a whole. Furthermore, to offset inflation's entire impact on either individual or business income, tax base inflation adjustments must be made to interest and capital gains income.

The tax system's treatment of interest income is distorted greatly by inflation.¹⁰¹ Since interest income is taxed the same as other business or individual income,¹⁰² inflation adjustments to the tax structure of either of these two broad categories of income could eliminate any effective-rate creep but not the taxation of nominal or fictitious income generated solely by inflation. To neutralize this impact of inflation would require adjustments to the tax base of interest income. Absent such adjustment, creditors bear the burden of inflation, and debtors reap the benefit. Creditors are taxed on the entire amount of interest received, regardless of the interest rate's relation to the inflation rate.¹⁰³ If the interest rate is below the inflation rate, the creditor's asset, the loan, is really declining in value to the extent of the difference, however, under current tax law, he is taxed on a nominal gain instead of being allowed a deduction for the real loss he suffers.¹⁰⁴ To offset inflation's impact, the

¹⁰¹ See TANZI, *supra* note 45, at 51-62; Downs & Giliberto, *How Inflation Erodes the Income of Fixed-Rate Lenders*, BROOKINGS INSTITUTION REPRINT 372 (1981) [hereinafter cited as Downs].

The authors take issue with those who assert that, taking a macro-view, taxation of interest among individual taxpayers or as between them as creditors and corporations as borrowers is in the whole not distorted by inflation. Sunley, *supra* note 10, at 331-32 (also asserting that market adjustments made to rate of interest so that no inflation adjustment is necessary). If such an approach was warranted, taxation of many types of income could be foregone and deduction of corresponding expenses by other taxpayers denied. The argument that the before tax rate of interest will adjust to the fact that the inflation component of the interest is taxed, is not born out by experience. Downs at 45, 50-51 (lenders have not anticipated future increases in the rate of inflation, and, thus, have not raised interest rates high enough to offset inflation). Bossons, *Indexing Financial Instruments for Inflation*, 22 CAN. TAX J. 107, 109 (1974) [hereinafter cited as Bossons II], (much price inflation is unanticipated); INFLATION AND THE INCOME TAX, *supra* note 30, at 3-4.

At a rate of inflation of 10%, in order to obtain an after tax real interest of 1.5% for a taxpayer in the 50% marginal tax bracket, an interest rate of 23% is required. At a rate of inflation of 15%, the required rate of interest would be 33%. Despite exceptionally high rates of interest in 1980-1981, such a gap between inflation and interest rates was never recorded.

¹⁰² I.R.C. § 61(a) (1982).

¹⁰³ See *id.* at § 61(a)(4).

¹⁰⁴ For example, consider the situation where a creditor makes a loan of \$100 at an interest rate of 8% per year when annual inflation is 10%. After one year the creditor receives \$8

creditor should be allowed to deduct from taxable income an amount equal to the percent of the outstanding principal equivalent to the excess — the rate of inflation less the rate of interest.¹⁰⁵ Meanwhile, the debtor is allowed to deduct his entire interest payment.¹⁰⁶ In this situation the debtor really is receiving a gain, to the extent the inflation rate exceeds the interest rate, yet he is taxed as if all of the interest payments were a cost item.¹⁰⁷ To offset inflation's impact, the debtor should be required to include as taxable income an amount equal to the percent of the outstanding principal equivalent to the excess of the inflation rate over the interest rate.¹⁰⁸ Where the interest rate exceeds the inflation rate, creditors are only experiencing real gain to the extent of the difference between these two rates and debtors are only experiencing real loss, or cost, to the same extent.¹⁰⁹ Therefore, to offset inflation's impact, creditors should only be required to include as taxable income, and debtors allowed to deduct from taxable income, an amount equal to the percent of principal equivalent to the excess of the interest rate over the inflation rate.¹¹⁰ Thus, any adjustment to the tax base to reflect the real rather than the nominal measurement of taxable income would benefit creditors, and hurt debtors.¹¹¹ This holds true whether either party is a business or an individual. Therefore, such an inflation adjustment would affect both broad income categories.¹¹²

interest income. The value of the loan's principal has declined to \$90 due to inflation — representing a loss of \$10 over the year. The net real value of the asset resulting from receipt of \$8 interest income and decline \$10 in principal value is a \$2 loss on the asset. Under current tax law, however, the creditor must pay tax on an \$8 gain and is allowed no offsetting deduction to account for the erosion in the loan's principal value due to inflation.

¹⁰⁵ See Bossons II, *supra* note 101, at 114.

¹⁰⁶ I.R.C. § 163(a) (1982).

¹⁰⁷ In the example *supra* note 104, the debtor pays \$8 interest, but the value of the principal to be repaid has decreased by \$10, representing a \$2 net gain. Under current tax law, however, the debtor receives an \$8 deduction and reports no gain.

¹⁰⁸ See Bossons II, *supra* note 101, at 114.

¹⁰⁹ For example, consider the situation when a creditor makes a loan of \$100 at an interest rate of 12% per year when inflation is 10%. After one year, the creditor receives, and under current tax law pays taxes upon, \$12 interest income. The debtor pays, and under current tax law deducts, the \$12 interest expense. The real value of the loan is then \$90 — representing a \$10 loss to the creditor and a \$10 gain to the debtor. Netting the interest and principal gains and expenses, the creditor has experienced a real gain, and the debtor a real expense, of only \$2.

¹¹⁰ See Bossons II, *supra* note 101, at 114.

¹¹¹ To the extent that upper-income bracket entities are creditors, and lower-income bracket entities are borrowers, an inflation adjustment to interest income to reflect a real rather than a nominal base would represent a redistribution of tax liabilities that is regressive in nature. This is because creditors now paying taxes on nominal income would be relieved of this liability and actually receive new deductions, while debtors would lose most of their current deduction and be required to recognize income if the inflation rate exceeded the interest rate. Also, historically favored taxpayers, such as homeowners, would suffer from an inflation adjustment to interest income since they would lose the substantial tax benefit of mortgage interest deductions.

¹¹² Examples of items generating interest income and deductions affecting both individual and business income include a home mortgage, where a bank is the creditor and an individual the debtor, and a corporate bond, where an individual is the creditor and a corporation is the debtor.

As with interest income, capital gains income is distorted by inflation and is a component of overall business and individual income.¹¹³ Inflation adjustments to the tax structure can serve merely to eliminate effective-rate creep, not to neutralize, inflation's impact upon these components of overall income. Adjustments to the tax base are required to offset inflation's entire impact on these components. With regard to capital gains, in a nominal system, such as our current tax system, taxable gain is determined by the excess of sale price over historical cost basis.¹¹⁴ All or part of this excess may be a fictitious gain caused by inflation during the holding period rather than a real gain in constant dollars. Therefore, under our current tax system, inflation may result in over-taxation of income received from the sale of capital assets or other property.¹¹⁵ Thus, during inflationary times, at least part of the tax on gains from the sale of such properties inevitably will tax equity rather than income.¹¹⁶ Unlike interest, income from the sale of a capital asset already receives preferential tax treatment in most countries.¹¹⁷ A capital gains preference that does not distinguish real from fictitious gains, however, will overcompensate some taxpayers for inflation while undercompensating other taxpayers for its effects.¹¹⁸ In the United States, the 60% exclusion for capital gains income¹¹⁹ has general-

¹¹³ See TANZI, *supra* note 45, at 41-50; Brinner, *Inflation, Deferral, and the Neutral Taxation of Capital Gains*, 26 NAT'L TAX J. 565 (1973).

¹¹⁴ For example, in the United States the sale for \$120 of an object purchased for \$100 and held less than one year will be taxed as a \$20 gain. I.R.C. § 1001(a), 1011(a) (1976). If inflation between the date of purchase and the date of sale has been 10%, only \$10 represents a real gain in constant dollars. Thus, one half of the \$20 taxable gain is a fictitious gain due to inflation, so taxation of the entire \$20 represents overtaxation of the real gain of \$10.

¹¹⁵ TANZI, *supra* note 45, at 41.

¹¹⁶ *Id.*

¹¹⁷ At least in the United States, preferential tax treatment accorded capital gains has stemmed from attempts to encourage capital investment rather than an express intent to adjust for inflation. See S. SURREY, W. WARREN, P. MCDANIEL, & H. AULT, 1 FEDERAL INCOME TAXATION 944 (1972).

¹¹⁸ For example, in the United States, 60% of the gain on the sale of a capital asset held more than one year is exempt from taxation, while 40% is taxed at the taxpayer's applicable marginal rate. I.R.C. § 1202(a). Assume that two taxpayers, A and B, each in the 50% marginal tax bracket, sell for \$200 a capital asset that has a basis in their hands of \$100. Further, assume A has held his asset for one year and a day while B has held his asset for five years. Under present tax law, both would be taxed at the rate of 50% on 40% of their gain, resulting in a \$20 tax liability. *Id.* If inflation were 10% for each of the preceding five years, A's real gain is 90% of his nominal gain of \$100, or \$90. If the gain were not given preferred treatment and instead taxed as ordinary income and if A were taxed at the rate of 50% of his real gain, his tax liability would be \$45. Thus, A has been overcompensated for inflation under current preferential tax laws. Conversely, B's real gain would be only 39% of his nominal gain of \$100 after compounding inflation rates, or \$39. Treating the gain as ordinary income if B were taxed at the rate of 50% of his real gain, his tax liability would be \$19.50. Thus, B has been undercompensated for inflation under current tax laws. If the inflation rates were to be above 10% per year, or B's holding period were to increase, B would become increasingly undercompensated for inflation, reaching a point where tax was paid on a nominal gain when a real loss exists. See Feldstein, *Taxes, Inflation and Capital Formation*, 32 NAT'L TAX J. 347, 348 (1979) (study of capital gains on sales of corporate stock in 1973 reveals that tax was paid on \$4.6 billion nominal gain when taxpayers suffered a real loss of almost \$1 billion).

¹¹⁹ I.R.C. § 1202(a) (1982).

ly been depicted as operating as a rough correction for inflation's effect on the cost basis of capital assets. This fixed-rate exclusion, however, could result in a lock-in effect during prolonged periods of inflation. As the holding period lengthens, an increasing portion of the excess of sale price over cost basis may become fictitious gain generated by inflation rather than real gain. Under the current American taxation system, especially when inflation-generated fictitious gain accounts for more than 60% of the excess of present value over basis, the taxpayer becomes locked-in with no incentive to sell the property.¹²⁰ This could be corrected by tax base adjustments which would adjust the basis of a capital asset or other property to reflect its present worth in constant terms.¹²¹ Compared to current tax treatment, substituting scientific inflation adjustments to the tax base of capital gains for the 60% exclusion generally would benefit those taxpayers, both businesses and individuals, who have sold capital assets held over longer periods of time or during higher periods of inflation, and hurt those taxpayers who have sold capital assets after shorter, or less inflationary, holding periods.

The effect of interrelations between the various categories and components of income described above must be recognized in order to determine accurately the impact of particular inflation adjustments upon the tax system. In addition to earned income, individuals are the recipients of interest income, capital gains, and business income in the form of corporate dividends, proprietorship profits, or partnership interests. Therefore, inflation-adjusting any of these types of income will affect individual income. In the absence of neutralizing inflation's impact on all individual income, making any of these adjustments to other types of income would redistribute tax liabilities in favor of those individuals receiving the adjusted income. Similarly, part of business income is produced by the sale of capital assets and receipt of interest. Thus, in the absence of neutralizing inflation's impact on all business income, adjustment of these types of income would redistribute tax liabilities in favor of those businesses receiving the adjusted income. Furthermore, if specific assets and liabilities such as financial instruments were only adjusted for businesses, individual creditors would suffer vis-a-vis business creditors.¹²²

¹²⁰ As fictitious gains due to inflation increase as a portion of overall gain as currently determined, the lock-in effect increases regardless of whether fictitious gain exceeds the arbitrary 60% cut-off point. Under current taxation of nominal gain, any tax that is triggered by realization of gain instead of mere accrual will cause a lock-in effort to develop as the nominal value of the asset being held increases.

¹²¹ See generally S. SURREY, W. WARREN, P. MCDANIEL & H. AULT, 1 1979 SUPPLEMENT TO FEDERAL INCOME TAXATION 382 (1979) [hereinafter cited as 1979 Supplement] (the indexing of capital gains should be considered in conjunction with (1) taxing gains at ordinary income rates, (2) imposing an interest gain or tax deferral, and (3) tax accrued gains in property transferred at death or by gift), Bossons, *supra* note 91, at 155 (Problems arising from indexing the cost base of capital assets for eliminating inflation-induced nominal gains have relatively straight-forward solution.); Blinder, *Capital Gains: Tax Them Like Income*, Washington Post, July 2, 1982, §A at 19, col. 1. (indexing should be extended to capital gains and tax gains over and above the general rise in the price level as ordinary income).

¹²² For example, if corporate bonds were adjusted for inflation only for business holders,

In summary, once the decision has been made to adjust the income tax system for inflation, the choice of what types of income to adjust and what type of adjustment to make, must be faced. Adjustments can be made to the tax structure or the tax base. Tax structure adjustments can offset inflation's erosion of nominal fixed-dollar amounts in the tax laws. Tax base adjustments can offset inflation's impact on the measurement of income subject to taxation. While both types of adjustments are necessary to neutralize inflation's entire effect on the tax system, either type of adjustment can be made to all or selected categories of income. The broad categories of individual and business income are each distorted by inflation and, therefore, are candidates for adjustment. In addition to these categories, the specific components of income represented by interest and capital gains are particularly prone to distortion by inflation. When considering any of these types of income, separately or together, for inflation adjustments, their interrelation and the effect that a particular adjustment will have on the entire tax system should be recognized.

4. Whether Adjustments Should be Ad Hoc or Scientific

Once the decision has been made to adjust particular categories of income, attention must next turn to the method of inflation adjustment to be undertaken. Three alternative methods of inflation adjustment could each provide an effective offset of inflation's impact. First, ad hoc, discretionary adjustments could be undertaken to offset the effects of inflation. These adjustments could be made either annually or periodically every few years. Alternatively, scientific, automatic adjustments such as indexing could be used to offset the effects of inflation. Under such automatic adjustments the portion of the tax system to be adjusted would be linked directly to an index determined to be the appropriate measure of inflation. Automatic adjustments in the tax system would then be made in accordance with the rise in the index. Finally, inflation adjustments to the tax system could be composed of a mixture of discretionary and automatic adjustments. In this manner, adjustments to the tax system, or to a particular portion of the tax system could be partially automatic and partially discretionary. Similarly, some parts of the tax system could be indexed while other parts would be subject to discretionary adjustments.

Even after a decision to inflation-adjust particular portions of the tax system is made, proponents of such adjustments differ over this choice between discretionary and automatic adjustments. At the crux of this disagreement is what amount of flexibility the legislature should retain in shaping budgetary and tax policy. Opponents of automatic adjustments contend that indexing would complicate the task of determining budgetary policy.¹²³ Properly drawn, these automatic adjustments could eliminate the hidden annual increases in

business would be taxed only on real gain while individuals would be taxed on nominal gain.

¹²³ CBO STUDY, *supra* note 15, at 19.

government revenues caused by inflation.¹²⁴ Supporters of an active and expanded public sector recognize that in some years fiscal restraint, or a balanced budget, could be obtained only by reducing government expenditures or explicitly increasing taxes.¹²⁵ Moreover, such persons also recognize that the option of explicitly increasing taxes, in recent years, has been feasible politically only in times of national emergency.¹²⁶ Major portions of government spending are already committed, enjoy wide public support, or are backed by a powerful political lobby. Due to budgetary pressure caused by these commitments, the flexibility to increase the role of the public sector by enacting tax increases or postponing "tax cuts," or by increasing government spending, would be reduced greatly under a system of automatic adjustments because of the lost incremental revenue increase which inflation provides.¹²⁷ Therefore, such persons may be led to oppose any automatic adjustments to offset inflation.

A second "flexibility" argument advanced by opponents to indexing is that such automatic adjustments will "lock-in" the existing distribution of the tax burden.¹²⁸ The rationale for this position is that periodic, discretionary adjustments to the tax code to offset the effects of inflation would also force continual scrutiny of the distribution of tax liabilities.¹²⁹ Such adjustments could take into account inflation's disproportionate effect on incomes from different sources and on revenues in general.¹³⁰ This necessity of continual review would allow the government in effect, to alter the distribution of tax liabilities and the amount of progressivity as it sees fit with each discretionary adjustment. Further, such critics contend that this *ad hoc* adjustment process would facilitate the opportunity for tax review and evaluation, and that meritorious changes in the tax laws would be less likely under a system of automatic adjustments.¹³¹ Thus, any such automatic adjustments are viewed by some people as unwise.

Proponents of automatic inflation adjustments counter these "flexibility" critiques by arguing that flexibility in a system of discretionary adjustments has its drawbacks as well and that these drawbacks outweigh any benefits of relying solely on discretionary adjustments to offset inflation.¹³² While an unindexed system of inflation adjustments may ease the political task of setting budgetary policy, these proponents would argue that such flexibility results in increased government spending.¹³³ Under an indexed system, the same increase in government spending would require either an increased deficit, or an explicit

¹²⁴ See *supra* notes 13-16 and accompanying text.

¹²⁵ CBO STUDY, *supra* note 15, at 19.

¹²⁶ *Id.* (for example during the Vietnam War in 1968-69).

¹²⁷ *Id.*

¹²⁸ *Id.* at 23.

¹²⁹ *Id.*

¹³⁰ See *id.*

¹³¹ *Id.* at 23-24.

¹³² See *id.* at 19-20.

¹³³ See *id.*

tax increase.¹³⁴ Both of these alternatives are more difficult steps for the legislature to take than is taking no action and receiving an automatic, inflation-induced gain in government revenues.¹³⁵ Thus, proponents would contend that automatic adjustments promote fiscal restraint.

The second "flexibility" position that reliance on ad hoc adjustments will promote continued reevaluation of the tax laws is countered in two ways. First, there is no reason why offsetting inflation by adopting indexing forecloses future changes in the distribution of tax benefits.¹³⁶ Other countries that have adopted various forms of indexing have made subsequent ad hoc changes.¹³⁷ Second, and more importantly, adoption of an automatic adjustment procedure would provide future legislators with more time to consider the merits of altering the distribution of tax liabilities, or of major tax law review, because a large amount of time would not be continually required for the purpose of designing adjustments to offset past inflation.¹³⁸ In this regard, reliance upon frequent ad hoc, discretionary adjustments provides the vehicle for enacting numerous special interest tax breaks that might lack the support necessary to pass as a separate bill.¹³⁹ Hence, automatic adjustments are seen as superior, in the long run, to ad hoc, discretionary adjustments.

One final consideration when deciding whether to make discretionary or automatic inflation adjustments is the extent of wage indexation.¹⁴⁰ Where a large part of the population has its taxable income automatically linked to a measure of inflation, a stronger argument can be made to automatically inflation-adjust taxes. Without such automatic tax adjustment, a rise in inflation will cause more disproportionate increases in tax revenues in a country with extensive wage indexation than in a country without extensive wage indexation. Similarly, where a high percentage of the population's wages are indexed with one index, the strength of the argument supporting use of that index to adjust taxes also increases.¹⁴¹

In resolving this choice between ad hoc and automatic adjustments to offset the effects on inflation or a tax system, most commentators would agree that ad hoc, discretionary adjustments are adequate to cope with "low" levels of in-

¹³⁴ *Id.* at 20.

¹³⁵ *See id.* at 19.

¹³⁶ Congress has made major changes in the tax code during relatively inflation-free periods in the past, *i.e.* in 1954 and 1964. *Id.* at 24. *See* INFLATION AND THE INCOME TAX, *supra* note 30, at 294-96.

¹³⁷ CBO STUDY, *supra* note 15, at 24 (Canada, Denmark, the Netherlands).

¹³⁸ *See id.*

¹³⁹ *Id.*

¹⁴⁰ For example, cost-of-living adjustment (COLA) clauses in employment contracts tied to some index of cost-of-living or inflation. In the United States, more than 8.5 million workers were covered by collective bargaining contracts that included such clauses tied to the Consumer Price Index. C. CLARK & L. SCHKADE, STATISTICAL ANALYSIS FOR ADMINISTRATIVE DECISION 501 (3d ed. 1979) [hereinafter cited as STATISTICAL ANALYSIS].

¹⁴¹ *See generally infra* note 223.

flation.¹⁴² Moreover, most also would agree that automatic adjustments become desirable at "high" levels of inflation.¹⁴³ The question then becomes at what level of inflation do automatic adjustments become necessary? In this regard, it is useful to examine foreign experience with automatic inflation adjustments in order to observe the points at which other nations have determined that automatic adjustments were called for.

During the 1970's, a survey of foreign experience shows that the countries of Argentina, Australia, Canada and Columbia enacted indexing provisions to automatically offset the entire inflationary impact on their individual income tax structures with Israel reaching this stage by 1981.¹⁴⁴ Several additional countries, including Belgium, Brazil, Denmark, France, Luxembourg, the Netherlands, and Sweden provided for partial-indexing that offset some of in-

¹⁴² See, e.g., Sunley, *supra* note 10, at 332.

¹⁴³ *Id.*

¹⁴⁴ Ruppe, *supra* note 10, at 113-14 (Argentina, Australia, Canada); TANZI, *supra* note 45, at 23-40, 150 (Argentina, Australia, Canada); ROSENN, *supra* note 76, at 329-31 (Argentina, Australia, Canada, Colombia); Gubbay & Sheshinski, The Influence of Taxation, Transfer Payments, and Subsidies on Income Distribution 23-24, (1981) (unpublished paper); Israel and Uruguay also had such a system before abolishing its individual income tax in 1974. TANZI, *supra* note 45, at 27-28. Argentina enacted automatic indexing of exemption, deduction and minimum taxable income levels in 1974, with inflation at approximately 37%. Reig, *National Report: Argentina*, 62 *STUD. ON INT'L FISCAL L.* 181, 184, 193, 196 (1977) (IFA Conference Vienna). Argentina enacted automatic indexing of income tax brackets in 1976, when inflation surpassed 400%. *Id.* at 196; TANZI, *supra* note 45, at 27. Australia enacted automatic indexing of income tax brackets, tax credits, and the standard deduction in 1976, with inflation at 13.0% that year and 16.7% a year earlier. Bratby & Orrock, *National Report: Australia*, 62 *STUD. ON INT'L FISCAL L.* 201, 203, 214 (1977) (IFA Conference Vienna). In 1976 and 1977 these components were indexed by the full rate of inflation. J. DAVIS, AUSTRALIAN NATIONAL REPORT ON TOPIC IIA(1) TO THE XI INTERNATIONAL CONGRESS OF COMPARATIVE LAW, 1, 3 (Caracas, Venezuela 1982). In 1978 and 1980, however, they were indexed by less than the full rate of inflation and in 1979 they were not indexed at all. *Id.* at 3-4. In 1981, the Federal Treasurer announced that indexation would be abolished beginning with the fiscal year commencing July 1, 1982. *Id.* at 4 and n.8. Canada enacted automatic indexation of the basic, marital, dependent, old-age, and disability exemption, as well as the progressive tax brackets in 1973, with inflation at 7.5%. See Kelley, *supra* note 13, at 20; Bodard & Lees, *National Report: Canada*, 62 *STUD. ON INT'L FISCAL L.* 283, 283-84 (1977) (IFA Conference Vienna). After returning to power in 1980, the liberal government advocated limiting indexing to a maximum percent rather than indexing to offset current double digit inflation. In 1982 the government of Canada proposed maximum indexation of 6% in 1983 and 5% in 1984. Deloitte, Haskins & Sells, *Budget — June 28, 1982* (July 1982).

Israel enacted partial indexing in 1975 with inflation over 30%. Peck, *National Report: Israel*, 62 *STUD. ON INT'L FISCAL L.* 377, 380-81 (1977) (IFA Conference Vienna). See Rafael, *supra* note 67, at 198-200. From 1975 to 1980, twice each year tax brackets were adjusted most of the time only by 70% of the inflation rate, while credits were fully adjusted. Draft Law 1523 of Mar. 9, 1981 of the Law for the Amendment of the Income Tax Ordinance (No. 45). Beginning in 1980, with inflation surpassing 100%, Israel provided indexation of brackets four times each year while retaining full indexation of credit twice annually. Although the Finance Minister retains the authority, with the consent of the Finance Committee of the Knesset, to restrict indexation to 70% of the inflation rate, the practice since then has been full indexation of the market and credits. See *id.* By 1981, due to the earlier partial indexing of brackets, "bracket-creep" had set in as compared to the 1975 schedule, increasing the proportion of taxpayers in the highest marginal rate from 1.2% to 15%. *Id.* In 1975 72% of taxpayers paid the lowest marginal rate

flation's impact on their tax structures.¹⁴⁵ Meanwhile, the countries of Finland, Japan, Norway, the United Kingdom, and West Germany relied on discretionary adjustments to counter inflation's effect on their tax structures, even when inflation reached higher levels than those at which other countries chose to implement automatic adjustments.¹⁴⁶ The results of this survey show that only three countries enacted even partial indexing when the inflation rate was below 5%. Of these three, two partially indexed systems provided for adjustments only when inflation exceeded 5%,¹⁴⁷ and the third allowed for discre-

while by 1981 only 35% fell into this bracket. *Id.* As a result, the following new tax brackets were introduced in 1981 to offset this severe erosion due to partial indexation:

ISRAEL — PERCENT OF WAGE EARNERS IN TAX BRACKETS		
TAX RATE	NEW BRACKETS (APRIL 1981)	OLD BRACKETS (MARCH 1981)
25%	50%	35%
35	20	31
45	15	11
50	10	13
60	5	10

See id.

¹⁴⁵ Belgium enacted partial indexing in 1967 with inflation at 12.8%. Dupont, *National Report: Belgium*, 62 STUD. ON INT'L FISCAL L. 251 (1977) (IFA Conference Vienna). Brazil enacted partial indexing in 1964 with inflation at over 100% and revised it in 1967 with inflation at 30.5%. d'Almeida & Neviani, *National Report: Brazil*, 62 STUD. ON INT'L FISCAL L. 271, 272 (1977) (IFA Conference Vienna). Denmark enacted partial indexing in 1969 with inflation at 3% and revised it in 1974 with inflation at 16%. TANZI, *supra* note 38, at 38; Kjuer, *National Report: Denmark*, 62 STUD. ON INT'L FISCAL L. 295, 296, 298 (1977) (IFA Conference Vienna). France enacted partial indexing in 1968 with inflation at 4.5%. Meary, *National Report: France*, 62 STUD. ON INT'L FISCAL L. 351, 362 (1977) (IFA Conference Vienna). Luxembourg enacted partial indexing in 1967 with inflation under 5%. TANZI, *supra* note 38, at 31; Arendt, Deckler & Bernard, *National Report: Luxembourg*, 62 STUD. ON INT'L FISCAL L. 425, 431 (1977) (IFA Conference Vienna). The Netherlands enacted partial indexing in 1971 with inflation at 7.9% and revised it in 1973 with inflation at 8.2%. Meeles, *National Report: Netherlands*, 62 STUD. ON INT'L FISCAL L. 461, 462, 466 (1977) (IFA Conference). Sweden enacted partial indexing in 1977 following three years of inflation over 10%. TANZI, *supra* note 38, at 29; Grasskopf, *National Report: Sweden*, 62 STUD. ON INT'L FISCAL L. 493 (1977) (IFA Conference Vienna).

¹⁴⁶ Finland enacted a law in 1974, with inflation at 17.9%, requiring that the government in specific legislation adjust both tax rates and brackets due to inflation each year. Raiha, *National Report: Finland*, 62 STUD. ON INT'L FISCAL L. 341, 341-42 (1977) (IFA Conference Vienna). Japan has enacted regular, discretionary tax reductions since 1957 aimed at offsetting inflation. Sato, *National Report: Japan*, 62 STUD. ON INT'L FISCAL L. 411, 414 (1977) (IFA Conference Vienna). Inflation in Japan, which averaged just over 5% in the late 1960's, peaked at almost 25% in 1974. *Id.* at 412 (cost-of-living table). Norway enacted annual discretionary adjustments throughout the 1970's with inflation ranging from 6% to over 11%. Odegard, *National Report: Norway*, 62 STUD. ON INT'L FISCAL L. 451, 451-52 (1977) (IFA Conference Vienna). The United Kingdom reviewed its tax structure annually by the late 1970's. Dobson, *United Kingdom: Budget 1977*, 17 EUROPEAN TAX. 125 (1977). Inflation in the United Kingdom was over 10% throughout most of the 1970's, reaching 23% in 1975. Expley, *National Report: United Kingdom*, 62 STUD. ON INT'L FISCAL L. 479 (1977) (IFA Conference Vienna). West Germany made only discretionary adjustments to its tax structure in the 1970's, with inflation averaging just over 5%. Piltz, *National Report: West Germany*, 62 STUD. ON INT'L FISCAL L. 161, 178 (1977) (IFA Conference Vienna) (English Summary).

¹⁴⁷ INFLATION AND THE INCOME TAX, *supra* note 30, at 223 (France — annual inflation must exceed 5%; Luxembourg — annual inflation must exceed 5% or cumulative inflation since last adjustment must exceed 10%).

tion as to the application of indexing.¹⁴⁸ Two additional countries enacted indexing of the tax structure when the rate of inflation was between 7.5% and 10%, one provided for full indexation,¹⁴⁹ the other for partial indexation.¹⁵⁰

On the one hand, ad hoc, discretionary adjustments would allow the legislature to retain the flexibility to time and target adjustments so as to reap maximum political gain based on the particular situation. In addition to indicating a desire to retain flexibility, a decision to rely on this type of adjustment may indicate the belief that inflation will remain at a relatively low level, capable of being periodically offset without requiring continual legislative time and effort. On the other hand, scientific, automatic adjustments would remove legislative power to time or target adjustments and would require increasing either taxes or the deficit in order to increase government spending. The adjustments would be automatically tied to an index and would be made to reflect changes in the index without additional legislative action. In addition to indicating a desire to require explicit action to increase spending or alter the tax burden, the choice of automatic adjustments may reflect the belief that inflation will become, or remain, relatively high in the foreseeable future. In light of the legislature's other concerns, in an era of high inflation the burden of determining specific discretionary adjustments may become too time consuming without automatic adjustments, and such automatic adjustments would therefore provide the best means for responding to the effect of inflation upon the tax system.

In summary, certain preliminary factors should be considered before a decision is made to implement inflation adjustments to the tax system. The initial factors to examine include the primarily political and psychological considerations related to the question of whether taxes should be inflation-adjusted. If general agreement is reached to adjust income taxes, attention then focuses upon the choice of which parts of the tax system are to be adjusted, and what type of inflation adjustment is to be made. Factors to be considered at this point include the effects of inflation on various categories of income, as well as the potential which each type of adjustment, whether to the structure or the base, possesses to eliminate these effects. An additional factor is the inter-relatedness of the various categories and components of income. In this regard, a decision to make either type of adjustment to any given part or parts of the tax system should be analyzed to determine its impact on other parts of the tax system. Even if agreement is reached concerning the categories of income to be adjusted and the type of adjustment to make, alternative methods of implementing the desired adjustments exist. The adjustments can be discretionary, automatic, or a combination of some discretionary and some automatic adjustments. Again at this point, the relevant factors to consider are primarily

¹⁴⁸ TANZI, *supra* note 45, at 38 (Denmark, in 1970 — Parliament to vote whether to apply the adjustment and to determine extent of adjustment).

¹⁴⁹ Canada. *National Report: Canada*, *supra* note 144, at 283-84.

¹⁵⁰ The Netherlands. *National Report: Netherlands*, *supra* note 144, at 462, 466.

political. These factors include the difficulty of formulating budgetary policy, the desirability of altering the existing tax burden, the opportunity for major tax review, as well as the expected level of future inflation. If consideration of these preliminary factors results in a decision to automatically index the tax structure as it relates to various categories of income, a secondary set of factors becomes relevant.

B. *Secondary Factors — Options for Indexing*

Once a decision has been made to adjust the tax structure by means of automatic adjustments based on some measure of inflation, the appropriate indexing system must be designed. The design decisions in this secondary stage involve the consideration of at least four factors: 1) whether a single index or multiple indexes should be used; 2) which index or indexes should be used; 3) whether to adjust taxes for the entire change in the index or indexes; and 4) how timing considerations will be reflected in the indexing.

Unlike the considerations in the primary stage of a decision to adjust taxes for inflation, which tend to be heavily political, the considerations present in the secondary stage, once the decision to index has been made, tend to be more technical. In the primary stage of such a decision, it is difficult if not impossible to reach normative conclusions because the conclusion depends in large part on the individual's political viewpoint. In the secondary stage, however, when appropriate design of an indexing system is at issue, it becomes possible to reach some conclusions concerning design of a system that can effectively and efficiently carry out a political decision to offset inflation's effect on the targeted areas of income.

1. How Many Indexes to Use.

If taxes are to be inflation-adjusted automatically by indexing, one of the first design considerations that must be addressed is how many indexes should be used. A single general index could be used for all taxpayers, or multiple indexes representing particular geographic regions in which they live, particular income classes in which they fit, or particular goods and services which they buy, could be used. All countries now using indexing have chosen to use a single index and a single base period for all income tax structure adjustments.¹⁵¹ Although living costs and incomes differ sociologically and geographically, the practical difficulties in using multiple indexes and determining which should apply to each taxpayer group or geographic region would be enormous.¹⁵²

The existing tax structure in the United States does not take account of differing costs-of-living in various geographical areas or income classes in

¹⁵¹ INFLATION AND THE INCOME TAX, *supra* note 30, at 242. Since only individual income taxes have been indexed, countries have not had to decide whether to use different indexes when corporations were involved. *Id.* at n. 15.

¹⁵² See Ruppe, *supra* note 10, at 114.

determining tax liability.¹⁵³ Regardless of geographic differences in living costs, taxpayers throughout the country with the same dollar incomes from the same sources pay the same tax.¹⁵⁴ While a comparison of separate geographic indexes indicates noticeable differences between geographic areas,¹⁵⁵ a comparison of separate income class indexes does not reflect major differences between various income level groups.¹⁵⁶ Where such conditions have no influence in setting the initial tax structure, it has been argued that there is no point in introducing automatic adjustments based on these differences.¹⁵⁷ Unless it is decided that the original structure should reflect such differences in the base costs, it follows that the adjustments should not reflect these differences in subsequent costs in the adjusted structure. Furthermore, since taxpayers move from one region or income class to another, a system using multiple indexes would require a complex rule to permit the averaging of index adjustments across regions or income classes for taxpayers whose positions have changed during the relevant tax period.¹⁵⁸

It would also be an impossible task to base multiple indexes on an individual's actual purchases or costs. If the objective of indexing is to offset inflation's effect on taxation, then only changes or differences in relative prices due to inflation should be taken into account.¹⁵⁹ Changes in relative prices, however, are in large part due to the effects of supply and demand independent of inflation.¹⁶⁰ Even if these problems in deriving individual indexes and determining how much of the change in the indexes was due to inflation could be solved, a system using so many indexes would be impractical.¹⁶¹ It may be

¹⁵³ CBO STUDY, *supra* note 15, at 34. Yet regional prices may effect tax liability, for example, if two taxpayers from different states receive the same type of car as a prize in a contest, their current tax treatment would be different if the retail price of that particular car model varied between the two areas (e.g. Detroit, Michigan and Fairbanks, Alaska) because the amount included in income would be the fair market value of the car as determined by the local market. See Treas. Regs. § 1.74-1(a)(2) (1982).

If regional indexes were to be used, as a practical matter the CPI would have to be the index choice. See *infra* notes 174-84 and accompanying text. The GNP deflator-based indexes are calculated for the nation as a whole. See *infra* notes 186-91 and accompanying text. Administratively, it would prove an overwhelming burden to formulate uniform state-wide, or regional, indexes for all areas of the country comparable to a GNP deflator. While regional CPI indexes are easier to formulate and currently are available for many areas, GNP deflator-type indexes are not available for most areas.

¹⁵⁴ INFLATION AND THE INCOME TAX, *supra* note 30, at 236.

¹⁵⁵ *Id.* at 237, 240-41. Advocates of regional indexing should consider whether the use of more than one index would withstand constitutional challenge, premised on different effective tax rates under what is supposed to be a uniform federal tax law. Such challenges might be based on substantive due process grounds. Situations where different burdens are applied regionally for arguably "similar" incomes, however, exist under current tax law. See *supra* note 153. So long as the indexing method used provided a neutral and objective standard for offsetting inflation the use of multiple indexes appears likely to withstand any constitutional challenge.

¹⁵⁶ INFLATION AND THE INCOME TAX, *supra* note 30, at 239-40.

¹⁵⁷ *Id.* at 237.

¹⁵⁸ CBO STUDY, *supra* note 15, at 34.

¹⁵⁹ INFLATION AND THE INCOME TAX, *supra* note 30, at 237.

¹⁶⁰ *Id.* at 238.

¹⁶¹ *Id.*

possible to establish a few indexes which accurately represent large groups of taxpayers. The available evidence, however, suggests that differences between indexes representing purchases of various taxpayer groups are not large.¹⁶² If this is so, it does not matter greatly whether a single index or separate group indexes are used.¹⁶³

Finally, from a social and political viewpoint, it would be undesirable to have continual debate among various groups about which group is favored more by a particular index or base year.¹⁶⁴ Practical administrative considerations would rule out individual indexes for all taxpayers, in addition, the appropriate number and composition of groups to base indexes upon is difficult to determine.¹⁶⁵ Beyond these administrative problems, even where some limit is placed on the number of indexes, inequities that multiple indexes would seek to remedy might still remain. For instance, living costs can vary considerably within broad groupings such as geographic regions or income classes.¹⁶⁶ This difference might not be accounted for when a limit is placed on the number of indexes. So long as the basic tax system to be adjusted ignores differences among taxpayers and sets tax liabilities without regard to such differences, the case for using the same general index for all taxpayers seems compelling.

2. Which Index to Use

Once the decision is made to use a single index to adjust the tax structure one must decide which index should be used to measure inflation. This choice depends on the political goals or tax policy objectives which the government desires to achieve by indexing. Different indexes are based upon different measures of income. Under a progressive tax system, a rise in the taxpayer's income raises his tax liability as a percentage of that income whether the gain is due to inflation or real growth measured in constant dollars.¹⁶⁷ If the objective of indexing is to prevent any automatic rise in government revenue from a taxpayer whose income is not rising faster than the national average, whether due to real growth or inflation, the appropriate index would be based on some measure of average per capita income.¹⁶⁸ An average income-based index would avoid both nominal concealed progression and real concealed progression.¹⁶⁹ Both Denmark and Iceland have opted for an average income-based index.¹⁷⁰ If, however, a government's objective is only to offset increased govern-

¹⁶² *Id.*

¹⁶³ *Id.*

¹⁶⁴ *See id.* at 238-39.

¹⁶⁵ CBO STUDY, *supra* note 15, at 34.

¹⁶⁶ *Id.*

¹⁶⁷ INFLATION AND THE INCOME TAX, *supra* note 30, at 243-44.

¹⁶⁸ *Id.* at 244. In 1966, Vito Tanzi proposed such a system based on an index of per capita income. *Id.* & n.19. (citing TANZI, *A Proposal for a Dynamically Self-Adjusting Personal Income Tax*, 21 PUBLIC FINANCE 507-19 (1966)).

¹⁶⁹ Ruppe, *supra* note 10, at 115.

¹⁷⁰ *Id.*; INFLATION AND THE INCOME TAX, *supra* note 30, at 218.

ment tax revenues due to inflation, a price-based index would be appropriate.¹⁷¹ All countries other than Denmark and Iceland which currently provide some form of indexed adjustments use a price-based index.¹⁷²

In designing an indexing system under current policies and laws, which provide for a progressive rate structure, a price based index is more appropriate than an average income based index. Increases in tax liabilities due to inflation, not those due to real growth, are the appropriate target for American indexing. Only the former are accounted for when a price based index is used. In addition to most foreign countries that have enacted indexing, the current American proposals also use a price index. Thus, the remainder of this section will address the issue of which index to use only in the context of the relevant price changes to consider.

Two alternate types of price index exist, thus, the primary question is which type should be used.¹⁷³ One choice is to use a consumption price index that measures only those changes in consumer prices due to inflation that reflect income earned when producing goods for consumers.¹⁷⁴ If the goal of indexing is to offset the effects of higher prices due to inflation on the taxpayers real income, a measure of consumer price increases would be appropriate,¹⁷⁵ because linking tax indexation to such an index will cause income taxes to be adjusted solely to offset inflation's impact on prices of consumer goods. The alternative is a national income price index that reflects changes, due to inflation, in prices of the national output. This would reflect income earned in producing goods and services for all final purchasers.¹⁷⁶ If the goal of indexing is to prevent the share of total personal income required to pay taxes from rising solely due to inflation, such a measure of the effects of inflation on all incomes would be appropriate, because income taxes would then be adjusted to offset inflation's impact on all income rather than only the income from the production of consumer goods.¹⁷⁷

In the United States, readily available indexes constructed to reflect changes in consumer prices include the Consumer Price Index for All Urban Households (CPI-U) prepared by the Bureau of Labor Statistics of the Department of Labor¹⁷⁸ and the implicit price deflator for personal consumption expenditure (PCE), prepared by the Bureau of Economic Analysis of the Department of Commerce.¹⁷⁹

¹⁷¹ See INFLATION AND THE INCOME TAX, *supra* note 30, at 243-44.

¹⁷² See *supra* notes 144-45 and accompanying text.

¹⁷³ See INFLATION AND THE INCOME TAX, *supra* note 30, at 258 (The major choice to be made is between a comprehensive [price] series and one restricted to consumption. *Id.*).

¹⁷⁴ See INFLATION AND THE INCOME TAX, *supra* note 30 at 249.

¹⁷⁵ CBO STUDY, *supra* note 15, at 29.

¹⁷⁶ INFLATION AND THE INCOME TAX, *supra* note 30, at 249.

¹⁷⁷ CBO STUDY, *supra* note 15, at 29.

¹⁷⁸ STATISTICAL ANALYSIS, *supra* note 140, at 501.

¹⁷⁹ *Reconciliation of Quarterly Changes in Measures of Prices Paid by Consumers*, SURVEY OF CURRENT BUS. 6, 6 (March 1978) [hereinafter cited as *Reconciliation*].

While the PCE deflator covers all United States residents, (Letter from J.C. Byrnes,

The CPI-U is a fixed-weighted index, reflecting the change in constant 1967 dollars of prices of a fixed quantity market-basket based on 1972-1973 consumption.¹⁸⁰ The Commerce Department's PCE deflator is based on the change in constant 1972 dollars of prices of a current market basket.¹⁸¹ Since the PCE deflator uses a current market basket, quantities of goods and services currently purchased, both changing prices and changing quantities purchased will be reflected.¹⁸² The Commerce Department also publishes a PCE fixed-weighted price index based on the change in constant 1972 dollars of prices of a

Chief, Consumption Branch, National Income and Wealth Division, Bureau of Economic Analysis, Department of Commerce to Charles P. Shimer p.2 (August 1981) (Form letter response to request for information regarding consumer price indexes) [hereinafter cited as Letter]), the CPI-U covers only about 80% of this group, ignoring the farm population, the institutional population, and those temporarily abroad. STATISTICAL ANALYSIS, *supra* note 140, at 501. Although there are numerous, but frequently compensating, differences in these two measures, the most important difference between the PCE deflator and the CPI-U for the period 1978 through 1982 is the treatment of home ownership costs. See Letter, *supra* at 2; *Reconciliation*, *supra* at 6, 9; *Inflation and the Income Tax*, *supra* note 30, at 257 n.38. During this period, the CPI-U calculated home ownership costs based on the assumption that all home owners have mortgages at prevailing interest rates. Wall St. J., Oct. 28, 1981 at 25, col. 3 [hereinafter cited as Wall St. J.]. This index did not, therefore, reflect home owners with old mortgages or below-market rates. *Id.* The PCE deflator calculates home ownership costs based on a "rental-equivalency" method, using a rent index to compute space rent for owner-occupied dwellings. *Reconciliation*, *supra* at 9. In October 1981, the Labor Department announced plans to begin using "rental-equivalency" in 1983 to calculate the CPI-U home ownership costs. Wall St. J., at 25, col. 3. This switch will result in smaller increases in the CPI-U when interest and home mortgage rates are rising, and might result in larger increases if mortgage rates decline. See *id.* at col. 5. Use of "rental-equivalency" in fiscal 1981 would have resulted in a rise in this index 1.8% lower than that actually calculated. *Id.* at col. 4. Representatives of organized labor unions, whose members' contracts are tied to the CPI-U, immediately complained about the change, which will result in lower wage increases in the future if because of the change the index uses more slowly. *Id.* at col. 5-6. Over time, however, this change may not affect the index significantly, as its impact causes quicker rises in the index when interest rates fall. See *id.* at col. 5. This change in the computation of the CPI-U has raised questions concerning the possibilities of government intervention in data collection, or manipulation of data used to achieve desired results in the publicized level of price changes. See *id.*

¹⁸⁰ STATISTICAL ANALYSIS, *supra* note 140 at 501. The CPI-U is designed to measure the effect of price changes of about 400 items of almost everything consumers buy for living, called a "market basket" of goods and services. *Id.* The market basket was developed from a detailed consumer expenditure survey of 20,000 families and single individuals conducted in 1972 and 1973. *Id.* The CPI-U is a chain price index which is a modified Laspeyres-type index. *Id.* at 499, 501. As a chain index, the CPI-U has a moving base, the month immediately preceding the month of the index. *Id.* Average price changes from the previous month are expressed in percentage terms for each item, and the percentage changes of all items covered are combined using a formula and, thus resulting in a chain index number. *Id.* at 501. The resulting number is multiplied by the index number for the previous month and divided by 100 to obtain a fixed-base index number with 1967 as the base. *Id.* at 501-02.

¹⁸¹ Letter, *supra* note 179, at 1. As a price index, the PCE implicit price deflator may be described as an index in which prices relative to 1972 are averaged with weights consisting of quantities currently purchased valued in constant 1972 prices. *Id.* The PCE implicit price deflator is obtained by dividing personal consumption expenditures valued in current prices by personal consumption expenditures valued in constant 1972 prices. *Id.* The change in the resulting index figure from the previous period's figure is best interpreted as the change in the average price paid for goods and services purchased in each period. *Id.*

¹⁸² See *id.* at 1.

fixed market basket based on 1972 consumer expenditures.¹⁸³ Notwithstanding other differences, if home ownership costs were measured similarly, the CPI-U and the PCE fixed-weighted index would reflect approximately the same changes from 1978 through 1982.¹⁸⁴

Both the CPI-U and the PCE implicit price deflator reflect only personal consumption and the income earned in producing consumer goods. Measures of national output, which reflect business and government consumption as well as personal consumption, are another means of measuring "income."¹⁸⁵ Readily available indexes constructed to reflect changes in the prices of total national output include the Gross National Product (GNP) implicit price deflator¹⁸⁶ and the GNP fixed-weighted price index,¹⁸⁷ prepared by the Bureau of Economic Analysis of the Department of Commerce. The GNP implicit price deflator is a shifting-weight index reflecting the change in constant 1972 dollars of prices of quantities currently purchased, a current market basket.¹⁸⁸ The GNP fixed-weighted price index, however, reflects the change in constant 1972 dollars of fixed 1972 quantities, a fixed market basket.¹⁸⁹

Whether examining consumer price indexes or national output price indexes, a fixed-weight index adjusted infrequently for changes in consumption patterns risks overestimating the impact of a price rise, if consumption of that

¹⁸³ *Id.* The fixed-weighted index uses 1972 weights, and is obtained by averaging current prices relative to 1972 prices with weights consisting of nominal expenditures in 1972. *Id.* The fixed-weighted index reflects only price change. *Id.* The Commerce Department also publishes a PCE chain price index. *Id.* at 2. The chain price index also reflects only price change and is calculated only for a single period rather than as a time series. *Id.* Current prices relative to the prior period are averaged with weights consisting of nominal expenditures in the prior period. *Id.* To the extent that relative prices and quantities change subsequent to the base period, the implicit price deflator may be expected to show a smaller increase or larger decrease than comparable fixed-weighted price indexes with a common base period. *Id.*

¹⁸⁴ *Id.* at 2.

¹⁸⁵ See INFLATION AND THE INCOME TAX, *supra* note 30, at 249.

¹⁸⁶ As a price index, the GNP deflator reflects the changes in the market price of all goods and services produced domestically. CBO STUDY, *supra* note 15, at 31. Thus, it also reflects any changes in income earned in producing goods and services for all final purchases. *Id.* at 31-32; See INFLATION AND THE INCOME TAX, *supra* note 30, at 249. The GNP deflator, like the PCE deflator which is one of its components, uses a current market basket or shifted weighting and is a Paasche-type index. See *id.* at 250 n. 28; CBO STUDY *supra* note 15, at 31 & n.5.

Although not as readily available or widely known, component deflators of national output can be calculated. See CBO STUDY, *supra* note 15, at 31 & n.5. The Net National Product (NNP = GNP - depreciation) implicit price deflator, and the National Income (NI = NNP - indirect business taxes - private transfer payments - current surplus of government enterprises + subsidies) implicit price deflator are also indexes that can be calculated reflecting national output. INFLATION AND THE INCOME TAX, *supra* note 30, at 248-49.

¹⁸⁷ The GNP fixed weight price index is a supplementary price index to the GNP figure published by the Commerce Department. See *id.* at 250 n.28. This index uses a fixed market basket, like the CPI-U index, based upon quantities purchased in 1972. See BUREAU OF ECONOMIC ANALYSIS STAFF PAPER, DEPARTMENT OF COMMERCE, QUARTERLY GNP ESTIMATES REVISITED IN A DOUBLE-DIGIT INFLATIONARY ECONOMY 28 (1980) [hereinafter cited as STAFF PAPER].

¹⁸⁸ See STAFF PAPER, *supra* note 187, at 23, 27.

¹⁸⁹ *Id.* at 23, 28.

component is reduced.¹⁹⁰ Over periods of time, consumption habits change and the base period quantities reflected in the fixed market basket become outdated. As the market basket changes, the fixed-weighted index becomes less accurate and overcompensates for inflation. Changes in consumption patterns reflect changes in consumer taste as well as inflation's impact on prices. For example, in the 1980's, an index reflecting fixed quantities based on early 1970's expenditures greatly overemphasizes energy consumption and automobile purchases thus giving a distorted measurement of inflation.¹⁹¹ Such fixed-weighted indexes, therefore, are inferior measurements of inflation compared to current market basket indexes.¹⁹²

Various arguments are made on the one hand in support of using a consumer price index as a basis for adjusting a tax system to offset for the effects of inflation. Other countries providing indexed tax adjustments based on a price index use an index of consumer prices to reflect inflation.¹⁹³ As a practical matter, consumer price indexes already enjoy a high level of public familiarity and acceptance.¹⁹⁴ Second, some proponents of a consumption index contend that changes in real consumption opportunities should bring changes in taxable income.¹⁹⁵ This argument is particularly appealing to those holding the view that the progressive tax system represents a political judgment to tax households enjoying the same consumption opportunities at the same rates.¹⁹⁶ Third, since many Americans' incomes are already linked to the CPI-U, it is logical to use this index to adjust income taxes.¹⁹⁷ As of 1979, in the United States, 8.5 million workers had contracts tied to the CPI-U and another 50 million Social Security beneficiaries and retirees had benefits tied to the CPI-U.¹⁹⁸

On the other hand, a strong argument can be made for indexing taxes based on a total national income, or output price, index.¹⁹⁹ This position views the purpose for indexing the tax system as that of preventing changes in the general price level, inflation, from changing the ratio of income taxes to the value of the national output.²⁰⁰ In other words, the goal of adjusting a tax

¹⁹⁰ See CBO STUDY, *supra* note 15, at 31.

¹⁹¹ See *id.*

¹⁹² See INFLATION AND THE INCOME TAX, *supra* note 30, at 250-51 & n.28 (shifting weight Paasche-type index preferable for purposes of inflation-adjusting taxes to fixed weight Laspeyres-type index).

¹⁹³ *Id.* at 246; CBO STUDY, *supra* note 15, at 30 & n.3.

¹⁹⁴ See CBO STUDY, *supra* note 15, at 29, 30.

¹⁹⁵ INFLATION AND THE INCOME TAX, *supra* note 30, at 264 (comments by R. J. Gordon).

¹⁹⁶ *Id.* This argument loses much of its validity when studied in light of the present tax system. Different tax liabilities apply to the same amount of capital gains income and ordinary income, I.R.C. §§ 161(a), 1201(a), 1222(1) yet equal amounts of after-tax income, whether derived from capital or wages, represent the same "consumption opportunities."

¹⁹⁷ See STATISTICAL ANALYSIS, *supra* note 140, at 501; CBO STUDY *supra* note 15, at 30.

¹⁹⁸ STATISTICAL ANALYSIS, *supra* note 140, at 501.

¹⁹⁹ See INFLATION AND THE INCOME TAX, *supra* note 30, at 249-58; CBO STUDY, *supra* note 15, at 30-31.

²⁰⁰ INFLATION AND THE INCOME TAX, *supra* note 30, at 247; CBO STUDY, *supra* note 15, at 30.

system for the effects of inflation is to make the ratio of real tax on a given amount of real income invariant to inflation.²⁰¹ Since personal income is derived from the production and sale of goods and services to all final purchasers — private consumers, businesses, governments, and foreigners — the relevant price index should reflect an increase in prices paid by any of these groups, not just private consumers.²⁰² According to this view, using any one of the national output deflators would be better than using a consumption price index.²⁰³ In addition, public familiarity with, and acceptance of, at least one national output index, the GNP deflator, is also relatively high, although perhaps not as high as for the CPI.²⁰⁴

On balance, it seems preferable to use a national *income* index when adjusting an *income* tax to offset the impact of inflation. The existing tax system measures and assesses tax liabilities based on income.²⁰⁵ Within the present framework, therefore, an attempt to neutralize inflation's impact on taxes should be directed at offsetting its impact on the basis of the system — income. Consumption, or even the opportunity to consume, is not a basis on which federal taxes have been levied.²⁰⁶ Given that income is the tax base, some index of national income which reflects inflation's impact on income should be used to adjust the income taxes for inflation.²⁰⁷ Theoretically, therefore, the correct index would be the one whose context most accurately represents taxable income.²⁰⁸

To determine which index most accurately represents taxable income would require resort to an index that measures income from all taxable sources, not to one that only measures income from selected sources or one that measures how income recipients spend their taxable income.²⁰⁹ In theory, an index which reflects national output produced for all purchasers, not just for consumers, will represent all taxable income and, thus, can be used to indicate changes in that income due to inflation.²¹⁰ As a practical matter, the issue would come down to which index, be it a consumption price index or a national output index, actually reflected taxable income more accurately. The definition of taxable income most closely corresponds to an implicit price deflator derived from the GNP deflator: the National Income (NI) deflator.²¹¹

²⁰¹ INFLATION AND THE INCOME TAX, *supra* note 30, at 247-48; CBO STUDY, *supra* note 15, at 30.

²⁰² INFLATION AND THE INCOME TAX, *supra* note 30, at 249.

²⁰³ *Id.* at 257-58; CBO STUDY, *supra* note 15, at 32.

²⁰⁴ INFLATION AND THE INCOME TAX, *supra* note 30, at 268.

²⁰⁵ See I.R.C. §§ 1, 61 (1982).

²⁰⁶ See INFLATION AND THE INCOME TAX, *supra* note 30, at 267. See also *supra* note 196 and accompanying text.

²⁰⁷ See INFLATION AND THE INCOME TAX, *supra* note 30, at 247, 249, 267.

²⁰⁸ See *id.* at 249.

²⁰⁹ *Id.*

²¹⁰ See *id.*

²¹¹ *Id.* at 249-50. The NI deflator represents GNP - depreciation - indirect business taxes - private transfer payments - current surplus of government enterprises + subsidies. See *supra* note 186.

Of the more familiar indexes available today, the GNP deflator represents the best practical choice of an index by which to inflation adjust income taxes. Although many analysts theoretically prefer the NI derivative,²¹² in recent practice changes in the GNP deflator have been very similar to those in the NI deflator.²¹³ The differences among annual figures for either deflator are much less than those between either deflator and any consumption price index.²¹⁴ The GNP deflator reflects income from production for all final purchasers, not just consumers, and it is a current market-basket index.²¹⁵ Thus, the GNP deflator possesses the primary characteristics that should be exhibited by an index used to neutralize inflation's impact upon the income tax structure.²¹⁶

3. Whether to Adjust Taxes for the Entire Change in the Index

Once the appropriate index is decided upon, the next choice is whether to adjust the selected components of the tax system for the entire change in the index. In this regard, there are three basic options. First, the components could be adjusted annually to reflect the full rise in the index.²¹⁷ Full, annual adjustments offset the entire increase in tax revenues due to inflation, regardless of the rate of inflation. Second, the components could be adjusted annually by some fraction of the rise in the index or the adjustments could be limited to a maximum level even if the rate of inflation is higher.²¹⁸ A design incorporating this option allows the discretionary option of adjusting taxes by more than the fraction or maximum because it only partially offsets the inflation induced increase in tax revenues.²¹⁹ Third, the components could be adjusted automatically only when inflation reached or passed a set level.²²⁰ This would implement indexing, either full or fractional, when inflation is high and allow for discretionary action when inflation remains below the predetermined level.

A survey of the foreign experience shows that each of these options has been adopted at some point in the indexing systems of various countries. Five countries enacted an indexing system that provided for annual adjustment in tax brackets and/or exemptions to reflect the full rise in the relevant index.²²¹

²¹² CBO STUDY, *supra* note 15, at 32 n.7. See INFLATION AND THE INCOME TAX, *supra*, note 30, at 249-50; ROSENN, *supra* note 76, at 345.

²¹³ CBO STUDY, *supra* note 15, at 32.

²¹⁴ INFLATION AND THE INCOME TAX, *supra*, note 30, at 257-58.

²¹⁵ See *supra* notes 185, 188 and accompanying text.

²¹⁶ It should be emphasized that the choice of this index is primarily for use as an automatic adjustment to the tax structure. Various automatic adjustments to the tax base, perhaps, should be based upon other indexes. See INFLATION AND THE INCOME TAX, *supra* note 30, at 268. But this again raises the issue whether to use multiple indexes for the adjustment process.

²¹⁷ TANZI, *supra* note 45, at 16, 23, 29.

²¹⁸ CBO STUDY, *supra* note 15, at 41-42.

²¹⁹ *Id.* at 42.

²²⁰ *Id.* at 39.

²²¹ The first option, full annual adjustment in tax brackets and exemptions to reflect the rise in an index has been enacted in three countries: Argentina, TANZI, *supra* note 45, at 26-27; Australia, *Id.* at 24-26; *National Report: Australia*, *supra* note 144, at 214 (Australia abolished in-

Several other countries adopted a design in which annual adjustments reflected only a portion of the rise in the selected index.²²² This design has left room for discretionary tax adjustments or targeted relief, as well as additional budget flexibility.²²³ Two countries adopted variations of the third option in their indexing system, applying automatic indexing only when inflation reaches a

dexing beginning July 1982. See Davis, *supra* note 131 at 4); Canada, TANZI, *supra* note 45, at 23-24; *National Report: Canada*, *supra* note 144, at 283-84; Kelley, *supra* note 13, at 20; (The Canadian government acted to limit the maximum level of indexing in 1982. See Delvite, Haskin, & Sells, *supra* note 144.); and is practiced for brackets and credits also in Israel, Gubbay & Sheshinski, *supra* note 144, at 23-24. In addition, Sweden provides for full annual adjustments in brackets only, TANZI, *supra* note 45 at 29, while the United Kingdom passed a measure calling for full adjustments to exemptions. *Id.* at 29-30.

²²² The second option, annual adjustment of this tax system by a fraction of the rise in the selected index, has been adopted in three countries: Belgium, DeProft, *Belgium: A New Program Law*, 17 EUROPEAN TAX. 330 (1977) [hereinafter cited as *New Program Law*]; Brazil, *National Report: Brazil*, *supra* note 145 at 281; and the Netherlands *National Report: Netherlands*, *supra* note 145, at 466. The Belgium system enacted in 1976 was targeted at taxpayers in the lowest brackets, providing full indexation for the lowest brackets, partial indexation for the middle brackets, and no indexation for the highest brackets. *New Program Law*, *supra*, at 330. Under the Brazilian system, income brackets have not been fully adjusted due to the government's policies favoring a redistribution of wealth. *National Report: Brazil*, *supra* note 145, at 281. Under the Netherlands system, the Minister of Finance has authority to limit corrections in nominal amounts to 80% of the change in the index, and he exercised the full extent of this authority to adjust those amounts by that percentage in 1971, 1972, 1973, and 1975. *National Report: Netherlands*, *supra* note 145, at 466. In one year a statute rendered the automatic correction inoperative, and in another year a statute rendered it inoperative for higher income brackets while correcting lower brackets by 80% of the index change. *Id.*

Prior to the adoption of full indexing in 1980, Israel indexed tax brackets on most occasions by only a portion of the rise in the index in the years 1975-1980. While credits, tax debts and refunds were fully and automatically adjusted, *National Report: Israel*, *supra* note 144, at 380-81, the Minister of Finance was given direction to exercise his authority to prescribe that tax brackets be adjusted by only a part of the increase in the cost of living index. *Id.* at 381. The rate of indexing he chose to apply, 70% of the increase, corresponded to the rate of indexing of wages under a nation-wide collective bargaining agreement and a pact between government, union, and industry. Gubbay & Sheshinski, *supra* note 144, at 23-24. In 1980, these parties agreed to index wages by 80% of the increase in the price index every 3 months, and to index tax brackets at the same intervals by 100% of the price increase. *Id.*

²²³ Partial indexing might also be enacted as a response to imported inflation. Since imported inflation causes a country to export more of its resources to pay for a constant level of imports, the country either will have fewer resources left for domestic consumption, or will import less goods from other countries. The country as a whole is therefore less well off due to imported inflation. Where imported inflation is a significant component of a nation's overall inflation rate, a strong argument can be made that wages should be indexed, or adjusted, only enough to offset domestic inflation. If wages were fully adjusted to offset total inflation, either the same amount of constant money would be left chasing a stable amount of imports and fewer domestic resources, or fewer imports and stable domestic resources. In either event this would create a new spiral of demand-pull inflation since the same amount of constant money would be chasing fewer goods. If wages are only adjusted to offset domestic inflation, however, a lesser amount of constant money would be chasing the reduced amount of goods which are available in the economy, allowing prices to stabilize at a lower level. Under a partial wage adjustment, the individual wage earner, like the country as a whole, will be less well off due to imported inflation over which neither the country nor the worker has any control. Meanwhile, taxes are adjusted for domestic inflation so that a constant income pays a constant tax unaffected by the domestic inflation. Where wages are only partially adjusted, full indexation would overcompensate for inflation's impact on wages, not merely offset it. Thus, if a country experiences imported inflation, and only

predetermined level.²²⁴ In indexing systems incorporating this option, the automatic adjustment is triggered when the annual or cumulative inflation rate reaches the particular level at which adjustments are deemed desirable.²²⁵ When the predetermined level is reached, the system can provide for adjustment based on either the most recent annual increase or the compounded cumulative increase since the last adjustment was made.²²⁶

The authors conclude that the third option, triggered indexing when inflation exceeds a predetermined level, represents the best design for an indexing system. This option combines the attributes of both discretionary and indexed adjustment systems while lessening their drawbacks. Triggered indexing provides for budgetary flexibility through discretionary and targeted adjustments at low levels of inflation, and automatic inflation offsets through adjustments that do not require legislative action at high levels of inflation. Although less frequent adjustments, made only when inflation is high, allow the government to benefit more from the increase in revenues caused by inflation, the costs resulting from annual indexing may outweigh the benefit to taxpayers in the form of guaranteed tax reductions during periods of lower inflation.²²⁷ Full, annual indexing regardless of the rate of inflation is unnecessary when inflation is

partially adjusts its wages, the result may be that taxes too should only be adjusted by the same portion of the overall index increase. Another reason for partial indexation may be the policy not to adjust tax increases due to price increases created by the government, by increasing indirect taxes or reducing price subsidies.

²²⁴ This option has been adopted in France and Luxembourg. France provides for partial indexing to adjust the tax structure when consumer price inflation exceeds 5% in any year. INFLATION AND THE INCOME TAX, *supra* note 30, at 223. The French system allows different adjustments to be made to the various brackets, and as a result greater adjustments were made to lower brackets than to upper brackets. *Id.* In 1973, the average increase in the nominal limits of the income tax brackets was 6.5% when the index rose 7.3%, in 1974 the average bracket increase was 12% when the index rose 13.7%, and in 1975 the average bracket increase was 10% when the index rose 11.8%. Oliveau, *1977 Tax Council Report: France*, 17 EUROPEAN TAX. 336, 337 (1977). In 1976, the nominal limits of all brackets were adjusted upwards between 10.36% and 11.03%, while in 1977 the four lowest brackets, rates 0-15%, were increased an average of 9.3%, the five middle brackets, 20-40%, were increased an average of 4.0%, and the three highest brackets, 45-60%, were decreased an average of 1.4%. Van Waardenberg, *France, The 1977 Finance Bill*, 17 EUROPEAN TAX. 184, 195 (1977). For 1978 income, nominal limits of the lowest brackets were increased an average of 7.6%, the middle brackets an average of 7.9%, and the highest brackets were decreased an average of 3.7%; while a 10% increase was made in the level of those exempt from taxation, and in old age or invalid deductions. Van Waardenberg, *France: Finance Bill 1980* 19 EUROPEAN TAX. 310, 316-17 (1979). Finally for 1979 income, "tapering" relief continued, with the top brackets not experiencing any increase, while a 10% increase was provided for the 0% tax bracket. Van Waardenberg, *France: Finance Law 1980*, 20 EUROPEAN TAX. 113, 119 (1980).

Luxembourg has also provided for indexing of the tax structure when inflation reaches a certain level. Where cumulative, weighted CPI increases more than 5% over the last tax adjustment, the tax rate is adjusted based on the index. INFLATION AND THE INCOME TAX, *supra* note 30, at 223. Although discretion as to the adjustment is allowed, since 1968 Luxembourg has made the adjustments strictly in line with the price index increases. *Id.*

²²⁵ CBO STUDY, *supra* note 15, at 39-40.

²²⁶ *Id.*

²²⁷ *Id.* at 39.

low.²²⁸ In addition, because it automatically offsets the entire revenue increase due to inflation, full indexing leaves no room for discretionary budgetary action to provide targeted incentives for curbing inflation.²²⁹ Fractional indexing might be more effective in providing business and labor with incentives to curb inflation.²³⁰ Such a system, however, would require additional legislative action to offset the full effects of inflation. Especially at high levels of inflation, therefore, it could be less effective than full indexing in preventing further wage and price escalation.²³¹ A system designed to trigger full indexing only when inflation reaches a predetermined level allows the legislature to retain full flexibility to manage or target economic policy with discretionary actions so long as inflation remains low. This retained flexibility provides an incentive for the government to keep inflation below the trigger level. If inflation exceeds this level, this budgetary flexibility will be eliminated because the automatic adjustment will offset the full increase in revenue due to inflation, leaving the government with no room for discretionary action in the absence of budget reductions elsewhere.

Although an examination of academic and practical experience with indexing suggests no clear-cut choice for the correct trigger level, it is suggested that 8% annual inflation would be an appropriate trigger level. On the one hand, domestic²³² and foreign experience²³³ indicate that indexing is not necessary where the inflation level is below 5%. Both stabilization and administrative cost arguments weigh against indexing when inflation is below this level. The benefit of the automatic stabilization effect present under an unadjusted progressive tax system in times of demand-pull inflation outweighs the detriment of concealed progression to the tax structure. In addition, administrative costs of implementing indexing at such a low level of inflation outweigh the benefits of indexing. Where inflation remains below 5%, periodic ad hoc adjustments are adequate to offset inflation impact on taxation. On the other hand, commentators²³⁴ and foreign experience²³⁵ indicate that indexing is necessary where the inflation level is in double, and certainly in triple, digits. At high levels of inflation, the detriment of concealed progression becomes intolerable and benefits of indexing outweigh any administrative costs involved.

Between 5% inflation and double digit inflation, however, a gray area exists where it is unclear exactly when indexing becomes desirable. Although any

²²⁸ See Sunley, *supra* note 10, at 332.

²²⁹ See CBO STUDY, *supra* note 15, at 42.

²³⁰ *Id.*

²³¹ *Id.*

²³² See *infra* notes 278-318 and accompanying text. See text and notes at notes 278-313 *infra* (Discretionary adjustments have been sufficient to offset the levels of inflation experienced from 1964 through 1978. See Appendix A.).

²³³ See *supra* notes 146-48 and accompanying text.

²³⁴ Sunley, *supra* note 10, at 332.

²³⁵ See *supra* notes 144-45 and accompanying text (experience of Argentina, Brazil and Israel).

such choice is somewhat arbitrary, it is concluded that an 8 percent trigger will allow the maximum discretionary budget flexibility and incentive to keep inflation to an acceptable level while allowing the maximum benefit from automatic adjustments when inflation is high. To insure the maximum inflation-offset benefit from indexing, once indexing is triggered by annual inflation of 8% or more, automatic adjustments should offset the cumulative effect of inflation. These adjustments can either be determined from the last automatic adjustment, or from enactment of the triggered provision. To achieve this, the selected components of the tax system would be adjusted upward by an amount equal to the full cumulative change in the index over this period decreased by the cumulative effect of any discretionary adjustments made to these components in the interim. Thus, the automatic adjustment will offset the impact of any inflation not already offset by discretionary adjustments during years in which inflation is less than 8 percent.

4. Timing Considerations in an Indexing System

Various timing factors must be considered in designing an indexing system. The first decision to be made is how often to adjust taxes to reflect inflation. The second is what time lag there will be between the end of the indexing period and application of the adjustment. So long as inflation is relatively low, annual inflation adjustments are sufficient. At high rates of inflation, however, more frequent adjustments may be required.²³⁶ If the tax system operates on an annual basis, so long as inflation is not too high, it is most practical to adjust taxes annually and to base this adjustment on an annual index increase.²³⁷

Even if the decision is reached to make automatic annual adjustments, the time lag between the applicable index rise and making the adjustment remains to be addressed. Especially when inflation is high, or volatile, the greater the lag, the greater will be the amount of discrepancy between the inflation for which taxes are being adjusted and current inflation.²³⁸ A lag can make the index increase used irrelevant since the index will measure past, not present, inflation.²³⁹ Also, any past increase will, in the meantime, be compounded. On the one hand, when inflation is increasing the adjustment based on past inflation will not offset this compounding. The government will benefit from higher tax revenues due to inflation that is not yet offset for the duration of the time lag. This benefit during the lag, similar to that which exists in the absence of indexing, diminishes any incentive for the government to pursue anti-inflationary policy. If inflation decreases, on the other hand, the adjustment

²³⁶ See, e.g., Rafael, *supra* note 67, at 199-200 (Israel's 1975 provision for biannual adjustments where inflation exceeds 10%); Gubbay & Sheshinski, *supra* note 144, at 24 (Israel's 1980 provision for adjustments every 3 months enacted in a three digit inflation environment).

²³⁷ See CBO STUDY, *supra* note 15, at 34.

²³⁸ See INFLATION AND THE INCOME TAX, *supra* note 30, at 244.

²³⁹ See *id.*

may more than compensate for any compounding of the inflation rate. Such an overcompensation will decrease tax revenues, or, by more than offsetting current inflation's impact on the tax system, allow them to increase less than that occasioned by real growth. The shorter the lag between inflation-measurement and the resulting adjustment, the less compounding of inflation will take place. Thus, the shortest possible lag will minimize the benefit to government of higher taxes during periods of increasing inflation and the overcompensation for current inflation during periods of decreasing inflation. Assuming therefore, that a country has decided to automatically adjust taxes to offset inflation's actual impact on the targeted component of income, the longer the lag, the less effectively the indexing system will accomplish this goal. Countries that implemented indexing, in some instances, have experienced lags of up to nine months from the end of the period to which the change refers to the beginning of the relevant tax period to which the adjustments are actually applied.²⁴⁰ Lags of three months before the beginning of the tax period to which the adjustments will be applied are common.²⁴¹

Such long lag times are unnecessary.²⁴² Proponents of time lags claim that such lags are due to the necessity of having tables available for withholding and declaration of estimated tax purposes before the tax period begins.²⁴³ Any practical advantages of preparing final withholding tables ahead of time is outweighed by the disadvantages of using an outdated, irrelevant index change as the basis of an adjustment. If a goal, therefore, is to offset the actual current impact of inflation, the time lag should be kept to a minimum. Forecasts on the most recent monthly index could be used for withholding and estimation purposes, and the figures used could be updated during the tax year.²⁴⁴ A similar use of such updating already has been implemented in the United States in the case of tax rate changes.²⁴⁵ Practical administrative considerations seem to dictate that the annual index period used for determining the adjustment end at the latest possible point in the tax period which would allow tax filing forms to be printed and distributed to individuals at the close of the tax year, as is currently the practice.²⁴⁶

²⁴⁰ For example, this phenomenon was true in Denmark in 1975. INFLATION AND THE INCOME TAX, *supra* note 30, at 244.

²⁴¹ For example, such lags exist in Canada. *Id.* This is also the case under ERTA. *See infra* notes 373-74, and accompanying text.

²⁴² INFLATION AND THE INCOME TAX, *supra* note 30, at 244-45.

²⁴³ *Id.* at 245.

²⁴⁴ *Id.*

²⁴⁵ *Id.*

²⁴⁶ An alternative, the deflated income method, is theoretically superior to the method described in the text. *See id.* This deflation method would allow all nominal amounts appearing on the tax form that are to be indexed to appear in base-year dollars. The taxpayers would be required to deflate their adjusted gross income to the base period and compute their tax liability in base year amounts, then multiply this amount by the index increase since the base year to determine liability in current dollars. Use of this deflation method would allow the appropriate index figure to reflect inflation over most or all of the tax year, providing for announcement of the index figure at the end of the year or a later date that would fall before the date or required tax fil-

In summary, once a decision has been made to implement a system providing for automatic indexed adjustments to offset the effects of inflation on selected components of the tax system, several key factors in the design of such a system must be considered. These design factors include the number and type of indexes on which to base an adjustment, as well as the size and timing of the appropriate adjustment. Factors in the design of an indexing system are primarily technical or administrative in nature. Thus, assuming a political decision to offset inflation's impact by indexing is made, choice of the appropriate system design can determine how effectively and efficiently this objective is reached. Upon an analysis of the design factors, it is suggested that an appropriate indexing system would: use a single index that measures national income; trigger full automatic adjustments only when annual inflation reaches a given level; and keep time lags between the measurement of inflation and the corresponding adjustment to an absolute minimum.

Over the period from 1978 to 1980, several states enacted some form of indexing to adjust state income taxes for the effects of inflation. These states adopted a wide variety of indexing systems, an examination of which provides background for analyzing the federal indexing decision. Since many states allow a deduction for federal income tax liability, an inflation adjustment at the federal level could automatically effect taxable state income for persons living in these states.

II. STATE TAX INDEXING

By 1981 nine of the forty-four states with personal income taxes already had some formal indexing provision and six more were considering indexing.²⁴⁷ The states which have adopted indexing, and the year in which it was adopted, are as follows: Arizona (1978), California (1978), Colorado (1978), Iowa (1979), Montana (1980), Oregon (1979), South Carolina (1980), and Wisconsin (1979).²⁴⁸ No two of these state indexing provisions are alike.²⁴⁹

All of the states index various elements of the tax structure. While five states index both tax brackets and exemptions or deductions,²⁵⁰ two states index tax brackets alone,²⁵¹ and two states index only exemptions or

ing. This method would greatly shorten or eliminate the time lag between the index period and application of the adjustments. While the deflation method conceptually would be the best way to eliminate any time lag, it is not a realistic option for designing an indexing system to be used by individual taxpayers due to the extensive calculation required to be carried out by the taxpayer. *See id.* at 263 (comments by A. Blinder) ("administrative considerations dictate that the Internal Revenue Service do the deflating").

²⁴⁷ Washington Post, July 12, 1981, at 68.

²⁴⁸ Shannon & Lucke, *State Experimentation with Indexed Income Taxes — Early Results*, PROCEEDINGS OF THE SEVENTY-THIRD ANNUAL CONFERENCE 143, 143 (Nat. Tax Assoc. — Tax Inst. of America 1980).

²⁴⁹ McHugh, *Income Tax Indexation in the States: A Quantitative Appraisal of Partial Indexation*, 34 NAT. TAX J. 193, 193 (1981).

²⁵⁰ California, Colorado, Minnesota, Montana, South Carolina. Shannon & Lucke, *supra* note 248, at 152.

²⁵¹ Iowa, Wisconsin. *Id.*

deductions.²⁵² Five states chose a local metropolitan CPI-U as the relevant index,²⁵³ and two states chose the national CPI-U as the relevant index,²⁵⁴ one state chose the GNP deflator as the relevant index,²⁵⁵ and one state sets the annual index based on various price data.²⁵⁶ In addition, four states adjust for the full rise in the relevant index,²⁵⁷ two states adjust for the full rise so long as it does not exceed a maximum amount,²⁵⁸ two states adjust for a fixed percentage of the full rise,²⁵⁹ and one state adjusts for the full rise in excess of 3%.²⁶⁰

Beyond comparing state indexing provisions, consideration of state tax systems is necessitated in any thorough examination of the impact of federal inflation-adjustments because of another very important reason. There is a significant inter-relation between the federal tax system and the state tax system. First, some states allow full deduction of federal income taxes from state taxable income.²⁶¹ Second, most states calculate some of their own income taxes based on the federal tax structure.²⁶² For states included in either of these categories, an inflation adjustment to the federal tax system could have an impact on state tax collection.²⁶³

In states allowing full deduction of federal income taxes, the more-than-proportionate rise in federal taxes due to inflation produces a powerful restraint on inflation-induced increases in state taxes.²⁶⁴ Regardless of whether the state tax is indexed, state tax systems are always less sensitive to inflation where federal taxes are deductible.²⁶⁵ This deduction restrains inflation-induced growth in state tax liabilities.²⁶⁶ Due to this effect, under a non-indexed federal tax system, a full and complete state indexation plan could render such state's income tax inelastic with respect to inflation.²⁶⁷ State taxes could automatically decrease with a rise in inflation in such a system. Further, if the federal government indexed the federal income tax system to offset the effects of inflation the sensitivity of state income taxes to inflation will increase when the federal taxes are deductible.²⁶⁸ Thus, the restraining effect of the state's deduction upon in-

²⁵² Arizona, Oregon. *Id.*

²⁵³ Arizona, California, Minnesota, Oregon, South Carolina. *Id.*

²⁵⁴ Montana, Wisconsin. *Id.*

²⁵⁵ Iowa (used national CPI one year, did not put indexation with GNP deflator into effect due to not maintaining required minimum amount in general fund). *Id.* at 146, 152.

²⁵⁶ Colorado. *Id.* at 152.

²⁵⁷ Arizona, Colorado, Montana, Oregon. *Id.*

²⁵⁸ South Carolina (6%), Wisconsin (10%). *Id.*

²⁵⁹ Iowa (50%), Minnesota (85%). *Id.*

²⁶⁰ California. *Id.*

²⁶¹ McHugh, *supra* note 249, at 194, 200.

²⁶² N.Y. Times, Aug. 21, 1981 at A1.

²⁶³ If State tax is based on federal adjusted gross income and federal indexing applies only to brackets, exemptions, and zero bracket amount State tax collection will not be affected.

²⁶⁴ McHugh, *supra* note 249, at 194.

²⁶⁵ *Id.* at 201.

²⁶⁶ *Id.* at 202.

²⁶⁷ *Id.*

²⁶⁸ *Id.*

flation distortions of its own income tax will lessen.²⁶⁹ In states allowing deduction of federal tax payments, federal indexing will reduce these deductions, resulting in higher revenue collection.²⁷⁰ These states may be pressured to enact their own inflation-adjustments, such as indexing, to slow the rise in tax rates induced solely by inflation.²⁷¹

Approximately forty states calculate either corporate or personal income taxes based on federal rates, deductions, depreciation, or exemptions.²⁷² A provision for inflation adjustments at the federal level could automatically result in less state revenue being collected in these states if state taxes would also be automatically reduced.²⁷³ Any decision to automatically inflation-adjust the federal tax structure, therefore, could precipitate a rash of state tax changes to avoid this potential loss of state revenue.²⁷⁴

Before analyzing the inflation adjustments provided by ERTA, previous American federal tax adjustments which have had the consequence of offsetting inflation will be examined in Section III. These pre-ERTA adjustments illustrate how the government used discretionary tax adjustments in the past to counter inflation's impact on individuals and businesses. Social security taxes provide an example both of what limited federal experience with indexing existed prior to ERTA and of how discretionary adjustment to offset inflation's impact, for all practical purposes from the standpoint of the taxpayer, can be countered by increases in another tax levied on income but labeled something other than the income tax. Although some of these actions relative to federal taxes were motivated by inflation, many of them were not enacted explicitly in response to inflation. All of the actions, however, have had a de facto effect on the overall tax system, federal income and social security as well as state taxation, vis-a-vis inflation. The examination of whether the impact of inflation on taxes levied upon incomes has been offset in the past provides a background for analyzing how it could be offset in the future, and whether this will be accomplished by ERTA's provisions.

III. AD HOC ADJUSTMENTS TO THE TAX SYSTEM AS AN INFLATION OFFSET: 1969-1980

Although perhaps not readily apparent to the American public, ad hoc, discretionary changes to the federal income tax laws made from 1969 through 1978 had the aggregate consequence of overcompensating for the effect of inflation upon the individual income tax during the 1960's and 1970's.²⁷⁵ The im-

²⁶⁹ See *id.*

²⁷⁰ See CBO STUDY, *supra* note 15, at 63.

²⁷¹ McHugh, *supra* note 249, at 202. If federal indexing restricts the further growth of federal spending, however, the responsibility for certain social programs may be transferred to the states. CBO STUDY, *supra* note 15, at 63. States may then be worse off under federal indexing because of these additional expenditures. *Id.*

²⁷² N.Y. Times, Aug. 21, 1981, at A1.

²⁷³ *Id.*

²⁷⁴ See *id.*

²⁷⁵ Sunley, *supra* note 10, at 329.

pact of inflation on federal individual income taxation was offset in the aggregate by reductions in tax rates, coupled with increases in exemptions and tax bracket widths. Over the same time period, businesses benefitted from a cluster of ad hoc changes in the tax laws which had the aggregate effect of lessening but not offsetting inflation's impact on business taxation. In 1978, an increase in the capital gains exclusion also lessened the adverse effects of inflation on capital gains income received by both individuals and businesses.

While these discretionary adjustments in the federal income tax laws lessened inflation's effect on income taxes, during the same period Congress automatically indexed both social security benefits and the level of wages subject to social security taxes.²⁷⁶ In addition it also repeatedly raised the social security tax rate between 1969 and 1980.²⁷⁷ Thus, Social Security cannot be disregarded in any thorough examination of the interrelation between inflation and taxation in the United States.

A. Federal Individual Income Tax Adjustments

Discretionary federal income tax cuts and increases in both personal exemptions and deductions offset the aggregate impact of the inflation experienced from the mid-1960's through the early 1970's on the individual income tax structure of the United States.²⁷⁸ These periodic discretionary adjustments caused effective tax rates of the Federal individual income tax to be distinctly lower for low-income families in 1972 than at any time since 1950.²⁷⁹ For taxpayers in upper brackets, however, the effect of the inflation of the late 1960's and early 1970's had not been offset fully by 1972, with effective tax rates for these taxpayers being higher in 1972 than in 1964-1967.²⁸⁰

The effect of cumulative inflation beginning in 1964 on the individual income tax was not offset for low- and moderate-income families until the 1969 Tax Reform Act²⁸¹ took effect in 1970.²⁸² This act raised the levels of personal exemptions and deductions for the first time in over twenty years.²⁸³ Provisions in the 1969 Act and in the Revenue Act of 1971²⁸⁴ that had the effect of offsetting the effect of inflation on the individual income tax included: an increase in the personal exemptions from \$600 to \$750 by 1972;²⁸⁵ an increase in the standard deduction from a maximum of 10% of AGI, with a \$1000 limit, to a max-

²⁷⁶ 42 U.S.C. § 415(i)(1), as amended by the Social Security Amendments of 1972, Pub. L. No. 92-336, § 202, 88 Stat. 406.

²⁷⁷ See *infra* note 345.

²⁷⁸ INFLATION AND THE INCOME TAX, *supra* note 30, at 165; CBO STUDY, *supra* note 15, at 14-15.

²⁷⁹ Furstenberg, *supra* note 15, at 117.

²⁸⁰ *Id.* at 117-18.

²⁸¹ Pub. L. 91-172, 83 Stat. 487 (1969).

²⁸² Furstenberg, *supra* note 15, at 122.

²⁸³ *Id.*

²⁸⁴ Pub. L. 92-178, 85 Stat. 497 (1971).

²⁸⁵ Furstenberg, *supra* note 15, at 122.

imum 15% of AGI, with a \$2000 limit by 1972;²⁸⁶ replacement of the minimum standard deduction of \$200, plus \$100 per exemption, with the low-income allowance that reached \$1300 by 1972;²⁸⁷ and a decrease in the maximum marginal tax rate on earned income from 70% to 50%.²⁸⁸ Before the standard deduction was raised, taxpayers at higher levels of income were somewhat less exposed to inflation than those at lower levels because itemized deductions, primarily used by upper-bracket taxpayers, kept pace with inflation.²⁸⁹ The increase in the standard deduction, coupled with the increase in the personal exemptions, offset inflation's effect on taxes for lower-bracket taxpayers.²⁹⁰ The 1969 and 1971 Acts combined to total a 13 percent nominal reduction in taxes.²⁹¹ Since real tax liability measured in constant dollars is increased 1 percent as a consequence of 2 percent inflation, due to the 1.5 elasticity of income taxes relative to inflation, the 13 percent reduction represents an over-compensation for inflation over the period 1969-1972.²⁹²

Following the sharp rise in inflation after the 1973 oil crisis, the Tax Reduction Act of 1975²⁹³ had the effect of offsetting this renewed surge of inflation. This act reduced total income tax liabilities for 1974 by \$8.1 billion through use of a rebate.²⁹⁴ It also reduced 1975 tax liabilities by \$9.3 billion.²⁹⁵ The Act included temporary tax reductions, and increased low income allowances and the standard deductions, and also provided a per capita tax credit.²⁹⁶ This discretionary adjustment was sufficient to offset an inflation rate of 12 percent per year, more than offsetting the inflation actually experienced in 1974-1975.²⁹⁷ It also compensated for most of the effects of the inflation experienced in 1973.²⁹⁸

The tax reductions, however, were not targeted to differing taxpayer groups in proportion to the impact of inflation on each groups' tax liabilities.²⁹⁹ Under the 1975 Act, \$1 billion of the reduction was allocated to individuals not paying tax at all, and the bulk of reductions were allocated to individuals whose AGI fell below \$20,000.³⁰⁰ Although, across-the-board elimination of infla-

²⁸⁶ *Id.*

²⁸⁷ *Id.*

²⁸⁸ FEDERAL INCOME TAXATION, *supra* note 117, at 25.

²⁸⁹ Furstenberg, *supra* note 15, at 123-24.

²⁹⁰ *See id.*

²⁹¹ Note, *Inflation and the Federal Income Tax*, 82 YALE L.J. 716, 735 n.95 (1973).

²⁹² Because of the 1.5 elasticity factor, the 13% reduction would offset the effect of 26% inflation (an increase of 39% in tax liability). *See* Appendix A (Cumulative Inflation for 1969-72 totaled approximately 15%).

²⁹³ Pub. L. 94-12, 89 Stat. 26 (1975).

²⁹⁴ Kelley, *supra* note 13, at 19.

²⁹⁵ *Id.*

²⁹⁶ 1979 Supplement, *supra* note 121, at 3.

²⁹⁷ Kelley, *supra* note 13, at 19.

²⁹⁸ Inflation in 1973 totaled 5.7% using the GNP deflator, or 6.3% using the CPI; in 1974 8.7% using the GNP deflator, or 11.0% using the CPI; and in 1975 9.3% using the GNP deflator, or 9.1% using the CPI. *See infra* Appendix A.

²⁹⁹ Kelley, *supra* note 13, at 19.

³⁰⁰ *Id.*

tionary bracket distortions would have resulted in allocating 43% of the total tax reduction provided in the 1975 Act to individual taxpayers whose AGI exceeded \$20,000, in fact, only 15 percent of the total reductions provided in that Act went to this group.³⁰¹ Thus, over the period from 1960 through 1975, the discretionary tax cuts resulted in a much different distribution of tax reduction than would have occurred under an attempt to offset the impact of inflation on the tax system through use of an indexed system automatically linked to some measure of inflation.³⁰² Discretionary tax cuts were larger for low-income classes, and smaller for high-income classes than those which would have resulted from an indexed system designed solely to offset the effects of inflation upon the tax system.³⁰³

Similar discretionary action to that adopted in the Tax Reduction Act of 1975, targeted disproportionately to lower-bracket taxpayers, was enacted by Congress from 1975 through 1977. The Revenue Adjustment Act of 1975³⁰⁴ extended the time period covered by the temporary tax reductions of the 1975 Tax Reduction Act to July 1976.³⁰⁵ The Tax Reform Act of 1976³⁰⁶ further extended them through 1977.³⁰⁷ The 1976 Act also made the 1975 increases in the low-income allowance and the percentage standard deduction permanent features of the tax laws.³⁰⁸ The Tax Reduction and Simplification Act of 1977³⁰⁹ established in place of the standard deduction the Zero Bracket Amount of \$3200 for married taxpayers filing joint returns, and \$2200 for single taxpayers.³¹⁰ The 1977 Act also extended the tax reductions begun in 1975 through 1978.³¹¹

Although continuing the trend of targeting tax benefits to low-income taxpayers, the Revenue Act of 1978³¹² also helped higher-bracket taxpayers to a greater extent than had previous legislation in this period. While increasing the Zero Bracket Amount by 6.2% and personal exemptions by 25%, the 1978 Act widened tax brackets and reduced rates in some brackets beginning in 1979.³¹³

³⁰¹ *Id.* As Kelley stated:

Although the effect of inflation on a progressive tax system is to increase progressivity without legislative amendments, the effect of the disproportionate distribution of so-called inflationary tax relief exemplified by the Tax Reduction Act of 1975 is to increase further the progressivity of the tax System by overcompensating lower income groups and undercompensating higher income groups.

Id.

³⁰² INFLATION AND THE INCOME TAX, *supra* note 30, at 165.

³⁰³ *Id.* at 165.

³⁰⁴ Pub. L. 94-164, 89 Stat. 970 (1975).

³⁰⁵ 1979 SUPPLEMENT, *supra* note 121, at 4.

³⁰⁶ Pub. L. 94-455, 90 Stat. 1520 (1976).

³⁰⁷ 1979 SUPPLEMENT, *supra* note 121, at 4.

³⁰⁸ *Id.*

³⁰⁹ Pub. L. 95-30, 91 Stat. 126 (1977).

³¹⁰ 1979 SUPPLEMENT, *supra* note 121, at 5.

³¹¹ *Id.*

³¹² Pub. L. 95-600, 92 Stat. 2763 (1978).

³¹³ See 1979 SUPPLEMENT, *supra* note 121, at 6.

The 1978 Act only offset the effects of inflation on income taxes prior to and including 1978 for all individual taxpayers in the aggregate. In 1979, however, large increases in oil prices renewed in spiral of inflation resulting in levels even higher than those experienced earlier in the 1970's. Between enactment of the 1978 Act and enactment of ERTA in 1981, Congress made no further discretionary adjustments which would have had the effect of offsetting inflation's effect on individual income taxes.

In the 1960's and 1970's discretionary tax cuts in the United States more than offset inflation-induced increases in aggregate effective rates of the individual income tax.³¹⁴ Although this was true, considering all income groups together, higher-bracket taxpayers were under-compensated for inflation's effects and lower-bracket taxpayers were over-compensated.

In addition to inflation-induced rises, growth in real per capita income also causes increased tax liabilities as a result of the progressive tax rates.³¹⁵ If unchecked, from 1960 through 1975, the combined effect of inflation and real growth would have increased individual income tax liabilities from 10.7 percent to 16.2 percent of adjusted personal income, with real growth accounting for an increase from 10.7 percent to 12.2 percent.³¹⁶ After the discretionary tax adjustments discussed above, plus the 1964 tax cut,³¹⁷ personal income tax liabilities had risen during this period only to 11.3 percent of adjusted personal income in 1975. This, in fact, is less than the gain occasioned by real growth alone.³¹⁸

From 1951 through the 1970's, the overall effective federal individual income tax rate varied between a low of 9.2 percent, in 1964, and a high of 12.1 percent, in 1969.³¹⁹ Prior to passage of ERTA, however, the effective rate for 1981 was projected to be a new high, just over 12.1 percent.³²⁰

B. Business Income Tax Adjustments

The adjustments to the individual income tax were paralleled by a cluster of discretionary adjustments affecting business ordinary income taxation which were enacted in the 1970's. The primary adjustments to the treatment of business ordinary income over this period included various new forms of ac-

³¹⁴ INFLATION AND THE INCOME TAX, *supra* note 30, at 165; see Sunley, *supra* note 10, at 329.

³¹⁵ Sunley, *supra* note 10, at 328.

³¹⁶ INFLATION AND THE INCOME TAX, *supra* note 30, at 21. Adjusted personal income equals personal income less transfer payments and other labor income, plus employee contributions for social insurance. *Id.* at 159 (table 5-3, note a).

³¹⁷ Revenue Act of 1964, P.L. 88-272, 78 Stat. 19 (1964). This act reduced individual income tax rates from a range of 20-91% to a range of 14-70%. FEDERAL INCOME TAXATION, *supra* note 117, at 23.

³¹⁸ INFLATION AND THE INCOME TAX, *supra* note 30, at 21.

³¹⁹ Steuerle & Hartzmark, *Individual Income Taxation 1947-79*, 34 NAT. TAX J. 145 (1981).

³²⁰ *Id.* at 145, 157.

celerated depreciation allowances, investment credit provisions, and reductions in the corporate tax rate. The objective of these changes was to encourage capital investment. Although their purpose was not to offset inflation, one of their consequences, was to partially do so. Thus, to assess the overall success of offsetting inflation's impact on the federal tax system, the inflation-offset effect of these changes must be examined.

The Revenue Act of 1971,³²¹ by adopting the Asset Depreciation Range System,³²² created a new type of accelerated depreciation. The Act also reinstated a 7 percent investment credit.³²³ The Tax Reduction Act of 1975 increased the investment credit, temporarily reduced corporate tax rates, and increased the corporate surtax exemption.³²⁴ The reduction in tax rates and the surtax exemption were extended through 1977 by the Tax Reform Act of 1976.³²⁵ The Revenue Act of 1978³²⁶ provided a permanent reduction in the maximum corporate rate from 48% to 46% and instituted graduated rates for the first \$100,000 of corporate income.³²⁷ The 1978 Act also expanded the investment credit provisions.³²⁸

Although these reforms reduced the tax burden, thereby lessening inflation's impact upon business income, they did not offset the most substantial effect of inflation on American taxation in the 1970's. This effect was the extra tax paid by business because of the overstatement of corporate profits in an era of inflation.³²⁹ This over-statement was caused by the reliance of tax accounting upon traditional historical-cost based accounting principles.³³⁰ One study showed that in 1977 mismeasurement of depreciation and inventories due to tax accounting's use of historical cost data resulted in a \$32 billion increase in business income tax liability.³³¹ This figure represents an increase of 50% in total tax paid on corporate source income over the amount of tax liability computed using current cost data.³³² Due to inflation, the 1977 effective tax rate on real corporate income was calculated to be as high as 66%.³³³ Thus, while the cluster of adjustments to business income taxation resulted in a tax burden less than that which would have been imputed in their absence, they represented nowhere near a full offset of inflation's impact upon business income.

³²¹ Pub. L. 92-178, 85 Stat. 497 (1971).

³²² FEDERAL INCOME TAXATION, *supra* note 117, at 26-27, 403-06.

³²³ *Id.* at 27.

³²⁴ 1979 SUPPLEMENT, *supra* note 121, at 3.

³²⁵ *Id.* at 4-5.

³²⁶ Pub. L. 95-600, 92 Stat. 2763 (1978).

³²⁷ 1979 SUPPLEMENT, *supra* note 121 at 6.

³²⁸ *Id.*

³²⁹ Feldstein, *supra* note 118, at 348.

³³⁰ See *supra* notes 83-85 and accompanying text.

³³¹ See Feldstein, note 118 *supra*, at 348 (This study ignored debt.).

³³² *Id.*

³³³ *Id.* (effective tax rate on total real or inflation-adjusted, capital income of the non-financial corporate sector, representing taxes paid by corporations, their Shareholders and their creditors). But see Graville, *Inflation and the Taxation of Capital Income in the Corporate Sector: A Comment*, 33 NAT. TAX. J. 473, 482 (1980) (1977 effective corporate tax rate calculated to be 54%).

C. Capital Gains Tax Adjustments

Congress also reduced the tax burden on capital gains in the Revenue Act of 1978. This reduction had the consequence of partially reducing the impact of inflation on capital gains income. The Act increased the capital gains exclusion from 50% to 60%.³³⁴ Although tax rates on capital gains appeared to be relatively low when gains were calculated using traditional nominal cost accounting methods, the tax rate on real gain, as opposed to fictitious, inflation-induced gain, was much higher throughout the 1970's.³³⁵ The actual tax rate on real gain in some cases exceeded 100% due to the impact of inflation on the measurement of the asset's basis.³³⁶ Analysis of a 1973 IRS sample of 30,000 individual taxpayers who reported \$4.6 billion in capital gains on the sale of stock revealed that once historical purchase prices were adjusted for inflation, this "gain" was revealed to be an actual loss of almost \$1 billion.³³⁷ In the aggregate, therefore, these taxpayers who paid tax on a "gain" actually suffered a constant dollar loss after adjustments are made for the impact of inflation upon the assets they sold.³³⁸ The increase in the capital gains exclusion, thereby reducing the capital gains tax rate, did not change the fact that taxes are being paid on fictitious gains induced by inflation.³³⁹ Even where real losses are incurred, taxes are still levied on nominal gains, albeit at a lesser tax rate. Although not passed by the Senate, in 1978, the House approved a measure to index the bases of certain capital assets to offset the impact of inflation on them so that gain attributable to inflation would not be taxed.³⁴⁰ Such a measure would be required in order to eliminate the impact of inflation upon capital gains income.³⁴¹

D. Social Security Tax and Benefit Adjustments

Although the federal individual income tax was being adjusted to offset inflation with some success, Congress increased social security taxes throughout the 1970's. The social security tax is an increasing portion of the Federal tax burden. Hence, any analysis of the effects of inflation on the Federal tax system should include a consideration of the role played by social security in the federal tax scheme. In theory a large part of the social security "tax", paid by employees and employers in equal amounts, is a fee for future benefits; that is a payment for an annuity. In practice, however, the wage earner is likely to view the entire amount withheld from his paycheck for social security as a tax,

³³⁴ 1979 SUPPLEMENT, *supra* note 121, at 6.

³³⁵ See Feldstein, *supra* note 118, at 347.

³³⁶ See *id.* at 347-48.

³³⁷ *Id.* at 348.

³³⁸ *Id.* While individuals at all income levels paid taxes on these fictitious gains, analysis showed that the problem was most severe for individuals with incomes of less than \$100,000. *Id.*

³³⁹ *Id.*

³⁴⁰ H. REP. NO. 1445, 95th Cong., 2d Sess. 125 (1978); 1979 SUPPLEMENT, *supra* note 295, at 16.

³⁴¹ See *supra* notes 113-21 and accompanying text.

similar to income tax withholdings. A corresponding increase in either withholding category will result in equal reduction in take-home pay. Thus, a decrease in the federal income tax is unlikely to be perceived as either a tax cut or an inflation adjustment if it is offset by an increase in social security taxation.³⁴²

Although the individual income tax is progressive, social security taxes are regressive. Under a flat rate, the social security tax is applicable only up to a set maximum wage base.³⁴³ Due to the flat rate, social security taxes are not susceptible to either the effective-rate creep, or concealed progression, that inflation induces, given a progressive tax.³⁴⁴ The social security tax increased from 4.8% on the first \$7800 of wages in 1969, to 6.65% on the first \$29,700 in 1981.³⁴⁵ The maximum wage base subject to social security taxation has been fully indexed to increase this amount by the rate of inflation since 1974 and social security benefits have been indexed since 1975.³⁴⁶ The index used is the CPI-U.³⁴⁷ By indexing the wage base subject to social security taxes, Congress insured the value of social security receipts would not be eroded by inflation. In addition, discretionary increases in the wage base occurred for 1979-1981.³⁴⁸

³⁴² See N.Y. Times, Jan. 26, 1972, at 36, col.2 (President Nixon's proclaimed shift in fiscal philosophy to decrease the "bite" of the federal income tax has been relatively unnoticed and one explanation was that for many lower and middle income workers, payroll taxes for social security, as well as state and local taxes, climbed faster than the federal income taxes came down.). See also *infra* note 349.

³⁴³ T.R. DYE, UNDERSTANDING PUBLIC POLICY 119 (3d ed. 1978) (The social security tax is highly regressive. It takes a much larger share of the income from the poor than the rich.).

³⁴⁴ See *supra* notes 64-66 and accompanying text.

³⁴⁵ SOCIAL SECURITY EMPLOYEE TAXES AS
A PERCENT OF GROSS WAGES UP TO THE MAXIMUM
TAXABLE EARNING BASE, SELECTED YEARS*

YEAR	WAGE BASE	TAX RATE ^a	YEAR	WAGE BASE	TAX RATE ^a
1937	\$ 3000	1.0%	1973	\$10800	5.85%
1940	3000	1.0	1974	13200	5.85
1945	3000	1.0	1975	14100	5.85
1950	3000	1.5	1976	15300	5.85
1955	4200	2.0	1977	16500	5.85
1960	4800	3.0	1978	17700	6.05
1965	4800	3.625	1979	22900	6.13
1970	7800	4.8	1980	25900	6.13
1971	9000	5.2	1981	29700	6.65
1972	10800	5.2	1982	32400	6.7

^a For the old age and survivors insurance (OASI), disability insurance (DI), and hospital insurance (HI) programs combined.

NOTE: DI taxes began in 1957 and HI taxes began in 1966.

* Sources: 44 Social Security Bulletin 30, 30-31 (July 1981); Samuelson, *Benefit Programs for the Elderly — Off Limits to Federal Budget Cutters?*, NATIONAL J. 1757, 1761 (Oct. 3, 1981) (insert from Policymaking for Social Security (Brookings Institution 1979)).

³⁴⁶ Samuelson, *Benefit Programs for the Elderly — Off Limits to Federal Budget Cutters?*, NAT. J. 1757, 1761 (Oct. 3, 1981) [hereinafter cited as *Benefit Programs*].

³⁴⁷ STATISTICAL ANALYSIS, *supra* note 140, at 501.

³⁴⁸ See *Benefit Programs*, *supra* note 346, at 1761.

Both the income and the social security tax are levied on wage, or earned, income. Legislated increases in the social security tax rate effectively can offset any inflation adjustments made to the income tax. While the taxpayer will be better off with the inflation adjustments than without them, the net effect of the social security tax increases and the adjustments will result in little or no increase in nominal dollars retained once overall federal tax liability is paid.³⁴⁹ In an era of inflation, this outcome is equivalent to a decrease in constant dollar income retained. An increase in one federal tax rate, social security, while inflation adjusting another federal tax, income taxes, guarantees that the federal government will increase its overall tax receipts in constant, inflation adjusted dollars. Viewed in this manner, taxpayers' federal tax liabilities will not be "inflation-adjusted" or remain the same in constant dollars; rather they will increase in constant dollars. If the objective of adjusting for inflation is to maintain a stable effective tax rate on a constant dollar amount regardless of inflation, increases in social security taxes will raise the overall effective tax rate just as increases in income taxes will do the same. Although Congress overcompensated for inflation in the aggregate when only the ad hoc adjustments to the individual income taxes are considered, inclusion of social security taxes made in the past two decades in this calculation alters this conclusion. Increases in social security taxes erased the decrease in effective tax rates caused by the income tax adjustments. This was especially true at lower levels of income, where, as noted, the income tax adjustments were targeted in the 1970's. Overall, if social security taxes are considered together with federal individual income taxes, the discretionary adjustments made to the latter during the period from 1969-1980 did not offset the impact of inflation, and combined effective tax rates on individual income rose during the 1970's due to inflation.

E. Indexing Proposals

Meanwhile, throughout the mid- and late 1970's, various individual income tax indexing proposals were unsuccessfully introduced in Congress. Among the earliest, a Senate bill entitled the "Fair Income Tax Act of 1975,"³⁵⁰ provided for automatic cost-of-living adjustments to tax rates, the standard deduction, and personal exemptions.³⁵¹ The bill indexed these amounts to the CPI.³⁵² It provided an adjustment ratio equal to the ratio that the CPI for the preceeding calendar year bears to the CPI for the base period.³⁵³ This ratio was to be multiplied by the nominal amounts to be ad-

³⁴⁹ See Wall St. J., June 17, 1982 at 1, col. 3. (According to a Treasury Department analysis of families of four earning between \$15,000 and \$40,000, the July 1, 1982 10% income tax cut will be more than offset by inflation related "bracket-creep" and higher Social Security taxes.).

³⁵⁰ S. 2737, 94th Cong., 1st Sess. (1975).

³⁵¹ 121 CONG. REC. 38532-33 (1975). The writers drafted the bill using estimated rates of inflation averaging 7% from 1975 through 1985. *Id.* at 38532.

³⁵² *Id.*

³⁵³ *Id.*

justed — rates, deductions and exemptions — to determine their indexed amounts for the current tax year.³⁵⁴ Senator James Buckley,³⁵⁵ a supporter of the bill, stated that this bill would “result in taxing an individual’s ‘real’ income at the originally intended statutory rates” and would “remove the power of government to profit from inflation it causes,” as well as “require Congress to show political courage to vote the tax increases required to pay for its programs’ full cost, not benefiting from inflation.”³⁵⁶ Later, in the 95th and 96th Congresses, bills entitled the “Cost-of-Living Adjustment Act,”³⁵⁷ and “The Taxpayer Protection Act of 1977”³⁵⁸ were introduced in both houses. These provided various methods of indexing rate brackets, personal exemptions, depreciation deductions, and basis of assets for determining gain or loss in order to offset the effects of inflation upon these components of the tax system.³⁵⁹ Section 507 of the Tax Reform Act of 1976 directed the Joint Committee on Taxation to make a study on simplifying and indexing the tax laws in order to offset the impact of inflation.³⁶⁰ Released in April 1977, the report acknowledged that tax inequity resulted from the interaction of inflation and the progressive tax rates, and that a tax on net income determined under the traditional cost accounting methods currently used in tax accounting in periods of inflation is in reality a tax on capital.³⁶¹

In summary, by 1981 the United States had experienced ad hoc, discretionary inflation adjustments to the federal income tax. Although not adjusted explicitly for inflation, changes in the rate structure, changes in business taxation and capital gain laws during this period had as one consequence a lessening of inflation’s impact on the Federal tax system. Congress itself had enacted indexing of components of the social security system coupled with increases in social security taxes resulting in an increase in overall federal taxation. Against this background, Congress enacted ERTA with provisions for discretionary adjustments followed by automatic indexing adjustments to offset the impact of inflation on the individual income tax.

IV. THE ECONOMIC RECOVERY TAX ACT OF 1981

The effect of the rate adjustment in the Economic Recovery Tax Act³⁶² enacted August 13, 1981, is to provide discretionary inflation adjustments to the tax structure for the years 1981 through 1984, and automatic indexing adjustments beginning in 1985. The discretionary adjustments consist of across-

³⁵⁴ *Id.*

³⁵⁵ Conservative Republican representing New York.

³⁵⁶ 121 CONG. REC. 38532-33 (1975).

³⁵⁷ See, e.g., H.R. 426, 95th Cong., 1st Sess. (1977); H.R. 1260, 95th Cong., 1st Sess. (1977); S. 1431, 95th Cong., 1st Sess. (1977).

³⁵⁸ H.R. 1493, 95th Cong., 1st Sess. (1977).

³⁵⁹ Kelley, *supra* note 13, at 20. See CBO STUDY, *supra* note 15, at 79-81 (list of indexing bills proposed in the 96th Congress).

³⁶⁰ Kelley, *supra* note 13, at 20-21.

³⁶¹ *Id.*

³⁶² Pub. L. No. 97-34, 95 Stat. 172 (1981).

the-board reductions of individual tax rates, rather than the reductions targeted primarily at lower bracket taxpayers prevalent in the 1970's. This will result in a total reduction of 23% from prevailing 1980 tax rates.³⁶³ These actual rate reductions include a rate reduction of 1.25% below 1980 figures for 1981; 10% below final 1981 rates for 1982; 10% below 1982 rates for 1983; and 5% below 1983 rates for 1984.³⁶⁴ ERTA also provided for a reduction in the highest marginal rate from 70% to 50% effective January 1, 1982.³⁶⁵

In addition, ERTA provides a cluster of discretionary adjustments which will have the effect of offsetting some of inflation's impact on other categories of income. As a consequence of the reduction in the highest marginal rate and other individual rates, capital gains will be taxed at the maximum rate of 20%.³⁶⁶ Ordinary business income received several adjustments including a rate reduction in the two lowest corporate tax brackets for the first-\$50,000 of income,³⁶⁷ the allowance of LIFO inventory valuation for small businesses,³⁶⁸ a greatly accelerated depreciation method, the Accelerated Cost Recovery System (ACRS), allowing depreciation write-off of substantially all business property in either 3, 5, 10, or 15 years,³⁶⁹ and expand investment credit provisions.³⁷⁰ In addition, salability of tax benefits via safe harbor leasing³⁷¹ could dramatically reduce the effective tax rate of the business sector.

Under ERTA, beginning in 1985, the minimum and maximum dollar amounts for each individual income tax rate bracket, the Zero Bracket Amount, and the personal exemption will be automatically adjusted for inflation by fully indexing these amounts based on the CPI-U.³⁷² In 1985, these amounts will be adjusted upward based on the full percentage increase in the

³⁶³ HANDBOOK ON THE ECONOMIC TAX ACT OF 1981 6 (1981) (P-H Report Bull. 36 Extra) [hereinafter cited as HANDBOOK].

³⁶⁴ *Id.* See Economic Recovery Tax Act § 101(a), I.R.C. § 1 (1981), amending I.R.C. § 1 (1976). The 1981 reduction takes the form of a 1.25% credit against tax imposed for the calendar year. *Id.* at § 101(b).

³⁶⁵ Economic Recovery Tax Act § 101(d), I.R.C. § 1 (1981), amending I.R.C. § 1 (1976).

³⁶⁶ This percentage is 40% of the new top marginal rate of 50%, representing the actual marginal tax rate on capital gains calculated after excluding 60% of any net capital gain from gross income. See *id.*; I.R.C. 1202(a) (1976). This is retroactive to sales on or after June 9, 1981 — a point in time even before the top 70% rate for unearned income dropped to 50% in 1982. Economic Recovery Tax Act § 102; HANDBOOK, *supra* note 363, at 7.

³⁶⁷ Economic Recovery Tax Act § 231(a), I.R.C. § 11(b) (1981), amending I.R.C. § 11(b) (1976); HANDBOOK, *supra* note 363, at 16.

³⁶⁸ Economic Recovery Tax Act § 237(a), adding I.R.C. § 474; HANDBOOK, *supra* note 363, at 19. See Economic Recovery Tax Act § 235, adding I.R.C. § 472 (f) (1981); *id.* at § 236(a), I.R.C. § 472(d) (1981), amending I.R.C. § 472(d) (1981); *id.* at § 238.

³⁶⁹ Economic Recovery Tax Act § 201(a), adding I.R.C. § 168 (1981); HANDBOOK, *supra* note 363, at 20-27.

³⁷⁰ See Economic Recovery Tax Act §§ 207(c)(1), 211-14, I.R.C. §§ 46-48 (1981), amending I.R.C. §§ 46-48 (1976), 50A; HANDBOOK, *supra* note 363, at 33-34.

³⁷¹ See Economic Recovery Tax Act § 201, adding I.R.C. § 168(f)(8) (1981); HANDBOOK, *supra* note 363, at 32-33.

³⁷² See Economic Recovery Tax Act § 104(a), adding I.R.C. § 1(f) (1981); HANDBOOK, *supra* note 363, at 14.

average CPI-U for September 30, 1983 through September 30, 1984 over the average CPI-U for September 30, 1982 through September 30, 1983.³⁷³ This latter figure, called the CPI-U for 1983, will be the base period figure.³⁷⁴ For example, the 1986 adjustment will be based on the increase in the CPI-U for 1985 over this CPI-U for 1983, and so on in subsequent years.

Hailed by President Reagan as the biggest tax reduction in history,³⁷⁵ ERTA represented a dramatic shift in American tax legislation history. Contrary to tax reductions enacted in the late 1960's and 1970's, ERTA's discretionary tax rate reductions for individual income were across-the-board cuts rather than targeted relief.³⁷⁶ As a result of the reduction in the highest marginal tax rate from 70% to 50%, ERTA reduced, as noted, the maximum capital gains tax rate to 20%. Businesses benefited from ERTA's greatly accelerated depreciation system. Reagan claimed that "taxation of phantom corporate profits ha[d] . . . been significantly curtailed."³⁷⁷ Finally, of course, ERTA introduced indexing into the federal income tax system and scheduled it to be implemented beginning in 1985. This prompted the President to state that "[g]overnment profiteering on inflation has been abolished. . . . Bracket creep will never again systematically plunder the rewards for production and effort. Government will never again use inflation to take a rising share of the people's income without a vote of their representatives."³⁷⁸ With these statements in mind, the effect of ERTA's provisions as inflation adjustments will be analyzed.

V. ANALYZING ERTA'S INFLATION ADJUSTMENTS

Although ERTA will offset some of inflation's impact on federal income taxes, it will not fully neutralize inflation's effect on the Federal tax system either before or after 1985. The provisions of ERTA that adjust for inflation, listed in Section IV above, are, in effect, a Congressional decision to make inflation adjustments to the tax system. They also inherently make a decision as to how such adjustments are to be made. At the outset, it should be recognized that these provisions are purely adjustments to the tax structure; no adjustments are made to the tax base.³⁷⁹ Thus, since adjustments are not made to the tax base, it should be immediately apparent that ERTA will not fully correct any component of the tax system to offset inflation's effect.³⁸⁰ In the absence of tax base adjustments, the primary impact of inflation on business

³⁷³ See, Economic Recovery Tax Act § 104(a), adding I.R.C. § 1(f)(3)-(5) (1981); *HAND-BOOK*, *supra* note 363, at 14.

³⁷⁴ See Economic Recovery Tax Act § 104(a), adding I.R.C. § 1(f)(3), (4) (1981).

³⁷⁵ Reagan Budget Message, *supra* note 7, at 1.

³⁷⁶ See *supra* notes 301-03, 364 and accompanying text.

³⁷⁷ Reagan Budget Message, *supra* note 7, at 5.

³⁷⁸ *Id.*

³⁷⁹ See *supra* notes 59, 67-71 and accompanying text.

³⁸⁰ See *supra* notes 72-74 and accompanying text.

income and unearned income such as interest and capital gains income will remain unchanged under ERTA.³⁸¹

Inflation adjustments in general, and indexing in particular, are favored by persons desiring to halt the increasing flow to the government of tax revenues resulting from the high elasticity of tax revenues with respect to inflation.³⁸² The Reagan Administration and a more conservative Congress than existed in the 1960's and 1970's have looked with disfavor upon an increasing public sector and automatic tax increases. The enactment of indexing, therefore, should not be a surprise. Furthermore, it is understandable that automatic indexing, which results in the loss of political flexibility to redistribute tax reductions with each new adjustment,³⁸³ was enacted to begin at a point in the future. This timing allows political mileage to be gained from discretionary action for the next three years. Yet, it does not make sense to decide to index taxes four years in advance of the effective date of the adjustments when it is unknown what the rate of inflation will be at that time. According to administration forecasts issued in late 1981, inflation in 1985, barring unforeseen circumstances, will be only 3.7%.³⁸⁴ While the Congressional Budget Office forecasted inflation of 5.9% by 1985,³⁸⁵ many private economists regarded these forecasts as too low, and predicted inflation of at least 6 to 8% through 1985.³⁸⁶ Implementation of indexing is unnecessary at even the highest of these levels of inflation.³⁸⁷ Targeting indexing to begin in 1985, therefore, does not make economic sense, especially when the intervening years of 1981-1984 are anticipated to be a period of higher inflation³⁸⁸ and taxes are not indexed to offset the inflation of that intervening period. The indexing, assuming it is properly done, should be carried out in the earlier years before 1985.

Considering earlier federal indexing proposals, current state indexing systems, and the foreign indexing experience, the scope and attributes of the indexing provisions were also predictable. Although adjustments to both the tax structure and base are necessary to offset inflation's impact fully, foreign and state experience with indexing indicates that legislature usually consider indexing the tax structure independently of any provisions to take the much more complex step of indexing the tax base.³⁸⁹ In addition, prior federal indexing proposals called for automatic adjustments to be confined to an important, but limited, part of the nominal tax structure: rate brackets, Zero Bracket

³⁸¹ See *supra* notes 82-120 and accompanying text.

³⁸² See *supra* notes 42-46, 132-35 and accompanying text.

³⁸³ See *supra* notes 128-31, 136-39 and accompanying text.

³⁸⁴ Cowan, *Inflation Estimates in Conflict*, N.Y. Times, Dec. 21, 1981, § D (Business) at 1, col. 7.

³⁸⁵ *Id.*

³⁸⁶ *Id.*

³⁸⁷ See *supra* text accompanying notes 232-235.

³⁸⁸ See Cowan, *supra* note 384, at 1.

³⁸⁹ See Ruppe, *supra* note 10, at 112.

Amounts, and personal exemptions.³⁹⁰ Most other indexing provisions, both in the states and abroad, are based on consumer price indexes and entail substantial time lags.³⁹¹ It is not surprising therefore that ERTA's indexing provisions also fit this mold even though such an index is not sufficiently comprehensive,³⁹² and substantial time lags make the adjustment used irrelevant.³⁹³

A. *Deficiencies in the Discretionary Adjustments to Individual Income Taxation*

Prior to the implementation of indexing, ERTA continues the historical reliance on discretionary action to adjust individual income taxation to offset the effects of inflation. Across-the-board tax rate reductions³⁹⁴ spread over four years combined with a one time drop in the maximum tax rate for unearned income, from 70% to 50%, constitute the extent of ERTA's discretionary adjustments to the individual income tax structure. Until the start of indexing, scheduled for 1985, no further action is contemplated in ERTA to offset inflation's impact since the last discretionary adjustment was made in 1978.³⁹⁵ In analyzing the effectiveness of ERTA's discretionary adjustments, several deficiencies become apparent. The rate adjustments are unlikely to offset actual inflation experienced from 1979 through 1984. Consequently, most nominal amounts in the Code which are subject to erosion by inflation will continue to have their value eroded because they are not adjusted to offset this effect of inflation. Due to these limitations the discretionary structural adjustments provided in ERTA are not comprehensive enough to offset effective-rate creep caused by inflation's impact on the progressive rate structure.

First, absent additional discretionary adjustment during the period of 1981 through 1984, the inflation adjustments provided by ERTA for those years will not offset inflation's expected impact on the rate structure since the last discretionary adjustment was made in 1978. Although the scheduled reductions should be sufficient to offset current inflation, unless levels of inflation prove to be even lower than those forecasted by the administration for the years 1982-1984,³⁹⁶ the reductions will not be sufficient to offset the compounded impact of the "double-digit" inflation experienced in 1979 and 1980.³⁹⁷ ERTA's cumulative reduction in tax rates of 23% will offset the increase in real tax liabilities caused by compounded inflation of 46%.³⁹⁸ While actual and

³⁹⁰ See *supra* notes 350-58 and accompanying text.

³⁹¹ See *supra* notes 193, 240-41, 253-54 and accompanying text.

³⁹² See *supra* notes 185-208 and accompanying text.

³⁹³ See *supra* notes 238-47 and accompanying text.

³⁹⁴ See *supra* notes 363-65 and accompanying text.

³⁹⁵ See *supra* notes 312-13, 372 and accompanying text.

³⁹⁶ See Cowan, *supra* note 384, at 1.

³⁹⁷ See *infra* Appendix A.

³⁹⁸ Because of the elasticity of income tax liabilities with respect to inflation of +1.5, 46% cumulative inflation will raise income tax liabilities by 69%. See *supra* notes 13, 25 and accompanying text. In this example only 23%, 69% minus 46%, represents the increase in real tax

predicted inflation compounded over the period 1981 through 1984 totals only 29-33%,³⁹⁹ inflation for 1979 and 1980 alone totaled 18-26% depending on which index is used to measure inflation.⁴⁰⁰ After 1979-1981's compounded inflation level of approximately 30% measured by the GNP deflator or 39% measured by the CPI-U is taken into account,⁴⁰¹ the maximum compounded inflation which could be offset by these adjustments, if the impact of inflation since the last adjustment was made is to be offset, is 16% measured by the GNP deflator or 7% measured by the CPI-U for the years 1982 through 1984. Only additional adjustments, or a sudden return to inflation levels experienced in the 1960's, will enable ERTA to offset inflation's expected effect on progressive rates through 1984. Thus, compared with his position at the beginning of 1979, the American taxpayer will be paying higher taxes due to inflation when indexing is scheduled to begin in 1985.

The next, and most glaring, pre-1985 deficiency in inflation adjustment of the tax structure provided by ERTA is the failure to adjust a large number of fixed nominal amounts in the tax structure.⁴⁰² Although adjusting the tax rates is equivalent to adjusting the tax brackets, all other fixed amounts, including the Zero Bracket Amount, and personal exemptions will continue to have their value eroded by inflation prior to the beginning of indexing in 1985. The Act provides neither discretionary nor automatic adjustments of these amounts before 1985. Only tax rate adjustments will have the effect of offsetting inflation. The extent to which simple adjustment, discretionary or indexed, of the rate schedules alone would provide sufficient adjustment to offset "double-digit" inflation experienced in 1979-1981 is questionable.⁴⁰³

It has been proposed that all fixed, nominal amounts appearing in the Internal Revenue Code, Regulations, and Revenue Rulings be given a "fresh start" adjustment prior to implementation of indexing.⁴⁰⁴ This initial adjustment would increase the originally enacted nominal amount by the increase in

liabilities due to inflation, since tax liabilities that rise 46% during a period of 46% inflation would represent the same tax liability in constant dollars before and after the inflationary period. To maintain tax liabilities at the same constant dollar level, the elasticity of income tax liabilities with respect to inflation must be reduced to +1.0. In this example, a 23% reduction in tax liabilities would be necessary to maintain tax liabilities at the same constant dollar level. Therefore, a 23% reduction in income tax liabilities will offset the impact on income taxes of 46% cumulative inflation.

³⁹⁹ Projected cumulative inflation for the period 1981-84 is between 29% and 33%, based on the range of inflation estimates in Cowan, *supra* note 384.

⁴⁰⁰ Calculations of cumulative inflation for the period 1979-80 range from 18% to 26% depending on the index used to measure inflation. See *infra* Appendix A (18% based on the GNP deflator, 26% based on the CPI-U).

⁴⁰¹ See *infra* Appendix A.

⁴⁰² See CBO STUDY, *supra* note 15, 47-52 (Appendix A-listing of 82 nominal amounts in the Code).

⁴⁰³ Lubell & Lavin, *Indexation of the Tax Laws: A "Fresh-Start" Adjustment*, 58 TAXES 355, 355-56 (1980).

⁴⁰⁴ *Id.* at 356, 361. Advocates of this approach proposed that these "fresh-start" adjustments should be based on increase in the CPI since it would be the index which Congress would probably use in indexing. *Id.*

the applicable index from the year of original enactment to the present.⁴⁰⁵ Such an adjustment would return these nominal amounts to the real value they represented when created by the legislature. Indexation of all nominal amounts could then proceed and intended real values would remain unaffected by inflation.⁴⁰⁶

This "fresh-start" proposal serves to highlight a major deficiency in the inflation adjustments to the tax structure provided by ERTA. Regardless of the impact of ERTA's across-the-board rate reductions, the value of all other fixed, nominal amounts in the Code will be eroded by inflation. Consequently, even the amounts selected for subsequent indexing will represent substantially fewer constant dollars when indexing begins than they currently represent. Unless the selected amounts are adjusted before indexing takes effect, the erosion in value occurring between 1981 and 1984, let alone that which occurred before 1981, will not be regained under ERTA's indexing proposal. Instead, only the eroded value of amounts selected for indexing will be protected from further erosion by inflation under indexing.

In summary, ERTA's discretionary tax reductions will not reduce the taxpayer's tax liabilities by enough to offset the effect of the inflation that has occurred since the last discretionary tax reduction. The reductions are insufficient to neutralize the impact on taxes of the high inflation experienced in 1979 and 1980. In addition, ERTA's provisions do nothing to halt inflation's continued erosion of fixed nominal amounts in the Code. In the absence of further adjustments, the American taxpayer will enter ERTA's indexation of individual income taxes in 1985 with higher tax liabilities, due to inflation's effective-rate creep, than existed in the late 1970's. Furthermore, the amounts scheduled to be indexed will have a lower real value, due to inflation's erosion, than they did in the late 1970's or even when ERTA was enacted in 1981.

B. *Deficiencies in the Indexing Provision*

The indexing provision contained in ERTA was passed in the final stages of Congressional action on the Act, with little attention paid to its design.⁴⁰⁷ The inclusion of indexing in ERTA greatly increased the complexity of a bill the administration had originally intended to be a simple, discretionary tax rate reduction.⁴⁰⁸ The result was a provision that was both ill-considered and inadequate to offset inflation's impact on the income tax structure. Most fixed amounts were overlooked by the Act and left totally unadjusted. Congress did not consider alternatives to the use of a single index, or to the particular single index chosen. Nor did it consider the problems of time lag and compounding of inflation's effect, produced by a time lag.

⁴⁰⁵ *Id.*

⁴⁰⁶ *See id.*

⁴⁰⁷ Samuelson, *Sloppy Indexing*, NAT. J. 1553 (Aug. 29, 1981).

⁴⁰⁸ 13 TAX NOTES 237 (July 27, 1981).

To effectively offset inflation's impact on the tax structure, comprehensive indexing would include adjusting all nominal amounts in the Code,⁴⁰⁹ after some sort of initial "fresh-start" adjustment has been made to each amount. Since all of the fixed-dollar amounts in the Code are not indexed, many taxpayers can still incur higher constant dollar tax liabilities due to inflation, because the real value of non-indexed tax provisions will decline.⁴¹⁰ For example, the earned income credit⁴¹¹ was not indexed by ERTA. The oversight of the earned income credit in effect burdens those benefitted by the credit, workers now in the \$5000 to \$10,000 income range, with a large tax increase, while taxpayers in higher income ranges will be somewhat cushioned from inflation.⁴¹² Oversights such as this may be the result of the hasty consideration the indexing provision received. This inadequate consideration was perhaps the result of the fact that the measure would not take effect for four years, and was added as a mere amendment to a major tax-cut bill.⁴¹³ Indexing simply did not receive the requisite attention given its potential impact. Congress had available information that would have enabled it to do a more thorough job of evaluating indexing. For instance, experience from the various state indexing provisions already in effect, and a comprehensive Congressional Budget Office study on indexing commissioned in 1980⁴¹⁴ could have been consulted. Instead the issue of indexing was buried in the mass of other provisions enacted in ERTA and in the escalating enticements offered by both political parties to gain support for their particular tax package in the weeks prior to ERTA's enactment.

Alternative price indexes to the CPI-U do not appear to have been seriously considered. The objective of an inflation-neutral income tax should be to offset all price changes reflected in an individual's income.⁴¹⁵ Thus, a theoretically better index would be some measure of GNP.⁴¹⁶ Practically, the question might come down to which measure actually reflects taxable income more accurately: the CPI-U or GNP deflator. Using the GNP deflator was inadequately debated prior to Congressional choice of the CPI-U. In fact, it appears Congress chose the wrong index by which to adjust income taxes. An index based on a current market-basket, and which reflects inflation's impact on all income, consumption plus savings, would be more appropriate. The GNP deflator has each of these characteristics. Congress, it follows, should have chosen a GNP deflator rather than the CPI-U.

⁴⁰⁹ *Sloppy Indexing*, *supra* note 407, at 1553; *See* CBO STUDY, *supra* note 15, at 47-52.

⁴¹⁰ CBO STUDY, *supra* note 15, at 14.

⁴¹¹ I.R.C. § 43 (1982).

⁴¹² *Sloppy Indexing*, *supra* note 407, at 1553.

⁴¹³ Perhaps the earned income credit, essentially a welfare provision, was not indexed as part of the overall trend toward limiting welfare programs.

⁴¹⁴ CBO STUDY, *supra* note 15.

⁴¹⁵ *See supra* notes 200-03 and accompanying text.

⁴¹⁶ *See supra* notes 185-216 and accompanying text.

Under ERTA the CPI-U figures are subject to monthly averaging.⁴¹⁷ In the alternative, seasonally adjusted annual figures could have been used. The use of monthly averaging has been described as eliminating seasonal and other erratic changes.⁴¹⁸ Despite this purported advantage, whether it was really desirable to use the raw data inherent in monthly averaging rather than annually adjusted data was never debated and considered.

The indexing enacted will entail annual adjustments for the entire rise in inflation as measured by the CPI-U, regardless of inflation level.⁴¹⁹ Although indexing might be necessitated by "double digit" levels of inflation, most observers would agree that it would be more of a burden than it is worth when inflation is below 5-7 percent.⁴²⁰ Between these two ranges, opting for full, automatic indexing becomes a close call. Built-in flexibility may be a better choice where it is unclear whether inflation will drop to levels where indexation is unnecessary or rise to levels requiring indexation. This uncertainty makes some sort of triggered option⁴²¹ preferable to ERTA's provision, especially since indexing will not begin until four years after its enactment.

Finally, time lags of up to 15 months, from the last date used in calculating the applicable index to the end of the relevant tax year⁴²² in which the adjustment would be made, greatly limit the effectiveness of automatic indexing.⁴²³ This index adjustment might be totally irrelevant to the current rate of inflation at the time of the adjustment.⁴²⁴ In addition, the effects of inflation for which the adjustment will be made will be those of the previous year.⁴²⁵ Not only, therefore, does the government benefit both from higher taxes in the interim due to inflation's compounded unadjusted impact, it has a diminished incentive to lower inflation since it reaps automatic benefits of higher taxes due to inflation over the long time lag. The shorter the lag, and the more current the rate of adjustment, the less government reaps these benefits.

⁴¹⁷ Economic Recovery Tax Act § 104(a), adding I.R.C. § 1(f)(4) (1981). Similar monthly averaging occurs in the Canadian indexing system. *INFLATION AND THE INCOME TAX*, *supra* note 30, at 244.

⁴¹⁸ *INFLATION AND THE INCOME TAX*, *supra* note 30, at 245.

⁴¹⁹ See Economic Recovery Tax Act § 104(a), adding I.R.C. § 1(f) (1981).

⁴²⁰ See *supra* notes 224-35 and accompanying text. See also ROSENN, *supra* note 76, at 353.

⁴²¹ See *supra* notes 220, 224-26 and accompanying text.

⁴²² See Economic Recovery Tax Act § 104(a), adding I.R.C. § 1(f)(3), (4) (1981).

⁴²³ For example, the lag between September 1984, when the first index averaging period is scheduled to end, and January 1985, when the first tax period is scheduled to begin, is 3 months, while the lag between September 1984 and December 1985, when the first tax period under indexing is scheduled to end, is 15 months. Thus, the average lag between the most recent figures used and the period during which the adjustment is made will be 9 months.

⁴²⁴ While it has been contended that use of the wrong time period could be a virtue, because it would minimize any adverse effect of automatic indexing on economic stabilization properties of an unadjusted system, this view has been criticized in the absence of the showing of a regular and predictable relation between a lagged price change and the unemployment rate. *INFLATION AND THE INCOME TAX*, *supra* note 30, at 245 n.20.

⁴²⁵ See Economic Recovery Tax Act § 104(a), adding I.R.C. § 1(f)(3), (4) (1981).

Congress did not explore all the relevant considerations involved in any adjustment to a tax system to offset the effect of inflation in passing the inflation adjustments in ERTA. In particular, Congress did not sufficiently debate the numerous options available in designing an indexing system to fit the objective of offsetting inflation's impact on individual taxes. Due to the interrelations of all aspects of the tax system, federal and state, the decision to adopt a scientific automatic adjustment to offset inflation following years of familiarity with ad hoc, discretionary adjustments should have received and still can receive thorough scrutiny and be subject to comprehensive debate.

C. *Overview of the American Tax System After ERTA*

The post-ERTA mix of measures intended to adjust to tax for inflation developed to a large extent accidentally. These measures are neither a consistent nor a scientific attempt to neutralize the impact of inflation. The effect of pressure groups upon national policy and the resulting enactment of specific, ad hoc tax provisions can be discerned much more readily than can any express intention to comprehensively offset inflation's effect on taxes. This is evident in the areas of accelerated depreciation, energy credits and other investment credit provisions. The question is not whether the system is defensible or whether such ad hoc provisions should be eliminated, but rather what changes are desirable to explicitly adjust taxes to account for inflation.

An overview of the individual tax system reveals that the rate structure will be indexed, whereas the tax base and thus the definition of income will remain nominal for both ordinary and capital gains income. Due to inflation's impact, interest income is especially overtaxed, while a reverse impact of inflation on the interest deduction results in undertaxation of the borrower.⁴²⁶ It is little comfort to the individual taxpayer to learn that another is undertaxed at the same time that he is overtaxed.

The special treatment of capital gain taxation has been supported as a means to encourage capital investment and, to some extent, to compensate for what otherwise would be bunching in one year of income representing nominal appreciation in the asset's value over the entire holding period.⁴²⁷ Its retention and most recent extension, from a 50% exemption to a 60% exemption, however, was also defended in part as an adjustment for inflation's impact on the nominal appreciation.⁴²⁸ As an inflation adjustment, this rule produces arbitrary results that harshly overtax some activities while others are subsidized.⁴²⁹

The cluster of prevailing business income tax provisions prior to ERTA, on the whole, under-compensated businesses for the impact of inflation upon their income. The effective tax rate on real corporate income reached a level of

⁴²⁶ See *supra* notes 101-12 and accompanying text.

⁴²⁷ Blinder, *supra* note 121, § A at 19, col. 2.

⁴²⁸ *Id.* at col. 3.

⁴²⁹ *Id.* See also *supra* notes 113-20 and accompanying text.

approximately 60%.⁴³⁰ Ad hoc preferential treatment provisions such as accelerated depreciation,⁴³¹ various investment credits,⁴³² and the LIFO accounting option,⁴³³ coupled with the failure to correct the debt liability portion of the balance sheet, resulted in an effective tax rate that was primarily a function of the composition of a firm's assets and liabilities. ERTA's increase in the scope of some of these ad hoc preferences, together with saleability of depreciation deductions and tax credits through safe harbor leasing,⁴³⁴ should result in a decrease in the effective rate of taxation business income in 1981 and subsequent years. So long as safe harbor leasing is allowed, this effective tax rate essentially becomes a function of negotiated tax deals between profitable firms and firms which otherwise would not incur sufficient tax liability to make full use of available depreciation and credits on their assets.

An overview of the post-ERTA federal tax system indicates that government's more than proportionate increase in revenue due solely to inflation has not been abolished. While ERTA's reduction in this effect of inflation is not insignificant, major areas of "profiteering on inflation" were not directly addressed in the Act. Direct action to limit this phenomenon was limited to the area of the individual income tax structure. Although sufficient to offset foreseeable levels of inflation over the three year period, the discretionary adjustments made by ERTA are insufficient to offset inflation's impact since the last such adjustments were made in 1978. Beyond the rate structure, all other fixed amounts in the Code will continue to have their real value eroded by inflation prior to indexing. Due to this erosion, enactment of an automatic annual indexing provision four years before it is to take effect is irrational. Furthermore, the indexing provision is not comprehensively applied to all fixed amounts and reflects the lack of debate and consideration which this measure received. While ERTA's provisions decreased individual income taxes compared to the level that would have existed absent the Act, social security tax increases automatically took effect. Therefore, regardless of ERTA, the individual's overall tax burden will increase.⁴³⁵ In the area of business income taxation, other than the indirect impact of greatly accelerated depreciation under ACRS, extended ad hoc provisions such as investment credit, LIFO accounting and safe harbor leasing, neither direct tax structure nor tax base adjustments were made to offset inflation. Finally, no attention was focused upon two major areas of government profiteering on inflation: the tax treatment of capital gains and of interest. Adjustments that were made to the individual income tax structure will do little to offset inflation's impact on individual recip-

⁴³⁰ Feldstein, *supra* note 118, at 348.

⁴³¹ See *supra* note 322 and accompanying text; I.R.C. § 167(M) (1982).

⁴³² See *supra* notes 323, 328 and accompanying text; I.R.C. §§ 50 (repealed 1978), 50A (1982).

⁴³³ See *supra* note 85 and accompanying text; I.R.C. § 472 (1982).

⁴³⁴ Economic Recovery Tax Act § 201(a), adding I.R.C. § 168(f)(8); HANDBOOK, *supra* note 363, at 32-33.

⁴³⁵ See *supra* note 349.

ients of income from these sources, and nothing to offset inflation's impact on corporate recipients. Only adjustments to the tax base of these income areas would neutralize inflation's effect. Thus, although explicitly addressing the effect of inflation upon taxation, ERTA did not abolish government "profiteering on inflation."

VI. PROPOSALS TO AMEND THE INFLATION ADJUSTMENTS IN THE ECONOMIC RECOVERY TAX ACT OF 1981

A. *Individual Income Tax Proposals*

Four major changes to ERTA's inflation adjustments to the individual income tax structure are proposed by the authors. First, automatic indexing inflation adjustments to the tax structure should be linked to the GNP implicit price deflator rather than to the CPI-U. Second, the period to which the index refers for determining the adjustment should be the twelve month period ending September 30 of the current tax year. For example, the inflation adjustment for the tax year 1985 would be the increase in the index as of September 30, 1985, over the base index as of September 30, 1984. Third, an immediate "fresh-look" reconsideration should be given to all nominal, fixed amounts in the tax structure. Fourth, indexing should be implemented immediately, but a triggering mechanism should be designed so that indexing would go into effect only when a particular level of inflation is reached.

The GNP implicit price deflator is preferable over the CPI-U as an index to use for adjusting the tax structure to offset the effect of inflation.⁴³⁶ An inflation adjusted tax structure should tax individuals on the basis of their real income, in constant dollars, regardless of consumer price changes.⁴³⁷ Increases in prices paid by any group for goods or services will raise someone's earnings.⁴³⁸ This increase in income under progressive tax rates will result in increased effective tax rates.⁴³⁹ Consequently, these are the prices on which an index for adjusting a tax system should be based.⁴⁴⁰ Although consumer purchases are a major factor in this index, they represent only one portion of entire national production which gives rise to income.⁴⁴¹ The GNP deflator is also superior to the CPI-U since the personal consumption expenditure portion of the GNP deflator covers all consumer purchasing, not just that done by non-farm urban individuals used in the CPI-U.⁴⁴² Also unlike the CPI-U, the GNP deflator is a

⁴³⁶ See *Sloppy Indexing*, *supra* note 407, at 1553 (NI deflator should be used in place of the CPI).

⁴³⁷ See *supra* notes 180-202 and accompanying text.

⁴³⁸ The GNP deflator would take account of prices paid by business and government as well as the private consumer. See *INFLATION AND THE INCOME TAX*, *supra* note 30, at 249-50 & n.28.

⁴³⁹ *Id.*

⁴⁴⁰ See *supra* notes 205-08 and accompanying text.

⁴⁴¹ See *supra* note 202 and accompanying text.

⁴⁴² See *supra* note 179 and accompanying text. For this reason, should the decision remain to use a consumer price index, the PCE implicit price deflator would be better than the

current market-basket index.⁴⁴³ This eliminates the problem with fixed weight indexes such as the CPI-U, the tendency to overstate inflation since consumption habits change over time.⁴⁴⁴ Like the CPI-U, the GNP deflator is widely recognized and accepted by the public. The GNP implicit price deflator, as a more comprehensive, stable index, less subject to volatile movement,⁴⁴⁵ is superior to the CPI-U for indexing inflation adjustments to an income tax.

Second, the time lag between the end of the indexing period and application of the adjustment should be minimized. Time lags of up to 15 months both are unnecessary and make the adjustments which are applied irrelevant.⁴⁴⁶ Forecasts based on the most recent monthly index could be used for withholding estimation purposes. Tax filing forms could be printed and distributed to individuals at the close of the tax year, as is currently the practice. These forms could then incorporate the most recent information from the relevant index through September 30 of the tax year. Practical administrative considerations require use of this method instead of the "deflation" method⁴⁴⁷ which entails extensive calculations by the taxpayer. This change would go a long way toward improving the effectiveness of the indexing provisions and eliminating the time in which the tax structure would not be adjusted to offset the effects of large increases in inflation.

Third, Congress should examine the current dollar valuations of all the nominal amounts in the Code. Such a "fresh-look" requirement would increase the effectiveness of the inflation adjustment provisions of ERTA. None of the fixed dollar amounts in the Code have been adjusted every year, and many amounts have not been adjusted since adoption of the 1954 Code. In light of both the inflation that has occurred since the last adjustment of an amount and the presently anticipated future inflation, all fixed amounts should be reconsidered by Congress to insure their intended value is expressed in current dollars. Even if the nominal amounts now scheduled to be indexed were immediately and fully adjusted to account for inflation, the effects of inflation on the tax structure will not be completely offset so long as most nominal fixed amounts remain unadjusted year after year.⁴⁴⁸ ERTA, therefore, should be amended to provide for indexing to apply to these nominal amounts in addition to the indexation already provided in the Act.⁴⁴⁹

CPI-U because the former is a current market basket index and is not limited to urban households.

⁴⁴³ See *supra* notes 180-88 and accompanying text.

⁴⁴⁴ See *supra* notes 190-92 and accompanying text.

⁴⁴⁵ See *infra* Appendix A.

⁴⁴⁶ See *supra* note 423.

⁴⁴⁷ See *supra* note 246 and accompanying text.

⁴⁴⁸ See *supra* notes 61-66 and accompanying text. If for some reason a fresh-look reconsideration is ruled out, a fresh-start adjustment should be made. See *supra* notes 404-06 and accompanying text. This fresh-start adjustment should be tied to the rise in the GNP deflator since the amount's original enactment.

⁴⁴⁹ In the alternative, in the interest of equity, at least the earned income credit should be included in the list of amounts to be indexed. See *supra* note 412 and accompanying text.

Fourth, ERTA should be amended to provide that no inflation adjustments will be made until a specified level of inflation has been reached. Such a "trigger" provision would provide for indexing when inflation is high, while not providing for indexing when inflation remains low. The authors propose that the trigger-level be 8% annual inflation. When annual inflation reaches 8% for the year ending September 30 of the tax year, the tax structure automatically would be indexed. Consequently, so long as inflation remained below 8%, Congress would retain full flexibility to manage or target economic policy with discretionary actions. This retained flexibility would provide an incentive for the government to keep inflation below 8%.⁴⁵⁰ Once the adjustments are triggered, the tax structure, including all fixed, nominal amounts, should be adjusted for the entire cumulative change in the index since the previous adjustment, or since the fresh-look readjustment. These automatic adjustments, however, should be decreased to account for any offsetting of inflation resulting from discretionary adjustments Congress made to nominal Code amounts in the interim. This triggered indexing as of 1982 coupled with a fresh-look reconsideration of all fixed amounts is a better approach than the scheduled tax cuts which are to be made from 1981 through 1984. As a practical and political matter, since the Administration has announced the scope of the tax cuts prior to 1985, it may not be feasible to implement this triggered indexing before the date ERTA's original indexing provisions begin. If this is the case, the tax structure should be indexed in 1985 to offset the inflation of 1979-1984 not offset by the rate cuts.

Taken together, these four proposals could neutralize the impact of inflation on the individual income tax structure, hence eliminating effective-rate creep over time.⁴⁵¹ To the extent that an individual's income represents earned income, these adjustments could offset inflation's effect on his taxes. The fresh-look readjustment would immediately revalue all fixed amounts and state them in current dollars. Then, indexing based on the GNP deflator and a minimal time lag would be triggered whenever annual inflation reached a level of 8%. Although inflation would affect taxes when indexing is not triggered annually, in the absence of discretionary adjustments, this drawback is balanced by the budgetary flexibility accorded Congress when inflation is less than 8% coupled with the cumulative adjustment made to offset inflation's impact during the intervening years without indexing once inflation reaches 8% and indexing is triggered.

These proposals, however, do not offset distortions of the tax base caused by inflation thus not diminishing the effect of inflation on taxation of unearned individual income derived from the sale of property and interest, or business income from sole proprietorships, partnerships, and corporate dividends. In addition, ERTA's proposals do not take into account inflation's effect on business taxation or the public's perception of social security taxes as part of

⁴⁵⁰ See generally *supra* notes 228-32 and accompanying text.

⁴⁵¹ See *supra* notes 75-80 and accompanying text.

the overall tax burden. These concerns as well as capital gains, interest, and business income treatment must be addressed if government profiteering on inflation truly is to be abolished.

B. *Inflation-Adjusting the Entire Tax System*

To effectively offset the impact of inflation on federal taxes in the United States, the entire tax system rather than just a portion of the individual income taxes must be adjusted. Furthermore, Congress must be aware that inflation adjustments to the income tax system, even full, automatic indexed adjustments, probably will not be viewed by the public as effectively offsetting inflation in years when the social security tax rate is increased.⁴⁵² Increases in social security taxes may well influence the extent or timing of discretionary inflation adjustments undertaken alone or in addition to indexed adjustments. Nonetheless, it is difficult to credibly portray to the public any such adjustment as eliminating inflation's impact on *taxes* if social security tax rates are concurrently raised.

Elimination of the effect of inflation on earned income, by itself, is not adequate to offset inflation's full effect on individual or business income taxes. Taxation of fictitious, inflation-induced gains in unearned income must also be addressed by comprehensive adjustments. Several steps can be undertaken to accomplish this latter goal. The authors would replace the present system of taxation of capital gains with a system of indexing the basis of all capital assets and taxing only the real gain, at ordinary income rates, as well as allowing averaging over the holding period and full loss offset against ordinary income.⁴⁵³ As capital gains generally reflect income accumulated over long periods, such a system should be instated even if the annual rate of inflation is relatively low. Interest income should also be indexed. The real component of income above the rate of inflation should be taxed, and a corresponding deduction allowed.⁴⁵⁴

Although the aforementioned reforms are crucial to a comprehensive adjustment for inflation, not all of the possible tax base adjustments necessarily should be made. When addressing business income the authors do not suggest that it generally be measured in real terms. Such a rule is exceptionally complex⁴⁵⁵ and is not justified at the present rate of inflation. The authors would not propose adopting this tax base adjustment unless inflation was substantially higher, in the range of triple-digit inflation. Short of this sort of scientific

⁴⁵² See *supra* notes 345, 349. (Wage base indexing of social security taxes does not cause this effect associated with rate increases because it merely insures that constant dollar tax liabilities on the same constant dollar income remain the same. Since there is an upper limit on wages subject to social security tax, in the absence of rate increases, constant dollar tax liabilities on a constant dollar income level that exceeds the limit would decrease because of inflation if the wage base limit was not indexed.)

⁴⁵³ See *supra* note 121.

⁴⁵⁴ See *supra* notes 104-10 and accompanying text.

⁴⁵⁵ See *supra* notes 91-99 and accompanying text.

measurement of income on a real base, current policies of partial adjustment to specific assets, or industries, through discretionary measures are inevitable, so long as a continuing goal of national tax policy is the neutralization or alleviation of inflation's impact. In determining the scope and extent of these discretionary adjustments, Congress should not forget the liability side of the balance sheet. This does not mean necessarily that adjustments should be made for the taxation of liabilities, but in deciding how to adjust the taxation of assets, the extent of the discretionary adjustment should be a function of the fact that liabilities are not adjusted. This consideration should be kept in mind, for example, if accelerated depreciation or the investment credit are extended further. Perhaps the Administration and Congress should determine the desired effective tax rate for corporate taxation, and then attempt to achieve it by adjusting the extent of the discretionary measures presently employed in light of current inflation.

In summary, to truly abolish "government profiteering" on inflation much more must be adjusted than the individual income tax structure adjusted by ERTA. In addition, policymakers should recognize how the public is likely to perceive the federal tax system — as an integrated whole. Both social security and income taxes together constitute their federal tax burden. Where social security rates are scheduled to be increased at or close to the time inflation adjustments to the individual income tax are implemented, only if adjustments go beyond that required to offset inflation's impact on income taxes, will the adjustments be viewed as sufficient to offset the effect of inflation on an individual's federal tax liabilities.

To neutralize the actual effect of inflation on income taxes, the tax base as well as the tax structure of income derived as capital gain or interest should be adjusted scientifically. Only real gain should be required to be included in taxable income; similarly, only real loss should be allowed to be deducted from taxable income. Although such adjustments would constitute major changes to the present Code, they are both administratively feasible and desirable at current levels of inflation. Scientific adjustment of the tax base of ordinary business income, however, would be much more complex and would entail tremendous problems of transitional equity for many industries if such an adjustment were to be attempted.⁴⁵⁶ Such an adjustment is not warranted at current or anticipated future levels of inflation. Discretionary measures currently in use, such as accelerated depreciation, can and should be employed as adjustments to the degree necessary to achieve the specific objective of offsetting the effects of current and anticipated future levels of inflation. These adjustments, when combined with the proposals to improve ERTA's individual tax structure adjustments, can serve together as an effective offset to the actual effects of inflation on federal income taxation.

⁴⁵⁶ See generally INFLATION AND THE INCOME TAX, *supra* note 30, at 33-60 (Chapter 2: Tideman and Tucker, *The Tax Treatment of Business Profits Under Inflationary Conditions*).

CONCLUSION

The Economic Recovery Tax Act of 1981, first by providing across-the-board discretionary inflation adjustment and then by providing for automatic inflation adjustment through indexing, represents a major departure from earlier discretionary adjustments to the United States tax system. Even as a more scientific departure from previous inflation adjustment treatment, ERTA is still in many aspects inadequate. Most nominal fixed amounts in the tax structure remain unaffected by the adjustment made in the Act. Discretionary adjustments prior to 1985 are likely to be insufficient to fully offset actual inflation experienced since the last income tax adjustment in 1978. Also, several crucial considerations effecting indexation were not examined sufficiently closely before deciding how to index the tax structure.

In conclusion, the Act represents a major change in terms of inflation adjustments to the tax structure. Fortunately, unlike many instances of overzealous and sloppy legislation, time still remains before ERTA's indexing is scheduled to begin. Ideally this will allow the Administration, Congress, and the public a second chance to take a more comprehensive look at the options and considerations associated with indexing and to improve the indexing provision before it is implemented. Unless this is done, the government will continue to profiteer on inflation.

Appendix A

United States Price Indexes Since 1960¹

YEAR	GNP IMPLICIT PRICE DEFLATOR ²	PERCENT ANNUAL INCREASE	PCE IMPLICIT PRICE DEFLATOR ³	PERCENT ANNUAL INCREASE	CPI ⁴	PERCENT ANNUAL INCREASE
1960	68.70	1.6%	71.9	1.8%	88.7	1.6%
1961	69.33	0.9	72.6	1.0	89.6	1.0
1962	70.61	1.8	73.7	1.5	90.6	1.1
1963	71.67	1.5	74.8	1.5	91.7	1.2
1964	72.77	1.5	75.9	1.5	92.9	1.3
1965	74.36	2.2	77.2	1.7	94.5	1.7
1966	76.76	3.2	79.4	2.8	97.2	2.9
1967	79.06	3.0	81.4	2.5	100.0	2.9
1968	82.54	4.4	84.6	3.9	104.2	4.2
1969	86.74	5.1	88.4	4.5	109.8	5.4
1970	91.45	5.4	92.5	4.6	116.3	5.9
1971	96.01	5.0	96.5	4.3	121.4	4.4
1972	100.00	4.2	100.0	3.6	125.2	3.1
1973	105.69	5.7	105.7	5.7	133.1	6.3
1974	114.92	8.7	116.3	10.0	147.7	11.0
1975	125.56	9.3	125.2	7.7	161.2	9.1
1976	132.11	5.2	131.6	5.1	170.5	5.8
1977	139.83	5.8	139.5	6.0	181.5	6.5
1978	150.05	7.3	149.1	6.9	195.4	7.6
1979	162.77	8.5	162.3	8.9	217.4	11.5
1980	177.36	9.0	178.9	10.2	246.8	13.7
1981	193.64	9.2	193.8	8.3	272.4	10.4

¹ Yearly figures represent annual averages of the indexes rather than year end figures. The percent annual increase is the increase represented by the more recent annual average over the immediately prior year's annual average.

² Department of Commerce, Bureau of Economic Analysis Index (current quantities in 1972 price — annual average figure).

³ Department of Commerce, Bureau of Economic Analysis Index (current quantities in 1972 prices — annual average figure).

⁴ Department of Labor, Bureau of Labor Statistics Index (weighted quantities — 1972 weights — in 1967 prices, CPI-W prior to 1978, CPI-U for 1978 and subsequently — annual average figure).