TAX FOUNDATION Since 1937

SPECIAL REPORT

November 2006
No. 148

Issues in the Indexation of Capital Gains

Removing Inflation from the Base is Fair, Pro-Growth Concept

By
Curtis S. Dubay
Economist
Tax Foundation

Introduction

The nation may revisit the issue of capital gains taxation now that the Democratic Party controls the Congress. Republicans have been almost unanimous in their view that the rate cuts on capital gains and dividends in May 2003 were, among all the Bush tax cuts, two of the most successful at boosting the economy. Democrats have mostly held the opposite view, asserting that compared to the rates on wages, capital income has long been under-taxed.

Key Findings:

- *As a percentage of real gains, the average capital gains tax rate on stock has often exceeded the top tax rate on wages.*
- *Indexing capital gains for inflation on stock imposes no special administrative burden.*
- *Lowering the effective rate to equal the statutory rate will improve investor performance.*
- *Even if adopted without raising the statutory rate, the revenue cost would be modest.*

In one respect, though, the parties may be able to agree on a reform to capital gains taxation: indexation of capital gains for inflation. When Congress indexed income tax brackets for inflation in 1981, it was considered such a daring reform that a four-year delay was built in. But in retrospect, like air conditioning, indexation seems like something we should never have had to live without.

Inflation has increased the rate of capital gains taxation in wild fashion over the last 50 years. In some years the effective rate has been so much higher than the statutory rate that it mocked the idea of capital gains being taxed at a "preferential rate." Even now, after two decades of modest inflation, indexation would be an excellent reform, improving the predictability of tax burdens on capital investment.

The occasional bill has been introduced in Congress to index capital gains. In the current Congress, it is H.R. 6057, sponsored by Representatives Mike Pence (R-IN) and Eric Cantor (R-VA). Although an unlikely prospect for enactment on its own, such a bill could become part of a fundamental tax reform plan.

Brief History of Capital Gains Tax Rates

For most of the history of the income tax, capital gains have been taxed at a lower statutory rate than wages (see Table 1, Column C). In addition, for much of that time a portion of each gain was excluded from taxation entirely. There have been many justifications for preferential treatment, but the most easily

understood and most frequently cited is that the inflationary gain is also taxed.

The statutory tax rate was 25 percent from 1956 through 1970. During that time the highest rate on wage income ranged from 91percent in the late 1950s to 70 percent in the late 1960s.

The top rate on capital gains was raised to 29.5 percent in 1970, then to 32.5 percent in 1971 and to 35 percent in 1972.

In some years the effective tax rate has been so much higher than the statutory rate that it mocked the idea of capital gains being taxed at a "preferential rate."

This 35-percent rate was cut to 28 percent in 1979 and then to 20 percent in 1980. Income tax rates were also cut dramatically during the 1980s. As part of the landmark 1986 tax reform act, the top rate on wage income was cut to 28 percent. At the same time, the statutory rate on capital gains was raised to 28 percent, equaling the wage rate for the first time, at least on a statutory basis.

The capital gains rate remained 28 percent during the early and mid-90s while the top wage rate was raised, first to 31 percent in 1991, then to 39.6 percent in 1994.

In 1997 the rate on capital gains was cut to 20 percent and was cut again in 2003 to the current 15 percent. Meanwhile, the top rate on wages was cut to 35 percent in 2003, where it remains today.

But has the statutory rate been the actual percentage taken in tax from each capital gain? No, and this paper focuses on inflation as one reason that the taxpayer selling an asset actually pays a much higher percentage of his profit than the tax rate in law would suggest.

While there are certainly many forms of capital gain, ranging from the sale of stock to the sale of a home to the sale of collectibles, this analysis will focus solely on corporate stocks as represented by the value of stock in the S&P 500 Index from 1956 through 2006.

Background on Capital Gains

What is a taxable capital gain? Under current law a taxable capital gain occurs whenever stock is sold for a price higher than its original purchase price, and the entire gain is taxable. A capital loss is the reverse, but the tax code doesn't permit the entire loss to be deducted from other taxable income. Instead only $3,000 of capital loss can be deducted each year.

Economists generally define income as anything that increases a person's ability to consume, and capital gains certainly do that. Inflationary gains, however, do not. They merely allow the owner of a capital asset to maintain the same level of consumption that he had when he purchased the asset.

Twenty-five years of effective central banking have proven that inflation can be fought effectively, but that does not mean it will never rise to damaging levels again.

The timing of capital gains taxation also sets it apart from other types of income. An investor can sell, or "realize" the gain, whenever he chooses, and he pays tax on the income at that time. However, the gain accrued over the course of the investment's life, usually many years and not just during the current year. This tax deferral generally benefits the investor because the gain is allowed to compound untaxed until he sells it. However, the value of tax deferral has in many cases been more than wiped out by the taxation of inflation-induced gains.

Indexing Capital Gains

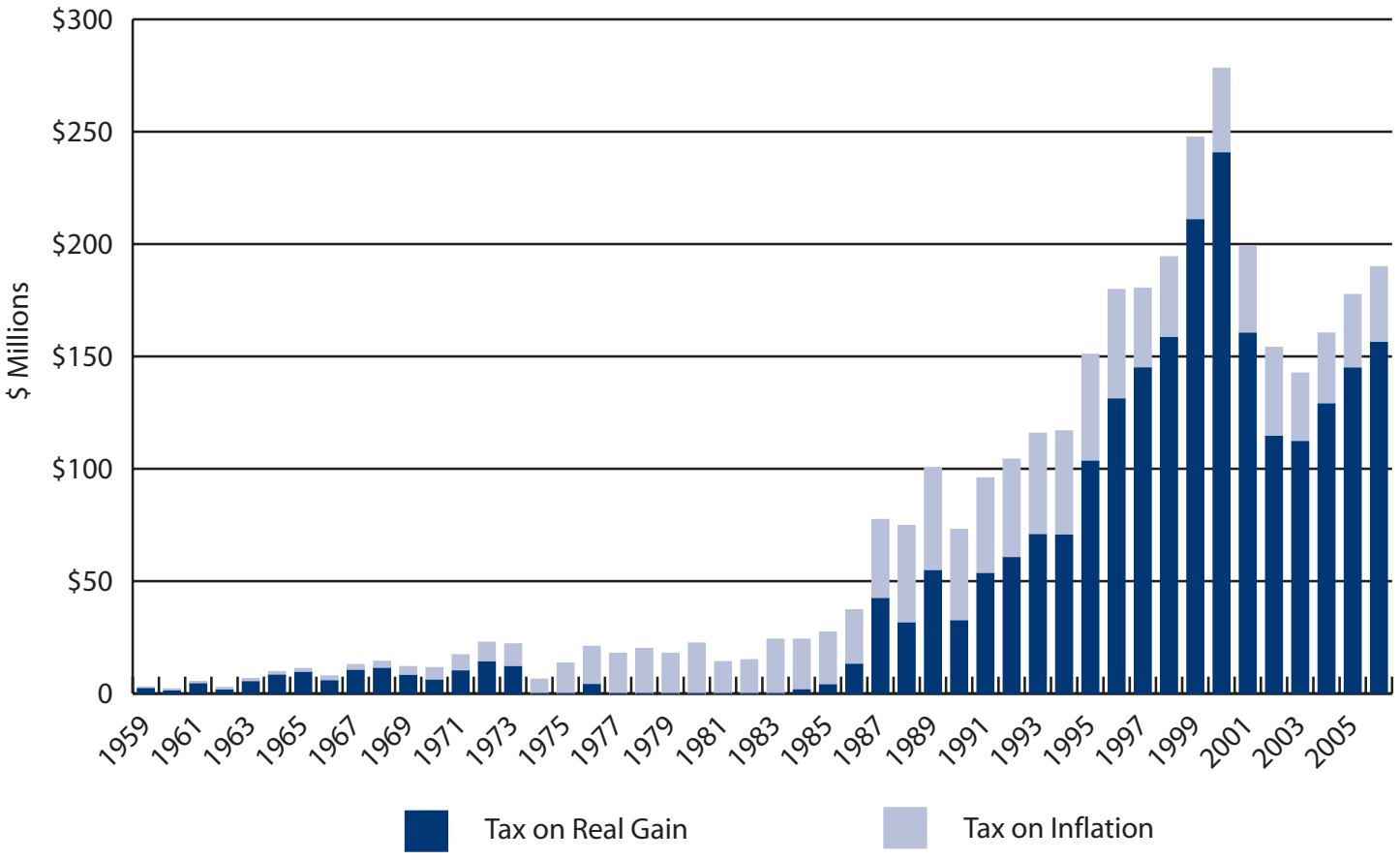
H.R 6057 has been introduced in the House of Representatives to index capital gains for inflation. Sponsored by representatives Mike Pence (R-IN) and Eric Cantor (R-VA), the bill proposes that taxpayers would adjust the price of an asset held for a period of longer than three years using the Gross Domestic Product Implicit Price Deflator, as published by the Bureau of Economic Affairs in the Department of Commerce.

This would be a simple multiplication performed by the taxpayer, and it would adjust the dollar value of an asset's purchase price by the rate of inflation. Barring a rare deflation, this means reducing the taxable gain. The higher inflation has been during the years the investor held his asset, the more his tax liability would be cut by the inflation adjustment.

It is often argued that indexing capital gains would add too much complexity to the already onerous income tax. This is a red herring.

Since the mid-1980s, inflation has been modest, and the statutory tax rate on capital gains has been lowered. Low inflation and

Figure 1
Tax on Real vs Inflationary Capital Gains
1959 – 2006



Note: H.R. 6057 proposes that assets held three years may be indexed, so 1959 is the first year shown in this example. When there's a nominal gain but a real, inflation-adjusted loss (1974-75 and 1977-82), the effective tax rate is unknown.
Sources: Yahoo Finance, ACCF Center for Policy Research, St. Louis Federal Reserve Board (FRED II), Tax Foundation.

comparatively low statutory rates have greatly diminished the effective tax rate on capital gains even though there is still a component of inflation-induced tax liability. All that was necessary, then, to create a surge of realizations was rapid stock market appreciation, and during the past decade there have been two great run-ups in the market. Since 2003, the

Table 1
Taxation of Capital Gains, Real and Inflationary
1956 – 2006

		Nominal (Current Law)				Inflation-Adjusted (Proposed Law)				
Year	Standard & Poor's 500 Index (A)	Capital Gain (or Loss) On S&P 500 Since 1956 (B)	Statutory Tax Rate (C)	Tax Owed (D)	Inflation Factor (E)	Current Year Value of 1956 Asset (F)	Capital Gain (or Loss) (G)	Tax Owed with Indexing (H)	Effective Tax Rate on Real Gain without Indexing (I)	Effective Tax Rate on Real Gain Minus Statutory Rate (J)
1956	45.35	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1957	42.42	$ (2.93)	25.0	$ 0	1.03	$ 46.86	$ (4.44)	n.a.*	n.a.*	n.a.*
1958	50.06	4.71	25.0	1.18	1.06	47.93	2.13	n.a.*	n.a.*	n.a.*
1959	56.88	11.53	25.0	2.88	1.07	48.53	8.35	$ 2.09	34.5%	9.5%
1960	53.52	8.17	25.0	2.04	1.09	49.21	4.31	1.08	47.4	22.4
1961	66.73	$ 21.38	25.0%	$ 5.35	1.10	$ 49.76	$ 16.97	$ 4.24	31.5%	6.5%
1962	56.27	10.92	25.0	2.73	1.11	50.44	5.83	1.46	46.8	21.8
1963	71.70	26.35	25.0	6.59	1.12	50.98	20.72	5.18	31.8	6.8
1964	84.18	38.83	25.0	9.71	1.14	51.76	32.42	8.11	29.9	4.9
1965	89.96	44.61	25.0	11.15	1.16	52.70	37.26	9.32	29.9	4.9
1966	76.56	$ 31.21	25.0%	$ 7.80	1.20	$ 54.20	$ 22.36	$ 5.59	34.9%	9.9%
1967	96.71	51.36	25.0	12.84	1.23	55.88	40.83	10.21	31.4	6.4
1968	102.67	57.32	25.0	14.33	1.28	58.26	44.41	11.10	32.3	7.3
1969	93.12	47.77	25.0	11.94	1.35	61.15	31.97	7.99	37.4	12.4
1970	84.30	38.95	29.5	11.49	1.42	64.39	19.91	5.87	57.7	28.2
1971	98.34	$ 52.99	32.5%	$ 17.22	1.49	$ 67.61	$ 30.73	$ 9.99	56.0%	23.5%
1972	110.55	65.20	35.0	22.82	1.56	70.54	40.01	14.00	57.0	22.0
1973	108.43	63.08	35.0	22.08	1.64	74.48	33.95	11.88	65.0	30.0
1974	63.54	18.19	35.0	6.37	1.79	81.22	(17.68)	n.a.**	n.a.**	n.a.**
1975	83.87	38.52	35.0	13.48	1.96	88.85	(4.98)	n.a.**	n.a.**	n.a.**
1976	105.24	$ 59.89	35.0%	$ 20.96	2.07	$ 94.00	$ 11.24	$ 3.94	186%	151.4%
1977	96.53	51.18	35.0	17.91	2.20	99.96	(3.43)	n.a.**	n.a.**	n.a.**
1978	102.54	57.19	35.0	20.02	2.36	106.96	(4.42)	n.a.**	n.a.**	n.a.**
1979	109.32	63.97	28.0	17.91	2.55	115.86	(6.54)	n.a.**	n.a.**	n.a.**
1980	125.46	80.11	28.0	22.43	2.79	126.39	(0.93)	n.a.**	n.a.**	n.a.**
1981	116.18	$ 70.83	20.0%	$ 14.17	3.05	$ 138.27	$ (22.09)	n.a.**	n.a.**	n.a.**
1982	120.42	75.07	20.0	15.01	3.23	146.70	(26.28)	n.a.**	n.a.**	n.a.**
1983	166.07	120.72	20.0	24.14	3.36	152.47	13.60	$ 2.72	177.5%	157.5%
1984	166.10	120.75	20.0	24.15	3.49	158.21	7.89	1.58	306.0	286.0
1985	182.08	136.73	20.0	27.35	3.59	163.03	19.05	3.81	143.5	123.5
1986	231.32	$ 185.97	20.0%	$ 37.19	3.67	$ 166.63	$ 64.69	$ 12.94	57.5%	37.5%
1987	321.83	276.48	28.0	77.41	3.77	171.17	150.66	42.19	51.4	23.4
1988	271.91	226.56	28.0	63.44	3.90	177.01	94.90	26.57	66.8	38.8
1989	349.15	303.80	28.0	85.06	4.05	183.71	165.44	46.32	51.4	23.4
1990	306.05	260.70	28.0	73.00	4.21	190.82	115.23	32.27	63.3	35.3
1991	387.86	$ 342.51	28.0%	$ 95.90	4.35	$ 197.48	$ 190.38	$ 53.31	50.4%	22.4%
1992	417.80	372.45	28.0	104.29	4.45	202.02	215.78	60.42	48.3	20.3
1993	458.93	413.58	28.0	115.80	4.56	206.69	252.24	70.63	45.9	17.9
1994	462.71	417.36	28.0	116.86	4.65	211.08	251.63	70.46	46.4	18.4
1995	584.41	539.06	28.0	150.94	4.75	215.40	369.01	103.32	40.9	12.9
1996	687.33	$ 641.98	28.0%	$ 179.75	4.84	$ 219.48	$ 467.85	$ 131.00	38.4%	10.4%
1997	947.28	901.93	20.0	180.39	4.92	223.14	724.14	144.83	24.9	4.9
1998	1,017.01	971.66	20.0	194.33	4.97	225.61	791.40	158.28	24.6	4.6
1999	1,282.71	1,237.36	20.0	247.47	5.05	228.87	1,053.84	210.77	23.5	3.5
2000	1,436.51	1,391.16	20.0	278.23	5.16	233.86	1,202.65	240.53	23.1	3.1
2001	1,040.94	$ 995.59	20.0%	$ 199.12	5.28	$ 239.48	$ 801.46	$ 160.29	24.8%	4.8%
2002	815.28	769.93	20.0	153.99	5.37	243.66	571.62	114.32	26.9	6.9
2003	995.97	950.62	15.0	142.59	5.49	248.83	747.14	112.07	19.1	4.1
2004	1,114.58	1,069.23	15.0	160.38	5.64	255.90	858.68	128.80	18.7	3.7
2005	1,228.81	1,183.46	15.0	177.52	5.81	263.64	965.17	144.78	18.4	3.4
2006	1,311.01	$ 1,265.66	15.0%	$ 189.85	5.95	$ 269.93	$ 1,041.08	$ 156.16	18.2%	3.2%

* Because H.R. 6057 allows for indexation only for assets held 3 years, the asset holder in this example cannot index his gain until 1959.
** When there's a nominal gain but a real, inflation-adjusted loss (1974-75 and 1977-82), the effective tax rate is unknown.
Sources: Yahoo Finance, ACCF Center for Policy Research, St. Louis Federal Reserve Board (FRED II), Tax Foundation.

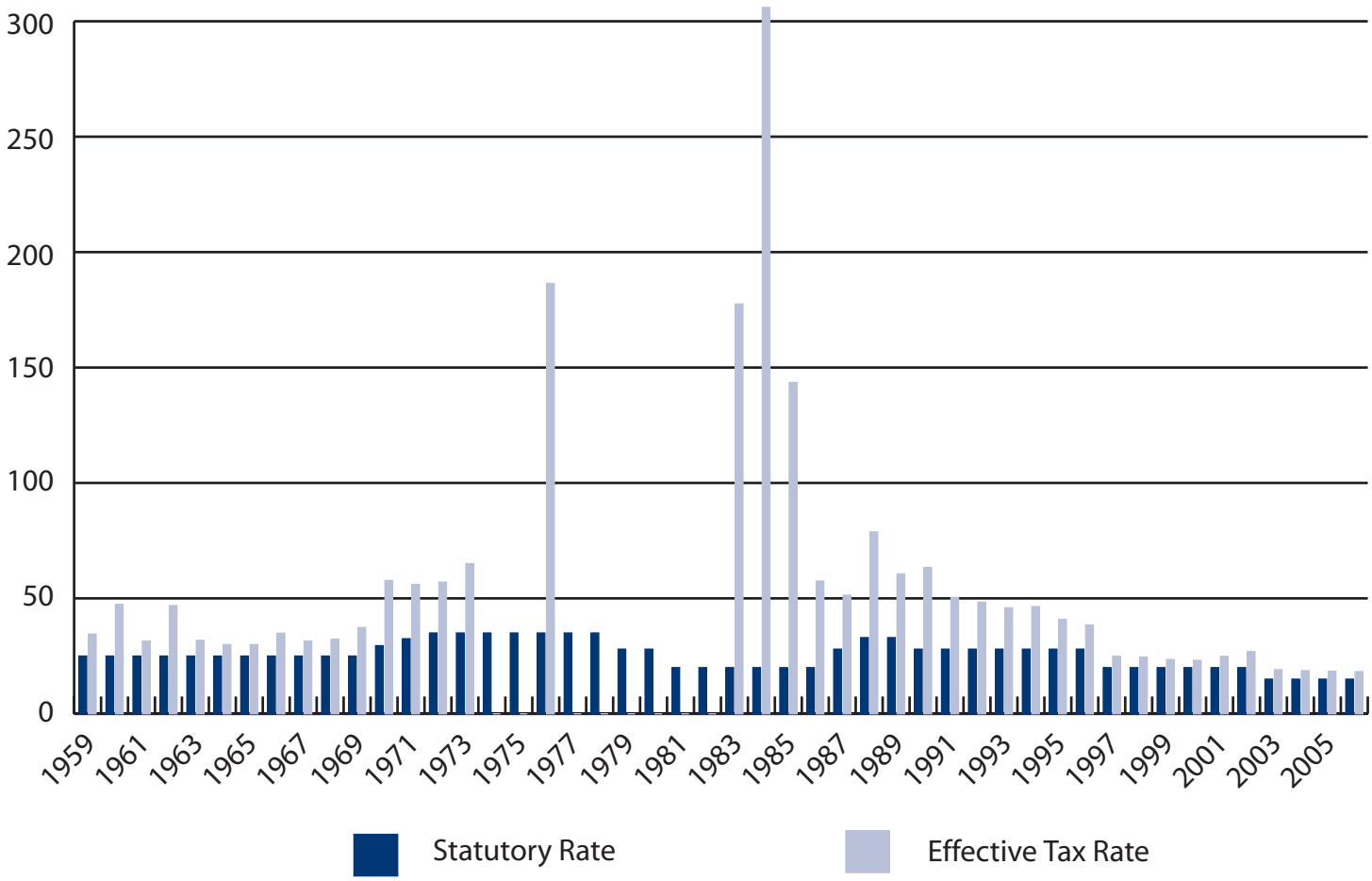
nation's lowest capital gains tax rate, 15 percent, has combined with low inflation and excellent stock performance to create a flood of realizations, and federal tax collections from this source have stunned estimators.

Opponents of indexation claim that further reducing the tax liability on capital gains by indexing capital gains would be unfair to people who receive no capital income and depend entirely on wages. But no matter what the ideal effective rate on gains, it is preferable to have the statutory rate match the effective rate without the confusing and unpredictable effect of including inflation in the tax base.

Since 2003, the nation's lowest-ever capital gains tax rate, 15 percent, has combined with low inflation and excellent stock performance to create a flood of realizations, and federal tax collections from this source have stunned estimators.

Figure 1 illustrates capital gains taxation for a stock purchased in September of 1956 and sold in each successive year through 2006.

Figure 2
Effective Tax Rate on Capital Gains



Note: H.R. 6057 proposes that assets held three years may be indexed, so 1959 is the first year shown in this example. When there's a nominal gain but a real, inflation-adjusted loss (1974-75 and 1977-82), the effective tax rate is unknown.
Sources: Yahoo Finance, ACCF Center for Policy Research, St. Louis Federal Reserve Board (FRED II), Tax Foundation.

The tax collected on inflationary price increases is separated from real gains. The stock is represented by the value of the Standard and Poor's Index of 500 stocks in September of each year from 1956 to 2006. The fraction of the capital gains tax that is on real gains fluctuates depending upon both the real and inflation-induced price of the stock at the date of sale.

For example, as shown in Column A of Table 1, a stock purchased in 1956 for $45.35 commanded a market price of $166.10 in 1984. Using the tax rates in effect at that time, a taxpayer in 1984 paid a tax on the capital gain of $120.75 as shown in Column B. The tax liability under the 20 percent tax rate of 1984 is $24.15 as shown in Column D (20 percent of $120.75). However, when the value of the capital gain is adjusted for inflation, the real value of the capital gain is only $7.89, or 6.53 percent of the total gain in value. The remaining 93.47 percent increase in value is represented solely by inflation, or the reduced purchasing power of the dollar.

Indexing capital gains will improve the performance of the economy, as investors could predict their future tax liabilities more accurately.

To determine the inflation-adjusted capital gain, one simply multiplies the 1956 purchase price of $42.35 (Column A) by the applicable inflation ratio 3.49 (Column E, calculated using the GDP Implicit Price Deflator). The inflation-adjusted purchase price equals $158.21, which yields the inflation-adjusted capital gain of $7.89 reported in Column G ($166.10 – $158.21).

Figure 2 shows the effective tax rates imposed on taxpayers when they are taxed on the inflation component of a capital gain. The inflation adjusted tax liability (shown in Column H of Table 1) for a taxpayer who bought a stock in September 1956 and sold it in September 1984 is $1.58, 6.53 percent of the $24.15 owed when no indexing occurs. The current unindexed law therefore imposed an effective rate of 306 percent — calculated by dividing the capital gains tax owed without indexing, $24.15 (Column D), by the real capital gain, $7.89 (Column G).

No matter what the ideal effective rate on gains, it is preferable to have it match the statutory rate, without the confusing and unpredictable effect of including inflation in the tax base.

The difference between the effective rate and the actual tax rate on capital gains is shown in Column J. The capital gains tax rate fluctuates over time, so the differential between the actual rate and the effective rate is shown to differentiate the effects of inflation from changes in statutory rates.

The statutory capital gains tax rate is a major factor influencing the size of the inflation tax. If the tax rate on capital gains were equal to the top rate on wage income, currently 35 percent, the inflation tax would be proportionately greater. Take, for example, an asset bought in 1956 and sold in 2006. As Table 1 shows, the nominal capital gain equals $1,265.66, and at a tax rate of 15 percent, $189.85 is owed. In real terms, the capital gain is $1,041.08, but the inflationary portion of the gain is taxed as well, so the effective rate is 18.2 percent ($189.85/$1041.08), or 3.2 percentage points higher than the statutory 15 percent rate.

However, if the capital gain were taxed at the 35 percent rate without indexing, the tax owed would equal $442.98, and the effective rate would be 42.6 percent — 7.6 percentage points higher than the statutory rate. The inflationary portion of the tax is 2.3 times higher

with a statutory rate of 35 percent than with one of 15 percent.

The effective rates shown in Table 1 are not as high in recent years as in earlier years for three reasons. First, the statutory tax rate has been cut to its lowest level since 1956. Second, inflation has been modest in recent years. Third, the stock market has seen substantial real gains in the past 25 years.

For almost a decade in the 1970s and early 1980s, most of the capital gains taxes collected were collected on inflationary gain.

Between 1956 and 1986, the S&P 500 increased 38 percent in real 2006 dollars while inflationary gains were 267 percent. That performance contrasts sharply with the results from the past two decades. From 1986 to 2006, the S&P 500 grew 250 percent in real terms while inflationary gains were only 62 percent. So real growth was more than six-and-a-half times faster, and inflation grew four times slower. As if buying high and selling low weren't bad enough, inflation taxes approach stratospheric levels for these poorly timed sales.

The highly volatile nature of the effective tax rate on capital gains is a great hindrance to investors. Investors who buy the same asset at the same time but sell at different times can experience vastly different effective tax rates. One of the basic tenets of sound tax policy is that the system should aim for neutrality, levying the same effective tax rates on all investments over time. The more neutral our tax system, the more taxpayers are able to make decisions purely for economic reasons without being swayed by tax considerations.

Table 2
Capital Gains
1990 – 2016

	Capital Gains Realizations, CY		Capital Gains Tax Liabilities, CY		Capital Gains Tax Receipts, FY		
Year	Billions of Dollars	Percentage Change from Previous Year	Billions of Dollars	Percentage Change from Previous Year	Billions of Dollars	Percentage Change from Previous Year	Capital Gains Tax Receipts as a Percentage of Individual Income Tax Receipts
1990	124	-20%	28	-21%	32	-14	6.8%
1991	112	-10%	25	-11%	27	-17	5.7%
1992	127	14%	29	16%	27	1	5.6%
1993	152	20%	36	25%	32	20	6.3%
1994	153	0.66%	36	0%	36	12	6.7%
1995	180	18%	44	22%	40	10	6.8%
1996	261	45%	66	50%	54	36	8.3%
1997	365	40%	79	19%	72	33	9.8%
1998	455	25%	89	12%	84	16	10.1%
1999	553	22%	112	26%	99	19	11.3%
2000	644	16%	127	14%	119	20	11.8%
2001	349	-46%	66	-48%	100	-16	10.0%
2002	269	-23%	49	-25%	58	-41	6.8%
2003	323	20%	51	4%	50	-14	6.3%
2004	479	48%	71	39%	60	20	7.4%
2005	539	13%	80	13%	75	25	8.1%
2006	550	2%	82	2%	81	8	8.1%
2007	564	2%	84	2%	83	2	7.4%
2008	660	17%	96	15%	84	2	7.1%
2009	465	-29%	86	-11%	97	15	7.5%
2010	564	21%	104	22%	94	-3	6.8%
2011	586	4%	111	6%	107	14	6.8%
2012	605	3%	114	3%	112	5	6.5%
2013	627	4%	118	3%	116	3	6.3%
2014	650	4%	122	4%	120	3	6.2%
2015	674	4%	126	4%	124	4	6.1%
2016	701	4%	131	4%	129	4	5.9%

Source: Congressional Budget Office, The Budget and Economic Outlook: Fiscal Years 2007 to 2016, Table 4-4, Page 92

Recent Inflation Modest but Indexation Still Necessary

Although the rate cuts, the lower inflation and the substantial real gains have made the problem of taxing inflationary gains less troublesome, these conditions actually create the perfect opportunity to fix the problem. In the past, one criticism has been that fixing this problem with indexation would deprive the government of too much revenue, the same argument that was eventually rejected in 1981 when wage tax brackets were indexed. The estimated revenue loss for the Pence-Cantor bill will be much lower than for similar bills introduced 10 or 20 years ago.

It is often argued that indexing capital gains would add significantly more complexity to the already onerous income tax. This is a red herring because indexing adds no more complexity than an additional exemption, against which few complaints are lodged. Just as other national tax authorities have done, the IRS would publish a table of inflation figures. Taxpayers would simply identify the year they purchased the asset and multiply the purchase price by a ratio from the IRS table.

Conclusion

Indexing capital gains would improve the fairness of the tax system in much the same way that indexing the individual income tax brackets has these past 20 years. Indexing capital gains will also improve the performance of the economy, as investors could predict their future tax liabilities more accurately.

Twenty years of effective central banking have proven that inflation can be fought effectively, but that does not mean it will never rise to damaging levels again. If U.S. tax writers can include indexation of capital gains in law now, when the revenue loss for the government will be low, the next generation of investors will look back with incredulity that we did without it for so long.

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SPECIAL REPORT (ISSN 1068-0306) is published at least 6 times yearly by the Tax Foundation, an independent 501(c)(3) organization chartered in the District of Columbia.

4–20 pp.
Single copy: free
Multiple copies: $5 each

The Tax Foundation, a nonprofit, nonpartisan research and public education organization, has monitored tax and fiscal activities at all levels of government since 1937.

Editor and Communications Director, Bill Ahern

Tax Foundation
2001 L Street, NW, Suite 1050
Washington, DC 20036
(202) 464-6200
(202) 464-6201 fax
www.TaxFoundation.org
TF@TaxFoundation.org