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Looking Back on Taxation of Capital Gains

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Key Findings

- A lookback charge is in addition to traditional income taxes due on the realization of a capital gain.
- In an ideal setting, the lookback charge eliminates the benefit of deferral and removes the "lock-in" effect, a design flaw in the current system of realization-based taxation of capital gains.
- Taxing capital gains with a lookback charge does have several advantages over mark-to-market taxation, such as preserving liquidity for taxpayers and eliminating valuation challenges for hard-to-value assets.
- However, a lookback charge faces administrability issues, encourages investors to seek higher returns, and raises taxes on U.S. savers.

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Introduction

Recently, Sen. Ron Wyden (D-OR) unveiled a mark-to-market proposal[1] to tax capital gains at the end of each year. This proposal also features a lookback charge, which would be assessed based on how long an asset owner defers their capital gains tax liability. When considering mark-to-market taxation of capital gains, a lookback charge provides a reasonable solution for taxing hard-to-value assets. However, it is important to recognize the limitations of a lookback charge compared to both mark-to-market and the current tax treatment of capital gains. This paper will walk through what a lookback charge is, how it is calculated, and its advantages and drawbacks. Using a simple example, this paper will compare the tax treatment of an asset under the current system, mark-to-market, and a lookback charge. Next, it will discuss the advantages of a lookback charge as well as its drawbacks, focusing on administrative difficulties and economic effects. Overall, a lookback charge reduces the incentive to hold onto assets but increases complexity in the tax code and the tax burden on U.S. saving.

What is a Lookback Charge?

A lookback charge is an interest payment on deferred taxes. For an asset that is subject to a lookback charge, the taxpayer would still pay capital gains tax when she sells the asset but with an additional interest charge accounting for the time the tax was deferred. There are many unique ways to construct a lookback charge, also called a retrospective capital gains tax, but all have the same three steps that are described below.

First, a hypothetical price path must be constructed to determine when a gain occurred. One way to construct a price path is to assume the asset appreciated at a constant annual rate. For example, an investor purchases an asset at the beginning of 2018 for $100 and sells it at the end of 2019 for $110.25, but the value of the asset is unknown between those points. This asset has an implied 5 percent rate of return. The imputed gain for 2018 is $5 and $5.25 in 2019.[2] However, it is possible that the actual gains were different.

The next step is to calculate the tax liability for each year. For this example, assume the capital gains tax rate is 40 percent, so the tax liability for the gain in 2018 is $2 and for 2019, $2.10. Finally, the taxpayer must pay not only the tax for the imputed tax liability in 2018, but also interest on the "tax loan" for deferring payment until the asset was sold in 2019. Most proposals use the after-tax risk-free rate of return to calculate the interest charge.[3] This rate would be independent from the asset's imputed rate of return. By including this lookback, or interest, charge, investors no longer get a tax benefit from holding onto an asset.

While mark-to-market taxation is relatively straightforward for tradable assets with up-to-date valuations, applying it to hard-to-value assets, such as small, closely held businesses, poses a significant hurdle. Annual valuation of these assets would be a burden for taxpayers and tax administrators but exempting those assets would cause taxpayers to invest in those assets to avoid taxes. One option for policymakers confronted with this issue is a lookback charge system, or

1 Taylor LaJoie, "Evaluating Senator Wyden's "Mark-To-Market" Capital Gains Tax," Tax Foundation, Sept. 9, 2019, https://taxfoundation.org/senator-wyden-mark-to-market-capital-gains-tax/.

2 $100 * (1+0.05) = $105 ($5 gain); $105 * (1+0.05) = $110.25 ($5.25 gain)

3 James Kwak, "Reducing Inequality With A Retrospective Tax on Capital," *Cornell Journal of Law and Public Policy* 25:191 (Fall 2015), https://www.lawschool.cornell.edu/research/JLPP/upload/Kwak-final.pdf.

retrospective capital gains tax, that would neutralize the tax benefit to holding assets longer.

Reviewing the Current System of Capital Gains Taxation

Under current law, capital gains tax is not due until the asset is sold and the gain is realized. By deferring realization of a capital gain, a taxpayer can defer their tax payment. The current system creates a lock-in effect[4] for taxpayers wherein they have an incentive to hold onto capital gains for the tax benefits rather than for economic reasons. Additionally, taxpayers have an incentive to realize capital losses immediately to deduct the loss against other capital gains, up to $3,000 of other taxable income, or carry the loss forward to next year's taxes.[5]

One way to think about the value of deferral is to think of deferred capital gains taxes as an interest-free loan from the government.[6] Under the current tax code, an investor defers paying taxes by not realizing her capital gains, and she can instead reinvest the amount that would have been paid in taxes, without owing interest. However, under a mark-to-market system, tax is paid each year, so investors cannot defer their taxes.[7]

Comparing Different Models of Capital Gains Taxation

Since capital gains are a stream of income over time, the timing of when taxpayers remit their taxes affects their future income. For example, under mark-to-market taxation, tax is due at the end of each year, so capital that would continue to accrue under realization is instead remitted in tax. The difference in after-tax gain between both mark-to-market and a retrospective tax compared to the current system of capital gains taxation for the same asset shows the benefit of deferral.

By looking at the after-tax return and effective tax rates, it is possible to see the benefit of deferring taxes. With deferral, the after-tax return increases and the effective tax rate falls the longer the asset is held. Under mark-to-market taxation, both the after-tax rate of return and effective tax rate are constant regardless of how long an owner holds an unrealized capital gain. This means that the tax system is neutral with respect to how long an owner holds an asset, unlike the current system of capital gains taxation.

The example in Table 1 shows this phenomenon. Table 1 compares three systems of capital gains taxation on the gain from a $100,000 investment held for 25 years and taxed at the current statutory tax rate of 23.8 percent that grows at 5 percent annually. For this example, assume 5 percent is also the risk-free rate of return.

4 Scott Eastman, "JCT Report Shows Capital Gains are Sensitive to Taxation," Tax Foundation, Sept. 25, 2019, https://taxfoundation.org/jct-report-shows-capital-gains-are-sensitive-to-taxation/.

5 IRS, "Helpful Facts to Know About Capital Gains and Losses," Jan. 17, 2020, https://www.irs.gov/newsroom/helpful-facts-to-know-about-capital-gains-and-losses.

6 Cynthia Blum, "New Role for Treasury: Charging Interest on Tax Deferral Loans," *Harvard Journal on Legislation* 25:1 (Winter 1988).

7 For a further discussion of mark-to-market taxation for capital gains, see Taylor Lajoie, "Evaluating Mark-to-Market Taxation of Capital Gains."

TABLE 1.

Comparing the Tax Burden on a $100,000 Investment Held for 25 Years

	Taxing Capital Gains at Realization	Mark-to-Market Taxation of Capital Gains	Retrospective Capital Gains Tax
Initial Investment	$100,000	$100,000	$100,000
Tax Liability	$56,795.25	$ 48,309.37	$83,964.33
After-Tax Gain	$181,840.25	$154,671.17	$154,671.17
Statutory Tax Rate on Capital Gains	23.8%	23.8%	23.8% + Lookback Charge
Effective Tax Rate*	15.4%	23.8%	23.8%
After-Tax Rate of Return	4.23%	3.81%	3.81%

* Effective tax rate is the difference between pretax and post-tax rates of return. For example, 1 – (3.81% / 5.0%) = 23.8% effective tax rate.
Source: Author's calculations.

A retrospective tax and mark-to-market system result in the same after-tax gain and the same after-tax rate of return but different tax liability. Compared to the current system, both systems result in a smaller after-tax gain and, correspondingly, a higher effective tax rate than the current capital gains tax. This difference in effective tax rates shows the benefit of deferring taxes for the 25 years the investor held the asset, and this benefit continues to expand as the holding period increases.

Table 2 shows a simple breakdown of the lookback charge for the example from Table 1. The tax liability is simply each year's imputed capital gain multiplied by the tax rate. The interest charge is every year's tax liability multiplied by the after-tax rate of return compounded annually until the year the asset is sold. In other words, it is the value of deferring taxes. The total retrospective tax liability is the sum of the tax liability for each year the asset is held and the lookback charge.[8] While taxpayers may see a larger tax bill, the after-tax gain is the same as under mark-to-market taxation.

TABLE 2.

Lookback Charge Breakdown

	Retrospective Tax Breakdown
Tax Liability on Imputed Gains	$56,795.25
+ Lookback Charge	$27,169.08
= Total Tax Liability under a Retrospective Capital Gains Tax	$83,964.33

Source: Author's calculations.

8 Daniel Hemel, "Taxing Wealth in an Uncertain World," University of Chicago Law School, National Tax Association 49th Annual Spring Symposium, May 17, 2019, https://ntanet.org/wp-content/uploads/2019/05/Wealth-Taxation-and-Policy-Uncertainty-SLIDES.pdf.

Advantages of Lookback Taxation

Lookback taxation has several advantages over mark-to-market taxation of capital gains.[9] One of the primary benefits for a retrospective tax is that it does not require annual valuations of an asset, whereas a mark-to-market tax does. A retrospective tax preserves liquidity for taxpayers, only requiring a tax payment when the asset is sold. By contrast, mark-to-market requires payment of capital gains tax each year regardless if the asset is sold. Some suggest that a lookback system could be implemented in conjunction with a mark-to-market system to tax hard-to-value assets.

The lock-in effect, that arises due to deferral, causes investors to keep their capital in lower return investments for the tax benefits rather than investing that capital in other assets with higher rates of return. [10] Eliminating deferral would remove this incentive, causing investors to sell assets held only for the tax benefits. As shown above, this happens by raising the tax rate on the returns to investment. It is possible that investors could use that newly realized capital to invest in other productive activities, but it is also possible that capital would go to unproductive uses.[11] Eliminating the lock-in effect would increase capital flow, but raising the tax burden on saving could have negative economic effects.

Challenges of Lookback Taxation

Implementing a retrospective capital gains tax would increase the complexity of the tax code, forcing taxpayers to spend more time and money figuring out their taxes.[12] A retrospective tax changes the investment decisions of investors. Specifically, the design of a lookback charge forces investors to seek higher returns, as investments with lower returns may not be worthwhile after tax. Also, while a retrospective capital gains tax would reduce the benefits of deferral, there are circumstances where there would be a tax benefit to deferring realization even with a lookback charge. Importantly, the tax burden on saving and investment would rise relative to current law, which would reduce gross national income.

As discussed, determining a lookback charge requires the taxpayer to perform a series of calculations and estimates. Each of those steps is cumbersome and time-consuming for taxpayers, especially for income from hard-to-value capital assets.[13] There are specific administrative challenges that arise from a lookback charge, such as how to treat losses and taxpayers whose tax rates change over time, and each solution must balance competing policy goals of accuracy and administrability.

9 Alan J. Auerbach, "On the Design and Reform of Capital Gains Taxation," *American Economic Review*, May 1992, https://www.nber.org/papers/w3967.

10 Roy H. Webb, "Taxing Capital Gains," Federal Reserve Bank of Richmond, 1980, https://www.richmondfed.org/-/media/richmondfedorg/publications/research/economic_review/1980/pdf/er660602.pdf.

11 Garrett Watson, "Proponents of Wealth Taxation Must Consider its Impact on Innovation," Tax Foundation, Nov. 12, 2019, https://taxfoundation.org/wealth-tax-economic-impact/

12 A retrospective tax exists in the tax code for passive foreign investment companies (PFIC). This provides a glimpse into some of these issues that a wider retrospective tax would bring. See Eric Toder and Alan Viard, "A Proposal to Reform Taxation of Corporate Income," Tax Policy Center, June 2016, https://www.taxpolicycenter.org/sites/default/files/alfresco/publication-pdfs/2000817-a-proposal-to-reform-the-taxation-of-corporate-income.pdf for a brief discussion of those issues.

13 For a comprehensive explanation of how a lookback charge would be applied to different forms of income, see Cynthia Blum, "New Role for Treasury: Charging Interest on Tax Deferral Loans."

A lookback charge would impact investors' decisions to buy and sell assets based on the rates of return and holding period. Under a lookback charge, capital gains tax liability declines as a proportion of the capital gain as rates of return and holding periods increase.[14] However, assets with lower rates of return and longer holding periods have a higher percentage of tax liability compared to assets with higher growth rates and shorter holding periods. [15] This causes investors to seek higher rates of returns to minimize the impact of the lookback charge.

The same incentive arises under a wealth tax. In fact, many proposals for a retrospective tax are economically the same as a wealth tax under most circumstances.[16] Some would argue that forcing investors to seek higher rates of return would increase entrepreneurial activity and innovation. However, investors could use their wealth to seek higher returns from activities that are not as productive. As my colleague Garrett Watson explains:

> While this may incentivize some owners of unproductive assets to engage in innovation, it is a poorly targeted method to encourage greater innovation. Owners of wealth will be motivated to seek higher returns wherever they find them, though not solely through engaging in innovative activity. For example, the wealthy may lobby policymakers to create barriers to entry in their respective industries. This would raise their returns by limiting competition without creating new wealth. There is evidence that high marginal tax rates and wealth taxes may also make it harder for new entrants to build wealth, which stabilizes the position of the incumbent wealthy.[17]

While a lookback charge eliminates the deferral advantage for returns that are constant over the life of the asset, real-world returns are rarely constant.[18] The lock-in effect can still exist under a retrospective tax when the rate of return for an asset changes over time. This is because most retrospective taxes assume the asset grows at a uniform rate and constructs a hypothetical price path that may not reflect the actual price path. There is an incentive to hold on to assets that appreciate quickly and are expected to have a lower rate of return in the future.[19] Investors could delay realization to after the additional period of slower growth and shift the initial higher returns to a later period, which reduces the lookback charge. However, a lookback charge overstates tax liability for assets that grow slowly and are expected to have higher returns in a later period. The higher rates of returns in the later period are shifted earlier and increase the lookback charge.

To summarize, investors with assets that grow quickly would hold onto the asset as growth slows, shrinking the lookback charge. Investors with an asset that grew slowly then appreciated quickly would face a larger lookback charge, paying more tax than if the gains were taxed each year. According to tax policy experts Eric Toder and Alan Viard, this effect would be exacerbated if moving to a retrospective capital gains tax was joined with an increase in the tax rate. This effect is more pronounced under the current capital gains tax but does not impact assets under mark-to-market taxation.[20]

14 Eric Toder and Alan Viard, "A Proposal to Reform Taxation of Corporate Income."

15 Ibid.

16 For a lookback charge that is economically equivalent to a wealth tax, see Alan Auerbach, "Retrospective Capital Gains Taxation," *American Economic Review* 81:1 (March 1991), https://www.nber.org/papers/w2792.

17 Garrett Watson, "Proponents of Wealth Taxation Must Consider its Impact on Innovation."

18 William McBride, "The Great Recession and Volatility in Sources of Personal Income," Tax Foundation, June 13, 2012, https://taxfoundation.org/great-recession-and-volatility-sources-personal-income/.

19 Eric Toder and Alan Viard, "A Proposal to Reform Taxation of Corporate Income."

20 Ibid.

An important issue when comparing a lookback charge and the current system is the increased tax burden on saving. Economist Alan Auerbach, architect of a retrospective tax, suggests lowering the capital gains tax rate when eliminating deferral on capital gains to avoid increasing the tax burden on saving.[21] The current U.S. tax code taxes saving multiple times, which leads to an overall lower level of saving and lower level of income for Americans.[22] Except for the circumstances described earlier, a retrospective tax is equivalent to mark-to-market taxation because they both eliminate the benefit of deferral, thus raising effective tax rates compared to current law. Any policymaker should understand how incentives may change for U.S. savers when considering changes to capital gains taxation.[23] This effect would lead to lower levels of domestic ownership of U.S. assets and income, but, since the U.S. is a relatively open economy, outside investors would provide saving to somewhat offset the decline in U.S. saving.[24] U.S. gross domestic product (GDP) would be affected but by a smaller magnitude than national income.

Ultimately, the determination of whether a lookback charge is a desirable policy depends on whether one thinks the ideal tax system is an income tax or a consumption tax. Both mark-to-market taxation and a lookback charge move the tax code in line with the principles of income, or Haig-Simons, taxation.[25] Under the Haig-Simons definition, income is the change in a person's ability to consume; so any change in the value of a person's assets should, at least theoretically, be considered income (or a fully deductible loss), regardless if it's realized. This definition of income includes income that is saved as well as the return to that saving in the tax base, imposing an extra layer of tax on saving that does not apply to income used for consumption. Those who advocate for a consumption tax base would argue that the capital gains tax itself is a form of double taxation. Both mark-to-market taxation and a retrospective tax are unnecessary as that gain is taxed when used for consumption by the taxpayer;[26] for example, in the same way that gains are currently treated in traditional Individual Retirement Accounts.[27]

Conclusion

When considering options to eliminate the deferral advantage of capital gains taxation, a lookback charge provides a reasonable solution for taxing hard-to-value assets. However, policymakers need to understand the limitations of a lookback charge compared to both mark-to-market taxation and the current system. It is complex and could have pernicious effects on the behavior of investors, potentially encouraging unproductive activity. Transitioning to a lookback charge would increase the tax burden on saving compared to current law; policymakers should carefully consider the effects on the incentive to save and invest.

21 Alan Auerbach, "The Future of Capital Income Taxation," *Fiscal Studies* 27:4 (December 2006), https://www.jstor.org/stable/24440008?seq=1.

22 For a further discussion of how taxes reduce domestic saving and income, see Alan Cole, "Losing the Future: The Decline of U.S. Saving and Investment," Tax Foundation, Oct. 1, 2014, https://taxfoundation.org/losing-future-decline-us-saving-and-investment/.

23 Erica York, "An Overview of Capital Gains Taxes," Tax Foundation, Apr. 16, 2019, https://taxfoundation.org/capital-gains-taxes/.

24 Scott Eastman, "The Trade-offs of Repealing Step-Up in Basis," Tax Foundation, Mar. 13, 2019, https://taxfoundation.org/step-up-in-basis/.

25 A pure income tax would tax all capital gains by mark-to-market accounting. See David J. Shakow, "Taxation Without Realization: A Proposal for Accrual Taxation," *University of Pennsylvania Law Review*, 1986, https://scholarship.law.upenn.edu/penn_law_review/vol134/iss5/2/.

26 Alan Viard, "Moving Away from the Realization Principle," *Tax Notes* 145:7 (Nov. 7, 2014), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2537653.

27 A traditional IRA, with unlimited contributions and no restrictions on withdrawals, is a feature of a consumption tax. For a comprehensive consumption tax proposal, see Robert Carroll and Alan Viard, *Progressive Consumption Taxation: The X Tax Revisited* (Washington, D.C.: AEI Press), May 11, 2012.