Indexing Capital Gains for Inflation: The Impacts of Recent Inflation Trends, Mutual Fund Financial Intermediation, and Information Technology

Shimon B. Edelstein

Follow this and additional works at: https://brooklynworks.brooklaw.edu/blr

Recommended Citation
Available at: https://brooklynworks.brooklaw.edu/blr/vol65/iss3/4

This Note is brought to you for free and open access by the Law Journals at BrooklynWorks. It has been accepted for inclusion in Brooklyn Law Review by an authorized editor of BrooklynWorks.
INTRODUCTION

A recurring tax reform proposal offers to index capital gains for inflation. Indeed, as recently as the 105th Congress, Senators Wayne Allard (R-Colo.) and Trent Lott (R-Mich.) jointly sponsored a bill ("bill") "[t]o amend the Internal Revenue Code of 1986 to reduce the maximum capital gains rates, to index capital assets for inflation, and to repeal the Federal estate and gift taxes . . . ."\(^1\) Section Two of the bill proposes to index capital gains for inflation.

Under Section Two of this bill, the tax code would be amended to index the basis of capital assets by the applicable inflation adjustment.\(^2\) The applicable inflation adjustment is the percentage, if any,\(^3\) by which the chain type price index for GDP\(^4\) of the last quarter ending before the asset is disposed exceeds the chain type price for the last quarter ending prior to when the asset was obtained by the taxpayer.\(^5\) As currently proposed, Section Two applies only to capital assets such as stock in a C Corporation or tangible property.\(^6\) It does not

---

\(^1\) S. 1635, 105th Cong. (1998).
\(^2\) See id. § 1022(c)(1).
\(^3\) If there is deflation, so the chain type index for the previous quarter is less than the index at the time of the purchase, Senate Bill 1635 does not adjust the gain upwards. Under a plain reading of the bill, the inflation adjustment only exists when the price index for the last quarter exceeds the price index for the previous one. In other words, inflation will lower the taxable gain, but deflation will not raise it.
\(^4\) The index most likely would be the Consumer Price Index ("CPI"). See infra note 105 and accompanying text.
\(^5\) See S. 1635 § 1022(c)(2)(B).
\(^6\) See id. § 1022(b)(1)(A)–(B).
apply to creditors' interests, preferred stock, options, net lease property, or stock in a personal or S Corporation.7

Prior to 1998,8 this same idea was proposed, but ultimately rejected, in a bill before the Senate in 1978.9 It was again considered in the Treasury Department's tax report in 1983.10 The Republicans, who gained control of the House of Representatives in their victorious elections of 1994, included such a proposal in their "Contract with America"11 in 1994 and in the Taxpayer Relief Act of 1997.12 None of these proposals have succeeded by passage into law.

Economists began to take note of the effect of inflation on capital gains during the period of high inflation in the 1970s.13 In an era of high inflation,14 investors can realize nominal gains while actually suffering losses in spending power. For example, someone who earns 9% during a 10% inflationary period has less actual spending power. The current method of calculating capital gains, measuring someone's initial investment in the pre-inflation dollar, while measuring the gain in post-inflationary dollars, has been aptly described as the theoretical equivalent of measuring the initial investment in French Francs and the profit in Italian Lires.15 One suggested measure to correct this problem is to index the basis of

---

7 See id. § 1022(b)(2)(A)–(E).
8 For a historical analysis of why this debate was first raised in the 1970s, see Reed Shuldiner, Indexing the Tax Code, 48 TAX L. REV. 537 (1993) [hereinafter Shuldiner, Indexing].
10 See DEPT OF THE TREASURY, TAX REFORM FOR FAIRNESS, SIMPLICITY, AND ECONOMIC GROWTH (1984).11 The "Contract With America" was the term used by the Republican party in 1994, after they gained control of Congress for the first time in 50 years, to describe their mandate, which consisted of acts to lower both taxes and government spending. See Reed Shuldiner, Index the Code, Not Capital Gains, 79 TAX NOTES 225 (1998) [hereinafter Shuldiner, Not Capital Gains].
12 See id.
13 See Shuldiner, Indexing, supra note 8.
14 In a period of low inflation (e.g., 2%), far fewer investments will turn a nominal profit while simultaneously suffering a spending power loss. This is largely because there is less room under the inflation rate to earn a profit that is less than the cost of inflation.
15 See Shuldiner, Indexing, supra note 8, at 550.
the investment for inflation, thereby measuring the entire investment in one "currency."\textsuperscript{16} This measure has yet to be adopted for either economic or political reasons.\textsuperscript{17}

Indexing the basis of capital gains for inflation would be a boon to capital investors.\textsuperscript{18} Investors who invest $100 and earn 10\% during a year with 5\% inflation have a nominal gain of $10, but in spending power, their $10 profit only nets them a spending power gain of $4.76\textsuperscript{19} in pre-inflationary dollars. Without inflation indexing, the investor is taxed for the entire $10 at a rate of 28\%\textsuperscript{20} for $2.80, which is more than half of the investor's spending power gain. Inflation indexing would adjust the basis by the applicable inflation adjustment,\textsuperscript{21} in this case 5\%, so that the invested basis would be $105. The taxable gain would then be $5 and the tax paid $1.40. Thus, the investor, by having tax liability limited to "real" gains, saves 50\%.

However, inflation indexing comes at a cost to government revenue.\textsuperscript{22} Every dollar that the taxpayer saves is "lost" by the Treasury. Accordingly, most, if not all, of that lost revenue will have to come from other sources or require a reduction in government spending. However, if ignoring inflation is indeed an improper approach to taxation, then the lost revenue rationale for not indexing the revenue should be either replaced from other sources or the government should reduce spending.\textsuperscript{23} On the other hand, if the argument for indexing is not

\textsuperscript{16} See id.; Shuldiner, Not Capital Gains, supra note 11.

\textsuperscript{17} See Bruce Bartlett, Inflation and Capital Gains, 75 Tax Notes 1263 (1997).

\textsuperscript{18} Note that as proposed in Senate Bill 1635, the asset is only indexed when the chain price index at disposal of the asset exceeds the chain type index at the time of purchase. Thus a taxpayer's basis can only be increased (decreasing the taxable gain and the tax payment) and not decreased by this measure. See S. 1635, 105th Cong. § 1022(c)(2)(B) (1998).

\textsuperscript{19} At 5\% inflation, where $105 at the end of the year only purchases what $100 did at the beginning, an individual dollar purchases $95.24. Hence, $110, where each dollar has the purchasing power of only $95.24, yields only $104.76 in purchasing power.

\textsuperscript{20} For simplicity, the reader should assume a hypothetical 28\% rate, which historically has been the capital gains tax rate and remains one of the rates for short-term capital gains at the time of publication. See I.R.C. § 1(h) (1999).

\textsuperscript{21} For an explanation of the applicable inflation adjustment, see Senate Bill 1635, section 1022(c)(2)(B).

\textsuperscript{22} See Bartlett, supra note 17; Harold Pepperell, Why The Capital Gains Tax Is Fair, 67 Tax Notes 131 (1995).

\textsuperscript{23} For such arguments, see generally Bartlett, supra note 17.
so persuasive, and the imposition on capital gains taxpayers is fair, then the loss in revenue is likely too high a price to pay for correcting a reasonable, albeit imperfect, code.\textsuperscript{24} Hence, if such a measure is to be adopted, the proponents of inflation indexing must pass a significant hurdle to demonstrate the need and propriety for inflation indexing.

This idea has both currently, and in prior years, solicited rich debate in law review articles\textsuperscript{25} and media commentary.\textsuperscript{26} This Note seeks to review that debate and then to add to its calculus various economic factors that have only recently emerged to determine whether those new economic realities militate for or against the adoption of the proposal. This Note seeks not only to analyze the merits of the specific bill recently proposed,\textsuperscript{27} but to also provide an economic analysis to assist in the future when new economic realities emerge and the issue is again revisited.

Part I of this Note reviews the academic arguments both for and against inflation indexing. Part II examines how today's low inflation rates, the possibility of deflation, the controversy over the Consumer Price Index ("CPI"),\textsuperscript{28} the growth of mutual fund investing, and the emergence of computer technology interface with those arguments. Finally, this Note concludes that for now, at least, such a bill is not warranted.

\textsuperscript{24} See generally Shuldiner, \textit{Not Capital Gains}, supra note 11.


\textsuperscript{27} See S. 1635, 105th Cong. (1998).

\textsuperscript{28} The CPI is measured by the Bureau of Labor and Statistics, a federal agency in the United States Department of Labor, for the purpose, \textit{inter alia}, of determining Social Security entitlements. See NORMAN FRUMKIN, GUIDE TO ECONOMIC INDICATORS 87, 91 (2d ed. 1994).
I. THE CLASSIC CASE FOR INDEXING CAPITAL GAINS AND RESPONSES TO IT

Tax policy is guided primarily by the goal of creating revenue through proper taxation. There is widespread agreement that, in an ideal world, a tax code should consist only of taxes that are both equitable and efficient. Equity, or fairness, means that people with the same abilities to pay taxes should carry the same tax burden. Efficiency, in the context of this Note, expresses the notion that, as taxes are an externality on economic behavior, undue influence on economic behavior from taxation would likely have an adverse macroeconomic effect. Hence, a tax code that causes minimal interference with individual economic choice is efficient. For a simple example of an inefficient tax, a tax on capital gains at 99% would likely interfere with taxpayers’ willingness to invest in stocks, and thus adversely affect the economy by preventing the flow of investment capital. An efficient tax code would successfully avoid such over-taxation and its consequences.

Another important tax policy goal is simplicity. Simplicity has both equity and efficiency implications. A complex tax code can be inefficient if it compels taxpayers to invest too much of their time (that would otherwise be devoted towards productive economic activity) to figuring out their tax liability. Also, a complex tax code can be inequitable, since variances in taxpayers’ ability to understand a complex code can lead to some taxpayers in similar economic and social circumstances (tax-paying ability) to carry different tax burdens due to superior tax planning. Simplicity, in the context of inflation indexing, is usually raised as an efficiency argument, and will be treated accordingly in this Note.

Some of the arguments in the area of inflation indexing are primarily driven by concerns of fairness to both the capital

---

30 See id.
31 See id.
32 See id.
33 See id.
34 See GRAETZ, supra note 29, ch. 1, § 4.
35 See id.
36 See id.
gains taxpayer vis-à-vis the income taxpayer and vis-à-vis other capital gains taxpayers. As capital investors are generally perceived by society to be wealthy, the merit afforded such arguments is often colored by one's political orientation. Those arguments stand in contradistinction to the other class of arguments that are primarily driven by concerns of economic efficiency. While economic theory itself is often motivated by political philosophy, the latter set of arguments is significantly less susceptible to the influence of political and philosophical beliefs. Hence, the merit, or lack thereof, of an economic efficiency argument will likely influence legislators from all parts of the political and philosophical spectrums.

This distinction between equity- and efficiency-driven arguments is also useful in this analysis. To properly break down and appreciate the arguments that militate for or against inflation indexing, it is helpful to consider those arguments within the framework of their respective underlying policy goals. Accordingly, this Note will try to address the various arguments within the two discrete categories of equity arguments and efficiency arguments.

A. Equity Arguments

The primary equity argument in favor of indexing the tax code for capital gains is that one can potentially pay taxes for a nominal gain, which represented an actual loss in real spending power. This anomaly occurs when someone has a gain that fails to outpace inflation. While the investor's nominal investment value has increased, the investor's real purchasing power has actually decreased. To pay taxes in such a situation strikes many taxpayers as unfair.

Furthermore, even in cases of a real gain, a large portion of the gain often merely reflects inflation. Even in a period of

37 See Bartlett, supra note 17, at 1265.
38 See infra note 56 and accompanying text.
39 As a simple example, consider someone who earns a 5% gain on a $10,000 investment in a period when inflation is at a rampant 10%. While the investor may have more money ($10,500), the amount the investor would need simply to be able to purchase the same number of goods as the investor could have purchased prior to the investment is $11,000. Hence, the hapless investor has actually netted a purchasing power loss from the investment.
historically moderate inflation, say 4%, the inflation over five years accumulates to 21.67%.\textsuperscript{40} Hence, someone who bought a stock at $100 and sold it five years later at $150 realized a $50 nominal gain, but a real gain of only $23.28.\textsuperscript{41} When the entire $50 nominal gain is taxed at 28%\textsuperscript{42} for $14, the hapless investor has paid $14 in post-inflation dollars or $11.23 in pre-inflation dollars, which is nearly one-half of the real gain. Such a high rate of taxation also causes taxpayers to question the equity of the current code.\textsuperscript{43}

In an equitable tax system, an equal gain among two taxpayers should provide an equal tax payment. According to Nobel Prize-winning economist James M. Buchanan, "[o]ne of the most widely accepted principles or norms for the distribution of taxes among individuals states that individuals in similar situations should be treated similarly, or in other words, equals should be treated equally."\textsuperscript{44} This concept is often described as "horizontal equity."\textsuperscript{45} A similar concept, sometimes referred to as "vertical equity,"\textsuperscript{46} is that non-equals should not be treated equally.

Failure to account for inflation yields results inconsistent with these equities. For example, consider the following two investors.\textsuperscript{47} Investor A begins a $1,000 investment prior to a 10-year period of high inflation, and Investor B also invests

\textsuperscript{40} This is 4% compounded over five years.
\textsuperscript{41} This surprisingly dramatic effect of 21.67% inflation eating away over 50% of a profit is easily understood when one breaks down an investment into its principle and profit. While the $50 profit after 21.67% inflation is only lessened by about $9, the inflation also lowers the value of the principle creating a loss in that part of the investment of $18. Cumulatively, a loss of $27 due to inflation takes place. Hence, even modest inflation can have a serious impact on how capital gains are taxed.
\textsuperscript{42} This rate was assumed for illustrative purposes; however, capital gains rates may be lower for an investor depending on the investor's tax bracket and the term of investment.
\textsuperscript{43} See Shuldiner, Indexing, supra note 8.
\textsuperscript{44} JAMES BUCHANAN, THE PUBLIC FINANCES 165 (1960), quoted in Cooper et al., supra note 25, at 638.
\textsuperscript{45} See Cooper et al., supra note 25, at 638 (describing this scenario as one where equals are not treated equally). However, a more accurate description is, as presented here, that the converse of non-equals getting equal treatment is what actually occurs.
\textsuperscript{46} This term was coined by the Musgraves in RICHARD A. MUSGRAVE AND PEGGY B. MUSGRAVE, PUBLIC FINANCE IN THEORY AND PRACTICE 216 (2d ed. 1976), quoted in Cooper et al., supra note 25, at 638.
\textsuperscript{47} GRAETZ, supra note 29, ch. 1, § 4.
$1,000, but in the beginning of the 9th year of that same period. Suppose they both realize nominal gains of 50% and are taxed, accordingly, as equals. In fact, however, as explained earlier, Investor A's principal has decreased substantially via inflation, while Investor B's has not. Yet the tax code ignores this disparity and treats them the same. Accordingly, it has been argued that the current tax code violates critical equity norms and that indexing the basis of capital gains for inflation is necessary to make the code equitable.

Furthermore, while the capital gains taxpayer's liability is affected by inflation, the income taxpayer's is not because the income tax is paid in inflationary dollars. While the capital gains tax is also paid in inflationary dollars, the gain is calculated by subtracting the basis from the return. Since, absent accounting for inflation, the capital gain is artificially high, paying inflationary dollars as a tax does not correct the inaccuracy in the calculation of the real amount of the capital gain. Because the tax is levied on an artificial gain, paying in inflationary dollars does not fully correct the inaccuracy in the capital gains tax liability. The income tax taxpayer, however, has no basis and therefore upon paying in inflationary dollars suffers no inaccuracy due to inflation. Hence, only some taxpayers are affected by inflation, but the code treats them all the same, thus violating equitable norms.

B. The Equitable Unindexed Code Arguments

The premise for the equity arguments in favor of indexing is that due to inflation, and the failure of the code to recognize inflation, the code often subjects capital gains investors to an unfairly high tax and does not provide "horizontal equity." Many believe the solution to these problems is to attack them at the source by indexing the code. While no explanation has been offered that definitively resolves the apparent injustices

---

48 See Cooper et al. supra note 25, at 638.
49 See Cooper et al., supra note 25, at 638.
50 See Shuldiner, Not Capital Gains, supra note 11, at 236.
51 See id; supra note 41 and accompanying text.
52 See Shuldiner, Not Capital Gains, supra note 11, at 236.
53 See supra note 44 and accompanying text.
54 See generally Cooper et al., supra note 25; Feldstein, supra note 26.
demonstrated in the hypotethicals above, commentators have made strong arguments that capital gains taxpayers are not unfairly taxed on the whole, and that better solutions than indexing exist for solving some of the injustices that occasionally arise.

1. Philosophical Arguments

Not everyone agrees that capital gains taxpayers are similarly situated to income taxpayers. One such equity argument that justifies an unindexed tax rate on capital gains is that capital gains taxes most often affect wealthier taxpayers. Hence, effectively high capital gains taxation is consistent with a progressive tax. This rationale can, in fact, be applied more broadly to justify a high capital gains tax even on taxpayers with lower income. Money invested for capital gains does not usually consist of living expense money. Instead, it often comes from the taxpayer's disposable income. Disposable income, by its nature, is income that one is more easily able to afford to spend, dispose of, or pay taxes with. The marginal utility of wealth that helps justify a progressive tax system likewise justifies progressively taxing income that the taxpayers indicate has marginal utility by placing it at risk. Therefore, even the less affluent taxpayer is being charged taxes on income of marginal utility, an income from which the taxpayer can afford to pay taxes. Accordingly, there is no compelling equity argument that the capital gains taxpayer must have horizontal equity with the income taxpayer, since the capital gains taxpayer can more easily afford to pay a higher tax on the capital gains than the income taxpayer can afford to pay on the income.

This rationale comports with the theories of Margaret Radin, who has posited that certain property which is not of

55 See supra note 39 and accompanying text.
56 See Bartlett, supra note 17, at 1265 (suggesting that opponents of inflation indexing are motivated by progressive taxation). In fact, statistics do indicate a direct relationship between a family's income and the percentage of a family's assets in stock investments. However, the gap is narrowing. See U.S. DEPT OF COMMERCE, STATISTICAL ABSTRACT OF THE UNITED STATES 532 tbl. 842 (118th ed. 1998) [hereinafter STATISTICAL ABSTRACT].
57 See Margaret J. Radin, Property and Personhood, 34 STAN. L. REV. 957, 978
a personhood value deserves less protection than property that has personhood value.\textsuperscript{58} Personhood property is property with which the owner's sense of self-worth is identified.\textsuperscript{59} For example, barring exceptional circumstances, most taxpayers are not likely to risk property such as their primary residence, which has a high personhood value. It follows that property invested at risk in capital markets that produces earnings often without an investor's actual work has very little personhood value.\textsuperscript{50}

Therefore, one might argue that it is fair to tax such capital gains more harshly for the purpose of redistributing property so that other, less fortunate, citizens can receive property with potentially greater personhood value. Hence, relatively high taxes on capital gains comport with the notion of taxing those who can afford to pay, even if the individual investor is not particularly wealthy. It follows that a greater tax burden for capital gains is consistent with a progressive tax, regardless of the individual taxpayer's wealth. It is also consistent with horizontal equity\textsuperscript{51} because the capital gains taxpayer is inapposite to the income tax taxpayer and need not be accorded the same tax treatment.

(1982). The author posits that "property for personhood gives rise to a stronger moral claim than other property." \textit{Id}. This position has been used to justify granting to a tenant of an apartment whose personhood is defined by the tenancy, under certain circumstances, property rights adverse to those of the actual owner or landlord, who often considers the dwelling a capital investment and has little personhood attachment to the property. This view is not conventional, particularly because it leads to a validation of the Marxist theory of awarding property to the one who gains it from personal labor, over the Lockean theory of just acquisition. \textit{See id.} at 979. However, in taxation, which is a justified property transfer from the individual to the community, it is more mainstream.

\textsuperscript{58} See \textit{id.} at 978.

\textsuperscript{59} See \textit{id.}

\textsuperscript{60} It is true that this rationale cannot explain a high tax on the capital gains of residential real estate, which is both the quintessential personhood property, and the capital gain enjoyed by more Americans than any other. However, historically, residential real estate was not taxed when the owner reinvested the proceeds into a principal residence and the owner thus retained his or her property's personhood value. \textit{See} 26 U.S.C. § 1034, \textit{repealed} by Pub. L. No. 105-34, tit. III, § 312(b), 111 Stat. 839 (Aug. 5, 1997). Furthermore, in 1997, the tax code provided a $250,000 exclusion on proceeds from residential real estate. \textit{See} I.R.C. § 121 (1999).

\textsuperscript{61} \textit{See supra} note 44 and accompanying text.
However, this argument is flawed in the situation where someone is taxed on a nominal gain that represents an actual loss, since the cash invested and lost to inflation is likely no longer disposable. In addition, some capital gains are the result of low risk investments, and may well have as much personhood value as income. Moreover, capital gains are often the product of retirement and savings plans, and as such they represent the future livelihood income of many taxpayers. Furthermore, the lower nominal rate on capital gains tax as opposed to income tax does not imply a congressional intent to tax capital gains at a rate above income tax. Rather, it implies a congressional intent to treat capital gains as less taxable than income. In addition, this does not address the unequal treatment accorded among capital gains taxpayers because the current code ignores inflation.

While important to be aware of, standing alone, the progressive tax argument does not fully defend the current tax policy. The argument likely influences those members of Congress who view taxes as a means of wealth distribution and therefore view capital gains as an area ripe for harvesting funds for the poor. In addition, it does provide somewhat of an equitable defense in the situations where the gain does reflect otherwise disposable income.

2. Practical Arguments

The primary argument that the current code's failure to index for inflation is, in fact, fair is that the lower rates for capital gains tax in comparison to ordinary income ameliorate this inequity. Clearly, this is only a partial defense of not indexing capital gains for inflation, since investors can have

---

42 See supra note 14 (noting that this phenomenon is not prevalent during periods of low inflation).
43 With regard to the argument that people's retirement savings are unfairly taxed, see infra note 70 and accompanying text (discussing the deferment principle).
44 See supra note 47 and accompanying text.
45 See Shuldiner, Not Capital Gains, supra note 11, at 236. Capital gains are taxed currently at 28% for assets held for less than 12 months and 20% for assets held for longer than that period. See I.R.C. § 1(h)(B) (1999). Income tax depends on the taxpayer's bracket, but capital gains can be paid as ordinary income if the taxpayer's income bracket is lower than the capital gains rate. See id. § 1(h).
actual losses and still pay taxes, albeit at a lower rate.\textsuperscript{65} Thus, it fails to address those situations where actual losses are treated as taxable gains. Furthermore, as illustrated earlier,\textsuperscript{67} even when inflation is fairly low, the inflationary effect produces a capital gains tax at over 50\%, which is significantly higher than the income tax rate for Americans in the highest income tax bracket. However, this rationale is important since it does somewhat ameliorate many of the effects of inflation and it can be combined with other rationales.

The most persuasive argument that not indexing capital gains is, in fact, fair rests upon the deferring principle.\textsuperscript{68} Capital gains taxes are paid not on an accrual basis, but when they are realized.\textsuperscript{69} This leads to the counter-intuitive notion that the longer the term of an investment, the less it is affected by inflation.\textsuperscript{70} This notion assumes that every year a profitable investment is held, investors are treated to a deferral of their tax obligations if they merely hold on to their investments. Theoretically, the longer one defers, the more benefits he reaps, and this benefit compensates for inflation. Moreover, the damage done by inflation to an investment that is not taken into account by the tax code is the loss of principal value due to inflation.\textsuperscript{71} In a profitable investment, the principal occupies its greatest percentage of an investment in the early years, and the ratio of principal to profit, if the investment continues to succeed, shrinks every year.\textsuperscript{72}

\textsuperscript{65} It is unclear if this situation occurs frequently enough, so that a capital investor cannot ultimately compensate for those individual situations by paying a lower tax in the majority of capital gains throughout the taxpayer's lifetime.

\textsuperscript{67} See supra note 40 and accompanying text.

\textsuperscript{68} See supra note 40 and accompanying text.

\textsuperscript{69} See L.R.C. §§ 1001, 1221, 1222 (1999).

\textsuperscript{70} See Durst, supra note 25; Shuldiner, Not Capital Gains, supra note 11, at 237.

\textsuperscript{71} See supra note 40. Consider that in the hypothetical of the \$50 nominal profit, discussed supra note 41, if the inflation would have only decreased the profit portion of the investment and not the basis, it would have resulted in an actual profit of \$41 instead of \$23. The \$14 paid in the post-inflationary dollars equals \$11 in pre-inflation dollars and both represent 28\% of their respective profits. The injustice here is created because the loss to the basis is not accounted for. Therefore, any activity that minimizes the effect of the value of principal on the success of the investment will minimize the ramifications of not accounting for inflation.

\textsuperscript{72} For example, take an investment that earns 10\% a year. At the point of investment the principle is 100\% of the equity. At the end of one year the invest-
Hence the longer the term, the less important the current value of the original principal, and the inflation impact is diminished accordingly.\textsuperscript{73}

Deferral is not a cure for the ill of inflationary taxes, rather it is an advantage that the capital gain taxpayer has over the income tax taxpayer.\textsuperscript{74} This advantage, coupled with a lower rate of taxation, arguably offsets the disadvantage of inflationary taxation. Some commentators have stated that, due to deferral and the lower rate of taxation for capital gains, the average effective burden of the capital gains taxpayer has indeed been lower than the average effective burden of the income tax taxpayer.\textsuperscript{75} Notwithstanding this, the fact remains that deferral and a low rate combine to merely provide rough justice for the capital investor. The advantage of deferral is a nominal benefit calculated by discounting the ultimate payment for the terms that the payment is deferred. Likewise, the lower rate for capital gains is a nominal advantage. Therefore, while in periods of low inflation these two benefits will likely outweigh the cost of inflationary taxation, in high inflationary years they are less likely to do so.\textsuperscript{76}

\textsuperscript{76} It might be helpful to compare mathematically the future earnings of an investment under the current tax code for capital gains to one under an accrual but indexed code, which resembles the tax structure for income tax. See supra notes 50-52 and accompanying text. Assume that the investment will earn a fixed percentage return each year. If $P$ is the original principal and $i$ is the percentage earned and $n$ is the term of years then $P(1+i)^n$ or $V$ is the pretax future value. Since the investor pays a rate ($r$) on the profit, the after tax value is $V-r(V-P)$. Under an accrual code an investor would pay out taxes every year. Hence, at the end of one year the investor has $P(1 + i(1-r)I)$ where $I$ is the inflation rate. (The investor pays $ri$ in taxes hence keeps $(1-r)i$ of the profit and has the inflation portion of the investment not taxed represented by $Ir$. This return is compounded every year resulting in $P(1 + (1-r)I)^n$. The critical difference between the investments is therefore $i$ (for an investment under current rules) vs. $i(1-r)I$ (for the hypothetical code). Since these terms are compounded, these terms determine which investment will eventually have a greater return, notwithstanding that model one requires a tax payment on the profit at the end of the investment. Accordingly, these terms are related such that if $I/i > 1$ or the inflation rate is higher...
Others have argued that investors who leverage through debt benefit from inflation since they pay their debts back in post-inflation dollars even though they borrowed in pre-inflation dollars.\textsuperscript{7} Hence, they contend that by leveraging, investors can compensate for their losses due to inflation.\textsuperscript{7} In addition, by following this strategy, the investor will also be able to minimize the gap of time between the investment input and the gain on investment. The investment input, in this case the loan payments, will occur at periods closer to the investment realization than the original investment. This strategy of minimizing the time gap prevents inflation from accumulating, as inflation by its nature needs time to accumulate, and therefore the detrimental effect inflation has on the investment is correspondingly diminished.

It has also been argued that indexing inflation for capital gains would lead to tax dodging or tax arbitrage.\textsuperscript{9} Investors would take an unindexed loss through leveraging and then pay an indexed capital gain.\textsuperscript{8} In other words, investors would use partially-indexed instruments to finance wholly-indexed gains.\textsuperscript{8} The response to this argument is that the government could, in fact, index the losses taken on leveraged investing.\textsuperscript{9} However, others have argued that this creates yet another level of complexity to the code, and that similar, heretofore
undiscovered, schemes for tax arbitrage are likely to result from inflation indexing.\textsuperscript{63}

The fallacy in the leveraging argument is that it rests upon the assumption that lenders are unaware that the borrower will be paying in inflationary dollars. It is more likely that the lender will normally charge higher interest to compensate for inflation, thereby passing the loss back to the investor. Indeed, interest rates are often directly related to lenders' perceptions of future inflation. Thus, the investor cannot really compensate the tax burden created by inflation.\textsuperscript{64}

C. Efficiency Arguments

The tax goal of efficiency is to structure the tax code so that it does not interfere with taxpayers' free economic choice and allows them to act in a way that is most efficient for the economy. Taxes are an externality influencing taxpayers' investment strategies. It follows that the tax code should not discourage taxpayers from investing their money in what the market would perceive, if not for the externality, as the "best" investments. The "best" investments are usually in well-managed companies; thus, an unbiased market prefers them.

Under Keynesian analysis,\textsuperscript{65} efficient capital raising from

\textsuperscript{63} See Shuldiner, Not Capital Gains, supra note 11, at 237.
\textsuperscript{64} See Durst, supra note 25.
\textsuperscript{65} See John Maynard Keynes, The General Theory of Employment, Interest and Money (1936). Among Keynes's many theories is the notion that a failure of efficient capital raising is not self-correcting and therefore can cause an economy to suffer permanent rather than temporary malaise. Under the classic model, too much money in the household sector leads to inflation through overconsumption by consumers and high interest rates as a result of a credit crunch. On the other hand, too much money in the business sector leads to recession through insufficient consumer spending and a corresponding dearth of entrepreneurial opportunities. Accordingly, Keynes concluded that if the capital in the business sector exceeds the household sector by a certain point, then the private sector will increase its rate of contraction since workers will be laid off, making the gap between the sectors permanent absent government intervention. The high unemployment and simultaneous inflation of the 1970s seemed to discredit Keynes, since in his analysis high unemployment should lead to less consumer consumption and hence low inflation. See, e.g., Robert W. McGee, Some Tax Advice for Latvia and Other Similarly Situated Emerging Economies, 13 INT'L TAX & BUS. LAW. 223, 238 (1996); Nancy C. Staudt, Constitutional Politics and Balanced Budgets, 1998 U. ILL. L. REV. 1105, 1171 (1998). Apparently, the increased disparity of wealth between rich and poor has made unemployment an inaccurate determinant of household sector capital, and so the gap between the business and household
the household sector to the business sector is critical in order to sustain long-term, healthy economic growth. The greater percentage of capital that is raised by superior investments, the greater the allocative efficiency of the nation's assets. More of the nation's investment capital will be in superior companies, who presumably will produce superior products more efficiently, thus benefiting the entire economy.86

Conversely, if the tax code is overbearing, it will not promote taxpayers to invest in the "best" investments. Rather, due to the externality, taxpayers will contribute capital to relatively inferior business enterprises while many superior enterprises will not succeed, either in whole or in part, for lack of adequate capitalization. This reduction in allocative efficiency can lead to inferior macroeconomic results and a drag in the economy.87

Someone who has already invested in a company for some time may have a strong disincentive to pull out of the investment, even if a healthier one comes along, because of the additional cost of the capital gains tax. Accordingly, money may remain in inferior enterprises due to an externality that makes

---

86 See Cunningham & Schenk, supra note 25, at 344. The conventional view is that the securities markets impact allocative efficiency. This view is the accepted economic justification for the enormous public expense to fund the Securities and Exchange Commission. See John C. Coffee, Jr., Market Failure and the Economic Case for a Mandatory Disclosure System, 70 VA. L. REV. 717, 730-33 (1984). A more informed securities market increases allocative efficiency, thus offsetting the public's cost of administrative regulation. See id.; Eugene F. Fama & Arthur B. Laffler, Information and Capital Markets, 44 BUS. J. 289 (1971). But see Lynn Stout, The Unimportance of Being Efficient: An Economic Analysis of Stock Market Pricing and Securities Analysis, 87 MICH. L. REV. 613, 644-645 (1989) (presenting the contrary position that there is a general "unimportance of equity as a source of capital" for business enterprises, and hence the equity markets have little impact on allocative efficiency). Accordingly, a supporter of this minority position would certainly not find arguments to index capital gains for inflation in order to correct lock in inefficiencies, which at most exist in the secondary securities markets to be persuasive. However, this is not the widely accepted view, and most economists believe that efficient secondary securities markets increase overall allocative efficiency. See Coffee, supra, at 733.

87 See Cunningham & Schenk, supra note 25, at 344.
it more marketable to the locked-in investor. This impedes the flow of money to the best investments and creates a drag in economic efficiency. This "lock in" effect has been called "the most serious argument in favor of a capital gains preference."

Under the current code, taxpayers have an incentive to avoid paying a capital gains tax, which fails to account for inflation, and is thus arguably inordinately high. One method available for investors to avoid or minimize the tax is to hold or defer the investment. Because the tax code does not impose a tax for accrued gains, but rather only for realized gains, the tax payment is likewise deferred. Although eventually upon the realization of the gain, a tax will be paid, the investor benefits greatly through deferral. In addition, the investor can hold the investment until death when it may receive estate tax exemptions. Therefore, taxpayers have an incentive to lock in their investments, not only for accrual benefits, but because it is the only way to avoid an arguably punitive tax.

It is true that any accrual system for capital gains tax creates a lock in incentive, since investors will try to have their gains remain unrealized for as long as possible so as to avoid paying the capital gains tax. The proponents of inflation indexing argue that the inflation element changes the lock on investors from an ordinary fence to one with barbed wire. They contend that an inflation indexed capital gains tax would be a necessary but relatively innocuous externality, while the present onerous, burdensome, and unfair capital gains tax is a more influential and hence far more dangerous externality.

---

88 See Cunningham & Schenk, supra note 25, at 344.
89 See supra note 68 and accompanying text.
91 See supra note 68 and accompanying text.
92 See supra note 68. The benefit of deferral is the difference between paying the tax now or a year later. The difference between the future value and the present value of the tax liability, the amount the taxpayer would have earned in interest by investing the money for the period prior to paying the tax, is, mathematically, the tax multiplied by its expected rate of return. Therefore, the higher the tax liability, the greater the incentive to defer paying the tax. An investment will have to be that much more profitable, and hence more risky, to compensate for the loss of paying the tax early. Furthermore, some investors simply do not ever remove their investment in order to avoid the capital gains tax by bequeathing it tax free. See I.R.C. §§ 102(a); 1014.
Others have argued that the lock in situation is somewhat unavoidable under our accrual system, and that the additional economic effect of not indexing inflation has on the economy is exaggerated. There is no clear conclusion to this debate of how much economic damage lock in actually causes or how much lock in is directly attributable to not indexing capital gains for inflation.

This lock in argument is potentially compelling in favor of inflation indexing. The equity arguments focus upon the putative unfairness to capital investors, which many lawmakers consider dubious since capital investors are supposedly wealthy. The lock in argument is the strongest one advanced that the failure to index has adverse effects on the national economy. Hence, if its effect is in fact significant and correctable, then regardless of political orientation, most observers would agree to indexing the code. Therefore, it is important to analyze if economic changes imply that the putative lock in effect likely exists today.

A second form of lock in exists when an investor who would otherwise reinvest a gain refrains from doing so to avoid tax liability. The investor who would personally prefer to buy a house is locked into an investment that is producing paper income but has little utility. Some economists have voiced concern that the capital gains tax prevents investors from enjoying the returns on their investments. Economists consider the likelihood that this form of lock in exists to be greater than

---

93 See Snoe, supra, note 25, at 78.
94 Some commentators have in fact argued for a tax liability on accrued gains instead of realized gains in large part because of lock in. See, e.g., Fred D. Brown, Complete Accrual Taxation, 33 SAN DIEGO L. REV. 1559, 1570 (1995).
95 See infra Part II. (discussing whether the growth of mutual fund investing provides supports to this argument at least for the present time).
96 See Cunningham & Schenk, supra note 25, at 345 & n.101 (concluding that whether lock in imposes a significant onus on the economy is unclear). Most commentators conclude that the putative lock in effect most likely impacts the ability of start up companies or newer companies. See Cunningham & Schenk, supra note 25, at 345. Established corporate giants likely have sufficient investors locked into them to offset any difficulty in attracting new equity investors. See Cunningham & Schenk, supra note 25, at 345.
97 See Bartlett, supra note 17.
98 See Cunningham & Schenk, supra note 25, at 345.
99 See infra Part II.B.1 (analyzing whether increased mutual fund investment impacts the macroeconomic effects of lock in).
the likelihood that lock in prevents efficient national allocation of investment capital.\(^{100}\)

However, this variant of the lock in argument has less broad influence than the macroeconomic one, since those who believe that capital gains investors should have to pay a high tax are not likely troubled by wealthy investors' difficulties in fully enjoying the fruits of tax-deferred investments. In addition, this lock in is at most a higher effective tax on capital gains. Furthermore, this additional tax burden, in fact, is a creation of the capital investors themselves. It is only the goal of earning or keeping even more money that prompts investors to voluntarily lock in profitable investments and avoid tax liability via accrual. Hence, this argument is actually a weaker form of the equity arguments articulated earlier and is, therefore, well answered by the responses to the equity arguments discussed above.\(^{101}\)

D. An Indexed Code's Ability to Remedy Inequities

In 1990, the New York State Bar Association ("NYSBA") authored a strongly-worded opinion against inflation indexing.\(^{102}\) In its report, it advanced arguments that basis indexing itself is not an entirely accurate remedy for the inequity of paying taxes on inflationary gains.\(^{103}\) First, it argued that there is no real way to accurately measure inflation, and so any indexing would, thus, by extension, be inaccurate.\(^{104}\)

Inflation statistics such as the Consumer Price Index ("CPI") estimate inflation based on means and aggregates.\(^{105}\) The method uses a "market basket" based on data collected from a survey of about 20,000 families, who provide information on their buying habits.\(^{106}\) The Bureau of Labor and Statistics then measures changes in the price of these goods by

\(^{100}\) See Cunningham & Schenk, supra note 25, at 345-46.

\(^{101}\) See supra notes 56-76 and accompanying text.

\(^{102}\) See New York State Bar Association Ad Hoc Committee on Indexation of Basis, Report on Inflation Adjustments to the Basis of Capital Assets, 48 TAX NOTES 759 (1990) [hereinafter NYSBA].

\(^{103}\) See id. at 773.

\(^{104}\) See id.


\(^{106}\) Id.
surveying a wide variety of retail establishments. These are not exact measures. Rather, the measures are drawn from the consumers whose purchasing habits and costs are gleaned from the surveys. While, based on probability theory, it is true that the survey is assumed to have some degree of mathematical accuracy, many economists believe that the conditions necessary to achieve true accuracy from such a survey rarely exist in an actual economy. Hence, the NYSBA argues that the CPI and similar available price indexes are not exact measures, and any inflation adjustment would be only a rough estimate.

Second, the NYSBA stated that "basis adjustments will match inflationary increases by happenstance." The NYSBA argues that, if someone holds a capital asset and inflation occurs, the inflation percentage should be calculated as it affects the market value of the asset, not the investor's basis. As an example, the NYSBA hypothesizes two investors who invest $100 for two years with 10% inflation annually. Investor A earns nothing during the first year and $21 during the second. Investor B earns $15 during the first year and $6 during the second. Using inflation indexing, neither of the investors would have to pay because their profits do not exceed the loss to inflation. However, the NYSBA argues that the basis for Investor A at the end of year two should be indexed at $120 instead of $121. This is because the 10% inflation that occurred at the end of year one affected the investor's asset when the asset was worth $100; thus, the 10% increase should be $10. Under the same reasoning, Investor B should

107 See id.
109 See id. The difficulty reflects the variance of distribution about the mean, which renders the mean not perfectly accurate for measuring spending habits. For example, if there are equal amounts of consumers on both sides of the mean consumer, and with an equal variance from the mean a normal distribution curve exists. The mean or aggregate will be more accurate then if some consumers, due to individual extreme habits not balanced on the other end of the spectrum, are able to distort the mean. See id.
110 NYSBA, supra note 102, at 773.
111 See id.
112 At the end of year one, their bases are adjusted 10% to $110, and at the end of year two, to $121.
113 See NYSBA, supra note 102.
have her basis increased by $15, making the basis $125. In short, the NYSBA argues that, when the investment grows at variable rates, as investments often do, the inflationary adjustment is not wholly accurate.\footnote{See id.}

This latter argument of the NYSBA is dubious. While it is true that the inflation only affected the amount Investor A had at the end of year one, this approach of focusing on the asset's market value disregards the loss that Investor A took at the end of year one in terms of real dollars.\footnote{See supra note 41 and accompanying text. If Investor A converted his pre-investment cash to post-investment cash where every $1 is worth only about 90¢, and still received only $100, that would be a 10% loss.} In a tax system that taxes capital gains upon realization rather than accrual, the best way to look at the investment is to calculate each investor's spending power gain from the beginning of the investment until the date that gain is realized. This is achieved by measuring the dollars invested and ultimately returned. Using that approach, both Investor A and Investor B need to earn $121 at the end of year two to outpace inflation and realize any spending power gain.

The NYSBA would likely concede that the inflation adjustment is still more accurate than no adjustment at all. While it may be impossible to measure inflation perfectly, we still rely on the CPI to determine tax brackets\footnote{See 26 I.R.C. § 1(f) (1999).} and Social Security entitlements.\footnote{See 42 U.S.C. §§ 402, 907 (1999).} It is still a widely-accepted and utilized estimate. In addition, granted that the NYSBA asserts that even accurately-measured inflation cannot index investments perfectly,\footnote{See NYSBA, supra note 102.} inflation indexing comes substantially closer than the current system to taxing investors' real purchasing power gains. However, the gravamen of the NYSBA’s argument is that, notwithstanding limited improvements in tax equity from inflation indexing, considering the imperfections and costs of inflation indexing, there are other simpler and superior methods of compensating the capital gains taxpayer, such as, lower capital gains rates.
E. The Inefficiency of an Indexed Code

Opponents of indexing have also argued that indexing itself will create an economic inefficiency. Indexing adds yet another layer of complexity to the code, which is inimical to the goal of tax simplicity. Economists generally assert that the most efficient economy has the lowest information costs. Information costs do not actually produce anything for the economy, but are merely costs incurred by those who wish to produce for the economy. Hence, lower information costs allow producers to spend more time on the actual production of goods than on gathering information. This leads to a more efficient allocation of the nation's resources.

A more complicated tax code requires more taxpayers to hire tax advisors who will in turn charge higher prices for a more difficult service. It follows that a tax code that will index inflation and be more complex will require more information costs and create an economic inefficiency. Therefore, opponents of indexing argue that it is better to simply have a low rate for capital gains taxes, which we arguably have, than to index capital gains tax for inflation.

The force of the simplicity argument against inflation indexing depends significantly on how much weight one believes should be given to simplicity (when crafting a tax code), in comparison to equity and efficiency. In light of the terrific complexities that the current unindexed code presently contains, and the additional complexities created by the amorphous state of federal taxation law, it is dubious that anyone finds that the concern that inflation indexing is inimical to simplicity is persuasive. Simplicity is not a policy to which lawmakers have granted much deference. In addition, many foreign countries with far less administrative capability than

---

119 See supra note 33 and accompanying text (defining “simplicity”).
120 See BAILEY KUKLIN & JEFFREY STEMPEL, FOUNDATIONS OF THE LAW 42 (2d ed. 1994).
121 See supra note 65 and accompanying text.
122 See Tom Herman, Tax Report, WALL ST. J., Jan. 20, 1999, at A1 (reporting that the IRS's national taxpayer advocate, Val Oveson, testified in his first report before Congress that the current state of tax law complexity is "the most serious and burdensome problem facing taxpayers"). This suggests that caution is appropriate prior to ascribing significant weight to the simplicity argument as a primary reason why Congress has not adopted indexing capital gains for inflation.
the U.S. have successfully implemented inflation indexing for capital gains. More likely, opponents of inflation indexing consider the loss of simplicity to be an additional factor, among other more persuasive factors, militating against indexing the code. 

F. Summary

In sum, proponents of indexing have argued that the current code’s blind eye to the effect of inflation on the real profit of investments creates inequitable results. Furthermore, in order to avoid such results many investors lock in to their investments creating allocative inefficiency of America’s capital resources. Opponents of indexing do not deny that there may occasionally be unjust results. However, they contend, first, that there are other advantages that the capital gains taxpayer has, such as deferral opportunities and a lower rate, which offset the occasional injustice. Second, they contend that inflation indexing is an inexact and expensive approach to correcting the occasional injustice created by ignoring inflation in the tax code. Third, they contend that any lock in effect on the economy is alternatively inevitable and somewhat exaggerated. Accordingly, opponents of indexing argue that there is no justification for the loss of revenue that would occur with inflation indexing.

Until today, at least, the opponents of indexing have been victorious; inflation indexing has not been adopted. It is plausible that the failure of Congress to ever index the code indicates that the national will, after a thorough consideration of the issues, is not to index. The question that remains to be answered is whether recent economic changes will have any impact on the debate.

123 See Bartlett, supra note 17, at 1265.
124 See supra notes 66-76 and accompanying text.
125 See supra notes 104-114 and accompanying text.
126 See supra notes 94-95 and accompanying text.
127 It is possible that inertia, see Shuldiner, Not Capital Gains, supra note 11, at 237, lack of populism in such a proposal, and the fear of losing revenue that would be hard to replace also played a role. However, it is also possible that Congress’s inaction does imply that inflation indexing was not a correct response for any of the reasons articulated earlier. See supra Part I.
II. THE EFFECT OF CURRENT ECONOMIC TRENDS ON INFLATION INDEXING

Recently, significant and potentially long-term changes in the economy have emerged, whose respective impacts on the wisdom of indexing capital gains for inflation justify consideration. These economic developments include: (a) the recent reduction in inflation coupled with warnings of deflation in the forthcoming years, (b) the emergence of the mutual fund as a leading financial intermediary, and (c) technological advances and their effect on information costs.

A. Current Inflation Trends

1. Low Inflation and its Impact on Fairness

During the late 1970s America faced double digit inflation, as measured by the CPI. In 1978, inflation was 7.6%; in 1979, 11.3%; and in 1980, 13.5%. In contrast, inflation in 1997 was at 1.7%. From 1992 to 1995 it was under 3% per annum. In short, inflation in recent years has been unusually low; thus, inflation's impact on capital investors is much less significant now than it has ever been. Conversely, the benefit that the capital gains investor has over the income tax taxpayer, the ability to defer taxes, is reduced. Accordingly, if there was a rationale for not indexing for inflation during relatively high inflationary periods due to the deferral benefit of the tax code, that rationale possesses particular force under current economic conditions.

Some proponents of inflation indexing have enthusiastically supported Senate Bill 1635 by arguing that the current state of low inflation may change. They argue that, now, when the
Treasury will lose less money, is a politically opportune time to push through this measure.\textsuperscript{135} Notwithstanding any political machinations, however, the bill must stand or fall on its merit. The fact remains that if (and arguably so) the tax code was not terribly unfair to capital investors during periods of high inflation, then it is not unfair now.

Furthermore, many economists, including Federal Reserve Chairman Alan Greenspan, have suggested that there is a real possibility of deflation in the future.\textsuperscript{135} The proposed bill for indexing capital gains, Senate Bill 1635, does not lower the basis in the case of deflation.\textsuperscript{137} Therefore, an imbalance exists since an investor's basis is raised to its "real" value during inflationary periods, but it is not counterbalanced with a downgrade during deflationary periods. Presumably, the bill's drafters are not bothered by this inconsistency because their goal is to simply lower capital gains tax.\textsuperscript{138} Concededly, to tax taxpayers with nominal losses or no gains for the "real" profits they earn is not politically viable. Doing so would amount to a property tax on cash or personal property and would be very unpopular. However, that difficulty alone does not justify indexing the basis for investors only when it helps them. Accordingly, the prospect of deflation militates against an inflation-only basis adjustment.

2. Inflation and Accuracy

The CPI was adjusted recently to comport with economic changes.\textsuperscript{139} The adjustments to the CPI were both far-reaching and controversial.\textsuperscript{140} In December 1996, a panel of economists testified before Congress that the old CPI was overstat-

\textsuperscript{135} See Norman G. Fosback, Stop Taxing Phantom Capital Gains, MUTUAL FUND MAG., Sept. 1998, at 3.
\textsuperscript{137} See supra note 3.
\textsuperscript{138} Senate Bill 1635 is entitled "A bill to reduce the maximum capital gains rates." S. 1635, 105th Cong. (1998).
\textsuperscript{140} See Schlesinger, supra note 139, at 2.
ing inflation by 1.1%. Other economists met the panel's recommendations for change with strong opposition. The difficulty in measuring the CPI is attributable to the difficulty in assessing quality improvements and incorporating them into price increases accurately. When prices increase, because of quality improvements, it is very difficult to assess if the consumer is getting less for the dollar or is paying more because the products are correspondingly superior. Quality improvements have been occurring more frequently and rapidly of late, thus exacerbating the difficulty of accurately measuring inflation. This development strengthens the NYSBA's argument that it is really impossible to accurately measure inflation. If the very yardstick measuring inflation is controversial, the measure it produces cannot be considered perfectly accurate.

Furthermore, inflation is not something that occurs across the board in all industries. Thanks to technology, information costs have often gone down in recent years, even though other sectors have experienced inflation. Different taxpayers and businesses have different spending needs. One business, say a media company, may need to spend a higher amount of its budget on information costs than another. In the past few years, while medical and food costs rose relatively sharply, communication, transportation, and electrical costs have consistently had much lower inflation.

Therefore, one whose livelihood and expenses are more dependent on communications may have actually increased her purchasing power. This is in contradistinction to an elderly citizen, who likely had greater expenses for medical care, whose purchasing power likely decreased at a higher rate than the CPI. Therefore, the overall inflation rate does not accurately reflect the "real" spending power of individual taxpayers.

---

141 See Inflation, supra note 139.
142 See Inflation, supra note 139.
143 See Inflation, supra note 139.
144 See Inflation, supra note 139.
145 See supra note 104 and accompanying text.
146 See Statistical Abstract, supra note 56, at 489.
Rather, as explained earlier, it is an aggregate estimate.\textsuperscript{148} It follows that using the inflation index would result in some investors having their basis indexed to an inordinately high increase. This result is not equitable. In addition, this wrinkle, combined with the controversy surrounding the CPI, further calls into question any reliance upon the CPI or similar indexes.

In sum, the current economy's low or disappearing inflation strongly militates against inflation indexing. Furthermore, deflation, which is a likely prospect, renders this measure both moot and inequitable. Finally, the accuracy of measuring inflation using an index such as the CPI has become more dubious, undercutting any notions that inflation indexing will yield accurate results.

\textbf{B. Mutual Funds}

More than ever before, Americans have spent the last decade giddily pouring money into mutual funds.\textsuperscript{149} In fact, by early 1996, United States investors had invested more in mutual funds than they had placed in savings accounts in banks.\textsuperscript{150} Since 1996, United States investors have steadily increased the flow of new money into mutual funds.\textsuperscript{151}

\textsuperscript{148} See supra note 109 (noting that the accuracy of the CPI is dependent on less variance or deviation from the mean). It follows that the increased variance created by technology and the consumers of said goods adversely affects the CPI's accuracy.

\textsuperscript{149} In 1980, there were 564 mutual funds with assets of $135 billion. In 1996, there were 6,293 mutual funds containing more than $4.5 trillion of assets. See \textit{STATISTICAL ABSTRACT}, supra note 56, at 533. In addition, in 1980, the total nominal value of stocks listed on the New York Stock Exchange was $1.24 trillion. See \textit{STATISTICAL ABSTRACT}, supra note 56, at 532. Equity mutual funds held only $44 billion in assets. See \textit{STATISTICAL ABSTRACT}, supra note 56, at 533. In 1996, while the total value of shares listed on the New York Stock Exchange increased approximately 600\% to $7.3 trillion, the assets in equity mutual funds increased approximately 4,000\% to $1.75 trillion. See \textit{STATISTICAL ABSTRACT}, supra note 56, at 532-33.

\textsuperscript{150} See generally WALTER UPDEGRAVE, \textsc{MONEY\textregistered THE RIGHT WAY TO INVEST IN MUTUAL FUNDS} (1996).

\textsuperscript{151} See Bob Davis et al., \textit{Sharing the Wealth, More Social Security or Less? Clinton Plan Faces Lots of Questions}, WALL ST. J., Jan 20, 1999, at A1 (noting that since 1991, investors have averaged $11.5 billion of new money in the stock market through mutual funds, and since 1996, they have averaged $17.1 billion a month).
A mutual fund is a pool of investment capital that is managed by the fund's manager. The manager typically informs the investor in a prospectus of the nature of the fund's general investment strategy. The investment strategy provides information to the investor about what proportion of the funds assets will be invested in which markets. This allows an investor to determine the compatibility of his own financial goals and risk tolerance with that of an individual fund. The prospectus also provides the investor with information concerning past performance of the fund, expenses for the investor, and some tax information. The fund manager is paid out of the assets of the fund by some predetermined expense ratio formula. There is an ever-growing diversity in the nature of funds accompanying an astonishing growth in the total number of mutual funds.

The advantages to the mutual fund investor are numerous. First, an unskilled investor receives the opportunity to have his or her money professionally managed and invested for a relatively low fee. Second, mutual funds by definition invest in more than one stock at a time, providing a level of diversification of the investor's portfolio, which for the small investor would otherwise be unachievable. This is accomplished by the pooling of many investors' resources to create a large enough pool of capital to afford diversification without

---

153 See UPDEGRAVE, supra note 150, at 59.
154 See id.
156 See UPDEGRAVE, supra note 150, at 59.
157 See id.
158 See id.
159 See id. at 137.
160 See id. at 2.
161 See GARDINER, supra note 155, at 81; UPDEGRAVE, supra note 150, at 19-37. These elementary concepts are lauded in the literature of most mutual fund companies. See, e.g., FIDELITY INVESTMENTS, THE FIDELITY CATALOG (1998). But see generally JOHN L. SPRINGER, THE MUTUAL FUND TRAP (1973) (describing a less flattering view of the mutual fund industry as one which takes advantage of unsophisticated investors by charging high premiums without a correspondingly adequate return on investment).
162 See UPDEGRAVE, supra note 150, at 23-24.
163 See id. at 28.
INDEXING CAPITAL GAINS FOR INFLATION

transaction costs eating away too much of the profit.\textsuperscript{164} Third, mutual funds are very liquid, and in most cases, the investor can cash out at any time.\textsuperscript{165} Fourth, mutual funds are easy to monitor.\textsuperscript{166} Finally, the ordinary investor, who simply does not have the money or time to otherwise invest can still participate in what has become a national pastime—watching one's portfolio increase in value.

Mutual funds have intrinsic advantages over retail investors as well. Due to large amounts of capital, fund managers can spend more on researching companies than retail investors can.\textsuperscript{167} In addition, institutional investors, because of the large capital they command, are often favored customers of underwriters in large securities offerings.\textsuperscript{168} Furthermore, the SEC has recognized that mutual funds, due to the sophistication of fund managers and the leverage funds have as a result of their large capital, need less regulatory protection from issuers than do retail investors. As a result, Rule 144A of the Securities Act of 1933 allows issuers, in certain limited circumstances, to issue securities that will be traded only among qualified institutional buyers without having to fully register the securities.\textsuperscript{169} As a consequence of avoiding the cost of full securities registration, issuers can raise capital via mutual funds or similar institutions more cheaply than they can on the public market. This additional market for mutual funds is another advantage that funds have over retail investors.

The evolution of the mutual fund industry has recently spawned an increasingly popular product, the index fund. Unlike actively managed funds, an index fund does not try to pick the best stocks.\textsuperscript{170} Rather, the goal of an index fund is to mimic the performance of a major index such as the S & P 500\textsuperscript{171} or the Russel 2,000.\textsuperscript{172} Index funds advertise that

\textsuperscript{164} See id.
\textsuperscript{165} See id. at 30.
\textsuperscript{166} See id. at 31.
\textsuperscript{167} See UPDEGRAVE, supra note 150, at 23-24.
\textsuperscript{168} See Randall Smith & Suzanne McGee, Major Institutions, Led by Fidelity, Get Most of Hot IPOs, Lists Show, WALL ST. J., Jan. 27, 2000, at C1.
\textsuperscript{169} Rule 144A basically provides that securities that are not traded on an exchange can be sold to qualified institutional buyers (specified entities, including mutual funds, that own and invest in a discretionary basis at least $100 million) without registration. See 17 C.F.R. § 230.144A (1999).
\textsuperscript{170} See UPDEGRAVE, supra note 150, at 189.
\textsuperscript{171} Standard and Poor's 500 is an index that measures the stock performance of
they provide adequate investment performance at low cost, which results in superior total returns for investors.

The theory behind index funds is that since the fund will mimic a cross section of the market, the investor will still profit from the general market performance. In addition, the manager, who must merely mimic an index, need not spend a lot of money on research and can be paid less than the counterpart in an actively managed fund. Furthermore, an index fund will ordinarily have a lower turnover rate. Hence, the expense ratio will ordinarily be lower in an index fund than in an actively managed fund. Index fund enthusiasts argue that the investor will have superior total earnings.\textsuperscript{173}

The performance of index funds has been promising in recent years.\textsuperscript{174} This is particularly true in index funds that mimic the indexes which track large companies.\textsuperscript{175} In general, such index funds have outperformed the majority of actively managed funds.\textsuperscript{176} Commentators have explained this phenomenon that mutual funds overwhelmingly dominate the market for large companies' securities.\textsuperscript{177} Hence, mathematically, only one half of mutual funds are able to outperform an index. Since the index fund carries a lower expense ratio for investors, it follows that its total performance will be better than the performance of most of the actively managed funds. However, in other investment sectors actively managed funds have generally outperformed index funds.\textsuperscript{178}

The tax regime of the mutual fund creates a tax liability similar to the one the investor would incur from direct investment. As a "regulated investment company" mutual funds qualify to be taxed as flow-through entities to their investors, thereby avoiding layers of taxation.\textsuperscript{179} Basically, to qualify, a

500 large U.S. corporations. See \textit{id.} at 259.

\textsuperscript{172} The Russel 2,000 is an index that measures the performance of 2,000 small U.S. corporations. See \textit{id.} at 258.

\textsuperscript{173} See \textit{id.} at 194.

\textsuperscript{174} See \textit{id.}

\textsuperscript{175} See \textit{UPDEGRAVE, supra} note 150, at 194.

\textsuperscript{176} See \textit{id.}

\textsuperscript{177} See \textit{id.} at 193.

\textsuperscript{178} See \textit{id.} at 194-95.

mutual fund must distribute 90% of its income to its shareholders as dividends. The income includes whatever the fund earns from interest, dividends, or the sale of capital gains. As a practical matter, funds ordinarily distribute 98% of their gains at the end of the year when the gains are most easily calculated. Accordingly, the mutual fund investor will pay the taxes on whatever capital gains are realized by the fund. The tax liability is analogous, with some important exceptions, to the tax liability incurred by a private individual investor.

1. Mutual Funds and the Lock In Argument

The growth of mutual funds impacts on the lock in argument for the indexing of capital gains for inflation. Arguably, the current unindexed capital gains tax is an influential externality on investment decision-making. Therefore, the ordinary investor under the current system of taxation is compelled to lock in investments in order to take advantage of deferral benefits that help offset the onerous burden of unindexed capital gains taxes. This lock in causes money to be inefficiently invested thus creating a drag in the economy. If popular investment vehicles, by their nature, did not allow for lock in, and such investment vehicles occupy a large proportion of the nation's investment capital, the capital gains tax would be a less influential externality on national investment decisions and national capital allocation. Hence, the lock in argument is much less persuasive.

The mutual fund manager, for a number of reasons, cannot simply lock in investors' funds for long periods of time.

See McGeorge & McGeorge, supra note 179.
See McGeorge & McGeorge, supra note 179, at 66 n.1.
See infra notes 211-213 and accompanying text.
See supra note 88 and accompanying text.
See supra note 88 and accompanying text.
See supra note 88 and accompanying text.

This perception of the tax oblivious mutual fund manager has also been articulated in the media. See Daniel Goldstein, VA Marketers 'Cheery' Despite Tax Woes, 6 BANK MUTUAL FUND REP. No. 8, Feb. 23, 1998, available in 1998 WL 5109940 ("[B]ecause mutual fund managers focus on total returns rather than tax efficiency, they don't hold individual stocks long enough to take advantage of . . . lower capital gains rate. They're going to sell the stock whenever it reaches its
Accordingly, mutual funds are investment vehicles with an immunity from the lock in effect. It follows that growth in mutual fund investing minimizes the influence that the capital gains tax externality has on national capital allocation. Hence, growth in mutual fund investing weakens any putative lock in effect on the economy.

There are several natural factors that prevent managers of actively managed funds from locking in investments. The first is purely economic. Investors in an actively managed fund ordinarily pay a premium over the share value of mutual funds that they invest in. This premium is usually paid as part of the expense ratio to pay for the management expenses of the fund. The premium is critical to the fund manager since, aside from any personal investments the manager may have in the fund, the premium that the fund charges to investors pays the manager's salary.

From the perspective of the investor, the premium she pays is not for the quality of the fund's present holdings. The investor could more cheaply duplicate any portfolio by examining the published stock holdings of a mutual fund, and assigning to a broker the task of acquiring the identical portfolio. Rather, the investor is paying a premium because the investor believes that the future stock trades of the manager will likely be significantly superior than the investor's individual stock trades will be. The investor hopes that the fund will realize enough gains that will make the premium the investor paid worthwhile.

Courts have long recognized this reality that any premium paid to a mutual fund reflects only the investor's perceptions or hopes of the fund's future performance. Gerdes v. Reynolds concerned the sale by a controlling group of shareholders of the controlling shares of the Reynolds Investment Company. The purchasers offered to the controlling shareholders a high premium for the shares, which the control

---

186 See UPDEGRAVE, supra note 150, at 2.
187 See id.
188 See infra note 199 and accompanying text.
189 See infra note 199 and accompanying text.
190 28 N.Y.S.2d 622 (Sup. Ct. Special T. New York County 1941).
191 See id. at 622.
group happily accepted. Upon obtaining control, the purchasers proceeded to loot the company of its assets. The minority shareholders sued the original control group for breaching their duty of care. The plaintiffs claimed that the premium offered for the shares should have put the control group on notice that the prospective buyers intended to loot the company.

The court in Gerdes found that because the company involved was a mutual fund, the directors could be charged with constructive notice of the purchasers' intent to commit fraud. Hence the court found that they had breached the duty of care to the minority shareholders and were liable for damages. The court in its holding described why paying a premium for purchasing control of a mutual fund company is almost impossible to justify.

Not even the sagacity and acumen displayed in selecting and assembling its portfolio was an element of value, because its portfolio was publicly disclosed in published statistics, and any admirer of the genius for security selection displayed by the company's managers could appropriate that genius for himself by examining printed volumes of security manuals which any broker expecting an order would have been only too glad to make available free of charge.

Therefore, the court concluded that the control group should have had notice that the buyers were planning deceit.

Of course, not every investor who pays a premium for mutual fund stock has evil designs. Rather, as explained earlier, the investor is paying for the future sagacity of the fund, which as a factual matter, the investor cannot duplicate. This is in contradistinction to Gerdes, where the purchasers bought the control of the fund, and changed its management, and

---

192 See id.
193 See id.
194 See id.
195 See Gerdes, 28 N.Y.S.2d at 654.
196 See id.
197 See id. at 658.
198 At the time this case was litigated, such disclosure was voluntary, but occurred in the particular case. See id. at 657. The Investment Company Act of 1940 has since made such disclosure mandatory in the case of all mutual funds. See 15 U.S.C. § 80 (1999); 17 C.F.R. § 270.30.d.1 (1999).
199 Gerdes, 28 N.Y.S.2d at 656.
200 See id. at 658.
201 See id. at 629.
had no interest in the future trades of the managers of the fund. The court found that absent the payment of a premium for future stock selection, there is no economic justification for paying a premium for mutual fund shares.

It follows that the fund manager is marketing future trades and not present holdings when he or she sells shares of the fund. Accordingly, to remain marketable a fund manager cannot simply hold stock positions or lock in investments. Investor perception of such inactivity would result in investors, particularly new ones, having little incentive to cover the cost of management. They would more likely attempt to follow the recommendation of the Gerdes court and simply mimic a fund's holdings. Indeed, an index fund, which generally has a much lower turnover than an actively managed fund and hence has a greater proportion of its value in its present holdings than an actively managed fund, does, in fact, generally charge lower fees. Thus, fund managers, if they wish to justify their expense ratios, are compelled to trade actively and not to lock in investments. The fund manager has a burden to attempt to consistently outperform any benefit provided by locking in investments. Therefore, rather than being induced to lock investments in inferior investments for tax purposes the manager is compelled to constantly seek out the best investments.

A second reason why fund managers are not likely to hold positions for the sake of tax benefits is practicality. It would be nearly impossible for a fund manager to account for all the shareholders' tax consequences, because not all mutual fund investors in a single fund are alike. In 1996 pension funds owned over $400 billion of mutual funds. These accounts are normally tax advantaged. Additionally, state and local governments held $37 billion. Furthermore, many investors may be non-profit organizations. Investors commonly have private IRAs invested in mutual funds. Also, tax-brackets may differ among investors. For these reasons a manager may find that it is nearly impossible to factor in tax ramifications for all of the shareholders because of the diversity of the inves-

202 See supra note 199 and accompanying text.
203 See supra note 56, at 529.
205 See id.
Tax conscious considerations appropriate for certain shareholders of the fund may be hyperconscious for other shareholders, leading to ultimately inferior returns. Hence, many funds operate as though taxes do not exist and allow the shareholders to deal with their taxes individually.

In addition, it is very hard to market a fund as tax conscious, since studies show that it is almost impossible to predict a fund's future tax performance. Some commentators have deemed futile the search for the tax efficient mutual fund. Traditionally, funds with a lower turnover rate were considered more tax efficient since they would have fewer distributions. Recently however, a consensus has emerged that turnover rate is often misleading. This is caused by an interesting quirk created by the flow-through taxation of mutual funds. The tax code measures the term of an investment and its profits by when the fund bought the stocks, not by when the shareholder bought into the fund.

The tax code's approach, in reality, is to assign the tax liability of the fund to those shareholders who own shares of the fund at the time the fund realizes its gains. Hence, it charges shareholders a tax on the distributions of the fund, regardless if those shareholders were already shareholders when the fund purchased the shares or accrued its gains, and whether or not those shareholders ever actually earned a profit. If a fund purchased a stock in 1990 for $50 a share and in 1997 it was worth $200, and the fund then sold in 1998 for $180, it makes a distribution to its shareholders who own shares at the time it declares its dividend, regardless of

---

206 See Julie Creswell, Mutual Fund's Stress on Taxes Shows Growth, WALL ST. J., Jan. 19, 1998, at A9 (noting that industry observers comment that tax consciousness by mutual fund managers would create a dichotomy, since some shareholders' tax considerations are different than other shareholders).
208 See id. (describing the search for a profitable and tax efficient fund as one for the holy grail). To be sure, some companies have tried to market tax efficient products. See Lowering the Tax Bill on Stocks, GLOBAL INVESTMENT STRATEGIES 25 (Sanford C. Bernstein & Co. Spring 1998). However, there has not been a market rush.
209 See McGeorge & McGeorge, supra note 179.
210 See McGeorge & McGeorge, supra note 179.
212 This usually occurs within a few months of when the shares were sold and
when they bought shares of the fund. Accordingly, an investor who bought when the stock was worth $200, not only will take a loss, but the investor will have to pay taxes.\footnote{213}{See Smith, supra note 211, at 75. This unfortunate phenomenon occurred with increased frequency in 1998, as many funds which held stock for long periods of time during the bull market of the 1990s had to sell during the market decline of the summer of 1998 to retain profits. See id. At the same time, many investors bought shares in those funds when the market was at its high and became liable for the tax distributions that occurred while they lost money. See id. This certainly violates horizontal equity. See supra note 45 and accompanying text. However, reform of the mutual fund tax regime is beyond the scope of this Note. Some suggestions will likely include greater disclosure by mutual funds of the possibility of paying taxes even when the investor loses money, or alternatively, protection for shareholders in the form of a right to defer some of the income from distributions that occur when the share value is lower than the purchase price until the shareholder redeems the shares.}

Accordingly, many funds which have had historically low turnover and high tax efficiency may in fact have been building up a ticking tax bomb, which will explode when they make their distributions. When the inevitable distributions take place, the investors will have the tax liability of all those accumulated profits from the years that the fund made no or small distributions and deferred its tax liability. A new investor, who thinks that a fund is tax proficient based on past performance, will receive a rude awakening. The investor can be hit not only with tax liability for the period of the investment but also with tax liability stemming from the time the fund earned its reputation as tax proficient. Conversely, a fund with a low tax rating may, though not necessarily, ultimately carry no tax liability, and therefore may be more tax efficient for a new investor.

Furthermore, turnover ratio measures the number of transactions regardless if the same 10% of the fund was traded ten times.\footnote{214}{See Harold Evensky, Turnover, Tax Efficiency, and the Big Myth, FIN. PLAN., Oct. 1, 1997, available in 1997 WL 10306390.} If the same portion of assets is turned over many times in one year, the distributions do not increase, since they are tallied at the end of the year.\footnote{215}{See id.} Accordingly, one
turnover of 30% of the funds assets results in greater tax liability than ten turnovers of 10%. Therefore, the turnover rate is not a reliable predictor of tax efficiency.  

For these reasons, actively managed funds cannot market themselves in the long term as tax conscious. An area a fund can market itself in, however, is the total pre-tax return. To achieve that, fund managers cannot be overly tax conscious. Therefore, mutual fund managers are compelled to constantly seek out the best investments, regardless of tax consequences, and are not susceptible to tax consideration inducing phenomena such as lock in.

In addition, index funds are completely immune from lock in. A successful index fund is one that successfully mimics its index. Indeed, this is the goal that the index fund contracts with its investors to accomplish. Hence, since its goal is to ensure that its portfolio maintains a similarity with the portfolio of a major index, tax considerations should play no role in the decision-making process. Performance is not measured by return but rather on the success of the fund’s achieving a resemblance to its index. Accordingly, the capital gains tax externality has no influence on both actively managed funds and index funds.

In addition, because of the flow-through regime of mutual fund taxation, individual investors are forced to realize a percentage of their gains. They cannot simply accrue gains and avoid tax liability. Hence, they are less susceptible to the second form of lock in, of reducing the utility of their assets in the hope of avoiding tax liability.

Therefore, if mutual funds continue to grow as a percentage of the capital investments market, more investment capital will be immune from lock in. The capital gains externality and its associated economic inefficiency of lock in will be accordingly diminished, and the utility of capital gains will not be so reduced from lock in. Hence, the need to index the code to avoid lock in and its economic effects is also diminished.

216 See id.
217 See Updegrave, supra note 150, at 254.
2. Mutual Funds and Simplicity

Commentators have pointed out that the greatest complexities likely to arise from inflation indexing of capital gains will be in the area of mutual funds.\textsuperscript{218} Mutual fund investors often invest in a fund under a plan that allows the fund to automatically reinvest their distributions. It follows that mutual fund investors who realize capital gains by selling shares in a fund will have to calculate a separate inflation adjustment for every period of investment. An investor with an automatic investment plan will be required to make as many as fifty different inflation adjustments.\textsuperscript{219} The enormous complexities and costs that could arise from this may well make mutual funds a far less attractive method of investing. This effectively undercuts any argument that the government should index capital gains to promote mutual fund investing.

In addition, the additional costs from the loss of simplicity may indeed outweigh any putative benefit of inflation indexing. In fact, it may well be that those countries who successfully implemented capital gains inflation adjustments\textsuperscript{220} have far fewer mutual fund investors than the United States has today. Rather, their national investment portfolio is likely comprised of less complex investment vehicles such as common stock and similar simple investments, which are not susceptible to the same complexities as mutual funds. Hence, it is not reliable to use those countries as a model for the United States to follow. Accordingly, the dynamic growth of mutual funds strengthens the argument that inflation indexing will create significant value complexity.

3. Mutual Funds and Equity

Mutual funds benefit the economy as a whole by providing an efficient intermediary household sector capital to reach the business sector. They are efficient intermediaries because they have economies of scale, and they thus reduce information costs by requiring only the manager to find out information.

\textsuperscript{218} See Shuldiner, Not Capital Gains, supra note 11, at 237.
\textsuperscript{219} See id.
\textsuperscript{220} See supra note 123 and accompanying text.
Furthermore, since fund managers presumptively have a superior ability to process and act upon market information, and because they are immune to externalities such as lock in, they increase national allocative efficiency. Finally, they open the door of portfolio investing to many private investors who would otherwise be unable to invest by giving them the opportunity to invest without the transaction costs of individual trades eating away at their profit. It follows that the tax code should therefore encourage mutual fund investing by taxing their investments equitably.

Currently, the tax code is unkind to mutual fund investors because fund managers ignore tax ramifications, thus causing mutual fund investors to actually pay the inflationary tax without the full benefit of deferral. Hence, mutual fund investors are likely to have a higher average effective tax burden than ordinary capital gains investors who benefit fully from deferral. In addition, the flow-through taxation regime of mutual funds, which in some cases creates tax liability for investors who suffered an actual loss, violates horizontal equity. In fact, individual fund investors who receive the same return from different funds will more likely than not have different tax liabilities, violating critical equity norms.

However, the tax inequities created from distribution timing are only tangentially related to inflation indexing. Inflation indexing would not remedy the lack of vertical equity among fund investors and therefore solutions to these problems are outside the ambit of this Note. In addition, notwithstanding that fund investors receive harsh and arbitrary tax treatment, mutual fund investors apparently believe they have done very

---

221 See supra notes 186-217 and accompanying text.
222 See supra note 86. It may well be that the unusual combination of low inflation coupled with economic growth of the last decade is a result of an increase in allocative efficiency. See supra note 86 and accompanying text. Under a Keynesian model, an inability of the business sector to attain necessary funds from the household sector, either because of insufficient savings or over consumption, causes a cash shortage and corresponding increases in interest rates followed by inflation. It should follow that allocative efficiency allows the household sector to save less, consume more and yet still sufficiently support the business sector to prevent inflation. This increased allocative efficiency, if it in fact exists, may be a result of more sophisticated investors or the increased use of investment vehicles such as mutual funds. See supra note 149 and accompanying text.
223 See supra note 185.
well, evidenced by the ever increasing flow of money into funds.\textsuperscript{224} Apparently, then, many investors believe that the fund manager can actually outpace what they would gain through individual investing and deferral.\textsuperscript{225} For now, the growth of mutual fund investing does not appear to be impeded by the tax code.

The growth of mutual fund investing is a phenomenon that reduces the lock in effect, an inefficiency which the current tax code arguably exacerbates. The minimization of lock in was "the most serious argument in favor of a capital gains preference."\textsuperscript{226} It also strengthens the argument that inflation indexing will lead to complexity and costs that will outweigh any benefit derived from inflation indexing.\textsuperscript{227} It is true that the mutual fund tax regime creates gross inequities, but inflation indexing would not fully correct the problems unique to mutual fund taxation. Therefore, on the whole, the emergence of mutual funds, with its attendant benefits, argues strongly against indexing the code.

C. Information Technology

An argument against the indexing of the code has always been that the code should be simplified. The rationale for a simplified code is that any money spent in trying to understand the code is essentially an information and agency cost and should be minimized accordingly. A simple code forces fewer taxpayers to pay for tax preparation, and the accountants' work is simpler and their fees cheaper. For the taxpayer, the fees paid for tax preparation are additional taxes; the only difference being that they are paid to an accountant rather than to the government. Hence, it is desirable to have a simple code.

With the emergence of user-friendly computer tax programs, this argument loses considerable merit. Accountants no longer spend their tax season carefully making long calculations on their ledgers. Instead, accountants are increasingly

\textsuperscript{224} See supra notes 149-151 and accompanying text.

\textsuperscript{225} It is possible that this is merely due to the combination of a booming stock market and low inflation, factors which may both well disappear in the future.

\textsuperscript{226} Cunningham & Schenk, supra note 25, at 344.

\textsuperscript{227} See Shuldiner, Not Capital Gains, supra note 11, at 237.
relying on tax programs\textsuperscript{228} for which the cost of a standard return in a simple system is not much different then the cost for a standard return in a complicated system. While estate planning may still require more costs, this too will likely change with increased information technology.

In 1997, Congress issued significant changes in the tax code.\textsuperscript{229} The day after the tax change was passed, T. Rowe Price, a large investment company, began the distribution of computer software designed to explain the effect of the new changes.\textsuperscript{230} The price of this software was a relatively insignificant $9.95.\textsuperscript{231} The ability of companies to disseminate more information to more taxpayers cheaply is a result of information technology. Products similar to the software that T. Rowe Price marketed are likely to minimize the information costs that indexing for inflation would cause.

Information technology complexities equalizes the cost of preparing standard returns in complicated codes to its cost in simple codes. Therefore, with the increase in information technology, the argument that indexing inflation will increase information costs is weakened.

However, as explained earlier, among the arguments against inflation indexing, the cost to the economy from complications was the least persuasive.\textsuperscript{232} Rather, the stronger arguments against inflation indexing are that there is no widespread unfairness to capital gains taxpayers, that no inflation adjustment is perfectly accurate anyway, and that there is no economic loss due to the failure to index for inflation. Hence, opponents of indexing conclude that there is no reason to make such a dramatic overhaul of the tax system with all its accompanying practical difficulties of implementation and revenue replacement.

\textsuperscript{228} Such programs include Turbo Tax and TaxCut. For a review of these products, see Jim Frederick, \textit{Filing on Your Computer, With the Right Software You Can do Your Return Yourself}, MONEY MAG., Jan. 1, 1999, at 132.


\textsuperscript{231} See id.

\textsuperscript{232} See supra note 122 and accompanying text.
An additional impact of technology is the increased ability of private investors to get sophisticated investment information cheaply. This is largely a product of the world wide web and similar electronic media. The impact of such media on investment behavior at the time of this note is speculative. It is possible that future individual investors may have sufficient access to sophisticated information to invest proficiently by themselves and have little need to pay mutual fund management fees. Accordingly, large institutions would no longer dominate the investment landscape. In such a world, allocative efficiency may be even greater than it is in today's world of institutional investors. However, in that world of individual retail investors, lock in would potentially be an externality that would justify tax preferences for capital gains. An alternative possibility is that investors simply will not wish to spend their leisure time tracking their portfolios and the world wide web will have a minimal impact on institutions. As all of this is speculative, any conclusions are currently inappropriate.

CONCLUSION

In the past few years, because of low inflation, the equity arguments against inflation indexing have been strengthened, since investors can now more easily compensate for inflation via deferral. The uneven distribution of inflation over the economy, caused by technological advances, also strengthens the argument that inflation indexing is not an entirely accurate remedy. Likewise, the recent controversy over the CPI makes the argument that inflation indexing is not accurate more compelling. Thus, considering its lack of accuracy, inflation indexing may, in fact, be inappropriate.

In addition, the mutual fund revolution has undermined the lock in argument, that the unindexed code creates an inefficient allocation of the nation's economic resources. As explained earlier, mutual funds are largely immune from lock in, hence the astonishing growth of funds would likely minimize any putative effect that lock in may have on the economy. In addition, mutual funds weaken any indexing argument based on utility lock in.\(^{233}\) As the merit of these arguments has in-

\(^{233}\) See supra Part II.B.1.
increased substantially over the past few years, it follows that the current economic trends militate against inflation indexing, both from an equity and an efficiency point of view.

Of course, all of these trends are not static. An increase in inflation coupled with higher interest rates and a depressed stock market reducing the mutual fund industry is a plausible future reality. Such a scenario would alter the conclusions of this Note. In addition, of the factors considered, information technology is the most likely to only continue to grow in impact. Hence, while this Note concludes that today is not a correct time for inflation indexing, inflation indexing may yet be a proper tax measure sometime in the future.

In conclusion, indexing inflation is not a new issue and the battle lines are as much political as they are economic. However, the failure of the government to pass this measure in the past is an indicator that the national will has seen inflation indexing as inappropriate. Given the nation's present economic conditions, this conclusion remains particularly strong.

Shimon B. Edelstein