

# HIGH-RISK, HIGH-REWARD: A CASE FOR TAX DEFERRAL

SCOTT GREENBERG\*

*The federal tax code contains a number of provisions that reduce taxes on personal and business investment income. Many of these provisions fall into two categories: yield exemption provisions, which reduce taxes on investment returns, and tax deferral provisions, which reduce taxes on investment principal. While these two families of tax provisions are sometimes said to be equivalent, there are important differences between them. This Note focuses on one under-appreciated difference between yield exemption and tax deferral: the amount of risk to which the federal government is exposed. Under a tax deferral approach, the federal government's expected revenue is higher but more uncertain, as revenue collections depend on the performance of taxpayers' investments. This Note argues that policies that raise revenue by exposing the federal government to greater risk could be more efficient than other avenues of raising federal revenue. The federal government is able to take on market risk at a relatively low social cost, because of its high liquidity and ability to diversify risk across generations. While there are many possible ways for the government to raise revenue by taking on more risk, this Note argues that the tax code is a promising vehicle for doing so. All in all, this analysis adds a reason why tax deferral provisions are preferable to yield exemption provisions.*

INTRODUCTION .....	2184
I. BACKGROUND ON THE TAXATION OF INVESTMENT .....	2187
A. <i>Defining Tax Deferral and Yield Exemption</i> .....	2188
B. <i>The Equivalence and Non-Equivalence of Tax Deferral and Yield Exemption</i> .....	2191
C. <i>Previous Arguments in Favor of the Tax Deferral Approach</i> .....	2193
II. TAX DEFERRAL AND GOVERNMENT EXPOSURE TO MARKET RISK .....	2196
A. <i>Effects of Tax Deferral and Yield Exemption on Government Revenue and Exposure to Market Risk</i> .....	2196
1. <i>Background on Investment and Risk</i> .....	2197
2. <i>Which Approach Raises More Revenue?</i> .....	2198
3. <i>Which Approach Makes Revenue Collections More Uncertain?</i> .....	2201

---

\* Copyright © 2021 by Scott Greenberg. J.D., 2021, New York University School of Law; B.A., 2015, Yale University. I wish to thank David Kamin, Daniel Shaviro, Ryan Fackler, and Brina Seidel for helpful comments, as well as the members of the Furman Scholars Program. Special thanks to members of the *New York University Law Review* for their advice and assistance.

B. <i>Reasons to Increase the Federal Government's Exposure to Market Risk</i> .....	2202
C. <i>The Case for the Tax System as a Vehicle for Increasing the Federal Government's Risk Exposure</i> .....	2205
III. NEXT STEPS FOR TAX POLICY .....	2209

## INTRODUCTION

For a few months in late 2017, it seemed that Republican lawmakers might fundamentally change the taxation of personal savings for millions of Americans. Throughout the late summer and fall, reports emerged that Republicans were considering sharply limiting the availability of traditional 401(k) accounts, which allow households to defer taxes on income that is saved for retirement.<sup>1</sup> This plan would have had the effect of steering taxpayers toward Roth 401(k) accounts, which allow households to face no tax upon withdrawing their retirement savings in the future.<sup>2</sup>

Reports that Republican lawmakers were planning to limit traditional 401(k)s immediately raised controversy: Financial industry representatives warned against the proposal,<sup>3</sup> and Congressional Democrats criticized the idea of “raising taxes on Americans who are trying to save for their retirement.”<sup>4</sup> Then, the idea was abruptly abandoned. On October 23, 2017, President Trump tweeted, “There will be NO change to your 401(k). This has always been a great and popular middle class tax break that works, and it stays!”<sup>5</sup>

While the proposal to steer taxpayers from traditional 401(k)s to Roth 401(k)s came and went quickly, it illustrates a larger debate in

---

<sup>1</sup> See Nancy Cook, *Trump's Team and Lawmakers Making Strides on Tax Reform Plan*, POLITICO (Aug. 22, 2017, 5:22 AM), <https://www.politico.com/story/2017/08/22/trumps-team-and-lawmakers-making-strides-on-tax-reform-plan-241873> (“One idea quietly being discussed would be taxing the money that workers place into their 401(k) savings plans up front . . . .”); Jim Tankersley, *Republicans Consider Sharp Cut in 401(k) Contribution Limits*, N.Y. TIMES (Oct. 20, 2017), <https://www.nytimes.com/2017/10/20/us/politics/republicans-tax-401-k.html>.

<sup>2</sup> See generally *Roth Comparison Chart*, IRS (March 11, 2021), <https://www.irs.gov/retirement-plans/roth-comparison-chart>.

<sup>3</sup> See Miles Weiss, *Here's How Money Managers Plan to Battle 401(k) Cuts in Trump's Tax Plan*, BLOOMBERG (Oct. 22, 2017, 4:00 AM), <https://www.bloomberg.com/news/articles/2017-10-22/fund-industry-ready-to-battle-any-change-to-401-k-tax-treatment>.

<sup>4</sup> Tankersley, *supra* note 1.

<sup>5</sup> Donald J. Trump (@realDonaldTrump), TWITTER (Oct. 23, 2017, 4:42 AM), <https://web.archive.org/web/20171024055705/https://twitter.com/realDonaldTrump/status/922428118685581313>; see also Sarah O'Brien & Evelyn Chang, *Trump Says There Will Be No Change to 401(k) Plans*, CNBC (Oct. 23, 2017, 7:48 AM), <https://www.cnbc.com/2017/10/23/trump-says-there-will-be-no-change-to-401k-plans.html> (discussing President Trump's tweet that there would be no change to 401(k) plans under the GOP tax bill).

federal tax policy about how investment income should be taxed. This is because the traditional 401(k) and the Roth 401(k)s represent two opposite approaches for taxing investment income: tax deferral and yield exemption.<sup>6</sup>

Tax deferral provisions, such as the traditional 401(k), reduce taxes on investment *principal*, lowering how much a taxpayer owes when an investment is made. By contrast, yield exemption provisions, like the Roth 401(k), reduce taxes on investment *returns*, lowering how much a taxpayer owes when the profits from an investment are ultimately realized.<sup>7</sup>

The question of whether to prefer an approach of tax deferral or yield exemption is a significant one, because it arises in a number of important debates in federal tax policy. These include: whether the current lower rate on capital gains should be replaced by a savings deduction;<sup>8</sup> whether businesses should be allowed to expense the full costs of their physical investments immediately;<sup>9</sup> and, as described above, whether to steer taxpayers toward traditional 401(k)s or Roth 401(k)s. Each of these debates touches on the question of whether it is preferable to reduce taxes on investment principal or on investment returns.

Previous discussions of this topic have sometimes focused on the similarities between tax deferral and yield exemption; indeed, under certain limited conditions, the two approaches may be economically equivalent.<sup>10</sup> However, in practice, tax deferral and yield exemption can lead to substantially different outcomes. Recognizing these differences, tax scholars have made a number of arguments for why tax deferral is the superior of the two approaches. For instance, the tax deferral approach ensures that taxpayers with unusually high invest-

---

<sup>6</sup> See generally Edward J. McCaffery, *A New Understanding of Tax*, 103 MICH. L. REV. 807 (2005) (discussing the relative merits of “prepaid consumption taxes,” i.e., a full yield exemption approach, and “postpaid consumption taxes,” i.e., a full tax deferral approach); Alan Cole, *The Four Ways the Tax Code Treats Saving and Investment*, TAX FOUND. (May 24, 2016), <https://taxfoundation.org/four-different-ways-tax-code-treats-saving-and-investment>.

<sup>7</sup> See *infra* Section I.A.

<sup>8</sup> Cf. Calvin H. Johnson, *Taxing the Consumption of Capital Gains*, 28 VA. TAX REV. 477, 515 (2009) (discussing the possibility of replacing the lower capital gains tax rate on investment returns with a lower tax rate that applies only to reinvested gain).

<sup>9</sup> Cf. Lily L. Batchelder, *Accounting for Behavioral Considerations in Business Tax Reform: The Case of Expensing* (Jan. 24, 2017) (working paper), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2904885](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2904885) (discussing whether it would be better to allow businesses to immediately deduct their investment costs or to reduce tax rates on business income).

<sup>10</sup> See *infra* Section I.B.

ment returns pay higher taxes; it is also less vulnerable than the yield exemption approach to tax avoidance schemes.<sup>11</sup>

This Note adds to the arguments in favor of the tax deferral approach. It discusses an under-appreciated feature of tax deferral provisions: They allow the government to collect revenue by taking on more market risk. Because the U.S. federal government is able to bear additional market risk with relatively little cost, the tax deferral approach potentially offers a way to make the federal tax system more efficient.<sup>12</sup>

My argument begins with a set of descriptive claims.<sup>13</sup> First, a system of full tax deferral raises more expected revenue than a system of full yield exemption at any given set of tax rates.<sup>14</sup> Second, the tax deferral approach makes revenue collections more uncertain because the amount raised by the government depends on the performance of taxpayers' investments. All in all, under the tax deferral approach (unlike the yield exemption approach) the government is exposed to more market risk and is compensated for doing so in the form of a broader tax base.

I argue that the tradeoff offered by the tax deferral approach—more risk for a broader tax base—may be desirable for federal lawmakers to make.<sup>15</sup> The federal government is uniquely well-positioned to bear market risk because of its high liquidity and ability to diversify risk across generations. As such, increasing the government's exposure to market risk could be a relatively efficient way to raise revenue.

While there are other ways in which the federal government could raise revenue by increasing its exposure to market risk, I argue that the tax code is a promising vehicle for doing so.<sup>16</sup> Through the tax system, the federal government is able to take positions in rarely traded assets that would otherwise be difficult to invest in. In addition, using the tax system to increase the federal government's risk exposure, unlike other options for achieving this end, avoids concerns about undue centralized control of the economy.

---

<sup>11</sup> See *infra* Section I.C.

<sup>12</sup> This Note's argument applies to the U.S. federal government, but not necessarily to state and local governments or foreign governments, who may have less ability to take on additional risk. See *infra* Section II.B.

<sup>13</sup> See *infra* Section II.A.

<sup>14</sup> By the same token, a system of full tax deferral can raise the same amount of revenue with lower marginal tax rates than a system of full yield exemption. See *infra* Section II.A.2.

<sup>15</sup> See *infra* Sections II.B–C.

<sup>16</sup> See *infra* Section II.C.

One conclusion of this analysis is that lawmakers could improve the federal tax code by eliminating yield exemption provisions and replacing them with tax deferral provisions.<sup>17</sup> For instance, lawmakers could eliminate the lower rate on capital gain income and replace it with a partial deduction for purchases of capital assets. Furthermore, if lawmakers are interested in modifying 401(k) accounts—as they were in late 2017—they should seek to favor traditional 401(k)s over Roth 401(k)s, not the other way around.

This Note proceeds as follows. Part I provides background on the taxation of investment and discusses the similarities and differences between tax deferral and yield exemption. Part II lays out the core argument: that it may be efficient for the U.S. federal government to bear more market risk; that the tax code is a promising vehicle for increasing the government's risk exposure; and that the tax deferral approach can help achieve this end, unlike the yield exemption approach. Part III discusses the implications of this argument for U.S. federal tax policy.

## I

### BACKGROUND ON THE TAXATION OF INVESTMENT

There is widespread disagreement in the field of tax policy over how investment income should be taxed.<sup>18</sup> Perhaps reflecting these disagreements, the Internal Revenue Code employs several approaches for taxing investment income, each applicable in different situations. Tax deferral and yield exemption are two of these approaches.

This Part explains how tax deferral and yield exemption provisions work. Section I.A gives an overview of how investment income is taxed and explains how to identify examples of tax deferral or yield exemption. Section I.B discusses the circumstances under which these two approaches may be economically equivalent, as well as conditions under which this equivalence breaks down. Section I.C reviews arguments in the academic literature about the relative merits of tax deferral and yield exemption.

---

<sup>17</sup> See *infra* Part III.

<sup>18</sup> See, e.g., Joseph Bankman & David A. Weisbach, *The Superiority of an Ideal Consumption Tax over an Ideal Income Tax*, 58 STAN. L. REV. 1413, 1414 n.1 (2006) (listing classic works discussing whether to tax income or consumption, a debate with important ramifications for the taxation of investment); Daniel Hemel & David Kamin, *The False Promise of Presidential Indexation*, 36 YALE J. REGUL. 693, 701 n.40 (2019) (listing notable articles about capital taxation).

### A. *Defining Tax Deferral and Yield Exemption*

Households and businesses make many types of investments, including real investments (such as equipment and buildings), intangible investments (such as intellectual property), and financial investments (such as stocks, bonds, and pensions).<sup>19</sup> In each of these cases, when a household or business makes an investment, it forgoes the opportunity to consume resources in the present, in order to receive resources in the future. The initial cost of an investment is known as *investment principal*.<sup>20</sup> The amount produced by an investment over the course of its lifetime, over and above the principal, is known as the *investment return*.<sup>21</sup> Investment returns can take a number of different forms, including dividends, interest, rents, royalties, capital gains, and pass-through business income.<sup>22</sup>

To understand how investment income is taxed, a useful starting point is the concept of a pure income tax, sometimes referred to as a Haig-Simons income tax.<sup>23</sup> Under a pure income tax, taxpayers are taxed on their income at the end of each accounting period. Income consists of the following two items: (1) a taxpayer's consumption during the period and (2) the change in the net worth of a taxpayer's assets during the period.<sup>24</sup>

Under a pure income tax, a taxpayer who earns money is subject to tax, no matter whether the money is used for immediate consumption or for investment. As such, a pure income tax reduces the amount of money that a taxpayer has available to invest; it taxes investment principal. Then, if an investment does well, a pure income tax will also reduce the amount of investment return, by imposing tax on the investment's proceeds. As a result, a pure income tax imposes two layers of taxation on investments: one on the principal, and a second on the return.<sup>25</sup>

---

<sup>19</sup> See James Chen, *Real Asset*, INVESTOPEDIA (May 22, 2021), <https://www.investopedia.com/terms/r/realasset.asp> (providing an overview of types of investments).

<sup>20</sup> See James Chen, *Principal*, INVESTOPEDIA (Aug. 18, 2020), <https://www.investopedia.com/terms/p/principal.asp>.

<sup>21</sup> See Adam Hayes, *Return*, INVESTOPEDIA (Aug. 28, 2021), <https://www.investopedia.com/terms/r/return.asp>.

<sup>22</sup> See, e.g., I.R.C. § 1411(c) (West) (defining "net investment income").

<sup>23</sup> See Christopher H. Hanna, *Tax Theories and Tax Reform*, 59 SMU L. REV. 435, 448 & n.59 (2006) (explaining that a pure income tax is one that uses the Haig-Simons definition of income).

<sup>24</sup> Victor Thuronyi, *The Concept of Income*, 46 TAX L. REV. 45, 48 (1990) ("[I]ncome can be described as the sum of accumulation (that is, the change in the taxpayer's net wealth) plus consumption during the taxable period.")

<sup>25</sup> See McCaffery, *supra* note 6, at 823–24 (illustrating how "any income tax is a 'double' tax on savings").

The following example illustrates these two layers of taxation.<sup>26</sup> Imagine a taxpayer who is subject to a pure income tax at a rate of 20% in all relevant periods. The taxpayer earns \$100 from labor and decides to invest it all in an asset, which will return 10% in one year. In the first year, the taxpayer would pay \$20 in tax on her labor earnings, leaving her with \$80 to invest. This is the first layer of tax, on the investment principal. In the second year, the taxpayer would earn \$8 in investment income; this income would also be taxed at a rate of 20%, amounting to \$1.60 of tax liability. This is the second layer of tax, on the investment return. All in all, the taxpayer would be left with \$86.40 in after-tax income at the end of the second year.

There is considerable controversy about whether a pure income tax would be a desirable policy, but it remains the case that no jurisdiction has ever implemented one.<sup>27</sup> All real-world income taxes deviate significantly from the model of a pure income tax, particularly in regard to the taxation of investment income. In some cases, real-world income taxes can impose a heavier burden on investment income than a pure income tax would, due to policies such as the taxation of inflationary gain and the imposition of a separate corporate-level tax.<sup>28</sup> However, this Note focuses on the many real-world tax policies that reduce the tax burden on investment relative to a pure income tax.

There are dozens of provisions in the U.S. Internal Revenue Code that reduce taxes on investment income, and each provision has its own unique design features.<sup>29</sup> However, at an abstract level, many of these provisions can be categorized into one of two groups: (1) yield exemption provisions, which reduce taxes on investment returns, and (2) tax deferral provisions, which reduce taxes on investment principal.

---

<sup>26</sup> See *id.* at 824–25 (providing a similar example).

<sup>27</sup> See James Alm, *Is the Haig-Simons Standard Dead? The Uneasy Case for a Comprehensive Income Tax*, 71 NAT'L TAX J. 379 (2018) (arguing that the Haig-Simons approach is “effectively ‘dead’ in terms of its actual real-world relevance to income tax design or reform”).

<sup>28</sup> See Reed Shuldiner, *Indexing the Tax Code*, 48 TAX L. REV. 537, 548–52 (1993) (discussing the taxation of inflationary gain); Boris I. Bittker, *Comprehensive Income Taxation: A Response*, 81 HARV. L. REV. 1032, 1033 (1968) (noting that moving to a pure income tax would entail “repeal of the separate corporate income tax”).

<sup>29</sup> See generally *Tax Expenditures*, U.S. DEP'T OF THE TREASURY: OFF. OF TAX ANALYSIS (Feb. 26, 2020), <https://home.treasury.gov/system/files/131/Tax-Expenditures-2021.pdf> (listing 165 tax provisions that “allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability,” many of which apply only to investment income).

Yield exemption provisions allow for the non-taxation of an indefinite amount of investment returns from a given class of assets.<sup>30</sup> Under a yield exemption provision, a taxpayer that makes an investment is still required to pay tax on the amount of principal invested but is then able to exclude all or a portion of the investment returns from tax.

Important yield exemption provisions in the U.S. tax code include Roth IRAs<sup>31</sup> and Roth 401(k) accounts,<sup>32</sup> the lower rate on long-term capital gain income,<sup>33</sup> the exclusion of interest on municipal bonds,<sup>34</sup> and the step-up in basis of property acquired from a decedent.<sup>35</sup>

By contrast, tax deferral provisions allow for the temporary non-taxation of the portion of income used as investment principal. Under a tax deferral provision, a taxpayer that makes an investment is able to deduct or exclude the cost of the investment but is still required to pay tax on the investment's returns in the future. Moreover, the tax on the investment principal is not entirely eliminated; it is only deferred until some point in the future. Even so, it is important to emphasize that the tax deferral approach *does* reduce the tax burden on investment principal relative to a pure income tax because taxes deferred until the future are less burdensome than taxes paid in the present.<sup>36</sup>

Important tax deferral provisions in the U.S. tax code include the like-kind exchange rules,<sup>37</sup> traditional IRAs<sup>38</sup> and 401(k)s,<sup>39</sup> other qualified retirement plans,<sup>40</sup> and provisions that provide full

---

<sup>30</sup> The term "indefinite" is meant here to exclude two categories of tax provisions that might informally be termed yield exemption provisions, but whose economic properties differ significantly from the yield exemption provisions discussed in this Note. First, provisions that exclude investment returns only up to a fixed dollar amount, such as the exclusion of up to \$250,000 or \$500,000 of capital gains on the sale of a principal residence. See I.R.C. § 121 (West). Second, provisions that exclude investment returns only up to a fixed rate of return. Cf., e.g., *id.* § 951A(b)(2)(A) (exclusion of ten percent of qualified business asset investment (QBAI) from global intangible low-taxed income (GILTI)).

<sup>31</sup> *Id.* § 408A.

<sup>32</sup> *Id.* § 402A.

<sup>33</sup> *Id.* § 1(h). This provision can be understood as excluding from federal taxation approximately 42% of investment returns that take the form of long-term capital gain.

<sup>34</sup> *Id.* § 103.

<sup>35</sup> *Id.* § 1014. This provision effectively allows for the exclusion of 100% of unrealized gain at the time of a taxpayer's death.

<sup>36</sup> See JOSEPH BANKMAN, DANIEL N. SHAVIRO, KIRK J. STARK & EDWARD D. KLEINBARD, *FEDERAL INCOME TAXATION* 37 (18th ed. 2019).

<sup>37</sup> E.g., I.R.C. § 1031 (allowing taxpayers to defer tax on gain from an exchange of real property for other real property of a like kind).

<sup>38</sup> *Id.* § 408.

<sup>39</sup> *Id.* § 401(k).

<sup>40</sup> *Id.* § 401(a) (describing certain benefit plans created by employers that are eligible for deferred taxation).



expensing for certain business investments.<sup>41</sup> Perhaps the most important tax deferral provision in the Code is the realization requirement, which allows taxpayers to defer tax on accrued gain until the underlying asset is sold or disposed.<sup>42</sup>

It is evident that the Internal Revenue Code makes extensive use of both yield exemption and tax deferral provisions. As such, lawmakers often face choices about whether to expand or scale back these provisions—and, more generally, whether to prioritize the yield exemption or tax deferral approach. The remainder of this Note explores the question of which of these two approaches is better policy.

### *B. The Equivalence and Non-Equivalence of Tax Deferral and Yield Exemption*

To assess the relative merits of the tax deferral and yield exemption approaches, it is useful to begin by describing the ways in which these two families of tax provisions are similar. This analysis, in turn, can help identify important differences between tax deferral and yield exemption.

As any introductory tax law textbook will tell you, tax deferral provisions and yield exemption provisions can have identical effects—at least under certain limited circumstances.<sup>43</sup> The following numerical example is a typical way of illustrating this proposition.<sup>44</sup>

Consider again a taxpayer who earns \$100 from labor and decides to invest it all in an asset that will return 10% in one year. Assume that the taxpayer faces a rate of 20% in all relevant periods. If the taxpayer is offered a choice between investing the \$100 through a Roth 401(k) (a provision that offers yield exemption) or a traditional 401(k) (a provision that offers tax deferral), which should she choose?

If the taxpayer chooses the Roth 401(k), she will face \$20 in current taxes on the \$100 in investment principal. The taxpayer will be left with \$80 to be invested, the value of which would grow to \$88 within one year. When the taxpayer withdraws this amount, she will face no additional tax on the investment return, leaving her with \$88

---

<sup>41</sup> *E.g.*, *id.* § 168(k) (providing an immediate deduction for 100% of the cost of certain capital investments). This provision effectively allows taxpayers to defer tax on income that is reinvested in capital assets.

<sup>42</sup> *See* 26 C.F.R. § 1.1001-1(a) (2020) (describing the realization requirement); David M. Schizer, *Realization as Subsidy*, 73 N.Y.U. L. REV. 1549, 1551 (1998) (characterizing the realization requirement as “the foundational timing rule of our tax system” and noting that it provides significant deferral benefits).

<sup>43</sup> *See, e.g.*, BANKMAN ET AL., *supra* note 36, at 191–92.

<sup>44</sup> For similar examples, see *id.*; Hanna, *supra* note 23, at 442–44; and McCaffery, *supra* note 6, at 819–21.

in after-tax income. By comparison, if the taxpayer chooses the traditional 401(k), she would be able to exclude her entire \$100 investment principal from immediate taxation. The value of the investment would grow to \$110 within one year. When the taxpayer withdraws this amount, she will face \$22 in taxes, leaving her with \$88 in after-tax income. Notice that the taxpayer would receive the same \$88 from either a traditional 401(k) or a Roth 401(k), suggesting that the taxpayer should be indifferent between these two provisions.

This example illustrates that from a taxpayer's point of view, tax deferral and yield exemption provisions can be equivalent. But it also contains a number of simplifying assumptions, such as a constant tax rate of 20% and a constant rate of investment return of 10%. By varying these assumptions, it is possible to identify conditions under which taxpayers would no longer be indifferent between tax deferral and yield exemption.

One factor that can disrupt the equivalence of tax deferral and yield exemption provisions is *non-constant tax rates*. In the real world, statutory tax rates change frequently, due to legislation.<sup>45</sup> Moreover, because the federal income tax employs a progressive individual tax rate schedule, a household's rate can vary from year to year depending on changes in its income level.<sup>46</sup> If a household expects its tax rate to go down in the future, it would tend to prefer a tax deferral provision, which pushes income into the period with the lower rate.<sup>47</sup> Conversely, if a household expects its tax rate to go up in the future, it would prefer a yield exemption provision.<sup>48</sup>

Another crucial factor is *non-constant returns on investment*. In the example above, imagine that the taxpayer were able to invest up to \$80 at a return of 10% in one year, but were only able to achieve a rate of return of 5% in one year on any subsequent dollars invested.

---

<sup>45</sup> See, e.g., *Historical Highest Marginal Income Tax Rates*, TAX POL'Y CTR. (Feb. 4, 2020), <https://www.taxpolicycenter.org/statistics/historical-highest-marginal-income-tax-rates> (showing that the top federal statutory tax rate has changed eleven times between 1980 and 2020).

<sup>46</sup> See generally Lee Anne Fennell & Kirk J. Stark, *Taxation over Time*, 59 TAX L. REV. 1 (2005) (discussing the consequences of variation in taxpayers' earnings and marginal tax rates over their lifecycles). A progressive tax rate schedule is one where taxpayers with higher incomes face higher average tax rates. See BANKMAN ET AL., *supra* note 36, at 24.

<sup>47</sup> See Daniel Shaviro, *Multiple Myopias, Multiple Selves, and the Under-Saving Problem*, 47 CONN. L. REV. 1215, 1226 (2015) ("[T]raditional IRAs provide better-than-neutral treatment for retirement saving, as compared to immediate consumption of one's earnings during one's working years, if the withdrawals are taxed at a lower rate than that which applied to one's deductible contributions.").

<sup>48</sup> This is one reason why young taxpayers are often advised to contribute to Roth savings accounts rather than traditional accounts. See, e.g., Joseph A. Clark, *Young Adults, Go with Roth*, USA TODAY (June 7, 2014, 7:45 AM), <https://www.usatoday.com/story/money/personalfinance/2014/06/07/adviceiq-young-adults-go-with-roth/10104869>.

In such a situation, a Roth 401(k) would still leave the taxpayer with the same \$88 of after-tax income, but a traditional 401(k) would only leave the taxpayer with \$87.20 in after-tax income.<sup>49</sup> In effect, tax deferral provisions impose a higher burden on taxpayers with windfall returns.<sup>50</sup>

Several other idiosyncratic factors can affect whether a taxpayer would choose a tax deferral provision or a yield exemption provision. For instance, if a taxpayer is in a loss position and is unable to fully benefit from additional deductions, certain tax deferral provisions may be less desirable.<sup>51</sup> More generally, real-world policy design details can create significant differences between tax deferral and yield exemption provisions that might otherwise be equivalent.<sup>52</sup> Finally, taxpayers may have different behavioral responses to tax deferral and yield exemption provisions due to policy salience or non-standard optimization.<sup>53</sup> All of these are recognized conditions under which the equivalence of tax deferral and yield exemption may break down.

### C. Previous Arguments in Favor of the Tax Deferral Approach

Given that tax deferral and yield provisions can lead to significantly different tax results, it makes sense to ask which is the better policy approach. Before discussing this Note's contribution to this

---

<sup>49</sup> The taxpayer with a Roth 401(k) would pay \$20 in taxes in the present period and would be left with \$80 to invest. This would grow to \$88 within one year and could be withdrawn with no further tax. The taxpayer with a traditional 401(k) would face no current tax and would invest \$100. This would grow to \$109 within one year ( $\$80 + (\$80 * 10\%) + \$20 + (\$20 * 5\%)$ ) and be subject to \$21.80 in taxes upon withdrawal ( $\$109 * 20\%$ ), leaving the taxpayer with \$87.20 ( $\$109 - \$21.80$ ).

<sup>50</sup> See David A. Weisbach, *Ironing Out the Flat Tax*, 52 STAN. L. REV. 599, 605–06 (2000) (presenting a similar example).

<sup>51</sup> See Hanna, *supra* note 23, at 445 (explaining that, for the equivalence between tax deferral and yield exemption to hold, any deductions associated with yield deferral “must offset income from other sources and . . . not [be] lost or delayed”).

<sup>52</sup> For instance, under current law, the contribution limit for Roth IRAs is effectively higher than for traditional IRAs. See Arielle O’Shea & Jonathan Todd, *For Savers Who Maximize IRA Contributions, the Roth Pays Off*, NERDWALLET (Mar. 15, 2017), <https://web.archive.org/web/20190211111548/https://www.nerdwallet.com/blog/investing/roth-ira/roth-tops-traditional-iras-up-to-six-figures>. To take another example, management fees on traditional retirement accounts typically exceed those on Roth accounts. See Daniel Hemel, *Is Rothification Just a Budget Math Gimmick?*, MEDIUM (Sept. 1, 2017), <https://medium.com/whatever-source-derived/is-rothification-just-a-budget-math-gimmick-381c83128fb3>.

<sup>53</sup> See Alicia H. Munnell & Gal Wettstein, *Dodged a Bullet? “Rothification” Likely to Reduce Retirement Saving*, CTR. FOR RET. RSCH., 2, 4–5 (Nov. 2017), [https://crr.bc.edu/wp-content/uploads/2017/11/IB\\_17-20.pdf](https://crr.bc.edu/wp-content/uploads/2017/11/IB_17-20.pdf) (commenting that “Roth 401(k)s do not provide tax relief today and therefore may not seem as appealing to the typical participant” because many taxpayers are subject to present bias).

question, it is worth briefly surveying previous arguments on the topic. In general, tax scholars have tended to favor tax deferral provisions over yield exemption provisions, arguing that the former approach helps make the tax code more equitable, efficient, and administrable.

One argument in favor of tax deferral approach is that it conforms more closely to commonly held notions of fairness.<sup>54</sup> This argument begins with the observation, discussed above, that when tax rates are not constant over time, yield exemption and tax deferral can produce substantially different outcomes. The yield exemption approach determines the tax rate on an investment based on a household's taxable income in the year when the investment principal is initially earned. By contrast, the tax deferral approach determines the tax rate on an investment in the year when the investment proceeds are withdrawn and presumably consumed. Principles of fairness suggest that the tax rate on a household should ideally reflect its economic position over the course of a full lifetime.<sup>55</sup> For most households, consumption is likely to be a better proxy for lifetime wellbeing than earnings because consumption levels tend to be less volatile than earnings levels.<sup>56</sup> This suggests that the tax rate on household investment income should not be determined when the principal is earned, but rather when the proceeds are consumed—which is exactly how the tax deferral approach works.<sup>57</sup>

Another argument focuses on the fact that tax deferral provisions impose a higher burden on taxpayers with windfall returns.<sup>58</sup> Taxation of windfall returns is thought to be relatively economically efficient because if an investment is expected to yield an unusually high return, it will remain profitable even if a large portion of the return is taxed. As such, while taxation of low-return investments can discourage taxpayers from investing, taxation of investments with windfall returns is

---

<sup>54</sup> See McCaffery, *supra* note 6, at 815 (arguing that a full tax deferral approach “corresponds with widely held and independently reasonable ordinary moral intuitions in regard to the taxation of capital”); see also Karen C. Burke & Grayson M.P. McCouch, *Lipstick, Light Beer, and Backloaded Savings Accounts*, 25 VA. TAX REV. 1101, 1115 (2006) (arguing that the yield exemption approach unfairly benefits lucky investors).

<sup>55</sup> See William Vickrey, *Averaging of Income for Income-Tax Purposes*, 47 J. POL. ECON. 379, 381 (1939) (describing how to design a tax system so that “no taxpayer should bear a heavier or lighter burden merely because certain items of his income happen to be earned or realized in one year or another”). But see Daniel Shaviro, *Beyond the Pro-Consumption Tax Consensus*, 60 STAN. L. REV. 745, 748 & n.11 (2007) (detailing the “surprisingly unfavorable” reaction to lifetime income averaging among tax academics).

<sup>56</sup> See Fennell & Stark, *supra* note 46, at 16–20 (summarizing empirical evidence that household consumption is less volatile than household earnings).

<sup>57</sup> See McCaffery, *supra* note 6, at 859–63, 876–78 (arguing that, by taxing households on their consumption in each year, a full tax deferral approach conforms to widely-held norms of equity).

<sup>58</sup> See *supra* notes 49–50 and accompanying text.

unlikely to have this negative economic effect.<sup>59</sup> In addition, taxation of windfall returns can make the tax code more equitable, by imposing a higher burden on taxpayers who have become better off. All of this suggests that the tax deferral approach is both more efficient and more equitable than the yield exemption approach, which imposes a lower tax burden on taxpayers with windfall returns.

A third argument in favor of the tax deferral approach is that it may be less vulnerable to certain tax avoidance strategies than the yield exemption approach. For instance, sophisticated taxpayers are sometimes able to characterize labor income as investment returns—such as by earning income through a closely-held corporation.<sup>60</sup> If this technique is combined with the use of a yield exemption provision, under which anything categorized as an investment return goes untaxed, a taxpayer may be able to eliminate taxes on a portion of her labor income.<sup>61</sup> By contrast, under a straight tax deferral regime, even if a taxpayer incorrectly characterizes her labor income as an investment return, the income will eventually be taxed when received by the taxpayer in the future.

Arguments in favor of the yield exemption approach tend to focus on how it creates relative certainty about the tax rates to which investment income will be subject. After all, under the tax deferral approach, no tax is assessed until investment returns are withdrawn in the future; a household investing today can face considerable uncertainty about what tax bracket it will fall into in the future and whether lawmakers will have adjusted tax rates in the interim.<sup>62</sup> This sort of economic uncertainty may be intrinsically undesirable.<sup>63</sup> It can also create large variance in marginal tax rates on investment, depending

---

<sup>59</sup> See Andrew B. Abel, *Optimal Capital Income Taxation* 2, 28 (Nat'l Bureau of Econ. Rsch., Working Paper No. 13354, 2007) (finding that a tax on capital income that allows for “immediate expensing”—i.e., deduction of investment principal—allows the government to raise “substantial revenue” without affecting the amount individuals will choose to invest).

<sup>60</sup> See David Kamin et al., *The Games They Will Play: Tax Games, Roadblocks, and Glitches Under the 2017 Tax Legislation*, 103 MINN. L. REV. 1439, 1446–50 (2019) (explaining the process by which taxpayers may create a corporation to facilitate tax avoidance).

<sup>61</sup> The most well-known use of this technique in recent years is the tax treatment of carried interest. By characterizing a portion of their labor compensation as investment returns, private equity fund managers are able to take advantage of the lower rate on capital gains, a partial yield exemption provision. In this way, fund managers are able to eliminate a portion of tax on their labor income. See generally Victor Fleischer, *Two and Twenty: Taxing Partnership Profits in Private Equity Funds*, 83 N.Y.U. L. REV. 1 (2008).

<sup>62</sup> Cf. *supra* note 45 and accompanying text.

<sup>63</sup> See, e.g., Scott R. Baker, Nicholas Bloom & Steven J. Davis, *Measuring Economic Policy Uncertainty*, 131 Q.J. ECON. 1593 (2016) (finding that economic policy uncertainty is associated with negative economic trends).

on whether rates go up or down.<sup>64</sup> And it can give taxpayers the opportunity to strategically time when they withdraw their gains,<sup>65</sup> as well as a strong incentive to lobby for lower federal tax rates.<sup>66</sup>

While much has been written about the relative merits of tax deferral and yield exemption, there remain tradeoffs between these two approaches that have not yet been explored in detail. In the next Part, I suggest an entirely different argument for why tax deferral is the better policy approach.

## II

### TAX DEFERRAL AND GOVERNMENT EXPOSURE TO MARKET RISK

One aspect of the choice between tax deferral and yield exemption that is under-discussed is how these policy approaches affect a government's fiscal position. In fact, the choice between tax deferral and yield exemption can have a significant effect not only on the level of government revenue, but also on how uncertain revenue collections are.

This Part argues that a potential virtue of the tax deferral approach is that it allows the federal government to collect revenue by taking on more risk. Section II.A presents several descriptive claims about the effects of tax deferral and yield exemption on government revenue and risk exposure. Section II.B discusses why increasing the risk exposure of the U.S. federal government may be an efficient way to raise revenue. Section II.C argues that, if lawmakers are interested in increasing the government's risk exposure, the tax code is an advantageous vehicle for doing so.

#### *A. Effects of Tax Deferral and Yield Exemption on Government Revenue and Exposure to Market Risk*

To analyze how the tax deferral and yield exemption approaches affect the government's fiscal position, at least two questions are rele-

---

<sup>64</sup> Cf. Daniel Shaviro, *Huge Problems with the Senate Finance Committee's Delayed Effective Date for the Corporate Rate Cut?*, START MAKING SENSE (Nov. 11, 2017, 2:22 PM), <https://danshaviro.blogspot.com/2017/11/huge-problems-with-senate-finance.html> (discussing this phenomenon in the context of business investment expensing).

<sup>65</sup> See David Kamin & Jason S. Oh, *The Effects of Capital Gains Rate Uncertainty on Realization* (UCLA L., Research Paper No. 19-06, 2019) (arguing that taxpayers have an incentive to wait to realize gains until tax rates are low).

<sup>66</sup> Cf. Ginger Gibson, *U.S. Companies Push Hard for Lower Tax Rate on Offshore Profits*, REUTERS (May 15, 2017, 6:10 AM), <https://www.reuters.com/article/us-usa-tax-repatriation/u-s-companies-push-hard-for-lower-tax-rate-on-offshore-profits-idUSKCN18B13Q> (describing how multinational companies, after years of deferring tax on foreign profits, lobbied aggressively for a lower tax rate on the deferred income).

vant. First, at any given set of tax rates, which approach raises more revenue? Second, under which approach are federal revenue collections more certain?

### 1. *Background on Investment and Risk*

Before delving into these questions, it may be useful to provide a bit of background about the relationship between risk and investment. Economic actors are typically *risk-averse*: They have a preference against uncertain financial outcomes.<sup>67</sup> Because no investment return can be perfectly certain, one of the major costs of investing is the associated risk.<sup>68</sup>

It is possible to decrease investment risk through *diversification*, the practice of combining a wide variety of investment positions. Diversification reduces risk if the returns from each investment position are imperfectly correlated with one another.<sup>69</sup> In a diversified portfolio, even if assets from one sector of the economy perform poorly, positive returns from other asset classes can often compensate.

However, diversification cannot entirely eliminate investors' risk exposure.<sup>70</sup> Investors always face the possibility that all of their investment positions may perform poorly at once, or that their losses from certain positions become so large as to outweigh their gains from others. For instance, in the case of an economic downturn, assets across the economy may decline in value, causing even diversified portfolios to suffer losses. The portion of investment risk that cannot be eliminated through diversification is often referred to as *market risk*.<sup>71</sup>

Because risk is costly and cannot be fully eliminated, investors are less willing to purchase risky assets unless they can expect a higher investment return from doing so. As a result, the riskier an asset, the higher its expected return tends to be.<sup>72</sup> The difference between the expected return of a risky asset and the expected return of a safe asset

---

<sup>67</sup> See David Kamin, *Risky Returns: Accounting for Risk in the Federal Budget*, 88 IND. L.J. 723, 729–31 (2013) (discussing the theory behind why people are generally risk-averse).

<sup>68</sup> See *What is Risk?*, U.S. SEC. & EXCH. COMM'N: INVESTOR.GOV, <https://www.investor.gov/introduction-investing/investing-basics/what-risk> (last visited Aug. 7, 2021) (“All investments involve some degree of risk. In finance, risk refers to the degree of uncertainty and/or potential financial loss inherent in an investment decision.”).

<sup>69</sup> See Kamin, *supra* note 67, at 730 (explaining that, due to the law of large numbers, combining many imperfectly correlated investment positions can reduce the variance of one's average investment outcome).

<sup>70</sup> See *id.* (“[U]ndiversifiable risk would remain, even if markets were efficient.”).

<sup>71</sup> *Id.*

<sup>72</sup> See *id.* (“Those who bear undiversifiable risk generally demand compensation, referred to as a ‘risk premium,’ for doing so, reflecting the cost of risk.”).

is known as the *risk premium*.<sup>73</sup> One recent study has estimated that the risk premium for assets such as equities and housing has historically equaled about 4% to 5% during peacetime.<sup>74</sup>

## 2. Which Approach Raises More Revenue?

Having described these fundamental concepts, we can turn to the first question in comparing the fiscal effects of tax deferral and yield exemption: Under which of these two approaches is the federal tax base broader? To phrase this question more specifically—assuming a given set of constant tax rates, how much expected revenue is raised under a full tax deferral provision compared to a full yield exemption provision?

Answering this question involves at least one conceptual difficulty: how to compare revenue streams that occur over different time periods. After all, under the yield exemption approach, taxpayers are taxed when an investment is made but not when returns are earned, which has the effect of raising revenue at the beginning of an investment's lifetime but not thereafter.<sup>75</sup> The tax deferral approach is just the reverse: Revenue collections occur throughout the course of an investment's lifetime, as the returns are withdrawn. To compare the present dollars raised under a yield exemption provision with the future dollars raised under a tax deferral provision requires some assumption about how to evaluate this tradeoff.

One reasonable assumption is that, when the federal government raises less revenue in the present, it simply increases its current borrowing.<sup>76</sup> Under this assumption, if the government forgoes an oppor-

---

<sup>73</sup> See Lawrence Zelenak, *The Sometimes-Taxation of the Returns to Risk-Bearing Under a Progressive Income Tax*, 59 SMU L. REV. 879, 880 (2006) ("The usual approach to determining the magnitude of the risk premium is to calculate the excess of the historic return on equity investments over the historic return on government securities, with the excess being interpreted as the risk premium.").

<sup>74</sup> Òscar Jordà, Katharina Knoll, Dmitry Kuvshinov, Moritz Schularick & Alan M. Taylor, *The Rate of Return on Everything, 1870–2015*, 134 Q.J. ECON. 1225, 1229 (2019).

<sup>75</sup> This is apparently why Congressional Republicans in 2017 were interested in steering households toward Roth 401(k)s—in order to raise more federal revenue in the immediate future so as to lower the cost of their tax legislation within the ten-year federal budget window. See Tankersley, *supra* note 1 ("Reducing contribution limits would be, in effect, an accounting maneuver that would create space for tax cuts by collecting tax revenue now instead of in the future.").

<sup>76</sup> Recent experience shows the plausibility of this assumption: In early 2020, when federal tax revenues fell sharply, the federal government responded by borrowing more money to cover its spending obligations. See Richard Rubin, *U.S. Budget Deficit Hit \$737 Billion in April as Taxes Slow, Spending Rises, CBO Says*, WALL ST. J. (May 8, 2020, 1:41 PM), <https://www.wsj.com/articles/u-s-budget-deficit-hit-737-billion-in-april-as-taxes-slow-spending-rises-cbo-says-11588959689>. In general, it is difficult to assess exactly how and whether the government adjusts its fiscal position in response to changes in the timing and



tunity to raise \$100 of revenue in Year One, it would borrow an additional \$100 to cover current spending, on which it would owe interest payments in the future.<sup>77</sup> Suppose the federal government can borrow money for a one-year term at an interest rate of 1.5%.<sup>78</sup> Under this rate, forgoing \$100 of revenue in Year One would lead to \$1.50 in additional interest payments in Year Two. This implies that the government would have to raise at least \$101.50 in revenue in Year Two in order to be in a better position than if it had raised \$100 of revenue in Year One. Put more generally: For a future stream of government revenue to be greater than an amount of revenue in the present, it must be the case that the future revenue exceeds the present revenue by at least the government's borrowing interest rate.<sup>79</sup>

Returning, then, to the question of whether tax deferral or yield exemption raises more revenue, the analysis is straightforward. Under a yield exemption provision, the tax base is the amount of principal invested currently. Under a tax deferral provision, the tax base is the amount withdrawn over the course of an investment's lifetime, which is equal to the amount of principal multiplied by the rate of return. Thus, the question of which of these two approaches raises more revenue depends on an investment's rate of return. If an investment's rate of return is higher than the government's interest rate, then a tax deferral provision will raise more revenue on a time-adjusted basis than a yield exemption provision.<sup>80</sup>

---

riskiness of revenue. See David A. Weisbach, *The (Non)Taxation of Risk*, 58 TAX L. REV. 1, 54 n.111 (2004) ("The government portfolio is very complex and casual observation may not be sufficient to determine how it behaves."). Nevertheless, the possibility that the government will borrow to cover reductions in current revenue has been discussed favorably. See *id.* at 54. ("The government can borrow to smooth spending across states of nature . . .").

<sup>77</sup> Section II.C, *infra*, will explore the consequences of varying this assumption.

<sup>78</sup> The one-year Treasury bond interest rate was 1.56% at the beginning of 2020, though it has since decreased significantly. See *Daily Treasury Yield Curve Rates*, U.S. DEP'T OF TREASURY, <https://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yieldYear&year=2020> (last visited Aug. 8, 2021).

<sup>79</sup> To use a familiar formula from the world of finance, if  $Y_0$  is current revenue,  $Y_1$  through  $Y_n$  is future revenue, and  $r_g$  is the rate at which the government borrows, then future revenue exceeds current revenue when  $\sum_{t=1}^n \frac{Y_t}{(1+r_g)^t}$  is greater than  $Y_0$ . See generally Jason Fernando, *Present Value (PV)*, INVESTOPEDIA (Feb. 8, 2021), <https://www.investopedia.com/terms/p/presentvalue.asp>.

<sup>80</sup> To express this conclusion mathematically: Let  $P$  be the investment principal,  $\tau$  the rate of tax, and  $r_i$  the investment's annual rate of return, which is assumed to be constant. The amount of revenue raised currently under a yield exemption provision is  $P \times \tau$ . If the entirety of the investment and its proceeds are withdrawn in year  $t$ , the amount of revenue raised under a tax deferral provision in year  $t$  is  $P \times (1 + r_i)^t \times \tau$ . Applying the time discount discussed above, the future revenue from tax deferral will be greater than the current

Applying this rule to the federal tax system as a whole, it is clear that the tax base is broader under a full tax deferral provision than under a full yield exemption provision. This is because the average rate of return on U.S. private investments is far higher than the federal government's interest rate.<sup>81</sup> As discussed above, private investments often come with a risk premium, which increases their rate of return.<sup>82</sup> By contrast, the U.S. federal government is able to borrow at a low rate, because its debt is perceived to be very safe.<sup>83</sup> As such, the tax deferral approach offers the federal government the opportunity to raise more revenue under any given set of tax rates.<sup>84</sup>

---

revenue from yield exemption if  $\frac{P \times (1+r_i)^t \times \tau}{(1+r_g)^t} > P \times \tau$ . This will only be the case if  $r_i > r_g$ ; if the investment's rate of return is higher than the interest faced by the government.

<sup>81</sup> A recent study found that since 1980, the average unadjusted real rate of return on U.S. equities has been 9.31% and the average unadjusted real rate of return on U.S. housing has been 5.86%. Jordà et al., *supra* note 74, at 1273. By contrast, the same study found that the average unadjusted real rate of return on short-term Treasury bills (a relatively good proxy for the real interest rate at which the federal government can borrow money) has been 1.91% since 1980. *Id.* at 1282.

<sup>82</sup> See *supra* note 70 and accompanying text. Another reason the rate of return on private investments is higher than the federal government's interest rate is because of the prevalence of economic rents—i.e., the portion of an investment return that is higher than the return that would be necessary to compensate an investor for taking on risk and for the time value of money. See *supra* note 49 and accompanying text; see also Julie Anne Cronin, Emily Y. Lin, Laura Power & Michael Cooper, *Distributing the Corporate Income Tax: Revised U.S. Treasury Methodology*, 66 NAT'L TAX J. 239, 243 (2013) (finding that 63% of corporate taxable income is due to supernormal returns, which consist of risk premiums and economic rents).

<sup>83</sup> See, e.g., Jordà et al., *supra* note 74, at 1234 (“The canonical risk-free rate is taken to be the yield on Treasury bills . . .”).

<sup>84</sup> Readers who are familiar with tax policy will note that this conclusion is equivalent to the uncontroversial claim that a cash flow tax raises an amount of revenue greater than zero. See, e.g., Elena Patel & John McClelland, *What Would a Cash Flow Tax Look Like for U.S. Companies? Lessons from a Historical Panel 4* (Off. of Tax Analysis, Working Paper No. 116, 2017), <https://www.treasury.gov/resource-center/tax-policy/tax-analysis/Documents/WP-116.pdf> (finding that a cash flow tax would have “a revenue base similar to the current corporate income tax”). This conclusion is also consistent with the observation that, in any given period, consumption is greater than labor compensation. See BUREAU OF ECON. ANALYSIS, GROSS DOMESTIC PRODUCT, FOURTH QUARTER AND YEAR 2019 (THIRD ESTIMATE) 10, 15 (Mar. 26, 2020), [https://www.bea.gov/system/files/2020-03/gdp4q19\\_3rd\\_0.pdf](https://www.bea.gov/system/files/2020-03/gdp4q19_3rd_0.pdf) (reporting that personal consumption expenditures in 2019 totaled \$14.6 billion while compensation of employees in 2019 totaled \$11.4 billion). One potential complication for this analysis is the possibility that, if the federal tax system were to shift toward a tax deferral approach, the interest rate at which the federal government borrows could increase to reflect the increased risk of the government's financial position. See Weisbach, *supra* note 76, at 54. If this were the case, then the amount of additional revenue raised by the tax deferral approach would be smaller. However, this possibility is largely theoretical given the continued perception of U.S. federal government debt as a risk-free asset. See, e.g., *U.S. Treasury Securities*, FINRA, <https://www.finra.org/investors/learn-to-invest/types-investments/bonds/types-of-bonds/us-treasury-securities> (last visited Oct. 26,

### 3. Which Approach Makes Revenue Collections More Uncertain?

Turning next to the question of revenue uncertainty, which of these two approaches provides the government with a more predictable stream of tax collections? There is a strong case to be made that revenue uncertainty is higher under the tax deferral approach because the amount raised by the government depends on the performance of taxpayers' investments.

To illustrate this proposition, consider an investment that costs \$100 and that will have an equal chance of returning either 50% or negative 40%, and assume a constant tax rate of 20%. If a yield exemption provision applies to this investment, it is certain how much revenue will be raised: The government will collect \$20 in taxes in the year when the investment is made. But if a tax deferral provision applies, there will be considerable uncertainty about how much revenue the government will raise when the investment is withdrawn. If the investment does well, the taxpayer will withdraw \$150, of which \$30 will be paid in taxes; if it does poorly, the taxpayer will withdraw \$60 and the federal government will collect only \$12.

Of course, under a tax deferral provision, the government's total revenue depends not on the performance of a single taxpayer's investment, but on the performance of millions of investments throughout the U.S. economy. This means that even under the tax deferral approach, the government's position will be highly diversified, reducing the extent of revenue uncertainty. However, diversification cannot entirely eliminate risk. An event such as a recession can cause investments across the economy to do poorly, posing a risk of a significant shortfall in tax collections. For example, between the 2008 and 2009 tax years, taxable distributions from IRAs fell by 16.3%, presumably because of the ongoing recession.<sup>85</sup>

As a result, under the tax deferral approach, the government is exposed to the possibility of significant revenue swings resulting from market-wide booms and dips. Put another way, the tax deferral approach exposes the federal government to more market risk than the yield exemption approach does.<sup>86</sup>

---

2021) (describing U.S. treasury securities as "among the safest investments you can make" with "virtually no liquidity, event or credit and default risk").

<sup>85</sup> INTERNAL REVENUE SERV., *INDIVIDUAL INCOME TAX RETURNS 2009*, at 7 (2011), <https://www.irs.gov/pub/irs-soi/09inalcr.pdf>. This estimate is in constant inflation-adjusted dollars. For context, reported wage and salary income fell by 3.7% in this time interval. *Id.*

<sup>86</sup> This conclusion is consonant with the literature on taxation and risk, where there is general agreement that shifting toward a tax deferral approach would increase the government's risk exposure unless it simultaneously adjusts other portions of its portfolio to counteract this effect. See Louis Kaplow, *Taxation and Risk Taking: A General Equilibrium Perspective*, 47 NAT'L TAX J. 789, 794 (1994) ("[S]hifting from an ex ante to an

All in all, while the tax deferral approach raises more revenue than the yield exemption approach, this additional revenue is not an entirely free lunch. By sharing in the returns of private investments, the government also shares in the risks that these investments entail.

*B. Reasons to Increase the Federal Government's Exposure to Market Risk*

If tax deferral provisions offer the federal government the opportunity to raise revenue by taking on additional market risk, would this be a tradeoff worth making? Would it be better for the federal government to rely less on existing sources of revenue and make up the difference by raising revenue through increasing its risk exposure?

These are admittedly difficult questions to answer in the abstract. One issue is that when the federal government takes on additional risk, it is not clear exactly who bears the cost. Perhaps it is recipients of government spending, who may see cuts to their programs if federal revenues fall short. Or perhaps it is taxpayers that bear the burden of uncertain federal revenue because lawmakers may increase tax rates in the future to make up for insufficient revenue collections.<sup>87</sup> In all likelihood, the cost of federal risk is borne by some combination of these two groups, and others as well.<sup>88</sup> In any event, it is clear that, when the federal government's fiscal position becomes more uncertain, this creates uncertainty for other actors in society—but it is difficult to say precisely which ones and to what extent.

Nevertheless, it is possible to make some general statements about the consequences of increasing the federal government's risk exposure. Broadly speaking, the costs of risk, which can be significant for households and businesses, are much less substantial when the government is the entity taking on the risk.

For instance, one reason why many households dislike risk is that they are in a position of limited liquidity: They are unable to access a

---

ex post form of taxation, holding the government's portfolio fixed, is the same as the government borrowing to invest in risky assets, holding the tax regime fixed."); Weisbach, *supra* note 76, at 56 ("[T]he choice between cash flow taxes and wage taxes can be thought of as a choice of government portfolios.").

<sup>87</sup> See Kamin, *supra* note 67, at 732 & n.28 (noting the possibility that increasing the government's risk exposure would create uncertainty for taxpayers, as well as the possibility that it would create uncertainty for the beneficiaries of government programs).

<sup>88</sup> Other parties that might bear the costs of federal risk exposure include consumers (who face more uncertainty about future inflation if a government may turn to seigniorage, i.e., increasing the money supply, as a funding source) and holders of Treasury bonds (whose assets theoretically become less secure when federal revenue grows more uncertain).

large amount of money on short notice without substantial cost.<sup>89</sup> If a household with limited liquidity is hit with an unexpected income shortfall, it might have to cut its standard of living temporarily due to its inability to access other sources of money. Avoiding this sort of situation is a key reason why households eschew risk and seek out safer sources of income.

By contrast, the U.S. federal government faces few to no liquidity constraints. Even in crisis times, investors around the world are willing to lend to the federal government at low interest rates.<sup>90</sup> As such, if the federal government faces an unexpected shortfall in tax collections, it can easily borrow enough money to cover current spending temporarily, with minimal interest costs.<sup>91</sup> This is one reason that the cost of increasing the federal government's risk exposure is relatively low.

Another reason why households dislike investment risk is because it is impossible to completely eliminate such risk through diversification.<sup>92</sup> For instance, no matter how well-diversified a person's portfolio is, if an economic downturn as large as the Great Depression occurs during her life, her lifetime standard of living could be permanently lower.<sup>93</sup> In theory, a person living today might want to enter into an insurance agreement with a person living in the future, to share the risks of an economic depression occurring during one of their two lifetimes. In practice, such a contract would be essentially impossible under private law.<sup>94</sup>

---

<sup>89</sup> See, e.g., Luigi Guiso & Monica Paiella, *Risk Aversion, Wealth, and Background Risk*, 6 J. EUR. ECON. ASS'N 1109, 1111 (2008) (finding that households that are liquidity constrained have lower risk tolerance).

<sup>90</sup> See Jordan Weissmann, *The Federal Government Can Borrow Money for Less than Ever. Maybe We Should Take Advantage of That.*, SLATE (Mar. 11, 2020, 4:29 PM), <https://slate.com/business/2020/03/government-borrow-bond-yield-infrastructure-coronavirus.html> (discussing how, in early 2020, during an economic crisis, the yield on ten-year Treasury bonds fell below one percent for the first time ever).

<sup>91</sup> See generally Olivier Blanchard, *Public Debt and Low Interest Rates*, 109 AM. ECON. REV. 1197, 1197 (2019) ("Put bluntly, public debt may have no fiscal cost.").

<sup>92</sup> See *supra* notes 61–67 and accompanying text.

<sup>93</sup> See Kamin, *supra* note 67, at 756 ("[G]enerations face large economic risks that are not fully correlated with one another.").

<sup>94</sup> See Laurence Ball & N. Gregory Mankiw, *Intergenerational Risk Sharing in the Spirit of Arrow, Debreu, and Rawls, with Applications to Social Security Design*, 115 J. POL. ECON. 523, 524 (2007) ("[M]arkets must be incomplete, because a person cannot engage in risk-sharing trades with those who are not yet born."). For instance, a person yet unborn would be unable to manifest the requisite consent to form a binding contract. See RESTATEMENT (SECOND) OF CONTRACTS § 17 (AM. L. INST. 1981) (requiring "a manifestation of mutual assent" to form a contract). Similarly, estate law does not generally assign liability to heirs for a decedent's debts, much less to heirs that have not been born yet. See *Debts and Deceased Relatives*, FED. TRADE COMM'N (May 2021), <https://www.consumer.ftc.gov/articles/0081-debts-and-deceased-relatives>.

However, the U.S. federal government has an avenue of diversification that is unavailable to ordinary economic actors: the ability to commit future generations to pay for current expenses.<sup>95</sup> For instance, if an economic depression occurs and federal revenue drops precipitously, this does not necessarily mean that currently living individuals will have to suffer from cuts in government spending of a similar magnitude. Rather, the government has the ability to issue debt to cover current expenses and require a future generation to eventually pay it back.<sup>96</sup> In essence, the federal government's portfolio is more diversified because it has a position in both the current economy and the economy of the future—unlike households, who can only have a position in the state of the economy during their lifetimes. This reduces the cost of federal risk exposure: Federal revenue collections can be highly uncertain without making current households highly uncertain about how much they will receive in federal benefits or pay in federal taxes.

All of this suggests that the cost of increasing the U.S. federal government's risk exposure is likely to be low. This observation is key in analyzing the circumstances under which the federal government should take on additional fiscal risk in order to raise additional revenue.

One conclusion is that federal lawmakers should generally be willing to take on a share of the risks and revenues of investments made by the private sector. When a private actor decides to make an investment, it implicitly determines that the benefits of the expected investment returns exceed the cost of the associated risk. If the federal government has the opportunity to acquire a share of a private investment, the cost-benefit calculus is similar, but the costs are even lower because it is the federal government bearing a portion of the investment risk. As such, investments made by the private sector are likely to be worthwhile from the public's perspective as well.<sup>97</sup>

---

<sup>95</sup> See Kamin, *supra* note 67, at 756 (“The government can essentially strike [deals between generations] by smoothing the path of consumption across generations by borrowing more in busts (to finance greater spending or less taxes) and the opposite in booms.”).

<sup>96</sup> The U.S. Treasury currently issues bonds with maturities of up to thirty years. *Treasury Bonds in Depth*, TREASURYDIRECT, [https://treasurydirect.gov/indiv/research/indepth/tbonds/res\\_tbond.htm](https://treasurydirect.gov/indiv/research/indepth/tbonds/res_tbond.htm) (last updated May 4, 2020). Treasury officials have also indicated interest in even longer bond maturities. See Andrea Shalal, *Mnuchin Says 100-Year Treasury Bond Possible*, REUTERS (Sept. 12, 2019, 5:42 PM), <https://www.reuters.com/article/us-usa-economy-mnuchin/mnuchin-says-100-year-treasury-bond-possible-idUSKCN1VX2SO>.

<sup>97</sup> This conclusion is complicated by the fact that private actors have heterogeneous risk preferences. See Hans-Martin von Gaudecker, Arthur van Soest & Erik Wengström, *Heterogeneity in Risky Choice Behavior in a Broad Population*, 101 AM. ECON. REV. 664,

Additionally, policies that raise revenue by increasing the federal government's risk exposure may be more efficient than other sources of revenue.<sup>98</sup> Many aspects of the U.S. tax system create economic inefficiency by inducing taxpayers to change their behavior; for instance, taxes on labor can lead individuals to work less.<sup>99</sup> To the extent that increasing the federal government's risk exposure comes with relatively low social costs, it could replace less efficient sources of revenue and make the federal tax system less burdensome overall.<sup>100</sup>

### C. *The Case for the Tax System as a Vehicle for Increasing the Federal Government's Risk Exposure*

If the U.S. federal government should take on additional risk to raise additional revenue, is the tax system necessarily the right vehicle for doing this? After all, there are other ways for the federal government to make money by taking on risk, such as by investing in financial markets.<sup>101</sup> How does the tax code compare to these alternatives?

To pose this question more concretely, consider again the numerical example used above to illustrate the differences between tax deferral and yield exemption.<sup>102</sup> A taxpayer begins with \$100, which she intends to invest at a return of 10% in one year. The tax rate in all

---

666 (2011) (finding significant heterogeneity in risk preferences). If the class of economic actors making investments have significantly lower risk aversion than the members of the public who bear the costs of increased federal risk exposure, then it is more ambiguous whether an investment made by the private sector is likely to be worthwhile from the public's perspective.

<sup>98</sup> "Efficiency" signifies the extent to which a tax (or other source of revenue) reduces aggregate welfare, such as by inducing private parties to change their behavior. *See, e.g.*, Martin S. Feldstein, *Effects of Taxes on Economic Behavior* 1–2 (Nat'l Bureau of Econ. Resch., Working Paper No. 13745, 2008).

<sup>99</sup> *See* CONG. BUDGET OFF., *HOW THE SUPPLY OF LABOR RESPONDS TO CHANGES IN FISCAL POLICY* 4 (2012), <https://www.cbo.gov/sites/default/files/112th-congress-2011-2012/reports/43674-laborsupplyfiscalpolicy.pdf> (finding substitution elasticities of labor supply ranging from 0.22 to 0.32).

<sup>100</sup> Of course, policies which increase the federal government's risk exposure might create economic inefficiency in their own ways. For instance, if a policy that increases federal risk exposure also decreases private-sector risk exposure, this might introduce moral hazard: investors who face less than full risk exposure might exercise less diligence in picking assets. *See generally* Steven Shavell, *On Moral Hazard and Insurance*, 93 Q.J. ECON. 541 (1979). On the possibility that changing the tax treatment of risk could alter investor behavior, *see generally* Evsey D. Domar & Richard A. Musgrave, *Proportional Income Taxation and Risk-Taking*, 58 Q.J. ECON. 388 (1944); John R. Brooks II, *Taxation, Risk, and Portfolio Choice: The Treatment of Returns to Risk Under a Normative Income Tax*, 66 TAX L. REV. 255 (2013).

<sup>101</sup> *See, e.g.*, *1994-96 Advisory Council Report: Findings, Recommendations, and Statements*, SOC. SEC. ADMIN., <https://www.ssa.gov/history/reports/adCouncil/report/findings.htm> (last visited July 26, 2021) (recommending that a portion of the Social Security trust fund be invested in the stock market).

<sup>102</sup> *See supra* Section I.B.

relevant periods is 20%. Under a yield exemption provision, the taxpayer pays \$20 in taxes immediately, leaving her with \$80 to invest. After one year, the investment grows to \$88, on which no additional taxes are paid. Under a tax deferral provision, the taxpayer pays no taxes currently, allowing her to invest the full \$100. After one year, the investment grows to \$110, on which the taxpayer owes \$22 in taxes, leaving her with \$88 in after-tax income.

The discussion above focused on how the taxpayer ends up with the same \$88 at the end of the day, whether she chooses tax deferral or yield exemption. But notice that the government's tax collections are not the same in both scenarios. Under the yield exemption approach, the government raises \$20 in revenue immediately. Under the tax deferral approach, the government raises \$22 in revenue one year later. So long as the government's borrowing rate is lower than 10%, it ends up with higher revenue under the tax deferral approach.<sup>103</sup>

But now imagine that the government was able to take the \$20 in current-year revenue raised under the yield exemption approach and invest it in financial markets at a rate of return of 10%. If so, the government would be able to end up with \$22 in one year's time. In other words, by combining the yield exemption approach with a program of financial market investment, the government could be able to achieve the same level of revenue as under the tax deferral approach.<sup>104</sup>

So, this example appears to be a challenge to this Note's contention that tax deferral is superior to yield exemption because of its effect on government risk exposure. If tax deferral is just one of several ways for governments to raise revenue by taking on additional risk, what makes it special?

To argue for the superiority of the tax deferral approach, a case must be made for why the tax system is an especially good vehicle for increasing the federal government's exposure to market risk, as opposed to other options. There are at least two convincing reasons to believe the tax system is better than other options.

First, the tax system offers the federal government the unique ability to take positions in assets that cannot easily be purchased in markets. Consider that over 30% of net wealth in the United States consists of real estate owned directly by households; another 13% is held in non-corporate businesses, many of which are not publicly

---

<sup>103</sup> See *supra* Section II.A.2.

<sup>104</sup> See Weisbach, *supra* note 76, at 56 ("A cash flow tax without adjustments is equivalent to imposing a wage tax and borrowing to purchase equity.").



traded.<sup>105</sup> It would be difficult for the U.S. government to purchase shares in the houses that Americans live in or the private businesses that they own.<sup>106</sup> But through the tax system, the federal government can automatically claim a portion of the profits and risks of these illiquid assets.<sup>107</sup> In effect, the tax system enables the federal government to diversify its financial positions. If, instead, the government were to invest directly in financial markets, its holdings would be less diversified, increasing the costs of bearing risk.<sup>108</sup> This is a major advantage of the tax system over other vehicles for increasing the government's risk exposure.

Second, the tax system provides a way for the federal government to assume a portion of private-sector risks without also gaining control

---

<sup>105</sup> See FED. RSRV., *FINANCIAL ACCOUNTS OF THE UNITED STATES* 8 (2021) (reporting that, in Q1 of 2021, households owned \$37.6 trillion of real estate, noncorporate businesses owned \$15.7 trillion of nonfinancial assets, and total U.S. net wealth was approximately \$121.7 trillion).

<sup>106</sup> See Kaplow, *supra* note 86, at 794 (noting that investing in closely-held businesses would be more difficult for the government than investing in publicly traded securities). Of course, it is not impossible to design programs that allow the federal government to assume a portion of the risks from private businesses and real estate. For example, the federal government is currently exposed to some small business risk through SBA loan programs. See *SBA Loan Programs*, U.S. SMALL BUS. ADMIN., <https://www.sba.gov/loans-grants/see-what-sba-offers/sba-loan-programs%20> (last visited July 27, 2021). Similarly, the federal government is exposed to a small portion of real estate risks through its flood insurance program. See *Flood Insurance*, FEMA, <https://www.fema.gov/flood-insurance> (last updated May 26, 2021). However, it would be unprecedented to expand these sorts of loan programs and insurance programs to cover the entire U.S. economy, and doing so could entail significant administrative complexity in determining appropriate interest rates and actuarially correct premiums. Notably, the federal government has increased its exposure to real estate risk in recent years through its purchase of mortgage-backed securities. See *Treasury and Federal Reserve Purchase Programs for GSE and Mortgage-Related Securities*, FHFA, <https://www.fhfa.gov/DataTools/Downloads/Pages/Treasury-and-Federal-Reserve-Purchase-Programs-for-GSE-and-Mortgage-Related-Securities.aspx> (last updated Sept. 30, 2019). Nevertheless, mortgage-backed securities do not offer exposure to the entire owner-occupied housing sector; for instance, many owner-occupied properties are not subject to mortgage debt. See Jonathan Jones, *Cities Whose Residents Have Paid Off Their Homes [2020 Edition]*, CONSTR. COVERAGE (NOV. 4, 2020), <https://constructioncoverage.com/research/where-residents-have-paid-off-homes> (reporting that 38% of owner-occupied housing units are owned free and clear of a mortgage).

<sup>107</sup> In the case of non-publicly traded businesses, the government can simply claim a portion of each business's annual profits through the normal operation of the income tax. In the case of real estate, the government can use the tax system to claim a portion of annual rents (in the case of landlords), annual imputed rents (in the case of owner-occupied housing), and gains upon sale—although it has traditionally shied away from the latter two. See John R. Brooks II, *The Definitions of Income*, 71 TAX L. REV. 253, 254 (2018) (describing the non-taxation of imputed rent); I.R.C. § 121 (West) (excluding capital gains from the sale of a principal residence); *id.* § 1031 (providing non-recognition for like-kind exchanges of real estate).

<sup>108</sup> See *supra* Section II.A.

rights.<sup>109</sup> Historically, a major concern with proposals for direct asset purchases by the government has been a worry that the government would also thereby gain control over large swaths of the economy.<sup>110</sup> There is reason to think that centralized, collective decision-making processes are less effective at economic management than private actors.<sup>111</sup> This suggests that policymakers interested in ensuring that private activities are aligned with the public good should focus on implementing rules-based regulatory measures, rather than granting government actors the sort of wide-ranging, discretionary control rights associated with property ownership. A virtue of using the tax code to increase the government's risk exposure is that it allows the federal government to effectively act as a passive investor, taking a share of private risks and private profits without all of the baggage of control.<sup>112</sup>

This is not to say that the federal government should never invest directly in financial markets. For instance, to the extent that it might be desirable to diversify the government's portfolio to include exposure to international risks, the tax system would be ill-equipped for this task, given that most federal revenue stems from domestic sources.<sup>113</sup> And, of course, it is possible for federal lawmakers con-

---

<sup>109</sup> See Kaplow, *supra* note 86, at 794 (“If the government actually owned a substantial share of many enterprises, it inevitably would have to consider how to exercise its influence.”).

<sup>110</sup> See, e.g., Barbara Black, *The U.S. as “Reluctant Shareholder”*: Government, Business and the Law, 5 ENTREPRENEURIAL BUS. L.J. 561, 574 (2010) (describing how the Treasury Department has repeatedly described itself as a “reluctant shareholder” in cases where it has taken equity stakes in U.S. businesses following bailouts).

<sup>111</sup> See, e.g., WILLIAM L. MEGGINSON, THE FINANCIAL ECONOMICS OF PRIVATIZATION 38–52 (2005) (summarizing evidence that managers of state-owned enterprises lack incentives to allocate resources well, and concluding that, “[g]iven the large number of empirical studies produced during the last 15 years, . . . the answer is that private ownership must be considered superior to state ownership in all but the most narrowly defined fields or under very special circumstances”); F.A. Hayek, *The Use of Knowledge in Society*, 35 AM. ECON. REV. 519, 521–26 (1945) (suggesting that private actors possess knowledge of local conditions which allows them to adapt to rapidly changing economic circumstances, a form of knowledge that is practically inaccessible to central decisionmakers). *But see*, e.g., Johan Willner, *Ownership, Efficiency, and Political Interference*, 17 EUR. J. POL. ECON. 723 (2001) (arguing that, for firms in imperfectly competitive markets, public ownership may promote efficiency).

<sup>112</sup> Cf. LEONARD E. BURMAN, WILLIAM G. GALE & AARON KRUPKIN, TAX POL’Y CTR., HOW SHIFTING FROM TRADITIONAL IRAS TO ROTH IRAS AFFECTS PERSONAL AND GOVERNMENT FINANCES, at ii (2019), [https://www.taxpolicycenter.org/sites/default/files/publication/157680/how\\_shifting\\_from\\_traditional\\_iras\\_to\\_roth\\_iras\\_affects\\_personal\\_and\\_government\\_finances\\_2.pdf](https://www.taxpolicycenter.org/sites/default/files/publication/157680/how_shifting_from_traditional_iras_to_roth_iras_affects_personal_and_government_finances_2.pdf) (“[W]hen people use Roth IRAs, the government misses a vital opportunity to be a silent partner on investment returns and thus diversify its financial risks.”).

<sup>113</sup> See, e.g., Melissa Costa & Nuria E. McGrath, *Statistics of Income Studies of International Income and Taxes*, STAT. OF INCOME BULL., Summer 2010, at 172, 173,

cerned about centralized control over the economy to direct the government not to exercise its voting power in private businesses or to purchase only non-voting shares.<sup>114</sup>

All in all, however, the tax system is a promising vehicle for enabling the government to take on more market risk. Tax deferral policies accomplish this end; yield exemption policies do not.

### III NEXT STEPS FOR TAX POLICY

In writing the Internal Revenue Code, Congress has apparently not felt a pressing need to make a definitive choice between the tax deferral approach and yield exemption approach. Instead, the Code is filled with examples of both types of provisions.<sup>115</sup>

Taxpayers can enjoy yield exemption on investments such as municipal bonds while enjoying tax deferral on investments such as defined benefit pensions.<sup>116</sup> Sometimes, taxpayers are able to choose between these two forms of taxation, such as the choice to contribute to a traditional 401(k) or a Roth 401(k). In certain cases, taxpayers are even able to benefit from both tax deferral and yield exemption on the same investment, a sort of super-charged tax benefit.<sup>117</sup>

If tax deferral and yield exemption really were interchangeable policies—as they are under the simplest models<sup>118</sup>—then Congress's willingness to employ both approaches would be understandable. However, the more arguments are raised in favor of the tax deferral approach, the less of a case there is for indifference about how investments are taxed.

Tax scholars have long pointed out the advantages of the tax deferral approach in promoting an equitable, efficient, and administrable tax code.<sup>119</sup> This Note has suggested another possible advantage of tax deferral: It offers a promising way for the federal government to collect revenue by taking on additional risk.

---

<https://www.irs.gov/pub/irs-soi/10intertax.pdf> (finding that between 1986 and 2006, corporations' foreign-source taxable income was a relatively small percentage of their total taxable income).

<sup>114</sup> Cf. Black, *supra* note 110, at 569 (describing how the Emergency Economic Stabilization Act of 2008 directed the Treasury not to exercise voting power if it acquired voting stock under the Act).

<sup>115</sup> See *supra* notes 29–42 and accompanying text.

<sup>116</sup> See I.R.C. § 103 (West) (municipal bonds); *id.* § 401(a) (qualified retirement plans).

<sup>117</sup> One example of this phenomenon is the tax treatment of health savings accounts, which allow households to exempt both investment principal and investment returns from tax. See *id.* § 223.

<sup>118</sup> See *supra* notes 43–44 and accompanying text.

<sup>119</sup> See *supra* Section I.C.

All together, these arguments should lead federal lawmakers to favor tax deferral provisions over yield exemption provisions going forward. In practice, there are several paths that lawmakers can take to shift the tax code further toward the tax deferral approach.

First, lawmakers who are interested in reducing the overall tax burden on investment could focus primarily on expanding tax deferral provisions in the Internal Revenue Code, rather than expanding yield exemption provisions. For instance, such lawmakers could focus on increasing the availability of business expensing, a policy that allows taxpayers to deduct the full cost of capital investments used in a trade or business.<sup>120</sup> The current Code allows expensing for certain business investments, such as most equipment and machinery,<sup>121</sup> research and development costs,<sup>122</sup> and advertising costs.<sup>123</sup> However, some categories of capital investments, such as many buildings and other structures, are ineligible for immediate expensing.<sup>124</sup> Furthermore, the eligibility of many investments for expensing is merely temporary, scheduled to phase out beginning in 2023.<sup>125</sup> For lawmakers interested in reducing the tax burden on investment, it would be better to enact tax deferral policies like permanent and expanded business expensing, instead of enacting yield exemption policies.

Second, lawmakers who are interested in increasing the overall tax burden on investment could focus primarily on scaling back yield exemption provisions in the Code, rather than scaling back tax deferral provisions. For instance, lawmakers could focus on repealing step-up in basis of capital gains at death, a policy that allows the exclusion of all unrealized gain at the time of a taxpayer's death.<sup>126</sup> Step-up in basis at death has been widely criticized as arbitrary, unfair, and distortive.<sup>127</sup> If lawmakers are interested in increasing the tax burden on investment, they should start by eliminating yield exemption provi-

---

<sup>120</sup> See, e.g., I.R.C. § 168(k). For one prominent, recent proposal to increase the availability of expensing, as part of a broader set of reforms, see Jason Furman, *How to Increase Growth While Raising Revenue: Reforming the Corporate Tax Code*, BROOKINGS (Jan. 28, 2020), <https://www.brookings.edu/research/how-to-increase-growth-while-raising-revenue-reforming-the-corporate-tax-code>.

<sup>121</sup> I.R.C. § 168(k).

<sup>122</sup> *Id.* § 174.

<sup>123</sup> 26 C.F.R. § 1.162-1(a) (2020) (noting that advertising is treated as a fully deductible business expense).

<sup>124</sup> See I.R.C. § 168(k)(2) (defining property eligible for expensing).

<sup>125</sup> *Id.* § 168(k)(6).

<sup>126</sup> *Id.* § 1014.

<sup>127</sup> See Richard Schmalbeck, Jay A. Soled & Kathleen DeLaney Thomas, *Advocating a Carryover Tax Basis Regime*, 93 NOTRE DAME L. REV. 109, 110 (2017) (stating that step-up in basis at death “violates fundamental tax principles” and that “there have been repeated calls for its repeal”).

sions like step-up in basis at death, rather than eliminating tax deferral provisions.

Third, all lawmakers should consider policy swaps that would replace yield exemption provisions throughout the U.S. tax code with tax deferral provisions. Because tax deferral provisions raise more revenue than yield exemption provisions,<sup>128</sup> a reform package of replacing yield exemption provisions with tax deferral provisions could increase federal revenue while keeping statutory tax rates the same—or, alternatively, could be designed to raise the same amount of revenue as the current tax system while lowering statutory tax rates.

For example, lawmakers could replace the lower rate on long-term capital gain income with a savings deduction.<sup>129</sup> Currently, the lower rate on capital gains operates as a partial yield exemption provision, excluding around 42% of long-term capital gains from tax.<sup>130</sup> One option for reform would be to replace this provision with a deduction for 42% of household investment in capital assets, a tax deferral provision. This swap would keep the tax burden on marginal household investments relatively constant, while improving the structure of the federal tax code.

Along similar lines, lawmakers could eliminate Roth 401(k)s while increasing the availability of traditional 401(k)s.<sup>131</sup> Currently, employees are able to contribute up to \$19,500 in pre-tax dollars to traditional 401(k)s and up to around \$31,000 in pre-tax dollars to Roth 401(k)s.<sup>132</sup> A reform package that eliminated Roth accounts while increasing the contribution limits of traditional accounts would shift the tax code away from the yield exemption approach, without changing the tax burden on marginal household investments.<sup>133</sup>

---

<sup>128</sup> See *supra* Section II.A.2.

<sup>129</sup> Cf. Johnson, *supra* note 8, at 515 (offering a similar proposal).

<sup>130</sup> This is a rough estimate, based on the fact that the top statutory rate on long-term capital gains (23.8%) is roughly 42% lower than the top statutory rate on ordinary income (40.8%). See I.R.C. § 1(h) (imposing a top rate of 20% on long-term capital gains); *id.* § 1(j)(2) (imposing a top rate of 37% on taxable income); *id.* § 1411(c)(1)(A)(iii) (imposing a 3.8% surtax on capital gains and on many sources of ordinary income). For taxpayers outside the top bracket, the rate of exclusion can vary.

<sup>131</sup> This is, of course, exactly the opposite of what lawmakers were reportedly considering in late 2017. See *supra* notes 1–2 and accompanying text.

<sup>132</sup> See *401(k) Contribution Limit Increases to \$19,500 for 2020; Catch-up Limit Rises to \$6,500*, IRS (Nov. 6, 2019), <https://www.irs.gov/newsroom/401k-contribution-limit-increases-to-19500-for-2020-catch-up-limit-rises-to-6500>. The contribution limit is \$19,500 for both accounts, but for Roth 401(k)s, this limit applies to the amount of post-tax dollars contributed, meaning that the Roth contribution limit is effectively higher. See O'Shea & Todd, *supra* note 52.

<sup>133</sup> One potential downside of this proposal is that allowing households a choice between traditional accounts and Roth accounts may help them smooth their income over

The debate in the United States over how investment income should be taxed is likely to continue for the foreseeable future. This Note has suggested one under-appreciated advantage of the tax deferral approach over the yield exemption approach: The former offers an opportunity for the federal government to collect revenue by taking on additional risk. This is one of many advantages of the tax deferral approach, which lawmakers should bear in mind when crafting federal tax policy.

---

time, helping to reduce the tax disadvantages faced by households with volatile incomes. See DEP'T OF TREASURY, BLUEPRINTS FOR BASIC TAX REFORM 125 (1977) (discussing the advantages and disadvantages of allowing taxpayers the option of choosing not to use traditional qualified accounts).