

University of Missouri School of Law Scholarship Repository

Faculty Publications

Faculty Scholarship

3-2023

Solving the Valuation Challenge: The Ultra Method for Taxing Extreme Wealth

David Gamage

Brian Galle

Darien Shanske

Follow this and additional works at: <https://scholarship.law.missouri.edu/facpubs>



Part of the Tax Law Commons

SOLVING THE VALUATION CHALLENGE: THE ULTRA METHOD FOR TAXING EXTREME WEALTH

BRIAN GALLE†

DAVID GAMAGE††

DARIEN SHANSKE†††

ABSTRACT

Recent reporting based on leaked tax returns of the ultrarich confirms what experts have long suspected: for the wealthiest Americans, paying taxes is mostly optional. Some of the country's richest have reported annual taxable incomes that would be modest for a schoolteacher, even as the share of wealth held by the top .1 percent is at its highest in nearly a century.

Experts have long understood that one problem sits at the roots of many of the tax system's failures to reach the very rich: valuation. Because it is difficult to appraise complex or unique assets, modern tax systems instead wait until an asset is sold to impose tax. In combination with a U.S. rule that wipes away income tax on inherited profits, and a highly porous estate tax system, this "realization" approach has deeply undermined U.S. efforts to tax extreme wealth.

This Article proposes a new approach: governments should take payments from the wealthy in the form of notional equity interests, which we call unliquidated tax reserve accounts ("ULTRAS"). Simply put, the ULTRA is economically equivalent to a government claim on a portion of the stock of a business, but because it is "notional," it does

Copyright © 2023 Brian Galle, David Gamage, and Darien Shanske.

† Professor of Law, Georgetown University Law Center.

†† Professor of Law, Indiana University – Bloomington, Maurer School of Law.

††† Professor of Law, University of California, Davis, School of Law. The authors gratefully acknowledge thoughtful comments from Yariv Brauner, Jake Brooks, Victor Fleischer, Ed Fox, Ari Glogower, Andrew Hayashi, Leandra Lederman, Bob Lord, Michael Love, David Miller, Susie Morse, Gregg Polsky, Alex Raskolnikov, Emmanuel Saez, Emily Satterthwaite, David Schizer, Michael Schler, Neel Sukhatme, Urska Velikonja, Alvin Warren, David Wishnick, and attendees of presentations at Columbia, Georgetown, Washington University, the Midwestern Law & Economics Association annual meeting, and the Association for Mid-Career Tax Law Professors' annual conference.

not provide the tax authority with any governance rights or minority shareholder protections. Because the ULTRA represents a set share of an asset, whatever that asset's worth, it does not require valuation.

We explain how the ULTRA proposal builds on existing components already in use by wealth and income taxes around the globe, as well as on prior academic proposals. By combining select features from predecessors, the ULTRA addresses many of the shortcomings those tools face individually. For example, unlike the "retrospective" systems proposed by the economists Alan Auerbach and David Bradford, the ULTRA method ensures that taxpayers who expect to outperform the market with their investments will still have no incentive to delay paying tax.

We then set out a variety of ways in which ULTRAs can be used to close the loopholes that wealthy taxpayers use to minimize their tax burdens. Most obviously, our proposal helps to make an annual tax on extreme wealth viable, and we detail how the ULTRA features in our proposal, developed more comprehensively elsewhere, for a state-level wealth tax. ULTRAs can also be used to reform the income tax system, most ambitiously as in the recent Billionaires Income Tax reform proposals for eliminating the realization approach for the very rich. We also show that valuation is at the core of many other common tax dodges, and we detail ways that ULTRAs can be used to curtail them.

TABLE OF CONTENTS

Introduction	1259
I. Realization and Its Discontents	1268
II. Partial Solutions to the Valuation Challenge.....	1273
A. Taxing Under the Lamppost: Wealth and Mark-to-Market Taxes Around the World	1274
B. Formulaic Valuations and the Swiss Near-Miss	1280
C. Putting It Off Until Tomorrow: Retrospective Taxation and Interest Charges	1283
D. Government Equity: A New Land?	1288
E. In-Kind Payments Are Not Sufficiently Kind.....	1291
F. Key Tools Already in Use: Separated Accounts, Information-Generating Rules, and the Problem of Identifying Withdrawals	1292
III. The ULTRA Method.....	1297
A. The Basics of the Notional Equity Interest.....	1297
B. The Scope of the Deferral Option	1299

C.	Contributions, Partial Withdrawals, and Deemed Withdrawals	1301
D.	The Take-It-or-Leave-It Alternative Valuation Mechanism	1304
E.	Comparing the ULTRA Solution to Alternatives	1309
IV.	Applications	1314
A.	Comprehensive Wealth Tax Reforms and the Proposed California Tax on Extreme Wealth.....	1314
B.	Mark-to-Market Income Tax Reforms.....	1317
C.	Death and Gratuitous Transfers.....	1322
D.	Property Tax Regimes	1326
E.	Other Income Tax Reforms.....	1327
1.	<i>Carried Interest and Other Deferred Compensation</i> ...	1327
2.	<i>Installment Sales, Earnouts, and Open Transactions</i> ..	1331
3.	<i>In-Kind Donations</i>	1332
	Conclusion.....	1335
	Technical Appendix.....	1337

INTRODUCTION

We live in an age of inequality.¹ While there is some disagreement over inequality’s exact scope and causes,² there are powerful arguments that inequality results from current or historical unfairness

1. See, e.g., Emmanuel Saez & Gabriel Zucman, *The Rise of Income and Wealth Inequality in America: Evidence from Distributional Macroeconomic Accounts*, 34 J. ECON. PERSPS. 3, 9 (2020) (noting that “the top 10 percent wealthiest tax units owned 77–78 percent of wealth in 2018, an increase of 10 points since 1989”); Emmanuel Saez & Gabriel Zucman, *Wealth Inequality in the United States Since 1913: Evidence from Capitalized Income Tax Data*, 131 Q.J. ECON. 519, 551–54 (2016) (summarizing income inequality data).

2. See Gerald Auten & David Splinter, *Income Inequality in the United States: Using Tax Data To Measure Long-Term Trends* 3–4 (Feb. 18, 2022) (unpublished manuscript), http://davidsplinter.com/AutenSplinter-Tax_Data_and_Inequality.pdf [<https://perma.cc/YJ8E-Z4LK>]; Matthew Smith, Owen M. Zidar & Eric Zwick, *Top Wealth in America: New Estimates and Implications for Taxing the Rich* 51 (Nat’l Bureau of Econ. Rsch., Working Paper No. 29374, 2021), <https://www.nber.org/papers/w29374> [<https://perma.cc/L8RD-M4GE>].

or injustice,³ harms our politics,⁴ and weakens the economy.⁵ Furthermore, because of the scope of current inequality, reducing it through taxation could raise a lot of needed revenue.⁶

Tax policy has played a major role in increasing inequality and, properly implemented, can play a key role in reducing it.⁷ Yet it turns out that our current tax system is not up to that task. Specifically, our tax system does a very poor job of taxing those who earn income through investments and hardly touches vast accumulations of wealth.⁸ This failure of our existing tax system to adequately reach wealth or investment income creates a host of problems, including harm to economic growth, harm to the administrability of the entire tax system, harms related to holding back historically disadvantaged groups of

3. David Gamage & John R. Brooks, *Tax Now or Tax Never: Political Optionality and the Case for Current-Assessment Tax Reform*, 100 N.C. L. REV. 487, 514–15 (2022) [hereinafter Gamage & Brooks, *Tax Now or Tax Never*]; see generally Goldburn P. Maynard, Jr. & David Gamage, *Wage Enslavement: How the Tax System Holds Back Historically Disadvantaged Groups of Americans*, 110 KY. L.J. 665 (2022) (analyzing how the tax system inhibits disadvantaged groups of Americans from building wealth).

4. See, e.g., Ari Glogower, *Taxing Inequality*, 93 N.Y.U. L. REV. 1421, 1445–49 (2018) [hereinafter Glogower, *Taxing Inequality*] (describing the relative economic power theory “used by political scientists to explain how economic inequality generates harmful social hierarchies and distorts political outcomes” and its implications); LARRY M. BARTELS, *UNEQUAL DEMOCRACY: THE POLITICAL ECONOMY OF THE NEW GILDED AGE* 284 (2d ed. 2018) (“Economic inequality clearly has pervasive, corrosive effects on political representation and policy making in contemporary America.”).

5. See JOSEPH E. STIGLITZ, *THE PRICE OF INEQUALITY: HOW TODAY’S DIVIDED SOCIETY ENDANGERS OUR FUTURE* 93–117 (2013); Gamage & Brooks, *Tax Now or Tax Never*, *supra* note 3, at 515–17 (“[T]he productive potential of the overall economy is diminished because scarce resources are devoted to tax gaming at the expense of productive investment and business activity.”).

6. Gamage & Brooks, *Tax Now or Tax Never*, *supra* note 3, at 507 (“Thus, a well-designed wealth tax could potentially increase revenues by more than the entire existing corporate income tax.”).

7. See *id.* at 487; Glogower, *Taxing Inequality*, *supra* note 4, at 1426; see also JEREMY BEARER-FRIEND, GREAT DEMOCRACY INITIATIVE, *RESTORING DEMOCRACY THROUGH TAX POLICY* 3 (2018), https://rooseveltinstitute.org/wp-content/uploads/2021/08/GDI_Restoring-Democracy-Through-Tax-Policy_201812.pdf [<https://perma.cc/C8J8-7TQ9>] (“To the extent rising inequality and the collapse of the middle class is a threat to our Constitution and the values it enshrines, tax policy offers a direct answer to the crisis.”). Other policies may also have a role to play in remedying inequality. See, e.g., Alex Raskolnikov, *Distributional Arguments, in Reverse*, 105 MINN. L. REV. 1583, 1646–52 (2021); Steven K. Vogel, *The Regulatory Roots of Inequality in America*, 1 J.L. & POL. ECON. 272, 272 (2021).

8. See, e.g., Greg Leiserson, *Taxing Wealth*, in *TACKLING THE TAX CODE: EQUITABLE AND EFFICIENT WAYS TO RAISE REVENUE* 89, 93 (Jay Shambaugh & Ryan Nunn eds., 2020); Lily Batchelder & David Kamin, *Taxing the Rich: Issues and Options* 4–8 (Sept. 11, 2019) (unpublished manuscript), https://ssrn.com/abstract_id=3452274 [<https://perma.cc/5KR5-CTM7>].

Americans, and the more general but especially insidious harms of making our tax system ineffective at addressing the problems of rising inequality.⁹

Yet even many of those who agree that inequality is a problem are skeptical of our ability to tax economic income or accumulated wealth.¹⁰ These skeptics often raise one particular concern: the difficulty of valuation.¹¹ It seems like it should be simple to know how much a thing is worth. Modern securities markets track value by the nanosecond; websites instantly appraise our homes, cars, and collectibles.

The difficulty is that a modest but important portion of the wealth held by the world's richest individuals is not publicly traded securities or even expensive homes, but instead complex assets, such as intellectual property rights or stakes in private businesses.¹² Far from being traded every nanosecond, many of these are hardly ever sold at all. Zillow and other websites estimate valuations by examining sales of comparable properties, but the relatively unique nature of a business or an intellectual property right can make that challenging.¹³

At the same time, private businesses raise money all the time, suggesting that large investors must have reasonably reliable tools—tools trustworthy enough to warrant billion-dollar gambles—for valuing their stakes in these businesses.¹⁴ Given the empirical evidence

9. See Glogower, *Taxing Inequality*, *supra* note 4, at 1426; Gamage & Brooks, *Tax Now or Tax Never*, *supra* note 3, at 506–20 (discussing some of the consequences of the current U.S. tax system, including lost tax revenues, vertical and horizontal inequity, and economic inefficiency).

10. E.g., Natasha Sarin, Lawrence Summers & Joe Kupferberg, *Tax Reform for Progressivity: A Pragmatic Approach*, in *TACKLING THE TAX CODE*, *supra* note 8, at 317, 344.

11. *Id.* at 344 (“One issue for wealth taxation involves valuation: how will ownership stakes in private firms without market valuations be ascertained, for example? Wealth taxation is also complicated by the illiquidity of the assets held by the ultra-wealthy.”); see also Stephen Daly & Glen Loutzenhiser, *Valuation* 1, 3 (Wealth Tax Comm’n, Evidence Paper No. 9, 2020) (“Valuation issues are frequently cited in the literature as the most problematic aspect of wealth taxes.”).

12. Emmanuel Saez & Gabriel Zucman, Response to Summers and Sarin, A Wealth Tax Presents a Revenue Estimation Puzzle 3 n.1 (June 25, 2019) (unpublished manuscript), <https://gabriel-zucman.eu/files/saez-zucman-responseto-summers-sarin.pdf> [<https://perma.cc/UCH3-LF73>] (estimating that “21.5% of top 0.1% wealth was invested in assets with no directly observable market value”).

13. Leandra Lederman, *Valuation as a Challenge for Tax Administration*, 96 NOTRE DAME L. REV. 1495, 1498 (2021) (noting the difficulty in “finding an approach or formula that fairly values private assets, or assets of a particular type”).

14. See, e.g., Thomas W. Bates, Jordan B. Neyland & Yolanda Yulong Wang, *Financing Acquisitions with Earnouts*, 66 J. ACCT. & ECON. 374, 377 (2018) (finding over 14 percent of

of valuations all around us, it is hard to believe that the potential tax tools for dealing with rising inequality were all discovered in the twentieth century or before, especially because the urgency of taxing great wealth suggests that we might be willing to accept a moderately imperfect tool.

Existing efforts to overcome the valuation challenge have had catastrophic side effects on economic inequality. Income tax systems' answer to the valuation challenge has historically been a principle known as the realization rule. Briefly, under a realization regime taxpayers include gains or losses in taxable income only when the taxpayer sells or otherwise disposes of an asset. Individuals who make most of their money through investments thus get to choose when to pay tax. In combination with other unfortunate U.S. rules, one of these options is "never." The result is evident in recent news stories reporting that many of America's wealthiest individuals, such as Jeff Bezos, have reported taxable incomes lower than those of the Internal Revenue Service ("IRS") agents who audit them.¹⁵ The realization rule in turn drives many governments to impose low rates on "capital gains," or investment earnings, with the obvious result that wealthy investors tend to pay lower rates than middle-class salary earners.

Valuation also stands in the way of many potential tax reforms. Critics of wealth taxes mostly claim that valuation problems make

transactions in a large sample of private firms used an earnout); Christopher R. Stewart, *Appraisal Rights and Corporate Disclosure During Mergers and Acquisitions*, J. ACCT. & ECON. (forthcoming 2023) (manuscript at 14), https://papers.ssrn.com/abstract_id=3799216 [<https://perma.cc/Q4E3-MWT6>] ("Over the entire sample period, 82 large Delaware mergers faced at least one appraisal lawsuit [in recent years], with the average merger facing 1.65."). That there is often dispute about valuations does not undermine our point. To the contrary, it indicates that despite the difficult judgment calls involved—and the risks—private parties, in dialogue with the law, have figured out how to at least muddle through. See generally Jerald E. Pinto, Thomas R. Robinson & John D. Stowe, *Equity Valuation: A Survey of Professional Practice*, 37 REV. FIN. ECON. 219 (2019) (presenting a survey of approaches used for equity valuations).

15. See Jessie Eisinger, Jeff Ernsthausen & Paul Kiel, *The Secret IRS Files: Troves of Never-Before-Seen Records Reveal How the Wealthiest Avoid Income Tax*, PROPUBLICA (June 8, 2021), <https://www.propublica.org/article/the-secret-irs-files-trove-of-never-before-seen-records-reveal-how-the-wealthiest-avoid-income-tax> [<https://perma.cc/RYE5-4UJJ>] (reporting, for example, that Jeff Bezos paid an effective tax rate of only 1.1 percent on his true income across 2006 through 2018, that he paid zero income tax in some of those years, that "he even claimed and received a \$4,000 tax credit for his children" in 2011 because he "filed a tax return reporting he lost money," and that in "both 2016 and 2017, investor Carl Icahn, who ranks as the 40th-wealthiest American on the Forbes list, paid no federal income taxes").

them impractical.¹⁶ Income tax reforms to reduce or eliminate the realization rule for the ultrawealthy have encountered similar criticism.¹⁷ And many loopholes in the current U.S. income tax system arise because lawmakers lack good solutions to valuing complex assets.¹⁸

Although valuation is therefore a problem of systemic importance, its solutions can be relatively modest. If the goal is primarily to address inequality, the income and wealth we would like to tax more effectively is that of the very affluent. A solution that reaches these taxpayers, but not others, is thus potentially enough. Further, if the goal is specifically to tax hard-to-appraise but highly valuable private assets—a relatively narrow problem—a relatively narrow solution again may be all that is needed.

Suppose a reform were adopted that taxed only the public assets of the very wealthy, based on the notion that reaching 80 percent of that potential tax base is good enough. Such a reform would create an incentive for the very wealthy to change from easily valued public assets to private assets, thus destabilizing the portion of the valuation problem that can be solved using current tools.¹⁹ What is needed to make the reform work is a valuation system that can reasonably reach

16. *Creating Opportunity Through a Fairer Tax System: Hearing Before the S. Fin. Subcomm. on Fiscal Responsibility and Econ. Growth*, 117th Cong. 9 (2021) (statement of Jeffrey L. Hoopes, Associate Professor, Kenan Flagler Business School, University of North Carolina at Chapel Hill); Robin Boadway, Emma Chamberlain & Carl Emmerson, *Taxation of Wealth and Wealth Transfers*, in *TAX BY DESIGN* 737, 776, 784 (James Mirrlees, Stuart Adam, Timothy Besley, Richard Blundell, Stephen Bond, Robert Chote, Malcolm Gammie, Paul Johnson, Gareth Myles & James Poterba eds., 2011); Sarin et al., *supra* note 10; Howard Gleckman, *Inequality Is a Big and Growing Issue, but a Wealth Tax May Not Be the Solution*, *TAXVOX* (Jan. 24, 2020), <https://www.taxpolicycenter.org/taxvox/inequality-big-and-growing-issue-wealth-tax-may-not-be-solution> [<https://perma.cc/67T3-NBRX>].

The other primary objection to wealth tax reforms at the U.S. federal level is constitutionality; however, one of us argues in another article that constitutionality concerns should not stand in the way of a federal wealth tax or related reforms. See John R. Brooks & David Gamage, *Taxation and the Constitution, Reconsidered*, *TAX L. REV.* 1, 7 (forthcoming) [hereinafter Brooks & Gamage, *Taxation and the Constitution, Reconsidered*], <https://ssrn.com/abstract=4061257> [<https://perma.cc/5GQA-6K7E>].

17. Brooks & Gamage, *Taxation and the Constitution, Reconsidered*, *supra* note 16.

18. See *infra* Part IV.E.

19. ORG. FOR ECON. COOP. AND DEV. [OECD], *THE ROLE AND DESIGN OF NET WEALTH TAXES IN THE OECD* 69 (2018) [hereinafter OECD, *NET WEALTH TAXES*] (“Partly as a consequence of valuation issues, many of these hard-to-value assets have been exempted from wealth taxes, eroding the tax base, distorting the choice of savings vehicles and creating opportunities for tax avoidance.”).

a sufficient portion of the difficult 20 percent so that taxpayers would not have problematic incentives to shift assets out of the easier-to-value 80 percent.

This Article thus proposes a new solution—perhaps not perfect, but we hope good enough—to the valuation challenge posed by this particular narrow, but systemically important, scenario. Many existing approaches to valuation have some promise but also suffer from serious flaws that have made them untenable.²⁰ We show that by combining pieces of several of these approaches, the strengths of some can compensate for the flaws of others.

Our new hybrid solution is what we call the unliquidated tax reserve account, or “ULTRA.” In essence, an ULTRA is a notional equity interest. That is, it is a slice of the value of some underlying asset that the government will claim when the asset is sold. That is the equity component. The interest is “notional” in the sense that the government does not exercise any traditional legal rights of ownership, such as voting for the directors of a business, and cannot invoke the legal protections usually afforded to minority property owners. In circumstances wherein taxing authorities would like to tax an asset today but cannot because its value is uncertain, the taxpayer pays with an ULTRA rather than cash.

Put in those terms, the ULTRA sounds a lot like a simple IOU, but it offers a crucial advantage over standard deferred payment mechanisms. Many tax systems use these deferral mechanisms, and they suffer from a common problem: they strongly encourage taxpayers to delay sale of the taxed property.²¹ For example, the City of Chicago allows homeowners to delay paying their property taxes until the property is sold (or, in some cases, until the owner dies, an option that is harder to delay).²² This encourages homeowners to defer sale because every day that they delay is a day in which the money they would have paid the government instead can be invested. Even if the government charges interest, taxpayers who expect their investment to earn more than the standard interest charge will come out ahead by

20. Stephen B. Land, *Defeating Deferral: A Proposal for Retrospective Taxation*, 52 TAX L. REV. 45, 59–73 (1996).

21. See *infra* Part I.

22. Cook County Treasurer, *The Senior Citizen Real Estate Tax Deferral Program*, COOK CNTY. TREASURER’S OFF. (2022), <https://www.cookcountytreasurer.com/theseniorcitizenrealstatetaxdeferralprogram.aspx> [<https://perma.cc/2DM8-TQXP>]. But see OSCAR WILDE, *THE PICTURE OF DORIAN GRAY* (1890).

waiting.²³ Usually, it is the richest taxpayers who benefit the most from such waiting because part of what makes them rich is that their investments earn more than the average.

The ULTRA eliminates these taxpayer advantages of deferral. The way an ULTRA works is that the government gets a percentage stake in a taxed asset: if there is a 10 percent tax rate, the government claims a 10 percent notional equity interest in the asset (we offer a quick example in the margin).²⁴ Since the government owns a slice of the taxed asset's value, when the asset goes up in value, so does the amount of tax payment the government ultimately receives. More technically, as we will explain, the government effectively charges the taxpayer an interest rate equal to the taxpayer's own internal rate of return on that asset. So if a taxpayer takes the money they saved from delaying a tax payment and reinvests it in their business or other property, the government gets a slice of that reinvested money too.

The ULTRA also resembles what's sometimes called "in-kind" tax payments. An in-kind payment, of course, is just a payment in some property other than cash. Some commentary, such as a thoughtful recent article by Professor Jeremy Bearer-Friend, notes that in-kind payments can help to solve the valuation problem.²⁵ If a taxpayer can pay a 10 percent tax by just giving the government 10 percent of the stock of her family business, we don't have to figure out how much each of the shares of stock is worth.

ULTRAs have some key advantages over true in-kind payments though.²⁶ For one, since they are only notional interests, they don't raise any of the traditional dangers of state ownership of private enterprise, such as corruption. They leave management of private

23. In addition, to charge the correct amount of interest, the government must know not only the value of the asset when it is sold but also the value that should have been subject to tax at the earlier time. By assumption, that government does not know that, and the subsequent sale does not tell us, unless we make strong assumptions about how the value changed over time. Furthermore, political optionality dynamics provide additional incentives for waiting in many important policy contexts; sophisticated taxpayers may defer tax in the hopes of taking advantage of potential future legal or political changes that are favorable to them, as explained in Gamage & Brooks, *Tax Now or Tax Never*, *supra* note 3, at 495, and as we discuss further in Part II.

24. Suppose Avi owns a small business that he originally purchased for \$100 million, and with its current value uncertain and difficult to determine. Suppose further that there is a 1 percent annual wealth tax, collected using the ULTRA mechanism. For 2021, Avi can pay the tax on his business by granting the government a 1 percent ULTRA. If he later sells the business in 2025 for \$200 million—and assuming no further ULTRA claims are added in subsequent years—the government will receive 1 percent of the sale proceeds, or \$2 million.

25. Jeremy Bearer-Friend, *Tax Without Cash*, 106 MINN. L. REV. 953, 991–94 (2021).

26. See *infra* Part III.E.

businesses in the hands of private entrepreneurs, who are likely to have the superior information and incentives needed to maximize firm value (subject to appropriate government regulation, of course). And they avoid the tricky legal complications that would arise from efforts to divide or assign minority interests in otherwise undivided assets. Lastly, because they are notional, ULTRAs are not limited to holding positive values. Government cannot give a small business owner more than 100 percent ownership of her business, but it can issue an ULTRA that results in a tax refund, a flexibility that is very useful in some cases.

After laying out the details and advantages of ULTRAs, we will then turn to explaining how they can be used to reform modern tax systems. With an effective valuation system, governments could disregard the realization rule and instead tax on a “mark-to-market” basis, eliminating wealthy U.S. investors’ option to never pay income tax. Alternately, governments could impose an annual tax on wealth, which would resemble mark-to-market income taxation but with some important differences and potentially offering some administrative simplifications. Indeed, the three of us are also the codrafters of a pending bill in California that would impose a wealth tax on Californians with a net worth of over \$50 million, and the ULTRA system is at the heart of that regime.²⁷ More recently, we have also been charged with codrafting proposed legislation to implement President Biden’s Billionaires Minimum Income Tax reform proposal—a mark-to-market reform targeted at billionaires and megamillionaires—and the ULTRA system similarly plays a key role in solving the valuation challenge for that proposed reform.²⁸

ULTRAs can also solve some of the thorniest legal problems in the U.S. tax system, many of which have been turned into loopholes exploited by the wealthy. At the risk of trying the reader’s patience, we describe some of these problems, explain why they are ultimately

27. Assemb. B. 310, 2021–22 Reg. Sess. (Cal. 2021). For a more complete description, see Brian Galle, David Gamage, Emmanuel Saez & Darien Shanske, *The California Tax on Extreme Wealth (ACA 8 and AB 310): Revenue, Economic, and Constitutional Analysis* (Ind. Univ. Maurer Sch. of L., Legal Stud. Rsch. Paper Series, Paper No. 461, 2021), https://ssrn.com/abstract_id=3924524 [<https://perma.cc/Y4AL-5EBZ>].

28. For legislative text, see H.R. 8558, 117th Cong. (2022); for the congressional fact sheet, see *Billionaire Minimum Income Tax*, <https://cohen.house.gov/sites/evo-subsites/cohen-evo.house.gov/files/BMIT%20One%20Pager.pdf> [<https://perma.cc/6HAC-CHTL>]; for the section-by-section summary, see *Section-By-Section: Billionaire Minimum Income Tax Act*, <https://cohen.house.gov/sites/evo-subsites/cohen-evo.house.gov/files/BMIT%20Section-By-Section.pdf> [<https://perma.cc/93ZU-WS9B>].

valuation problems, and outline how an ULTRA can solve them. Among other issues, we touch on the difficulties of the estate tax, local property tax systems, and income tax issues involving deferred compensation, installment sales, and in-kind gifts to charity.

For instance, the so-called “carried interest loophole” is the set of rules allowing private equity managers to defer tax on their management fees and pay tax only at capital gains rates.²⁹ A mark-to-market system could eliminate the loophole, but even if we don’t go that far, ULTRAs can close it. Private equity (“PE”) has argued successfully that managers cannot be taxed at the time they are promised their management fees because those fees depend on uncertain future events, such as the performance of the PE fund, and thus the promise cannot be valued accurately.³⁰ Various technical rules then convert the deferred earnings into capital gains. We could instead simply require PE managers to pay immediately via an ULTRA so that they will owe ordinary income, plus implicit interest charges at the fund’s own internal rate of return, when the fund resolves its affairs.

The rest of the Article proceeds in four parts. Part I summarizes the causes and consequences of the realization rule for readers who are relatively unfamiliar with it. Part II explores alternative solutions to the valuation problem from prior academic research and from tax systems around the world, showing that while many of these existing options have more promise than critics have appreciated, they also each have important flaws. Part III then lays out the basics of our ULTRA proposal, showing how it combines and builds on strengths of these prior ideas. Part IV then illustrates how the ULTRA system can be adapted to a variety of settings in which extreme wealth currently escapes taxation. For example, we explain how the ULTRA can be used as one component of a larger valuation system to implement a feasible tax on extreme wealth or for imposing a mark-to-market income tax on wealthy individuals. A technical appendix following the conclusion offers additional details on formulas and transition rules.

29. Victor Fleischer, *Two and Twenty: Taxing Partnership Profits in Private Equity Funds*, 83 N.Y.U. L. REV. 1, 3–4 (2008) [hereinafter Fleischer, *Two and Twenty*].

30. *Id.* at 12.

I. REALIZATION AND ITS DISCONTENTS

In this Part we briefly review the problems of a realization-based income tax. Because these problems have been well summarized by other writers and we break no new ground here, readers already familiar with this account may prefer to skip to Part II.

The defining feature of an income tax is that it taxes annual changes in a taxpayer's wealth.³¹ To tax changes in annual wealth, though, we must be able to measure it.³² Appraisals are expensive and, when stakes are high, often result in costly litigation. In recent decades, taxpayers have been able to bring more resources to these disputes, so governments very often lose.³³ Governments cannot just give up on these contests because the cost of litigating, if nothing else, likely constrains the most abusive taxpayer undervaluation efforts. But the government stands a strong chance of losing money in each individual contest it enters. Engaging in this process every year for every asset is not remotely realistic.³⁴

Highly related to the valuation challenge, liquidity issues pose further obstacles to levying annual taxes on wealth or on increases in wealth.³⁵ The most familiar example for many readers is probably in the context of local property taxes imposed on the assessed value of residential property. Retired homeowners with no incomes but highly appreciated property may not be able to afford their property tax bills.³⁶ In addition to potential fairness concerns, liquidity can also have "allocational efficiency" effects: taxpayers who are afraid of an unpayable tax bill may avoid illiquid assets, even if those assets would otherwise be their best investment option.³⁷

31. David A. Weisbach, *The (Non)Taxation of Risk*, 58 TAX L. REV. 1, 1 (2004) [hereinafter Weisbach, *(Non)Taxation*].

32. See HENRY C. SIMONS, PERSONAL INCOME TAXATION 153 (1938).

33. Noël B. Cunningham & Deborah H. Schenk, *Taxation Without Realization: A "Revolutionary" Approach to Ownership*, 47 TAX L. REV. 725, 743 & n.78 (1992).

34. See DEP'T OF THE TREASURY, BLUEPRINTS FOR BASIC TAX REFORM 81 (1977); David M. Schizer, *Realization as Subsidy*, 73 N.Y.U. L. REV. 1549, 1594-95 (1998).

35. See DEP'T OF THE TREASURY, *supra* note 34.

36. See Andrew T. Hayashi, *The Quiet Costs of Taxation: Cash Taxes and Noncash Bases*, 71 TAX L. REV. 781, 782, 789-90 (2018); Stewart E. Sterk & Mitchell L. Engler, *Property Tax Reassessment: Who Needs It?*, 81 NOTRE DAME L. REV. 1037, 1078 (2006).

37. See Hayashi, *supra* note 36, at 812-14.

A sale for cash solves both the valuation and liquidity problems.³⁸ Value, after all, is usually just what a willing buyer will pay to a willing unrelated seller. And if the sale is for cash, the seller can generally set aside a portion of the sales proceeds to pay their tax bill.

That is the basic logic of the realization rule.³⁹ Instead of taxing annual changes in a taxpayer's assets, modern tax systems overwhelmingly wait to assess tax until an asset is either sold or disposed of in a sale-like transaction. At sale, the seller has income equal to their sale price less their "basis," a tax concept that usually represents the price the seller originally paid for the asset.⁴⁰ Tax systems typically extend realization to barter transactions as well as cash sales, even though in-kind swaps don't perfectly solve the valuation and liquidity problems, on the assumption that most barter transactions could have been conducted in cash.⁴¹ Exempting barter from tax would thus inefficiently encourage barter over cash exchange.⁴²

To be sure, valuation problems are not nearly as serious for some, maybe most, assets.⁴³ Value is central to the functioning of modern markets, after all, and so market actors are highly motivated to develop valuation tools.⁴⁴ Exchanges, for instance, now track the value of many securities by the millionth of a second. For complex nontraded assets, buyers often use contract features that allow the purchase price to vary depending on the economic performance of the asset during a period after sale, a mechanism typically known as the "earn out." Arguably, tools like these could allow many assets to be taxed annually instead of being subject to the realization rule.⁴⁵

38. Daniel N. Shaviro, *An Efficiency Analysis of Realization and Recognition Rules Under the Federal Income Tax*, 48 TAX L. REV. 1, 12–13 (1992).

39. See David Elkins, *The Myth of Realization*, 10 FLA. TAX REV. 375, 379 (2010); Shaviro, *supra* note 38.

40. See I.R.C. § 1001(a).

41. See Edward A. Zelinsky, *For Realization: Income Taxation, Sectoral Accretionism, and the Virtue of Attainable Virtues*, 19 CARDOZO L. REV. 861, 872–73 (1997).

42. *Id.* at 872.

43. See Shaviro, *supra* note 38, at 13.

44. See Ilan Benshalom & Kendra Stead, *Realization and Progressivity*, 3 COLUM. J. TAX L. 43, 54 (2011) (observing that markets continue to develop improved valuation techniques).

45. See Michael Knoll, *An Accretion Corporate Income Tax*, 49 STAN. L. REV. 1, 12–16, 41 (1996) (describing techniques for valuing publicly traded stock and debt in public companies).

Nevertheless, by conventional wisdom, it isn't practical to tax some major categories of assets annually and others only at sale,⁴⁶ at least for most taxpayers. If taxpayers dislike annual taxation (and they do, as we will explain shortly), then subjecting different categories of assets to different rules will distort investors' choices.⁴⁷ Trying to draw legal lines between assets may also be difficult to implement. In the modern financial world, it is easy to reconstruct the underlying economics of one financial instrument using combinations of other instruments.⁴⁸ For example, if Betty wants to invest in ArchCo stock, but stock is taxed annually, she can instead purchase a notional financial contract that pays her based on the performance of ArchCo.⁴⁹ If the financial contract she purchases is privately offered and not traded on an exchange, she might be able to escape annual taxation, despite having made essentially the same financial investment as if she had bought the stock outright.

The realization principle helps to resolve the valuation challenge, but at enormous social cost. First, realization affects the timing of when taxpayers sell their property. In general, it's better to pay taxes later than it is to pay them today because deferral allows taxpayers to retain the time value of the money they would otherwise owe the government.⁵⁰ Because under a realization rule the taxpayer can defer tax indefinitely, as long as they continue to hold a piece of property, the rule offers a strong motive to delay sale.⁵¹ In the United States, this motive is made even more powerful by a special rule for inheritances.⁵²

46. See Schizer, *supra* note 34, at 1595–96; Zelinsky, *supra* note 41, at 917–18. Professor Zelinsky also argues that realization provides unique compliance advantages, such as the more reliable presence of a third-party reporter. *Id.* at 903.

47. See Joseph Bankman, *A Market-Value Based Corporate Income Tax*, 68 TAX NOTES 1347, 1352 (1995); Shaviro, *supra* note 38, at 38.

48. See Alan J. Auerbach & David F. Bradford, *Generalized Cash Flow Taxation*, 88 J. PUB. ECON. 957, 957–58 (2004).

49. See Deborah H. Schenk, *An Efficiency Approach to Reforming a Realization-Based Tax*, 57 TAX L. REV. 503, 528 (2004) (“Every derivative transaction is a bet and there are an infinite number of transactions. Presumably, every such bet can be repackaged fairly costlessly as some other bet.”).

50. Take Chen. Chen has the choice of paying \$100 in tax this year or instead paying it next year. If Chen defers payment, she can invest the \$100 for the intervening year. Suppose that she earns a \$10 investment return on her \$100 investment, then pays a 20 percent tax on that return. Thus, if Chen opts to delay payment for a year, her net tax bill is effectively only \$92 (that is, \$100 – (\$10 – \$2)—as opposed to the \$100 she would owe if she paid today.

51. See Schizer, *supra* note 34, at 1555–56.

52. See Lawrence Zelenak, *Taxing Gains at Death*, 46 VAND. L. REV. 361, 363 (1993).

Death is not treated as a realization event, and heirs essentially owe no income tax on any of the value an asset gained while it was in the hands of the decedent (this rule is known to tax mavens as the “basis step-up at death”).⁵³ Empirically, this combination of rules has been shown to powerfully constrain investors’ willingness to sell their property.⁵⁴

While realization makes taxpayers want to keep their appreciated property, it also may encourage disposition of property that has lost value. Realized losses allow taxpayers to claim deductions, potentially reducing taxable income.⁵⁵ Holding onto loss properties postpones this deduction, leaving tax payments in the hands of the government.⁵⁶ In some cases, taxpayers may dispose of investments it would be more efficient to retain solely to harvest their tax benefits sooner.⁵⁷

Realization not only changes when taxpayers sell property but also affects what they choose to buy in the first place.⁵⁸ To buy a new asset, the taxpayer often must sell an existing one. But doing so would result in immediate taxation if the existing asset has gained value while the taxpayer owned it. Often, it is economically rational to refuse to invest in a profitable new opportunity because the present value of switching is less than the cost of paying taxes on the swap. This is what is often known as the “lock-in problem.”⁵⁹

Realization also contributes massively to economic inequality⁶⁰ and holds back historically disadvantaged racial minorities and other historically disadvantaged groups.⁶¹ In granting investors, and only

53. *See id.* at 363–64.

54. Gerald Auten & David Joulfaian, *Bequest Taxes and Capital Gains Realizations*, 81 J. PUB. ECON. 213, 213 (2001). The rising share of investment assets held in tax-free retirement accounts, however, may somewhat dampen the impact of lock-in. *See* Leonard E. Burman, Kimberly A. Clausing & Lydia Austin, *Is U.S. Corporate Income Double-Taxed?*, 70 NAT’L TAX J. 675, 699 (2017).

55. I.R.C. § 1001(a).

56. *See* Schizer, *supra* note 34, at 1557–58.

57. Alan J. Auerbach & James Poterba, *Capital Gains Taxation in the United States: Realizations, Revenue, and Rhetoric*, 2 BROOKINGS PAPERS ON ECON. ACTIVITY 595, 622 (1988).

58. *See* Schizer, *supra* note 34, at 1610.

59. *Id.* A somewhat skeptical account of the magnitude of the lock-in problem, at least for publicly traded assets, is given by Jeff Strnad, *Periodicity and Accretion Taxation: Norms and Implementation*, 99 YALE L.J. 1817, 1885 (1990).

60. *See* Benschalom & Stead, *supra* note 44, at 52; Ari Glogower, *Taxing Capital Appreciation*, 70 TAX L. REV. 111, 116–21 (2016) [hereinafter Glogower, *Taxing Capital Appreciation*].

61. *Cf.* Dorothy A. Brown, *The 535 Report: A Pathway to Fundamental Tax Reform*, 40 PEPP. L. REV. 1155, 1162–63 (2013) (discussing racially disparate effects of favorable rates for

investors, the option when (and in many cases, ultimately whether) to pay tax, realization principles disproportionately benefit those who hold investment assets or who can borrow at favorable rates to obtain investment assets.⁶² In the United States, nearly all that benefit goes only to the very richest taxpayers. For example, about 90 percent of all U.S. individual stock ownership is concentrated among the wealthiest 10 percent of Americans.⁶³ Recent reporting has highlighted the fact that some of the world's richest people, such as Jeff Bezos, have reported close to zero taxable income in some recent tax years.⁶⁴ That was possible, even as Bezos's wealth was launching into orbit, because the realization rule did not oblige Bezos to treat his gains as taxable income. To pay his bills, he was probably able to borrow against his existing stock holdings; borrowed funds are not taxable income either. These sorts of tax gaming strategies are commonly used by ultra-wealthy taxpayers, and, as a result, scholars estimate that more than three quarters of the true investment gains of ultra-wealthy individuals and families fully and permanently escape income taxation.⁶⁵

Even when wealthy investors do realize their gains, they pay a lower rate of tax on them than many other taxpayers. Like many other countries, the United States imposes a lower rate on "capital gains," which are generally profits from the sale of investments; currently the effective tax rate on investments for top earners is 23.8 percent, versus 37 percent for wage income. The lower capital gains rate is a

capital gains). *See generally* Maynard & Gamage, *supra* note 3 (discussing the role of the tax system in holding back historically disadvantaged groups).

62. *See* George R. Zodrow, *Economic Analyses of Capital Gains Taxation: Realizations, Revenues, Efficiency and Equity*, 48 *TAX L. REV.* 419, 491 (1993). Of course, we could adjust tax rates to offset this effect, Zelinsky, *supra* note 41, at 910, but we don't; to the contrary, those with deferrable assets typically pay lower, capital gains rates, as we detail in the next paragraph. *See* Joseph M. Dodge, *A Deemed Realization Approach Is Superior to Carryover Basis (and Avoids Most of the Problems of the Estate and Gift Tax)*, 54 *TAX L. REV.* 421, 443 (2001) (noting this "irony").

63. Robert Frank, *The Wealthiest 10% of Americans Own a Record 89% of All U.S. Stocks*, CNBC (Oct. 18, 2021, 4:48 PM), <https://www.cnbc.com/2021/10/18/the-wealthiest-10percent-of-americans-own-a-record-89percent-of-all-us-stocks.html> [<https://perma.cc/RHD7-BJ3U>].

64. *See, e.g.*, Eisinger et al., *supra* note 15 (reporting Bezos paid an effective tax rate of 1.1 percent from 2006 to 2018 and did not pay any federal income taxes in 2007 and 2011).

65. For detailed explanation of how these strategies work, see Gamage & Brooks, *Tax Now or Tax Never*, *supra* note 3, at 489–506. For discussion of the empirical literature leading to the estimate "that most ultra-wealthy taxpayers only ever realize less than a quarter of their true investment income as taxable income," see *id.* at 501–02.

compromise necessitated by the lock-in problem.⁶⁶ We offer investors a break on their taxes so that they will be willing to sell an appreciated asset rather than continue to hold it until death. That reduces the economic drag caused by investors' accumulated decisions not to switch from low-performing but appreciated investments to stronger investments that would drive greater economic growth.⁶⁷ But, of course, because it is mostly rich taxpayers who hold highly appreciated investments, we buy this economic growth at the cost of greater inequality.

Lastly, implementing a workable realization system makes the income tax system much more complex, which in turn contributes to further inequality.⁶⁸ Among other issues, realization requires complex rules for determining when a sale has actually occurred⁶⁹ and which assets should receive favorable capital gains rates,⁷⁰ and it has inspired a host of even more complex special exceptions for favored transactions, such as corporate reorganizations.⁷¹

II. PARTIAL SOLUTIONS TO THE VALUATION CHALLENGE

In this Part we survey existing responses to the challenges posed by valuation and the related issues caused by liquidity concerns and realization rules. Most of these proposals have been subject to extensive criticism, with many smart commentators proclaiming them unworkable. We will argue that many of these efforts actually work quite well, at least for some core cases. That is, in some contexts the valuation problem is more easily solved than modern commentators have mostly assumed. We acknowledge, though, that all of these attempts leave significant room for improvement. In the next two Parts, we show how some of the best features of each of these past ideas can be combined to address most major criticisms of any one of them

66. See Dodge, *supra* note 62; Strnad, *supra* note 59, at 1886.

67. See Schizer, *supra* note 34, at 1611 & n.278.

68. See Edward D. Kleinbard & Thomas L. Evans, *The Role of Mark-to-Market Accounting in a Realization-Based Tax System*, 75 TAXES 788, 789 & n.1 (1997); David J. Shakow, *Taxation Without Realization: A Proposal for Accrual Taxation*, 134 U. PA. L. REV. 1111, 1117 (1986); William Vickrey, *Tax Simplification Through Cumulative Averaging*, 34 LAW & CONTEMP. PROBS. 736, 743-44 (1969).

69. See, e.g., Cunningham & Schenk, *supra* note 33, at 728-32; Edward D. Kleinbard, *Risky and Riskless Positions in Securities*, 71 TAXES 783, 788-92 (1993); Alex Raskolnikov, *Contextual Analysis of Tax Ownership*, 85 B.U. L. REV. 431, 438 (2005) [hereinafter Raskolnikov, *Contextual Analysis*].

70. Auerbach & Poterba, *supra* note 57, at 596; Strnad, *supra* note 59, at 1887.

71. See Shakow, *supra* note 68, at 1114-15.

individually. As we will explain, our proposed ULTRA method is in many respects a hybrid combination of key aspects of the existing responses that we will survey in this Part.

A. *Taxing Under the Lamppost: Wealth and Mark-to-Market Taxes Around the World*

One simple solution to the valuation problem would be only to tax assets that are easy to value. That sounds like a bad plan; why would anyone buy a taxed asset when an untaxed one is available? But if it is costly or otherwise difficult to substitute untaxed assets for those subject to tax, the plan starts to look better. Better still, imagine that the government has two different tools for determining taxable value. One is easy to escape, because it covers only certain easy-to-value assets. The other enables the government to tax hard-to-value assets, but still allows taxpayers to avoid part of the tax. If it's at least a little bit costly to hold hard-to-value assets, and the tax savings from switching are also small, there might not be much reason for taxpayers to switch. This is the basic intuition for what we will call the under-the-lamppost valuation solution: just tax the items where value is the easiest to see. We'll now lay out these points in a bit more detail.

Quite a few jurisdictions, especially in Europe but also including South Korea and Pakistan, have applied versions of the under-the-lamppost solution.⁷² These countries have imposed taxes directly on individual wealth. In the typical "wealth tax," the taxpaying household adds up the total value of all their assets (or a subset of those assets), then pays a fraction of that value each year.⁷³ This system is also familiar to anyone who has seen a local property tax bill in the United States. Of course, taxing wealth annually obliges the taxing authority to determine the value of noncash assets. To minimize this problem, many regimes simply exempt from taxation assets that are hard to value.⁷⁴ For example, some European countries only tax cash and

72. OECD, NET WEALTH TAXES, *supra* note 19, at 69, 83–84; Emma Chamberlain, *Wealth Tax in Foreign Countries 2–7* (Wealth Tax Comm'n, Background Paper No. 130, 2020).

73. See OECD, NET WEALTH TAXES, *supra* note 19, at 16, 49.

74. See Laurent Bach, Antoine Bozio, Arthur Guillouzoic & Clément Malgouyres, *Escape or Play Again? How Retiring Entrepreneurs Responded to the Wealth Tax 4–5* (Dec. 2020) (unpublished manuscript), https://ssrn.com/abstract_id=3758040 [<https://perma.cc/Q6DD-QB9G>] (describing exemptions from French wealth tax for intellectual property, collectibles, and small business stock).

publicly traded assets.⁷⁵ A white paper from two prominent tax policy commentators, Eric Toder and Alan Viard, similarly proffers a version of a U.S. mark-to-market tax limited to traded assets.⁷⁶

The federal income tax in the United States also pursues a similar mark-to-market strategy for certain securities.⁷⁷ Subject to a few technical limitations, taxpayers who hold certain forms of derivatives that are traded regularly on an exchange (or certain dealers in derivatives) are taxed each year as though the derivatives had been sold for their value on the last day of the year.⁷⁸ If the taxpayer still holds the asset at the end of the next year, they are treated as though they had sold it and then immediately repurchased it the year before. Since an income tax imposes tax only on net profits, not the whole value of an asset, in effect the taxpayer will have annual income or losses equal to the asset's change in value during the current tax year.

A standard critique of these approaches is that they can be highly distortionary.⁷⁹ All else equal, if publicly traded stock is subject to wealth or mark-to-market taxes but privately owned equity is not, we should expect that an investor who would otherwise be indifferent between the two to put her money into private equity instead of the public firm.⁸⁰ Again, when tax changes economic actors' decisions on this scale, it can have large effects on economic growth as investors choose less productive but more lightly taxed assets.

The size of these effects depends importantly on “elasticities,” or how responsive economic actors are to tax rules.⁸¹ The evidence on whether a partial wealth tax would cause serious economic distortions

75. *Id.*; see Chamberlain, *supra* note 72, at 4–6 (noting family companies exemption in Spain and limited scope of wealth tax in Italy).

76. See generally Eric Toder & Alan D. Viard, *Replacing Corporate Tax Revenues with a Mark to Market Tax on Shareholder Income*, 69 NAT'L TAX J. 701 (2016) (“[P]ropos[ing] reducing the corporate tax rate to 15 percent and replacing the foregone revenue with a tax of . . . mark-to-market income of American shareholders . . .”). Mark Gergen has somewhat similarly proposed applying a wealth tax to just publicly traded assets, backstopped by an ex ante form of prospective tax applied to other assets. See Mark P. Gergen, *How To Tax Capital*, 70 TAX L. REV. 1, 1 (2016).

77. See generally Peter Connors, *The Mark-to-Market Rules of Section 475*, in BLOOMBERG TAX MGMT. PORTFOLIO, No. 543-2d (analyzing mark-to-market rules for certain securities).

78. *Id.* § IV(a); see I.R.C. §§ 475, 1256.

79. See Zelinsky, *supra* note 41, at 863; Cunningham & Schenk, *supra* note 33, at 749; Strnad, *supra* note 59, at 1879–81.

80. Cunningham & Schenk, *supra* note 33, at 749.

81. See *id.* at 804; Strnad, *supra* note 59, at 1821.

is fairly mixed.⁸² Further complicating matters, these elasticities often depend importantly on other legal rules and social arrangements.⁸³

While we don't deny that differentiated wealth taxes undoubtedly cause some economic dislocations, the amount of the distortion matters a great deal. Both imposing and failing to impose wealth taxes represent tradeoffs. A traditional realization-based tax system itself has highly damaging side effects, ranging from lock-in to exacerbated economic inequality. The relevant policy framing for wealth or mark-to-market taxes, then, should not be whether they avoid any distortions but instead whether on net their combination of advantages and disadvantages is preferable to a pure realization-based system.⁸⁴

We think it is plausible that limiting annual taxes just to select assets, such as publicly traded stock, can still be an improvement over a pure realization system. Because realization damages an economy in so many ways, beating a realization-based system is not a high bar to clear. Marking publicly traded assets to market, for instance, would at least eliminate the lock-in problem with respect to those assets and, in the United States, end the inequality-spawning practice of exempting investment gains on inherited wealth. As long as these benefits are larger than the distortions that efforts to shift away from publicly traded assets produce, the policy will be advantageous on net.

It is instructive to consider the global popularity of other highly differentiated taxes: sales and value-added taxes ("VATs").⁸⁵ Most global economies raise a significant share of revenue from either a VAT or, in the United States, sales taxes.⁸⁶ VATs and sales taxes usually exempt many services, as well as necessities such as food and rent, which implies that they likely distort consumer choices between

82. Emanuel Saez & Gabriel Zucman, *Progressive Wealth Taxation*, BROOKINGS PAPERS ON ECON. ACTIVITY 437, 471–74 (Fall 2019) [hereinafter Saez & Zucman, *Progressive Wealth Taxation*].

83. David M. Schizer, *Frictions as a Constraint on Tax Planning*, 101 COLUM. L. REV. 1312, 1323–34 (2001).

84. Shakow, *supra* note 68, at 1118.

85. A VAT is similar to the sales taxes familiar to U.S. readers, but the retailer is allowed a deduction for the amount of tax it paid on purchases from its suppliers. *Briefing Book: What Is a VAT?*, TAX POL'Y CTR., <https://www.taxpolicycenter.org/briefing-book/what-vat> [https://perma.cc/5JCT-LNEU], (last updated May 2020).

86. Alain Charlet & Jeffrey Owens, *An International Perspective on VAT*, 59 TAX NOTES INT'L 943, 943–44 (2010).

taxed and untaxed purchases.⁸⁷ Moreover, they are regressive in at least one important sense because they are imposed at uniform rates on each purchase and wealthy households consume a smaller fraction of their lifetime earnings than the poor.⁸⁸ Yet, based on their widespread popularity, the general view seems to be that they represent a worthwhile tradeoff for every society. Some economists even argue that these kinds of retail taxes are a useful way to tax wealth because they in effect allow the government to collect taxes on a portion of the wealth that was accumulated before the tax was enacted.⁸⁹

In prior work, we have identified another useful feature of retail taxes that they might share with a wealth or mark-to-market system: they are more efficient when they serve as complements to an existing income tax.⁹⁰ In general, the economic damage or “deadweight loss” of a tax system rises exponentially with its effective rate; doubling the tax more than doubles the distortions.⁹¹ It is therefore potentially efficient to take one large tax, such as the income tax, and to split it up into two or more smaller taxes—say, a lower-rate income tax plus a VAT.⁹² Of course, this doesn’t work if the two taxes in effect burden the exact same behaviors; then in reality there is still only one tax.⁹³ But evidence suggests that taxpayers respond differently to the income tax than they do to a VAT or a sales tax.⁹⁴ Thus, adopting a VAT alongside an

87. OECD, CONSUMPTION TAX TRENDS 2020 § 2.3; Ian Crawford, Michael Keen & Stephen Smith, *Taxing Goods and Services*, in TAX BY DESIGN, *supra* note 16, at 148, 154.

88. Crawford et al., *supra* note 87, at 156.

89. Peter Birch Sørensen, *Can Capital Taxes Survive? And Should They?*, 53 CESIFO ECON. STUD. 172, 187–88 (2007) (noting that consumption taxes burden savings at the time those savings are later spent).

90. John Brooks, Brian Galle & Brendan Maher, *Cross-Subsidies: Government’s Hidden Pocketbook*, 106 GEO. L.J. 1229, 1253–55 (2018); David Gamage, *How Should Governments Promote Distributive Justice: A Framework for Analyzing the Optimal Choice of Tax Instruments*, 68 TAX L. REV. 1, 41–44 (2014) [hereinafter Gamage, *Framework*].

91. Alan J. Auerbach & James R. Hines Jr., *Taxation and Economic Efficiency*, in 3 HANDBOOK OF PUBLIC ECONOMICS 1347, 1415 (Alan J. Auerbach & Martin Feldstein eds., 2002). For discussion of the deadweight loss concept, see, for example, David Gamage & Darien Shanske, *Tax Cannibalization and Fiscal Federalism in the United States*, 111 NW. U. L. REV. 295, 304–05, 352–53 (2017); Gamage, *Framework*, *supra* note 90, at 16, 20–22.

92. Gamage, *Framework*, *supra* note 90.

93. *Id.* at 35–39.

94. David Gamage, *The Case for Taxing (All of) Labor Income, Consumption, Capital Income, and Wealth*, 68 TAX L. REV. 355, 387–400 (2015) [hereinafter Gamage, *Case*]; Brian Galle, David Gamage & Yulia Kuchumova, *Tax Base Diversification as an Enforcement Tool* 20–33 (Dec. 22, 2022) (unpublished manuscript), https://papers.ssrn.com/abstract_id=4309790 [<https://perma.cc/J2JX-H4HP>].

income tax and lowering the income tax rate likely allows for a more efficient tax system.⁹⁵ This efficiency gain has to be traded off against any unwanted inequality effects from reliance on the VAT, but many countries with a VAT appear to overcome this by having relatively more progressive spending programs.⁹⁶

Wealth and mark-to-market taxes may also have this property. The key empirical question would be the extent to which taxpayers would attempt to avoid an annual tax in the same ways they avoid the income tax.⁹⁷ We know for certain that holding assets until death is a key tool the wealthy use to minimize their income taxes and that this tool will not reduce wealth or mark-to-market income tax. On the other hand, while the individual income tax does not currently produce strong incentives for holding private equity, that is one important method for minimizing the U.S. corporate income tax.⁹⁸

This more nuanced account of the possible strengths and weaknesses of annual taxation tracks the global experience with wealth taxes. Critics have pointed to the supposed failure of many European wealth tax regimes—many of those that once existed have now been repealed⁹⁹—as evidence that they cannot succeed.¹⁰⁰ Most of these taxed only select assets, such as publicly traded stock.¹⁰¹ But careful historic accounts suggest that for the most part these regimes were repealed not because of their limited legal scope but instead because of tax avoidance and evasion.¹⁰² European legal and technological

95. Gamage, *Case*, *supra* note 94, at 407–13. Multiple tax systems can also be efficient if the distortions of one system tend to offset the distortions of the other. The wealth tax and income taxes, at least in some institutional contexts, may provide an example. Marie Bjørneby, Simen Markussen & Knut Roed, *Does the Wealth Tax Kill Jobs?* 16, 24–25 (IZA Inst. of Lab. Econ., Discussion Paper No. 13766, 2020).

96. Charlet & Owens, *supra* note 86, at 953.

97. Gamage, *Case*, *supra* note 94, at 431–37.

98. See George K. Yin, *The Taxation of Private Business Enterprises: Some Policy Questions Stimulated by the “Check-the-Box” Regulations*, 51 SMU L. REV. 125, 132 (1997) (discussing effects of the corporate income tax on firms’ choice of financing structures).

99. OECD, NET WEALTH TAXES, *supra* note 19, at 16.

100. *E.g.*, Boadway et al., *supra* note 16, 786–87.

101. See *supra* notes 72, 75.

102. Saez & Zucman, *supra* note 82, at 474–80; Sarah Perret, *Why Did Other Wealth Taxes Fail and Is This Time Different?* 22 (Wealth Tax Comm’n, Evidence Paper No. 6, 2020); see Anne Iara, *Wealth Distribution and Taxation in EU Members* 9 (Eur. Comm’n Taxation Papers, Working Paper No. 60, 2015), https://ec.europa.eu/taxation_customs/system/files/2016-09/taxation_paper_60.pdf [<https://perma.cc/KKV7-KLN5>]; OECD, NET WEALTH TAXES, *supra* note 19, at 17, 62, 68 (attributing repeals to tax havens, avoidance, and evasion, as well as to “narrow tax

arrangements made it easy for wealthy taxpayers to hide assets in tax havens, such as Switzerland and later in Eastern Europe.¹⁰³ These schemes helped to reduce both wealth and income taxes.¹⁰⁴ Over time, this avoidance and evasion was so successful that wealth taxes raised little revenue, making them easy to repeal.¹⁰⁵ We infer, then, that it was the unfortunate overlap of avoidance and evasion responses to wealth and income taxes and the very high elasticity of those responses that made it hard for these systems to succeed.

Nonetheless, these experiences offer a clear lesson that tax system designers should try to minimize, as far as possible, the economic differences between the treatment of different categories of assets. If we cannot erase the dividing line between assets subject to wealth or mark-to-market tax and those that are exempt, we should ideally draw that line where responses are relatively inelastic.¹⁰⁶ But the approach of simply omitting large categories of assets is unlikely to succeed in that effort because the border between assets that are easy to value and those that are not will rarely line up with a set of choices that are particularly hard for taxpayers to manipulate.

Governments might overcome this limitation by combining distinct tax rules for different asset-types. An assembly of several imperfect responses, each applied to a different category of assets, may

base.” and summarizing studies finding that wealth taxes have primarily affected tax avoidance, not the real economy); Thomas A. McDonnell, *Wealth Tax: Options for Its Implementation in the Republic of Ireland* 21 (Nevin Econ. Rsch. Inst., Working Paper No. 6, 2013) (attributing decline to “mobility of capital” and “visibility” of wealth taxes). For other recent evidence on avoidance of the wealth tax, see generally Katrine Jakobsen, Kristian Jakobsen, Henrik Kleven & Gabriel Zucman, *Wealth Taxation and Wealth Accumulation: Theory and Evidence from Denmark*, 135 Q.J. ECON. 329 (2020); Marius Brulhart, Jonathan Gruber, Matthias Krapf & Kurt Schmidheiny, *Behavioral Responses to Wealth Taxes: Evidence from Switzerland*, AM. ECON. J.: POL’Y (forthcoming 2022).

The Irish wealth tax, implemented for a few years in the 1970s, might be an exception. The tax had a narrow base and required appraisals for essentially all assets, so administrative costs were extremely high relative to the revenue it brought in, undermining its political support. CEDRIC SANDFORD & OLIVER MORRISSEY, *THE IRISH WEALTH TAX: A CASE STUDY IN ECONOMICS AND POLITICS* 145–46 (1985).

103. OECD, *NET WEALTH TAXES*, *supra* note 19, at 67, 92; *see also* Bjørneby et al., *supra* note 95, at 6, 20 (noting that under the Norwegian wealth tax foreign assets are self-reported).

104. *See* SANDFORD & MORRISSEY, *supra* note 102, at 144 (noting that wealth tax enforcement also identified sources of hidden income in offshore trusts).

105. OECD, *NET WEALTH TAXES*, *supra* note 19, at 17.

106. *See* Elkins, *supra* note 39, at 403 (noting the efficiency of drawing the line to “minimize the substitution effect”); David A. Weisbach, *Line Drawing, Doctrine, and Efficiency in the Tax Law*, 84 CORNELL L. REV. 1627, 1661–63 (1999).

outperform each individually because the combination results in lower elasticities. Even if each alternative can be exploited by well-advised taxpayers to reduce their tax rates, so long as the effective rate for the taxed assets is not zero, the existence of the alternative will reduce the payoff from swapping from one regime to another. In combination with other frictions, the existence of alternative valuation methods can substantially reduce the elasticity of responses, making each method more efficient than it would be alone.

Of course, this possibility raises the question of whether there are other even moderately effective tools for valuing assets other than those that are publicly traded. We turn now to considering several possibilities.

B. Formulaic Valuations and the Swiss Near-Miss

Another promising but partial solution derives from the experience of the Swiss wealth tax. Switzerland's share of national revenues collected through wealth taxes is by far the largest of any country, totaling more than 1 percent of its entire gross domestic product.¹⁰⁷ This despite Swiss bank secrecy, and despite the fact that the tax is actually administered by the dozens of tiny Swiss cantons, each of them with different rates, albeit subject to some common rules and guidelines.¹⁰⁸

A key distinguishing feature of the Swiss system, to which we would attribute at least part of its surprising success, is what we call its formulaic valuation method.¹⁰⁹ Instead of appraising every small privately held business, the formulaic valuation method computes the

107. OECD, REVENUE STATISTICS 2021: THE INITIAL IMPACT OF COVID-19 ON OECD TAX REVENUES tbl.4.69 (2021), <https://www.oecd.org/tax/revenue-statistics-2522770x.htm> [<https://perma.cc/BTL7-F82Y>].

108. Peter Hongler & Fabian Mauchle, *Is Switzerland a Role Model for Wealth Taxes?*, 97 TAX NOTES INT'L 645, 646–47, 649 (2020).

109. See, e.g., Jean-Blaise Eckert & Lukas Aebi, *Wealth Taxation in Switzerland 3* (Wealth Tax Comm'n, Background Paper No. 133, 2020) (“In general, the wealth taxation regime as such is respected in Switzerland and no major effort to abolish or fundamentally reform the Swiss wealth tax has been made in the last two decades.”); see also OECD, NET WEALTH TAXES, *supra* note 19, at 18 (suggesting that Switzerland’s “broad base”—that is, its ability to tax small businesses—explains its ability to raise much more revenue than other wealth taxes). We note that Norway’s wealth tax also uses what might be thought of as a form of formulaic valuation for privately held businesses (based on the value of the businesses’ assets), but we consider the use of formulaic valuations to be better developed and more comprehensive in the Swiss wealth tax. See Bettina Banoun, *Wealth Tax: Norway* 9–10 (Wealth Tax Comm’n, Background Paper No. 138, 2020).

taxable value of nonpublic businesses using two pieces of financial information: the book value of the firm's assets and its recent earnings.¹¹⁰ The exact impact of earnings on the firm's value varies from year to year based on prevailing interest rates, which are used to calculate the present discounted value of expected future earnings.¹¹¹

Both these pieces of data are readily available and fairly reliable because they are reported annually in firms' financial statements.¹¹² These are the documents that a business uses to represent its financial condition to trading partners, creditors, and other investors. Because sound financial condition is important to all these relationships—no retailer wants a long-term contract with a supplier that is on the brink of failure—firms rarely want to understate income or assets on their financial statements.¹¹³ This is not to say that cheating is impossible. Evidence suggests that financial statement income is somewhat sensitive to tax rates, and firms might understate financial statement income and use more covert methods to convey their real financial standing when needed.¹¹⁴

While not perfect, we think the Swiss solution works, at least for a core set of relatively easy cases, because it is just a codification of what most appraisals would already do. Market actors with financial

110. Hongler & Mauchle, *supra* note 108, at 648–49. In particular, the taxpayer calculates both a book value factor and an earnings factor, and the final valuation is the mean of the book value factors plus two times the earnings factor. The earnings factor, in turn, is the mean of recent years' income (either two or three years, depending on the canton), weighted by one over the applicable interest rate. In 2019, for instance, there was a 7 percent interest rate, so the earnings factor was 14.286 times mean recent earnings.

Spain also uses book value, with several fallback options, but does not typically make use of book earnings. OECD, NET WEALTH TAXES, *supra* note 19, at 86.

111. Hongler & Mauchle, *supra* note 108, at 649.

112. See George K. Yin, *Getting Serious About Corporate Tax Shelters: Taking a Lesson from History*, 54 SMU L. REV. 209, 224–25 (2001) (suggesting that book income is more “transparent” and less likely to be manipulated downwards by firms).

113. Wolfgang Schön, *The Odd Couple: A Common Future for Financial and Tax Accounting?*, 58 TAX L. REV. 111, 143–44 (2005); Yin, *supra* note 112, at 225.

114. See, e.g., Michelle Hanlon, Stacie Kelley Laplante & Terry Shevlin, *Evidence for the Possible Information Loss of Conforming Book Income and Taxable Income*, 48 J.L. & ECON. 407, 423–29 (2005); see also Itai Grinberg, *Stabilizing “Pillar One”: Corporate Profit Reallocation in an Uncertain Environment*, 23 FLA. TAX REV. 130, 179–80 (2019) (summarizing literature). For a broader discussion of techniques firms use to manipulate accounting data, see H. David Sherman & S. David Young, *Where Financial Reporting Still Falls Short*, HARV. BUS. REV., July–Aug. 2016, at 76–84. For critique of the empirical studies, see Mihir A. Desai & Dhammika Dharmapala, *Earnings Management, Corporate Tax Shelters, and Book-Tax Alignment*, 62 NAT'L TAX J. 169, 182 (2009).

incentives to price a business accurately often use book assets and a multiplier of earnings as a measure of a firm's value.¹¹⁵ Appraisers do too, though there may be some variation in the exact multipliers or "discount rates" different appraisers might choose.¹¹⁶ By imposing a uniform multiplier, formulaic valuation discourages taxpayers from shopping for appraisers who might be willing to use a lower multiplier than industry standard.

At the same time, formulaic valuation has important limitations.¹¹⁷ Firms with substantial growth opportunities may have value well in excess of their assets and current revenues. Think of Uber circa 2019, when the company had negative net assets, negative earnings, and yet a market capitalization of over \$50 billion.¹¹⁸ And there are problems for established firms as well. Suppose a firm has a few years of losses; is it now worth nothing?¹¹⁹ Or suppose a firm is distressed for some reason—in that case the book value of its assets may be much more than the assets' actual market value.¹²⁰

As to such limitations, we would make a few observations. First, these limitations need to be viewed in the context of the current regime, in which wealth is not directly taxed at all and the investment returns to owning wealth often also escape taxation. Second, even those skeptical of this approach tend to think that it can work well enough for small businesses.¹²¹ Third, there is the possibility of addressing some of these concerns. Tax system designers must decide

115. See Kyle Peterdy, *Valuation*, CORP. FIN. INST. (June 28, 2022), <https://corporatefinanceinstitute.com/resources/knowledge/valuation/valuation> [<https://perma.cc/F5H7-LU73>].

116. ASWATH DAMODARAN, DAMODARAN ON VALUATION: SECURITY ANALYSIS FOR INVESTMENT AND CORPORATE FINANCE 25–78 (2d ed. 2006).

117. See Stephen Daly, Helen Hughson & Glen Loutzenhiser, *Valuation for the Purposes of a Wealth Tax*, 42 FISCAL STUD. 615, 632–33 (2021) (summarizing critiques).

118. *Uber Technologies Market Cap 2017–2022*, MACROTRENDS, <https://www.macrotrends.net/stocks/charts/UBER/uber-technologies/market-cap> [<https://perma.cc/AC3T-B8Y4>]; Alex Wilhelm, *Will Ride-Hailing Profits Ever Come?*, TECHCRUNCH (Feb. 12, 2021, 11:16 AM), <https://techcrunch.com/2021/02/12/will-ride-hailing-profits-ever-come> [<https://perma.cc/D7PB-VK7Q>] (noting that by one measure Uber lost \$8.5 billion in 2019).

119. Jenny Nelder, *Valuation of Unincorporated Businesses (Sole Traders and Partnerships) and Shareholdings in Private Companies* 10 (Wealth Tax Comm'n, Background Paper No. 141, 2020).

120. Daniel Ryan, *Valuation of Businesses and Intellectual Property Assets* 13 (Wealth Tax Comm'n, Background Paper No. 144, 2020).

121. Daly et al., *supra* note 117, at 634 ("Alternatively, rather than ignoring human capital, a formula based on book value, as adopted in Switzerland, seems a plausible option for valuing smaller private businesses.").

whether adding fallback valuation methods for these kinds of companies is worth the added complexity. For example, the California wealth tax bill we helped to draft allows the tax authority to value firms at above their formulaic value when there are recent market transactions, such as private equity investments, establishing a higher value than the formula would.¹²²

Although formulaic valuation (perhaps supplemented with some fallback valuation rules) works reasonably well for simple equity interests, it struggles to pinpoint value for many other modern financial instruments, whether exotic or routine. In addition, formulaic valuation also obviously struggles as applied to many nonfinancial assets, such as land, jewelry, and art. Indeed, many Swiss wealth tax cases involve disputes over the value of real estate that are not much different from those we might see in the United States.¹²³ Empirically, these assets represent a fairly small share of the portfolios of the American rich.¹²⁴ Some of them can also be valued using third-party data, such as the value reported by the owner to their insurer,¹²⁵ or by making formulaic adjustments based on the purchase price. But the share of hard-to-value assets could grow if holding these assets would allow taxpayers to escape formulaic valuation and instead exploit the many gaps in most contemporary appraisal systems.¹²⁶

C. *Putting It Off Until Tomorrow: Retrospective Taxation and Interest Charges*

Another major set of solutions to valuation depends on what is usually termed “retrospective” taxation.¹²⁷ Retrospective taxation reforms have been proposed for both income taxes and wealth taxes.¹²⁸

122. Galle et al., *supra* note 27, at 15.

123. See Hongler & Mauchle, *supra* note 108, at 650 (describing common wealth tax controversies in Switzerland).

124. Smith et al., *supra* note 2, at 44–46.

125. OECD, NET WEALTH TAXES, *supra* note 19, at 86.

126. Florian Scheuer & Joel Slemrod, *Taxing Our Wealth*, 35 J. ECON. PERSPS. 207, 208 (2021).

127. Schizer, *supra* note 34, at 1596–97. Although it sounds like the opposite of retrospective taxation, for our purposes we include “ex ante valuation” in this category. See Cunningham & Schenk, *supra* note 33, at 734. Both approaches basically assess property based on a presumption about its annual rate of return, often the risk-free rate. Ex ante valuation also typically includes a retrospective “reconciliation” at the time of sale to capture unexpected gains. *Id.* at 736, 741.

128. Reed Shuldiner, *A General Approach to the Taxation of Financial Instruments*, 71 TEX. L. REV. 243, 284–89 (1992); Greg Leiserson, *Taxing Wealth*, in TACKLING THE TAX CODE, *supra*

In its simplest forms, such as in the Billionaires Income Tax (“BIT”) bill recently proposed by Senator Ron Wyden, a retrospective tax is just the standard realization rule but with an extra tax that amounts to an interest charge for the value of the deferred tax liability.¹²⁹ The BIT assumes that an asset has grown in value an equal amount each year and then charges interest as though the taxpayer borrowed from the government in an amount equal to the tax that would have been owed on that increase in value.¹³⁰

An example might be helpful. Suppose Facebook stock grew from \$100x to \$1100x between years one and eleven and then was sold in year eleven. The BIT assumes Facebook increased from \$100x to \$200x in year two (\$1000x in total appreciation / 10 years ownership = \$100x growth per year). At a 20 percent tax rate, that \$100x increase would have caused a \$20x tax bill. Upon sale in year eleven, taxpayer Marff Bezkerburg will owe tax on all \$1000x in gain. The BIT would then charge nine years’ worth of interest on the \$20x year-two tax bill, eight years’ worth of interest on the \$20x year-three tax bill, and so on.

There are a variety of other ways of implementing a retrospective tax, each with different tradeoffs. For instance, we could use different assumptions about when assets gained in value, charge different interest rates for each asset or category of asset, and so on. Professor Ari Glogower has provided a thorough summary and critique of most of these efforts,¹³¹ and so we will offer a general observation about retrospective methods, briefly summarize his summary, and then add a few small points.

A central challenge for retrospective methods is what one of us has termed the “political optionality” problem.¹³² By their nature, retrospective charges are not payable until some future event when the taxpayer sells or otherwise disposes of their investment. As interest charges pile up, the size of this expected future tax bill mounts. Savvy taxpayers will thus start thinking about ways to ensure that the bill

note 8, at 89, 105, 112 (proposing a retrospective wealth or mark-to-market tax with annual estimated prepayments).

129. Glogower, *Taxing Capital Appreciation*, *supra* note 60, at 134.

130. Sen. Ron Wyden, *Billionaires Income Tax: Section-by-Section Summary* 9 (Oct. 27, 2021), <https://www.finance.senate.gov/imo/media/doc/Billionaires%20Income%20Tax%20-%20Section-by-Section.pdf> [<https://perma.cc/4SJ2-FRTC>].

131. See Glogower, *Taxing Capital Appreciation*, *supra* note 60, at 128–42.

132. Gamage & Brooks, *Tax Now or Tax Never*, *supra* note 3, at 495.

never comes due.¹³³ In state taxing systems, another related option might be to relocate to another jurisdiction where the asset would no longer be subject to tax.

A key aspect of the political optionality problem is therefore that delayed tax bills create incentives for taxpayers to lobby to change the rules. We have seen dramatic evidence of this tendency in the U.S. estate tax, where over time the expectant heirs of the country's largest fortunes have funded political movements aimed at minimizing the tax on their inheritance, and succeeded at systematically paring the tax down to a nub of what it once was.¹³⁴ We expect that a delayed-payment system for realized gains would face similar pressures.

Any retrospective system will suffer from the political optionality problem, but, at least in theory, retrospective systems could eliminate the financial incentive to defer gains. However, as Professor Glogower has observed, most existing retrospective methods would not actually eliminate this financial incentive to defer realization of gains, and many of them would also preserve the incentive to accelerate realization of losses.¹³⁵ Consider again the BIT. If Marff believes that he can earn a better return on his investments than the interest rate charged by the statute, he would still prefer to delay paying tax. In effect, he would be borrowing from the government at the statutory rate (on average at a recent historical rate of about 2.9 percent) in order to invest in his business, which he expects to average (say) a 10 percent return. Similarly, if Marff believes that most of the gain in value of his stock will occur in years one and two, he will believe that he is getting a bigger bargain the longer he holds the stock because by assuming equal gains each year, the statutory formula shifts interest from early years, when

133. Cf. Leiserson, *supra* note 128, at 93 (noting possibility of strategic timing of sales to minimize effective tax rates); Schizer, *supra* note 34, at 1560–61 (same). Note that the political optionality problem can be mitigated by approaches that make use of ex ante valuation. However, ex ante valuation will tend to undervalue the fastest growing assets (which are disproportionately owned by the wealthiest), so it does not eliminate political optionality problems.

134. See generally MICHAEL J. GRAETZ & IAN SHAPIRO, DEATH BY A THOUSAND CUTS: THE FIGHT OVER TAXING INHERITED WEALTH (2006) (describing the multiyear campaign to repeal the estate tax).

135. Glogower, *Taxing Capital Appreciation*, *supra* note 60, at 139; see also Mark P. Gergen, *The Effects of Price Volatility and Strategic Trading Under Realization, Expected Return and Retrospective Taxation*, 49 TAX L. REV. 209, 214 (1994) [hereinafter Gergen, *The Effects of Price Volatility*] (explaining how a move to retrospective taxation does not resolve the issue of strategic trading alone); Thomas L. Evans, *The Taxation of Multi-Period Projects: An Analysis of Competing Models*, 69 TEX. L. REV. 1109, 1150–55 (1991) (discussing how tax avoidance problems cannot be resolved completely by a rate of return model).

the gain in value really occurred, to later years of Marff's holding period.¹³⁶ The longer the holding period, the larger the shift.

Even the most sophisticated retrospective systems, such as the dynamically adjusting model proposed by economists Alan Auerbach and David Bradford, fall short under real-world conditions.¹³⁷ Auerbach and Bradford improve over the simple interest charge with a complex formula that avoids the simplifying assumption that assets gained equal value every year. They prove mathematically that their method should leave taxpayers perfectly indifferent to the timing of realization so long as it is the case that income taxes do not burden the "risky return" on assets.¹³⁸ The intuition behind their result is simple. Government imposes a tax that, at every point in time, looks to the taxpayer as though it will require an interest payment exactly equal to what the taxpayer could earn in a risk-free investment.¹³⁹ Taxpayers with risky investments do not care about delaying tax because, by assumption, the income tax does not impose any net cost on such investments.¹⁴⁰ So the risk-free rate is sufficient to keep investors indifferent between selling and holding their assets.

In fact, though, taxpayers with risky bets care a great deal about avoiding tax on those wagers. Briefly, in an ideal system, taxes do not affect risk because a taxpayer can always scale up their bets: if there is a 50 percent tax, the taxpayer bets twice as much.¹⁴¹ Transaction costs and tax rules spoil this strategy, however.¹⁴² It is costly to raise money for risky bets—among other reasons, because funders may not trust the risk-taking entrepreneur to protect the funders' interests.¹⁴³ And

136. Schizer, *supra* note 34, at 1597–98.

137. See Auerbach & Bradford, *supra* note 48, at 959–63 (describing the generalized cash-flow taxation model).

138. *Id.* at 966.

139. *Id.* at 963–64.

140. *Id.* at 966.

141. See *id.* at 964–65; David F. Bradford, *Fixing Realization Accounting: Symmetry, Consistency and Correctness in the Taxation of Financial Instruments*, 50 TAX L. REV. 731, 763 (1995). For an in-depth but accessible explanation, see Weisbach, *(Non)Taxation*, *supra* note 31, at 8–21.

142. See Joseph Bankman & Thomas Griffith, *Is the Debate Between an Income Tax and a Consumption Tax a Debate About Risk? Does It Matter?*, 47 TAX L. REV. 377, 396–400 (1992); Alvin C. Warren, Jr., *Financial Contract Innovation and Income Tax Policy*, 107 HARV. L. REV. 460, 482 n.89 (1993); Weisbach, *(Non)Taxation*, *supra* note 31, at 33–34.

143. Some bets also cannot be expanded at any transaction cost because they are relatively uniquely available. Weisbach, *(Non)Taxation*, *supra* note 31, at 19–21.

doubling one's bet is a bad plan if it turns out that losses are not fully deductible, as they are not in most income tax systems.¹⁴⁴ Thus, even the Auerbach and Bradford method fails to achieve neutrality, as in actuality the income tax indeed burdens risky returns.¹⁴⁵

Professor Glogower nonetheless proposes a retrospective system in which the interest charge is relatively low, close to the risk-free rate.¹⁴⁶ In a perfectly competitive market, investors only earn large returns through risk-taking.¹⁴⁷ Our economy, though, features many investors who earn "rents," or profits in excess of competitive returns, often through monopolizing techniques such as patents or vast networks of users. A low interest charge will likely leave these investors with strong incentives to hold their existing asset. Professor Glogower argues this approach is preferable to a higher rate because at elevated rates there would be a risk of overtaxing investors who can only earn the low, risk-free rate.¹⁴⁸ Retrospective methods that measure the rate of return on every individual asset could solve that problem, but, as Glogower notes, only at the cost of great complexity.¹⁴⁹

Perhaps Glogower's is the most politically viable approach, but economically it is often defensible to impose a rate higher than the risk-free one. For the most part, the cost of any errors in setting the correct interest rate are likely to be symmetrical, which is to say it's just as bad to set rates too low as too high.¹⁵⁰ If the interest charge is too low, taxpayers will hold assets longer than they should; if it's too high, they

144. Auerbach & Poterba, *supra* note 57, at 626. This assumes that the loss limits in fact are binding; it may instead be the case that traders always have or can risklessly manufacture other gains to offset losses. See Gergen, *The Effects of Price Volatility*, *supra* note 135, at 213–14.

145. Retrospective systems also may not always solve the liquidity problem because the value realized at sale may not be sufficient to cover the interest charge. Cunningham & Schenk, *supra* note 33, at 744–45.

146. Glogower, *Taxing Capital Appreciation*, *supra* note 60, at 143–54.

147. William F. Sharpe, *Capital Asset Prices: A Theory of Market Equilibrium Under Conditions of Risk*, 19 J. FIN. 425, 436–42 (1964).

148. Glogower, *Taxing Capital Appreciation*, *supra* note 60, at 154.

149. *Id.* at 138; see also Cunningham & Schenk, *supra* note 33, at 745 (noting complexity of variable-rate retrospective approach). Further, even asset-specific interest charges fail to capture real economic growth of an asset if the interest charges are assessed only periodically, such as annually. Strnad, *supra* note 59, at 1893. These approaches may also be gameable through strategically timed sales and purchases. *Id.* at 1894–97; Gergen, *The Effects of Price Volatility*, *supra* note 135, at 210. But it is possible to make them relatively more game-resistant. Bradford, *supra* note 141, at 769–82 (describing an approach for reducing the tax benefits of strategic timing).

150. Shaviro, *supra* note 38, at 28.

will sell them faster than they should. Both can result in misallocation of capital, and it is not obvious that selling too soon is any more damaging to the economy than selling too late.¹⁵¹

It is usually preferable instead to minimize the magnitude of the government's errors. Because the economic damage from mispricing rises exponentially with the size of the distortion, it's typically better to have several small mistakes than one big one, even if the small errors total up to more than the big error in aggregate.¹⁵² To implement that principle, the government should probably aim to choose a value near the middle of the distribution of investors' rates of return, rather than selecting one at the extreme lower end.¹⁵³ Admittedly, overtaxing may be a greater concern for individuals with relatively little wealth, for whom there is steeply diminishing marginal utility. But there are few, if any, large investors with hard-to-value assets in that population.

In any event, whatever the optimal interest rate to charge, it is evident that these methods all involve tradeoffs. Setting one interest rate for all taxpayers will necessarily still leave many of them sensitive to the timing of when they sell. And trying to measure the individual rate of return every taxpayer faces seems enormously complicated. Either way, the existence of the delayed charge hanging over the taxpayer's head will encourage them to find avenues for changing the law they are subject to such as by moving or lobbying.

D. Government Equity: A New Land?

A close cousin to these "interest-charge" approaches for retrospective taxation is practitioner Stephen Land's proposal, building on an earlier insight by Professor Mark Gergen, for "yield-based" retrospective taxation.¹⁵⁴ Instead of applying a uniform interest charge, Land's method calculates how much an asset owner would save

151. *Id.*

152. Louis Kaplow & Steven Shavell, *Property Rules Versus Liability Rules: An Economic Analysis*, 109 HARV. L. REV. 713, 775-79 (1996).

153. For example, suppose that Al, Betty, and Chaz expect to earn profits of 1 percent, 5 percent, and 10 percent, respectively. If government sets an interest rate of 1 percent, it will only be off for two taxpayers, but the total error will be $(1 - 1) + (5 - 1) + (10 - 1) = 13$. If it sets a rate of 5.5 percent instead, it will be off for all three taxpayers. But the total error will be only $(5.5 - 1) + (5.5 - 5) + (10 - 5) = 10$. More importantly, since economic cost is an exponential function of the error size, the *squared* error in the first case is 169, and in the second only 100.

154. Land, *supra* note 20, at 75-103; *see also* Gergen, *The Effects of Price Volatility*, *supra* note 135, at 235 n.81 (observing that assuming deferred taxes are reinvested at asset's internal rate of return "reduces the pretax rate of return by precisely the tax rate").

from tax deferral for any given asset, then upon sale charges the owner that exact savings amount. The goal, of course, is to leave the owner with no incentive to defer gains or accelerate losses. If one key assumption holds, it also does not matter when the owner reaped their gains or losses.¹⁵⁵ Land's method thus can eliminate distortions arising from assets that gain their value earlier or later than the government assumes under a simpler retrospective method.

Land calls his approach the equivalent of an "equity investment by the government" because the government's tax claim grows or shrinks as the investment does.¹⁵⁶ That is, if one unpacks the math, Land's formula is effectively a form of retrospective interest charge, but one in which rather than charging interest on deferred taxes, the government instead gets a slice of the taxpayer's asset equal in value to the amount of tax that would have been paid. This slice then gets bigger or smaller at the same rate as the asset.

Although Land's proposal in theory solves the problem of setting the interest charge that has plagued other proposals for retrospective taxation, actually implementing Land's proposal would require addressing a number of troublesome issues related to contributions, partial withdrawals, and deemed withdrawals.¹⁵⁷ These issues give rise to what Land calls the portfolio problem.¹⁵⁸ Briefly, when the government holds an equity interest or its equivalent in multiple taxpayer assets, the total tax on the assets is often smaller when those assets are combined into a single asset (e.g., by merging a bond and share of stock into a hybrid instrument).¹⁵⁹ Land proposes an elaborate

155. The key assumption is that any tax savings the asset owner achieves through deferral can be reinvested in the asset itself, or another one with the same rate of return. Land, *supra* note 20, at 86. This is generally plausible. For example, if the owner would have sold some of the asset in order to pay tax, and deferral avoids this necessity, then the assumption is met: the taxpayer has kept their deferred taxes invested in the same underlying asset.

156. *Id.* at 84.

157. *See id.* at 86–109.

158. *Id.*

159. Land's explanation of why this occurs is opaque. It is a result of the fact that an equity stake gives the government compound interest at the asset's internal rate of return. Because the compound interest formula includes a logarithmic function, the tax increases logarithmically with that rate of return. Thus, an asset returning 20 percent will result in a retrospective charge that is more than twice the charge on an asset returning 10 percent. This nonlinearity then interacts with the equity method's choice of the rate of return. The equity method aims to make taxpayer indifferent between deferral and paying tax immediately. It presumes that deferral allows taxpayer to reinvest the deferred tax on an asset at the asset's own rate of return (or, equivalently, that taxpayer would have to sell some of the asset to pay tax immediately). By bundling assets

accounting system in response.¹⁶⁰ But Land acknowledges that this does not fully solve all of the implementation issues,¹⁶¹ and other scholars have concluded that this proposal would result in “unworkable administrative complexity.”¹⁶² Land also acknowledges he has no clear solution for what to do if tax rates fluctuate over the time a taxpayer holds an asset.

Even more than these issues, though, we think the key flaws in Land’s idea are the options it provides taxpayers. Like other forms of retrospective charges, the possibility of a future payment under Land’s formula offers the taxpayer political optionality benefits. That is, taxpayers could opt to delay tax while waiting for future legal or political changes that might allow them to escape or reduce their ultimate tax liabilities, and some taxpayers might also lobby or exert other political pressures to try to create such future legal or political changes. Another way taxpayers might escape—and this problem afflicts retrospective charges generally—is to make themselves relatively judgment-proof before sale.¹⁶³

For all of these reasons, although our proposed ULTRA method bears a philosophical resemblance to Land’s yield-based approach for retrospective taxation in that both are based on the idea of the government having a notional equity interest, we will argue that our approach is more practical in terms of both implementation and political sustainability.¹⁶⁴ Like other retrospective approaches, Land’s

with different rates of return together, however, taxpayers could potentially strategically manipulate this rate.

160. Land, *supra* note 20, at 97–101.

161. *Id.* at 104–09.

162. Glogower, *Taxing Capital Appreciation*, *supra* note 60, at 138.

163. Michael S. Knoll, *Financial Innovation, Tax Arbitrage, and Retrospective Taxation: The Problem with Passive Government Lending*, 52 TAX L. REV. 199, 215–16 (1997). However, Land’s approach improves over other retrospective methods in this respect because his formula will never impose a tax of greater than the asset’s sale price, while with an interest charge it is theoretically possible for interest to exceed 100 percent of the asset’s value.

164. See Land, *supra* note 20, at 84 (describing his approach as a form of government equity interest); see also Technical Appendix, *infra*, for further discussion of how Land’s proposal would be unadministrable and exploitable through taxpayer gaming in practice, and how integrating Land’s approach with ULTRAs could resolve these problems.

Another prior proposal that our ULTRA method bears a similar philosophical resemblance to is Herwig J. Schlunk, *The Cashless Corporate Tax*, 55 TAX LAW REV. 1 (2001) (proposing replacing the existing corporate income tax with an approach that would involve the government taking direct ownership interests). However, Professor Schlunk’s corporate income tax application is sufficiently different from the applications we discuss in this Article, and the

proposal would retain the realization rule and then use a formula for calculating the tax owed upon realization. By contrast, as we will explain in the next Part, our ULTRA proposal would make use of separated accounts and an alternative take-it-or-leave-it valuation mechanism so as to not be as dependent on realization.

E. In-Kind Payments Are Not Sufficiently Kind

If interest charges that resemble a government equity interest have some promise, why not an actual government equity stake? That idea has been proposed recently by Jeremy Bearer-Friend¹⁶⁵ and is also a component of the wealth tax proposal from Professors Emmanuel Saez and Gabriel Zucman.¹⁶⁶ Saez and Zucman offer in-kind payments, such as with shares of a start-up, as a solution to potential liquidity and valuation problems. Consider the founder of a startup who is only wealthy on account of illiquid shares in the startup. If they have one hundred shares in their startup and the tax is 1 percent, then they could choose to pay one share to the government. The government would then auction off the share—in effect, making a market. The payment in shares solves the liquidity problem, and the creation of a market solves the valuation problem.

However, the administrative appeal of payment in-kind declines as the number of businesses subject to this regime grows.¹⁶⁷ Having the government trying to dispose of shares in numerous successful regional plumbing supply businesses and other similar small businesses would be problematic economically and politically. Even if limited just to very wealthy taxpayers (and presumably very valuable businesses), we think this approach poses substantial political economy problems for the government to regularly take and dispose of significant assets in private businesses. Partially, there is a problem of political optics and public

mechanics of Schlunk's proposal are accordingly quite different from ours, that our ULTRA method has little in common with Schlunk's proposal beyond this philosophical similarity.

165. See generally Bearer-Friend, *supra* note 25 (considering the viability of in-kind tax paying). Schlunk's prior proposal for a cashless corporate tax might also be thought of as a form of in-kind payment proposal, see *supra* note 164.

166. Saez & Zucman, *Progressive Wealth Taxation*, *supra* note 82, at 482–83; see EMMANUEL SAEZ & GABRIEL ZUCMAN, *THE TRIUMPH OF INJUSTICE: HOW THE RICH DODGE TAXES AND HOW TO MAKE THEM PAY* 151–53 (2019).

167. Glenn Loutzenhiser & Elizabeth Mann, *Liquidity Issues: Solutions for the Asset Rich, Cash Poor*, 42 *FISCAL STUD.* 651, 672–73 (2021); see Daly et al., *supra* note 117, at 633.

opinion.¹⁶⁸ But there is also a nontrivial problem of political entanglements. Just when should the government sell its shares? Might regulators treat a business differently if the government stood to gain a substantial amount when the shares are sold? Also, if this option is only to be available to some businesses, which ones?¹⁶⁹

To be sure, there could be ways of making the authority responsible for selling the assets independent, but, leaving aside whether these reforms would be effective, the perception might well persist that it is not. The concern about state ownership of shares has a long pedigree and indeed has already resulted in many state constitutions forbidding state ownership of the shares of a private business.¹⁷⁰ More recently, the short-term stake the federal government took in General Motors during the Great Recession was extremely controversial,¹⁷¹ even though the overall relief program of which it was a part is generally seen as a success.¹⁷²

In sum, with guardrails, we think that paying in-kind is a possible solution for some valuation problems, but one that raises significant political economy concerns. Yet note that a substantial portion of the political economy problem involves the actual transfer of shares to the government. As we will explain, the ULTRA approach should be seen as aiming to achieve the benefits of the in-kind payment approach while reducing the political economy costs because this approach does not turn the government into an actual shareholder.

F. Key Tools Already in Use: Separated Accounts, Information-Generating Rules, and the Problem of Identifying Withdrawals

The final approach we wish to discuss—separated accounts—is a little different. Specifically, separated accounts differ from the other partial solutions we have discussed so far in this Part because they are

168. See, e.g., Karen Rowlingson, Amrita Sood & Trinh Tu, *Public Attitudes to a Wealth Tax: The Importance of 'Capacity To Pay,'* 42 FISCAL STUD. 431, 450 (2021) (noting that payment in kind gains less support than deferral or paying less tax in survey results).

169. See Loutzenhiser & Mann, *supra* note 167, at 672.

170. See, e.g., CAL. CONST. art. XVI, § 6 (prohibiting the legislature from authorizing the state to become a stockholder in any corporation).

171. Bill Vlasic & Annie Lowrey, *U.S. Ends Bailout of G.M., Selling Last Shares of Stock*, N.Y. TIMES (Dec. 9, 2013, 4:37 PM), <https://archive.nytimes.com/dealbook.nytimes.com/2013/12/09/u-s-sells-remaining-stake-in-gm> [<https://perma.cc/PN5L-EDAD>].

172. Austan D. Goolsbee & Alan B. Krueger, *A Retrospective Look at Rescuing and Restructuring General Motors and Chrysler*, 29 J. ECON. PERSPS. 3, 3 (2015).

not directly aimed at the difficulty of valuing hard-to-value assets but rather are designed to make the realization rule work for assets that are being held for designated purposes. In our ULTRA approach, some of a taxpayer's assets are subject to the special ULTRA rules, and some are not. It turns out that the tax system already offers other examples where the realization rule is applied differently to different assets for a single taxpayer. Usually, the taxpayer owners can set aside some assets for special uses and get special tax treatment—often partial relief from the realization rule—in exchange. The classic example is the individual retirement arrangement, or IRA.¹⁷³ A taxpayer puts investment money into an investment account and doesn't pay tax on any investment gains until retirement, even if some of the investments are sold and re-invested.¹⁷⁴ Other examples include the corporate income tax and trust taxation regimes, among other existing tax rules. All of these involve separated accounts mechanisms whereby income earned by assets held within the separated accounts is not taxable to the owners or beneficiaries of the accounts until there has been some form of distribution or deemed distribution from the accounts. For instance, a closely held C corporation might have only a single owner who has contributed assets to the corporation.¹⁷⁵ Nevertheless, any income earned by assets held by that corporation would not be taxed to the owner unless the corporation transfers property to the owner, such as through a dividend, deemed dividend, or stock buyback.

For our purposes, what is most interesting about these regimes are the rules governing what counts as withdrawals or deemed distributions from the accounts. These rules are critical because if the taxpayer owners or beneficiaries of these accounts could withdraw or otherwise access the assets held within the account without limitations, then these accounts could be used to escape the personal-level income tax (assuming, as has generally been the case historically for IRAs and C corporations, that the entity's own tax is lower than the owner's).¹⁷⁶

173. A useful overview and history of the IRA is Note, *Costs and Consequences of Tax Incentives: The Individual Retirement Account*, 94 HARV. L. REV. 864 (1981).

174. See I.R.C. § 408(e)(1) ("Any individual retirement account is exempt from taxation under this subtitle . . .").

175. Certain privately held corporations are eligible for pass-through treatment under Subchapter S of the Tax Code, see I.R.C. § 1361; our example refers to the others, which are taxed as separate entities under Subchapter C, see I.R.C. § 11.

176. Cf. Mary LaFrance, *The Separate Tax Status of Loan-Out Corporations*, 48 VAND. L. REV. 879, 881–82 (1995) (describing use of corporate structure to obtain tax timing benefits).

Why keep any money in your own bank account when your corporation pays a lower tax rate, and you can spend its money freely? Thus, multifaceted regimes have developed for preventing assets held within these accounts from being used for the personal benefit of owners or beneficiaries or for treating such personal benefits as deemed distributions that trigger personal-level tax.¹⁷⁷ Of course, these rules are not perfect, and there is some gaming. But these rules seem to work well enough in practice for separated accounts to function as primary features of the regimes governing corporate income taxation, the IRA retirement account system, and trusts, among other critical tax regimes.¹⁷⁸

An especially interesting separated-accounts regime, for our purposes, is the Passive Foreign Investment Company (“PFIC”) regime.¹⁷⁹ The PFIC regime was designed to prevent U.S. taxpayers from escaping U.S. income tax by investing through foreign entities. In essence, the PFIC regime offers applicable taxpayers who invest through foreign entities a choice between either (1) having the income from their PFIC assets taxed currently such as on a mark-to-market basis or (2) deferring income tax on these assets but then having a relatively steep interest charge added to the tax due upon sale or disposition of these assets and also upon any withdrawals or deemed distributions from the PFIC.¹⁸⁰

177. E.g., 26 C.F.R. § 1.996-1 (2021); Philip T. Pasmanik, *Look Out for Sec. 956 Inclusions*, TAX ADVISER (Nov. 1, 2017), <https://www.thetaxadviser.com/issues/2017/nov/sec-956-inclusions.html> [<https://perma.cc/ZY62-DSNZ>].

178. E.g., I.R.S., DEP’T OF TREASURY, PUB. 590-B (2020); I.R.C. § 667.

179. For discussion, see, for example, Emily Cauble, *Protective Tax Elections*, 13 COLUM. J. TAX L. 77, 89–90 (2022) (pointing to the PFIC as an example of a favorable fallback protective tax election); Haroldene Wunder, *The Perils and Pitfalls of Passive Foreign Investment Company Ownership*, CPA J. (Feb. 2019), <https://www.cpajournal.com/2019/02/06/the-perils-and-pitfalls-of-passive-foreign-investment-company-ownership> [<https://perma.cc/MQ5X-DGHB>]; Vadim Blikshsteyn & Holtz Rubenstein, *Passive Foreign Investment Companies*, TAX ADVISER (Oct. 1, 2011), <https://www.thetaxadviser.com/issues/2011/oct/clinic-story-04.html> [<https://perma.cc/K8Q5-3PY9>].

180. More precisely, there are actually three options offered by the PFIC regime: (1) the deferral with interest charge option of I.R.C. section 1291, (2) the mark-to-market option for marketable stock options of I.R.C. section 1296, and (3) the current taxation of income from qualified election funds option of I.R.C. section 1293. Because both the second and third of these options involve current taxation of undistributed income from PFIC assets, we simplify in the discussion above by discussing the choice between the deferral option (option one) and the current taxation option (by which we mean either option two or option three). See Cauble, *supra* note 179 (discussing possible outcomes under the PFIC regime).

By contrast to the relatively low interest charge used by Senator Wyden's proposed BIT reform or that Professor Glogower recommends,¹⁸¹ the interest charge for the PFIC regime's deferral option along with its associated rules governing distributions has been described as "highly punitive."¹⁸² This is mostly by comparison to the relatively very lenient realization-based rules governing U.S. income taxation of investment assets generally, and we thus consider this "highly punitive" description to be something of an exaggeration. More accurate would be to say that the PFIC regime's deferral option is designed to be strict and robust and to not err on the side of being taxpayer favorable. U.S. taxpayers can sometimes "find themselves paying significantly more tax" as a result of electing the PFIC regime's deferral plus interest charge option instead of its current taxation option.¹⁸³ Indeed, the eminent tax lawyers Boris Bittker and Lawrence Lokken have written that the strictness of the PFIC regime's deferral plus interest charge option suggests that the rules are designed to "force" taxpayers to elect the current taxation option "wherever feasible."¹⁸⁴

Put another way, the PFIC regime's deferral option is designed to be strict and robust enough so that taxpayers should generally not prefer it over the current taxation option except when the taxpayers face genuine valuation or liquidity issues that would make the current taxation option difficult to comply with. This can be thought of as a form of information-generating rule, in that taxpayers who face genuine issues in complying with the current taxation option should elect the deferral option, but taxpayers who merely seek to minimize their tax obligations should not generally face incentives to elect the deferral option.¹⁸⁵

As we will explain, the ULTRA approach is similarly designed to operate as a form of information-generating rule by offering

181. See *supra* Part II.C.

182. Blikshteyn & Rubenstein, *supra* note 179.

183. *Id.*

184. Wunder, *supra* note 179 (quoting BORIS I. BITTKER & LAWRENCE LOKKEN, *FUNDAMENTALS OF INTERNATIONAL TAXATION* (2d ed. 1991)).

185. For general discussion of information-generating rules in tax law design, see, for example, David Gamage, *A Way Forward for Tax Law and Economics? A Response to Osofsky's "Frictions, Screening, and Tax Law Design,"* 62 *BUFF. L. REV.* 189 (2014); Leigh Osofsky, *Who's Naughty and Who's Nice? Frictions, Screening, and Tax Law Design,* 61 *BUFF. L. REV.* 1057 (2013); Alex Raskolnikov, *Revealing Choices: Using Taxpayer Choice To Target Tax Enforcement,* 109 *COLUM. L. REV.* 689, 710–15 (2009).

designated taxpayers a choice between either (1) a strict and robust partial deferral option or (2) a current taxation option. The ULTRA approach also builds on the rules developed for the PFIC regime and for other existing separated-accounts regimes to govern distributions and deemed distributions.

However, a primary weakness of existing separated-accounts regimes arises from personal-level borrowing.¹⁸⁶ In theory, a separate-accounts system can treat borrowing in which the account funds are collateral as a distribution. But because money is fungible, these regimes generally do not try to prevent owners or beneficiaries from borrowing indirectly based on their personal creditworthiness, which of course may be based in part on lenders' knowledge of these assets.¹⁸⁷ Thus, a standard tax planning technique for owners or beneficiaries of these accounts is to borrow to the extent funds are needed either for personal consumption or for starting new investments or business endeavors, rather than withdrawing funds from the separated accounts and triggering tax.¹⁸⁸

Notably, all realization-based tax systems and other retrospective tax rules rely on separated accounts for critical features of their operations.¹⁸⁹ This means that the problems arising from personal-level borrowing and other issues related to identifying withdrawals and deemed distributions plague all of these tax systems. Put another way, any tax system that allows taxpayers to defer tax liabilities potentially creates large incentives for taxpayers to attempt to effectively withdraw funds without triggering tax, such as through personal-level borrowing. Further, these incentives interact problematically with political optionality because effectively withdrawing funds without triggering tax makes it easier for taxpayers to wait for future legal or political changes that might permit fully and permanently escaping tax.

In particular, it has frequently been noted that realization-based and retrospective tax regimes can only work successfully if death is deemed to be a realization event for triggering tax.¹⁹⁰ But the history of

186. David Kamin, David Gamage, Ari Glogower, Rebecca Kysar & Darien Shanske, *The Games They Will Play: Tax Games, Roadblocks, and Glitches Under the 2017 Tax Legislation*, 103 MINN. L. REV. 1439, 1448 (2019).

187. *See id.*

188. *See id.*

189. *See* Benschalom & Stead, *supra* note 44, at 52 (explaining how realization creates the need for corporate and partnership tax regimes).

190. Glogower, *Taxing Capital Appreciation*, *supra* note 60, at 153.

prior attempts at ending the current favorable income tax treatment of inherited wealth suggests that political optionality dynamics would ultimately undo reforms making death the general event for triggering tax.¹⁹¹ All of this suggests that, although separated-accounts regimes can play critical roles in addressing the valuation challenge, they do not suffice on their own.

* * *

To summarize, all of the solutions we have sketched so far have important gaps but also offer potential in limited cases or as partial components of broader solutions. In the next Part, we put them together, explaining how our proposed ULTRA method makes use of separated accounts—in combination with notional equity interests and an alternative take-it-or-leave-it valuation regime—to address the valuation challenge and its related realization and liquidity problems.

III. THE ULTRA METHOD

In the previous Part, we explained the strengths and weaknesses of prior solutions to tax valuation challenges and to the related problems of liquidity and realization. This Part explains our unliquidated tax reserve account (“ULTRA”) proposal, a novel hybrid that combines aspects of prior proposed solutions to take advantage of their distinct strengths while minimizing their weaknesses. We will first sketch how an ULTRA works in general and then explain how it advances over prior valuation efforts.

A. *The Basics of the Notional Equity Interest*

As we’ve previewed, an ULTRA is essentially a notional equity interest in a taxpayer’s assets, held by the government. That is, the taxing authority has a claim upon a specified percentage of the value of the assets to which an ULTRA is attached. When those assets are sold or otherwise disposed of, the taxpayer must pay the government its share out of the proceeds. Like other notional interests, such as swaps and derivatives, the ULTRA grants no formal ownership or governance rights. Thus, for example, the tax authority cannot vote for directors of a corporation subject to an ULTRA nor invoke corporate law doctrines protecting minority shareholders.

191. Gamage & Brooks, *Tax Now or Tax Never*, *supra* note 3, at 549–53.

Although ULTRAs do require some compliance burdens, these burdens are similar to what the existing income tax requires for tracking basis and adjusted basis.¹⁹² For most financial assets, taxpayers' brokers could potentially track and report the government's notional equity interest, just as they now track basis.¹⁹³ Simplifying rules, such as those used now to ease the burden of tracking basis for individual shares held through mutual funds, could also be applied to the ULTRA.¹⁹⁴

Because it may be hard to understand an ULTRA's operation in the abstract, let us consider the example of how an ULTRA could work within the context of an annual 1 percent tax on wealth. We further explain how an ULTRA might be integrated into a comprehensive wealth tax proposal in the next Part.

Suppose Shari Shareholder owns \$90 million worth of stock in a privately held business. In the first year of the wealth tax, she is subject to a 1 percent tax, or \$900,000. However, instead of paying the tax immediately, she grants the government an ULTRA representing a 1 percent notional interest in the attached stock assets. If the stock ultimately sells two years later for \$100 million, Shari will still owe the government 1 percent, which then would mean a \$1 million payment. If the stock instead later sells for only \$80 million, she would owe the government only \$800,000. In effect, Shari's \$900,000 tax bill will grow at exactly the rate of return earned by the assets to which the ULTRA is attached, even if that rate is negative. It is in this sense that we say that the ULTRA represents a notional equity interest.

In the case of a recurring tax like an annually assessed wealth tax, the government's ULTRA interest would then be adjusted on an ongoing basis to account for the recurring tax assessments. For instance, if Shari holds her stock into year two, there is now another 1 percent wealth tax assessment, paid with an addition to the notional equity interest owed to the government. With a small bit of math, we can calculate the government's overall share that represents the two years' worth of tax assessments. Specifically, the notional equity

192. For examples of how this currently works, see *Cost Basis: Tracking Your Tax Basis*, INTUIT TURBOTAX (Jan. 21, 2022, 11:54 AM), <https://turbotax.intuit.com/tax-tips/rental-property/cost-basis-tracking-your-tax-basis/L4i1f9qB1> [<https://perma.cc/F4FF-RUM9>].

193. See T.D. 9504, 2010-47 I.R.B. 670 (announcing new regulations requiring brokers and select other institutions to track customer basis).

194. Treas. Reg. § 1.1012-1(e)(1).

interest owed to the government would increase by applying the 1 percent tax rate for year two to the 99 percent of the notional equity interest retained by the taxpayer, for a total of 1.99 percent.¹⁹⁵

To continue the example, let's say that Shari continues holding her shares with the ULTRA attached until she sells all of the shares for \$100 million of cash at the beginning of year five. The government would then be entitled to 3.9404 percent of the value of that cash sale—\$3,940,400—reflecting the government's notional equity interest in the shares at that time.¹⁹⁶

B. *The Scope of the Deferral Option*

The ULTRA solution should not necessarily be applied to all of a taxpayer's assets but rather only to designated assets for which the combination of valuation and liquidity challenges justifies departing from the background valuation rules of the tax system. In other words, the ULTRA solution can be used as a plug for tax valuation holes—that is, for when the background valuation rules of the tax system would be inadequate. Although the ULTRA solution could potentially be used as a universal valuation mechanism, we think, as discussed in Part IV, that its most promising applications are to supplement and backstop prior valuation solutions.

Thus, we would limit deferral under an ULTRA system by requiring taxpayers to make prepayments of some of what they will eventually owe. As we will elaborate below, the primary reason to require estimated prepayment of taxes is to mitigate political optionality concerns.¹⁹⁷ For some taxpayers, admittedly, the combination of liquidity and valuation challenges will make prepayments difficult. To the extent that both valuation and liquidity challenges justify departing from the background rules of the tax system, the ULTRA method can permit taxpayers to defer making any

195. That is, the notional equity interest owed to the government would increase by 1 percent \times (100 percent – 1 percent) = 0.99 percent, so that the taxpayer would enter year three with a total notional equity interest owed to the government of 1.99 percent.

196. Continuing the example, the notional equity interest would be increased by another 1 percent \times (100 percent – 1.99 percent) = 0.9801 percent in year three, bringing the total notional equity interest owed to the government to 2.9701 percent at the end of year three. Then in year four, the notional equity interest owed to the government would be increased by another 1 percent \times (100 percent – 2.9701 percent) = 0.9703 percent, bringing the total notional equity interest owed to the government to 3.9404 percent at the end of year four.

197. See *infra* Part III.E.

cash tax payments until such time as the assets to which the ULTRA is attached are sold or otherwise withdrawn from the ULTRA.¹⁹⁸ However, for taxpayers who do not face major liquidity challenges, such that the use of the ULTRA is justified primarily based on valuation challenges alone, it may be preferable to require prepayment of estimated taxes. Indeed, for some forms of taxation—such as, perhaps, for wealth taxes applied only to extremely wealthy taxpayers—it could be argued that no taxpayers truly face major liquidity challenges, such that all taxpayers should arguably be required to make estimated prepayments of taxes.

To implement prepayment, we suggest the tax system would calculate a taxpayer's prepayment tax liabilities through a simplified valuation regime and then give the taxpayer credit for these prepaid taxes against future tax liabilities upon withdrawals or dispositions from the ULTRA. Consider the example above where Shari Shareholder holds her shares with an ULTRA attached until she sells all of the shares for \$100 million of cash at the beginning of year five. If Shari faced liquidity challenges substantial enough to absolve her of the prepayment requirements, she would pay no tax until year five and would then owe the entire \$3,940,400 tax liability in year five.

By contrast, consider if Shari were required to make prepayments of estimated taxes in years one through four. For instance, consider if the simplified valuation regime required annual estimated prepayments of \$900,000 (the 1 percent annual wealth tax rate multiplied by the initial valuation estimate of \$90 million). Then, Shari would have paid a total of \$3.6 million in estimated prepayment taxes by the beginning of year five (four times \$900,000). Giving her credit for this amount against her \$3,940,400 tax liability from selling all of her shares in year five would yield a net tax liability in that year of \$340,000. (Conversely, if the shares declined in value and were sold for less than \$90 million, Shari should be entitled to a refund of a portion of her prepayments.)

These rules for tracking estimated prepayments of taxes are also helpful for resolving issues related to contributions, partial withdrawals, and deemed withdrawals, as we will now explain.

198. There may also be arguments for allowing more complete deferral through ULTRAs—as opposed to requiring prepayments—based on political psychology or constitutionality concerns, as we discuss further, *see infra* notes 241–242 and accompanying text.

C. Contributions, Partial Withdrawals, and Deemed Withdrawals

A challenging issue for any tax system with realization-based or retrospective rules is how to treat additional investments into or divestments from assets subject to those tax rules. For instance, if a stock pays dividends, how should those dividends affect the eventual tax upon final sale of the stock? A key virtue of our ULTRA proposal over prior solutions is that, at any given point in time, there will be a single percentage figure for the government's notional equity interest in the assets to which the ULTRA is attached. This feature can be used to resolve the issues that would otherwise be caused by interim contributions, withdrawals, and deemed withdrawals.

To illustrate, let us say that, at the beginning of year three, Shari contributed an additional \$10 million of cash to the privately held business whose stock is subject to her ULTRA. This should presumably increase the value of her shares. If we were to treat this \$10 million increase in value the same as any other appreciation in the business's value, it would be overtaxed. That is, in year five when the stock was sold, government would claim 3.9404 percent of the \$10 million, as though it had been accumulating wealth tax obligations throughout the full four years.¹⁹⁹

Readers who are knowledgeable about corporate or partnership tax rules might recognize this as a familiar problem. In those contexts, the solution would be to increase the taxpayer's (outside) basis in the stock of the corporation or in the taxpayer's partnership interests.²⁰⁰ A similar solution works in the ULTRA context. This highlights how the ULTRA regime makes use of separated accounts similar to those used by corporate tax regimes.

Although the specifics may vary somewhat depending on what sort of tax system the ULTRA is being used within, at least within wealth tax contexts, the essence of the solution should involve giving the taxpayer credit for the value of the contribution multiplied by the government's notional equity interest in the ULTRA at the time of the contribution. In our example of Shari Shareholder and an annual wealth tax, this can be achieved by increasing Shari's account of

199. Indeed, this might represent double taxation if, for example, Shari held the \$5 million in a cash account during years one and two and paid wealth tax on it. Putting this possibility aside, the amount of the overpayment would be \$199,000. This is the difference between the \$394,000 charged in the absence of a credit, and the correct tax amount for the two tax years the \$10 million has been invested, which is $(0.9801 \text{ percent} + 0.9703 \text{ percent}) \times \10 million , or about \$195,000.

200. *E.g.*, I.R.C. §§ 358, 722.

estimated prepayment taxes for her ULTRA by the value of her contribution (\$10 million) multiplied by the government's notional equity interest in her ULTRA at the time of the contribution (1.99 percent) so that her account of estimated prepayment taxes for her ULTRA would increase by \$199,000 (1.99 percent times \$10 million). When Shari's bill comes due, the bill is reduced by this \$199,000, which also turns out to be the amount she would otherwise have been overtaxed if not for this credit.²⁰¹

The solution for partial withdrawals works similarly. As with cash sales followed by a complete withdrawal, a partial withdrawal should trigger tax in the amount equal to the value of the withdrawal multiplied by the government's notional equity interest at the time of the withdrawal. The only major complication then arises if withdrawals are made in forms other than cash or monetary equivalents. In that case, the taxpayer should typically be given a choice of either opting to apply an alternative take-it-or-leave-it valuation mechanism to the withdrawal (which we explain below) or else adding the withdrawn assets back into the ULTRA, thereby effectively canceling the withdrawal for tax law purposes.²⁰²

Deemed withdrawals present somewhat trickier problems: What happens if Shari spends \$1 million from the corporate treasury on a vanity run for public office or a year's worth of personal travel on private jets? However, these problems are familiar ones in that corporate tax systems and other separated-accounts regimes have already devised elaborate rules for assessing and taxing deemed dividends and other forms of deemed distributions.²⁰³ The ULTRA regime can therefore make use of these already developed rules for identifying deemed distributions. Transfers of the assets in an ULTRA to or for the benefit of the taxpayer should thus generally be treated as

201. See *supra* note 199.

202. That is, if Shari receives \$20 million in cash in year two, she will have a tax bill of 1.99 percent \times \$20 million, or \$398,000. If she instead receives stock in a subsidiary of her company, she would either (1) accept the government's appraisal of that stock and pay tax on that amount as if it were cash or (2) treat the stock as though it were still subject to the ULTRA, even though it is no longer owned by the company to which the ULTRA was originally attached. If she opts for the second path, government will take an immediate 1.99 percent interest in the distributed stock, the same as its share in the company that distributed it.

203. *Boulware v. United States*, 552 U.S. 421, 429–30 (2008); Anthony Polito, *Constructive Dividend Doctrine from an Integrationist Perspective*, 27 AKRON TAX J. 1, 3 (2012) (“[T]he [Constructive Dividend Doctrine] plays a vital role of policing for transactions that seek to evade full double taxation.”).

deemed distributions, with the exceptions of reasonable salaries paid to taxpayers for real work or other similar market-value transactions.²⁰⁴

Just as with existing separated-accounts regimes, these deemed withdrawal rules will not work perfectly and some gaming should be anticipated.²⁰⁵ Most notably, many assets grow due to a combination of both market returns to invested capital and taxpayers' labor efforts (often called "sweat equity").²⁰⁶ Under existing business income tax rules, taxpayers typically face incentives to undervalue reported compensation for this sweat equity because it is usually subject to higher taxation than the returns to invested capital.²⁰⁷ By contrast, for growth assets with ULTRAs attached, taxpayers may face incentives to *overreport* compensation for sweat equity so as to reduce the value of the government's notional equity interest. Thus, although these sorts of gaming incentives cannot be entirely prevented, we think that the ULTRA solution should handle them better than existing business income tax regimes because the gaming incentives created by the ULTRA solution will often point in conflicting directions, making it hard for taxpayers to aggressively manipulate their tax outcomes.

Furthermore, the ULTRA solution readily handles what is arguably the primary gaming flaw undermining existing corporate tax and other separated-accounts regimes—the problem of taxpayers borrowing at the personal level to effectively withdraw value from such regimes while escaping tax.²⁰⁸ The ULTRA solution solves this by treating personal-level borrowing—both secured and unsecured—by taxpayers maintaining ULTRAs as a form of deemed distribution from the ULTRA. This solution works within the ULTRA context because, at any given point in time, there will be a single percentage figure for the government's notional equity interest in the assets to which the ULTRA is attached. Thus, all that is needed to treat a taxpayer's personal-level borrowing as a deemed distribution from the taxpayer's

204. *E.g.*, Linda Campbell, Pamela C. Smith & Kasey Martin, *Defining 'Reasonable Compensation' Under the Tax Code*, CPA J. (Oct. 2019), <https://www.cpajournal.com/2019/10/28/defining-reasonable-compensation-under-the-tax-code> [<https://perma.cc/98DW-BU7L>]. Compensatory transfers don't have to be treated as deemed distributions because they will already be taxed to the owner/service-provider as ordinary income. I.R.C. § 61(a)(1).

205. *See generally* Edward D. Kleinbard, *Corporate Capital and Labor Stuffing in the New Tax Rate Environment* (Univ. of S. Cal. Gould School of L., Ctr. in L. Econ. & Org., Rsch. Paper No. 13-5, 2013) (discussing such gaming).

206. Fleischer, *Two and Twenty*, *supra* note 29, at 44.

207. *Id.*

208. Kamin et al., *supra* note 186 (explaining that if a taxpayer can use borrowing to escape the layer of individual tax, it will cut the overall "tax bill almost in half").

ULTRA is to multiply the amount of that borrowing by the government's notional equity interest in the ULTRA at the time of the borrowing.

This mechanism works best if all taxpayer assets are treated as held subject to a single common ULTRA account, as we think should generally be required. However, if instead different assets were to have different ULTRA accounts, which might be appropriate in some limited circumstances, then borrowing—whether secured or unsecured—must be allocated amongst the ULTRA accounts for purposes of deeming distributions. Such allocation could be done pro rata based on valuations, or a stricter rule might require that the entire amount of the borrowing be allocated to the ULTRA account with the highest notional equity percentage at the time of the borrowing. Alternatively, perhaps a rule similar to how 26 C.F.R. §§ 1.861-9T(f)–(g) allocates foreign versus domestic interest deductions might be employed for this purpose.

The taxes paid as a result of this can then be added to the taxpayer's account of estimated prepayment taxes for the ULTRA. If the taxpayer later pays off the borrowing, this should entitle the taxpayer to a refund of taxes previously paid on the borrowing (with a corresponding reduction in the taxpayer's account of estimated prepayment taxes for the ULTRA).

D. The Take-It-or-Leave-It Alternative Valuation Mechanism

Let us now return to the problem of noncash withdrawals. For instance, what if Shari Shareholder decides not to sell her shares, but instead eventually opts to bequeath those shares to her heirs? As discussed previously, prior proposals for retrospective reforms generally require that the taxpayer's death trigger tax realization because otherwise these reforms would fail.²⁰⁹ Yet this raises questions of how to value noncash withdrawals made either at death or for other allowed reasons.²¹⁰ Under either our ULTRA proposal or prior retrospective reform proposals, without a robust alternative valuation methodology, taxpayers could face strong incentives to avoid cash sales or cash distributions during life in the hopes of playing valuation games upon death or upon other allowed noncash distribution events.

209. Glogower, *Taxing Capital Appreciation*, *supra* note 60, at 153 (explaining why a "deferred tax account . . . would be settled at death, to ensure that all taxes on deferred gains and losses were fully accounted for").

210. *Id.*

Relatedly, ULTRAs can be offered either as a voluntary option or as a mandatory requirement. One reason why it may be preferable to offer ULTRAs as a voluntary option, at least for certain specified tax situations, is that the notional equity interest that the government obtains through an ULTRA might seem to result in excessive taxation for some high-growth assets or assets held within ULTRAs for very long time periods. Philosophically, we might argue that tax regimes should involve the government taking what amounts to partial equity interests in private businesses and investments because the economic success of these ventures depends in part on taxpayer-funded protections and services.²¹¹ Nevertheless, we worry that political arguments about the optics of excessive taxation might erode political support for mandatory ULTRAs in some contexts. A robust alternative valuation mechanism is thus helpful both for handling noncash withdrawals and for facilitating offering ULTRAs as a voluntary option rather than a mandatory requirement.

Implementing a robust alternative valuation mechanism is difficult-to-impossible within existing forms of taxation, however. Valuations provided by taxpayers or by expert appraisers hired by taxpayers are inevitably highly gameable.²¹² Formulaic valuations can work well enough for some assets, but it is impossible to design formulas capable of valuing all important forms of assets.²¹³ If valuations are instead provided by the tax authority or by third-party experts hired by the tax authority, then due process concerns necessitate offering taxpayers a way to either reject or challenge the valuations.²¹⁴ But offering taxpayers a way to challenge these

211. See David Gamage & Darien Shanske, *Three Essays on Tax Salience: Market Salience and Political Salience*, 65 TAX L. REV. 19, 86 (2011) (“[A]ny amounts calculated as gross income—or as other pretax resource measurements—are dependent on the existence of government in its current form.”).

212. Lederman, *supra* note 13, at 1497–99.

213. See *supra* Part II.B (explaining that “formulaic valuation has important limitations” and that while it “work reasonably well for simple equity interests, it struggles to pinpoint value for many other modern financial instruments”). Especially concerning here are convertible debt-equity interests and other complicated forms of hybrid ownership interests. These can be designed to be exceedingly difficult to value through formulaic methods, and standard appraisal-based valuation of these can be highly gameable. Yet allowing these to be substantially undervalued for tax purposes or otherwise exempting these from effective taxation could create problematic incentives for sophisticated taxpayers to switch from more straightforward (easier to value) ownership interests to these more complicated (harder to value) ownership interests.

214. Richard M. Lipton, *Procedural Due Process in Tax Collection: An Opportunity for a Prompt Postdeprivation Hearing*, 44 U. CHI. L. REV. 594, 594 (1977).

valuations then re-creates many of the problems with taxpayer-provided valuations because sophisticated taxpayers will often bring much greater resources to litigation or other valuation-dispute proceedings as compared to the resources available to the tax authority.²¹⁵

Offering ULTRAs as a voluntary option presents a way out of this dilemma. Specifically, the ULTRA option can be offered as an alternative to a regime where appraisals are all controlled by the tax authority. In this combined “take-it-or-leave-it” alternative valuation regime, the tax authority could hire third-party expert appraisers to value taxpayers’ assets and taxpayers would not generally be permitted to challenge these valuations.²¹⁶ But taxpayers would still have recourse to reject these valuations in favor of another alternative valuation: the value they would realize after accepting an ULTRA and later selling the asset. In place of using challenge or dispute mechanisms, then, due process can be protected by granting taxpayers the option of rejecting the government’s valuations and instead attaching an ULTRA to their assets.

This approach presents taxpayers with something of a gamble in deciding between the take-it-or-leave-it alternative valuation option and the ULTRA option. This is because the notional equity interest granted to the government by the ULTRA will result in larger tax obligations the more and the faster the asset grows over time, whereas the take-it-or-leave-it alternative valuation option would be based on assessing the value of the asset at the time of the valuation. Because

215. Lederman, *supra* note 13.

216. This is the essence of the approach used by the proposed California Tax on Extreme Wealth. *See* Part A (explaining that under ULTRA, “taxpayers would have the option of either attaching an ULTRA . . . or else accepting the alternative take-it-or-leave-it valuation”); Galle et al., *supra* note 27. For an analogous existing regime, consider the small tax case procedures of Section 7463 of the Internal Revenue Code, whereby eligible taxpayers can elect into a process that results in summary opinions that cannot be appealed and that may not serve as legal precedent. *See* Harold Dubroff & Brant J. Hellwig, *THE UNITED STATES TAX COURT: AN HISTORICAL ANALYSIS* 883–86, 891–94 (2d ed. 2014).

To elaborate just a bit more on some specifics, we do think that the taxpayer should perhaps be provided with a very limited ability to contest these valuations through an internal review process managed by the tax authority (without having to reject the valuation in favor of the ULTRA). But this internal review process should be limited to the taxpayer showing clear mistake in the valuation (an example of what might constitute a clear mistake is if the wrong assets were appraised). Importantly, the taxpayer should not be permitted to provide their own expert appraisal valuations as part of this review process. Then, any subsequent judicial review should be limited to a showing of abuse of discretion by the tax authority.

the future is uncertain, it will typically be impossible to predict with certainty which option will result in overall lower tax obligations.²¹⁷

Existing tax laws already contain some analogies. As we discussed in Part II.F, the existing PFIC regime is similarly based on offering eligible taxpayers the choice between relatively strict and robust alternative regimes and, in doing so, operates as a form of information-generating rule. Similarly, the ULTRA method's use of a strict alternative take-it-or-leave-it valuation option is designed as a form of information-generating rule to combat valuation-based gaming.

For another example from existing tax laws, consider the Internal Revenue Code's section 83(b) election.²¹⁸ This election is available when an employee is paid in a form of property that has a "substantial risk of forfeiture," like shares of stock that vest in the future.²¹⁹ Because these shares are payments for services, they should be taxed as income when received. Yet, because the shares might never be received, the Code's default rule is that they are taxed when they vest, when they "are not subject to a substantial risk of forfeiture."²²⁰ Yet a taxpayer can choose to be taxed on the shares when granted—before they vest—on the "fair market value of such property at the time of transfer."²²¹ In other words, the taxpayer can either choose (counterfactually) to treat the shares as theirs or choose deferral, which might or might not turn out to cost more.

To be sure, the section 83(b) election has been criticized because it appears that few taxpayers opt for the election as to property in a public company with known values.²²² Rather, taxpayers tend to opt for the election as to nonvested property in start-ups when the values are not known and there can be a big upside.²²³ But this does not change

217. See Heather M. Field, *Choosing Tax Explicit Elections as an Element of Design in the Federal Income Tax System*, 47 HARV. J. ON LEGIS. 21, 58–59 (2010) (noting that "factual uncertainty, where the tax consequences of making or failing to make the election depend on events that will occur in the future, that are uncertain, and that are largely outside the taxpayers' control" will limit the extent to which ability to make an election will systematically favor taxpayers).

218. I.R.C. § 83.

219. *Id.* § 83(a)(1).

220. *Id.*

221. *Id.* § 83(b)(1)(A).

222. David I. Walker, *Is Equity Compensation Tax Advantaged?*, 84 B.U. L. REV. 695, 707 (2004) (citing interview evidence).

223. See Victor Fleischer, *Taxing Founders' Stock*, 59 UCLA L. REV. 60, 73–74 (2011) (illustrating strategic use of 83(b) in startup context). *But see* Gregg D. Polsky & Brant J. Hellwig,

the fact that taxpayers are offered an option and that the provision of this option serves as a form of information-generating rule. Ultimately, we are not especially concerned with whether many or few taxpayers opt for ULTRAs or instead for the alternative take-it-or-leave-it valuation option when given such a choice.²²⁴

Rather, by offering taxpayers the ULTRA option, we can mitigate the due process concerns of the take-it-or-leave-it valuation option without permitting taxpayers to engage in the aggressive disputes and litigation that would otherwise make that option overly vulnerable to gaming. Simultaneously, by offering the take-it-or-leave-it alternative valuation option, we provide a mechanism for making noncash withdrawals from an ULTRA without opening the ULTRA regime up to excessive valuation-based gaming.²²⁵

Returning to our initial example, consider if Shari Shareholder decides to bequeath her shares to her heirs and if her heirs then decide to keep holding those shares rather than selling them for cash. Each of Shari's heirs could then be presented with the election of either continuing to maintain the inherited shares with an ULTRA attached (effectively also then inheriting the notional equity interest owed to the government for those shares)²²⁶ or else triggering the alternative take-it-or-leave-it valuation regime (and thereby accepting the valuation

Examining the Tax Advantage of Founders' Stock, 97 IOWA L. REV. 1085, 1106–11 (2012) (arguing that joint tax benefits are small or nonexistent in many startup scenarios). Note that in our case there is not a party analogous to the business paying the compensation complicating the analysis as to the overall tax effect of the election. If one does think that the section 83(b) election tends to systematically benefit the wealthy because taking the election and paying tax on nominal value is too generous, the election can be reformed so that the initial section 83(b) payment must be in notional equity—an ULTRA-type solution.

224. See Field, *supra* note 217, at 58–60 (arguing that allowing taxpayer elections may be defensible as a way of increasing taxpayer sense of autonomy, as long as the consequences of the elections are sufficiently constrained). This is of course premised on the alternative take-it-or-leave-it valuation option working sufficiently well to provide alternative valuations that are not excessively gameable or biased in a taxpayer favorable direction. If the alternative take-it-or-leave-it valuation option is to be provided, it is thus critical that it be designed and enforced in a robust manner.

225. Another related example of a stricter valuation option is the rule applied when taxpayers elect out of installment sale treatment. If a taxpayer opts out of the installment method:

The fair market value of a contingent payment obligation shall be determined by disregarding any restrictions on transfer imposed by agreement or under local law. The fair market value of a contingent payment obligation may be ascertained from, and in no event shall be considered to be less than, the fair market value of the property sold (less the amount of any other consideration received in the sale).

Treas. Reg. § 15a.453-1(d)(2)(iii).

226. This option is called a carry-over ULTRA in the proposed legislation to implement President Joe Biden's Billionaire Minimum Tax, *see supra* note 28.

assessment so determined). In other words, the heirs would not have the option of providing their own valuations for the shares because this is what opens the door to excessive gaming. Instead, due process concerns would be addressed by giving the heirs the option of maintaining the inherited shares within an ULTRA rather than accepting the alternative take-it-or-leave-it valuation option.

In this spirit of information-generating rules, then, taxpayers like Shari's heirs should be incentivized to opt for the ULTRA option only to the extent that these taxpayers have genuine valuation or liquidity or similar concerns. To the extent these taxpayers lack such concerns, they should often be better off selecting the alternative take-it-or-leave-it valuation option so as to avoid the restrictions of keeping the assets in an ULTRA and thereby offering the government a notional equity interest in those assets. The tax planning implications of this choice will not typically be clear-cut, as they will depend on the uncertain future growth path of the assets. Thus, taxpayers in this situation should find that they face incentives to reveal whether they have genuine valuation or liquidity or similar concerns by only opting for ULTRAs when they have such concerns and otherwise opting for the alternative take-it-or-leave-it valuation regime.

E. Comparing the ULTRA Solution to Alternatives

In Part II, we explained the limitations and weaknesses of existing valuation methods. Our proposed ULTRA method is a hybrid designed to take advantage of the distinct strengths of each of these prior approaches while minimizing their weaknesses. To that end, the ULTRAs can be used to supplement and backstop these prior approaches, plugging the major holes that none of them can adequately deal with alone.

To begin, we argue that ULTRAs are an improvement over the leading retrospective proposals because they effectively impose a retrospective charge that matches the growth rate of the asset itself.²²⁷ Furthermore, ULTRAs can be used for hard-to-value assets and thus can supplement lamppost or formulaic methods without creating substantial incentives for taxpayers to switch between assets covered by the ULTRA rules and those subject to other forms of valuation.²²⁸

227. See *supra* Part II.C.

228. See *supra* Part II.A–B.

In a sense, the ULTRA solution implements a variation on Land's retrospective tax proposal because the ULTRA's notional equity interest effectively charges an interest rate equal to the internal rate of return of the asset in a similar manner to Land's yield-based retrospective method.²²⁹ However, the ULTRA method then solves critical implementation problems of Land's proposal through a separated-accounts methodology that, at any given point in time, generates a single percentage figure for the government's notional equity interest in the assets to which the ULTRA is attached.²³⁰ The ULTRA method thereby readily manages the problems caused by contributions, partial withdrawals, and deemed withdrawals—problems that Land's original proposal cannot manage without creating what has been called “unworkable administrative complexity.”²³¹

In contrast to in-kind taxation,²³² the ULTRA method does not involve the government taking any actual equity interests or control rights (beyond those that the government already exercises to enforce corporate and personal income taxes), and so the political economy problems of in-kind taxation are avoided. Nevertheless, because the ULTRA is an actual asset of the government, it will likely be more difficult to legislate away than other future tax liabilities, reducing political optionality. Consider that federal budgeting rules generally measure the cost of legislation only over a ten-year budget window.²³³ It is widely understood that considering only this limited time horizon helps to hide much of the long-term cost of “reforms” that reduce the effective tax rate on investments.²³⁴ In contrast, under current budget rules, when Congress acts to reduce the value of a “direct loan,” such

229. See *supra* Part II.D.

230. See *supra* Part II.F & Part III.C–D.

231. Glogower, *Taxing Capital Appreciation*, *supra* note 60, 138; see also Schenk, *supra* note 49, 546–47 (“[Land] also acknowledges his proposal is schematic and does not deal with some extremely difficult issues, which undoubtedly would add to the complexity. . . . [N]ew and vastly more objectionable complexities would be introduced, including frequent valuation and extremely complex calculations.”); Technical Appendix, *infra* (providing further discussion).

232. See *supra* Part II.E.

233. BILL HENIFF JR., CONG. RSCH. SERV., RL30862, THE BUDGET RECONCILIATION PROCESS: THE SENATE'S “BYRD RULE” 1–4 (2021).

234. Alan J. Auerbach, *Budget Windows, Sunsets, and Fiscal Control*, 90 J. PUB. ECON. 87, 88 (2006); Douglas W. Elmendorf, *Dynamic Scoring: Why and How To Include Macroeconomic Effects in Budget Estimates for Legislative Proposals*, BROOKINGS PAPERS ON ECON. ACTIVITY 91, 94–95 (2015).

as the ULTRA contract, the full loss in value is budgeted immediately.²³⁵ Thus, in order to give away tax revenues represented by ULTRA claims, Congress would at least have to account transparently for that decision, and perhaps face some of the procedural hurdles that come with increased expenditures.²³⁶

The ULTRA method can further alleviate political optionality problems to the extent that prepayments of estimated taxes are required for taxpayers not facing major liquidity issues.²³⁷ There are some tradeoffs here because requiring prepayment of estimated taxes could potentially reduce political support for the ULTRA method.²³⁸ However, we think that such concerns can be muted to the extent that prepayment requirements are targeted just at the extremely wealthy and relatively sophisticated taxpayers who generate most of the problems related to political optionality. We then think that such concerns can be further muted by offering exceptions for tax situations where liquidity-related concerns are most salient, such as perhaps family farms or entrepreneurs who have most of their wealth tied up in ownership of early-stage start-up ventures.

On the other hand, providing ULTRAs as an option within a federal mark-to-market reform—and without requiring prepayments—is potentially a way to address possible constitutionality concerns.²³⁹ Courts have sustained prior tax regimes that offer mark-to-market treatment as an option that taxpayers can reject in favor of an alternative realization-based deferral option, even when that alternative realization-based deferral option is designed to be especially robust and strict, as in the case of the PFIC regime.²⁴⁰ Although we do not think that providing a realization-based deferral

235. 2 U.S.C. § 661a(1), (5)(D).

236. David Kamin, *Risky Returns: Accounting for Risk in the Federal Budget*, 88 IND. L.J. 723, 741–42, 746 (2013); Rebecca Kysar, *Listening to Congress: Earmark Rules and Statutory Interpretation*, 94 CORNELL L. REV. 519, 529–33 (2009). Note that this all presumes that the ULTRA would be treated as equivalent to a direct loan for budget scoring purposes, as we argue that it should be and as could be specified in the legislation enacting the ULTRA reform.

237. See *infra* Part III.B.

238. See Zachary Liscow & Edward Fox, *The Psychology of Taxing Capital Income: Evidence from a Survey Experiment on the Realization Rule*, 213 J. PUB. ECON., Aug. 3, 2022, at 3 (finding that survey respondents report an aversion to taxing unrealized gains, even with respect to the very wealthy).

239. For discussion of the constitutionality issue, see generally Brooks & Gamage, *Taxation and the Constitution, Reconsidered*, *supra* note 16.

240. *Id.* at 62–63.

option (like ULTRAs) should be necessary to sustain the constitutionality of a federal mark-to-market reform, providing such an option is one approach for mitigating the constitutional uncertainties and may have advantages over other approaches.²⁴¹

More generally, experience with the PFIC regime (and with other similar separated-accounts regimes) suggests that providing a strict and robust deferral option like ULTRAs might perhaps suffice to address political optionality concerns even without requiring prepayments of estimated taxes. For this to work, however, it is essential that the ULTRA option be perceived as sufficiently strict that taxpayers should only select the ULTRA option when they have genuine valuation or liquidity or similar concerns, in the spirit of information-generating rules. In other words, it is crucial that the ULTRA election not be viewed as generally being the taxpayer-favorable option. That way, relatively few taxpayers will face a future tax bill that they might want to exercise a political option to avoid. For this reason, to the extent that prepayments of estimated taxes are *not* required, we would argue that it is especially important to err on the side of designing ULTRAs to be strict and robust, even if this might give rise to some complaints about the ULTRA option potentially being “punitive” as applied to some taxpayers (echoing the complaints that are sometimes made against the PFIC regime).²⁴²

The ULTRA method also offers another key advantage for state-level tax reforms, especially in regard to mobile taxpayers. As with the federal tax system, there are ample ways to defer state income taxes. Consider employee stock options. An employee earns options as part

241. *See id.* at 68 (arguing that both the uniformity path and the apportionment path are viable approaches for designing a constitutional wealth tax or mark-to-market reform and suggesting strategies like fallback clauses for mitigating the constitutional uncertainties). If the Supreme Court were to require apportionment for a pure mark-to-market reform, transforming that reform into a hybrid by offering ULTRAs as a realization-based deferral option might be easier than transforming the reform to follow the apportionment path.

242. *See supra* note 182 and accompanying text. Whether it is possible to design an ULTRA regime to be sufficiently strict for this purpose, in the absence of requiring prepayments of estimated taxes, is somewhat speculative and will depend substantially on the political circumstances surrounding the reform. This is because political optionality inherently involves taxpayers' expectations about the likely sustainability of the reform in the face of potential future political or legal changes. That said, the PFIC regime's deferral option does not appear to have been substantially undermined by political optionality concerns, at least so far, implying that there are possible equilibriums in which taxpayers would consider a deferral regime to be sufficiently robust to political optionality so that most taxpayers would be unwilling to take the gamble of opting into the regime based on the hope of it being eventually weakened.

of their employment but then does not exercise them until some years later (and potentially after having moved to a jurisdiction without a state-level income tax). The fact that the compensation was delayed does not automatically defeat the source state's legal claim for a share of the income.²⁴³

Yet just because a state has a claim under current constitutional law to tax deferred income does not mean that it will be easy for the state to do so or that the law might not change. In response to a similar challenge, many states give nonresident limited partners or shareholders of a limited liability corporation (“LLC”) a choice: either consent to jurisdiction²⁴⁴ (and to future information-reporting requirements for updating the state tax authorities) or else the entity must withhold for the nonresident partners.²⁴⁵

Similarly, taxpayers that choose an ULTRA can also be asked to submit to the state's jurisdiction as to payment of their ULTRA liability in the future or else be denied the privilege of using an ULTRA. A state does not need to make the ULTRA available to help with liquidity and valuation concerns—as we have discussed, other options are possible—and so the state can use a number of possible alternative approaches for calculating the current value of assets if the taxpayer will not consent to jurisdiction as a requirement of opting for the ULTRA.

All things considered, while the ULTRA method is not a perfect solution to the valuation challenge, we believe it has key advantages

243. See, e.g., *Willacy v. Cleveland Bd. of Income Tax Rev.*, 151 N.E.3d 561, 569 (Ohio Sup. Ct. 2020) (stating that “the claim that a due-process problem arises because of a time gap between the income-producing activity and the imposition of a tax on compensation for that activity has no basis in law”).

244. Charles W. Rhodes & Cassandra Burke Robertson, *A New State Registration Act: Legislating a Longer Arm for Personal Jurisdiction*, 57 HARV. J. ON LEGIS. 377, 400 (2020) (“The Supreme Court has long acknowledged that non-resident defendants can consent to personal jurisdiction, which, when given in accordance with the Constitution, waives other potential constitutional challenges to the state's adjudicative power.” (citations omitted)).

245. See, e.g., CAL. REV. & TAX. § 18633.5 (stating that limited liability corporations and limited liability partnerships must pay a tax on distributive share of California income if the nonresident does not consent to jurisdiction); Bruce P. Ely & William T. Thistle, II, *An Update on the State Tax Treatment of LLCs and LLPs*, 94 TAX NOTES STATE 319, 321 tbl.1 (2019) (listing nonresident partner-withholding state tax treatment for each state). Importantly, courts have generally upheld the assertion of state nexus with limited partners if the underlying business has a nexus with the state. John A. Swain, *State Income Taxation of Out-of-State Corporate Partners*, 18 CHAP. L. REV. 211, 213–14 (2014); JEROME R. HELLERSTEIN, WALTER HELLERSTEIN & JOHN A. SWAIN, *STATE TAXATION* §§ 6.12, 20.08[2][a][ii]–[iii] (3d ed. 1998) (involving corporate nonresident partners, limited partners, and S corporation shareholders).

over prior approaches. We now proceed to discuss some specific applications, and the issues that arise in regard to those specific applications, in greater depth.

IV. APPLICATIONS

We believe that our proposed ULTRA method has great promise for improving numerous forms of taxation, including wealth taxes, income taxes, estate and gift taxes, and property taxes, among others. This Part explains some of the most promising applications. Because we originally developed the ULTRA method to solve key problems in designing a comprehensive wealth tax reform proposal—the proposed California Tax on Extreme Wealth—we begin by discussing that application.

A. *Comprehensive Wealth Tax Reforms and the Proposed California Tax on Extreme Wealth*

We first developed our ULTRA method while drafting a proposal for a comprehensive annual wealth tax reform for the state of California.²⁴⁶ At the time of this writing, that proposal—the California Tax on Extreme Wealth—is in the process of being revised in preparation for its consideration by the California state legislature. We are working with the economist Emmanuel Saez and with a coalition of interest groups to refine the proposal with the goal of eventually placing it on the ballot for voter approval.²⁴⁷

The proposed California Tax on Extreme Wealth is meant to apply only to California residents with a net worth of over \$50 million, levying a 1 percent annual tax rate on net worth in excess of \$50 million and a 1.5 percent rate on net worth in excess of \$1 billion.²⁴⁸ The original vision for the reform was to value publicly traded assets based on public trading values while using formulaic valuations for privately held businesses and other nontraded assets, building on the rules used by the Swiss wealth tax. However, this vision ran into implementation problems as we worked on drafting the details of the valuation rules.

Specifically, many important categories of assets cannot adequately be valued based on either public trading values or

246. See Galle et al., *supra* note 27.

247. *Id.*

248. *Id.*

formulaic valuations.²⁴⁹ Arguably, some of these categories of hard-to-value assets are not especially important, such that a comprehensive wealth tax reform could function reasonably well by just excluding some of these assets from tax or by relying on taxpayer-provided appraisal valuations—despite it being well known that taxpayer-provided appraisal valuations are easily gameable for hard-to-value assets.²⁵⁰ But other categories of hard-to-value assets gave rise to more fundamental problems. Most notably, there are no adequate formulaic approaches for valuing many more complicated forms of ownership interests in businesses.²⁵¹ Yet, without an adequate mechanism for valuing such interests, we worried that sophisticated taxpayers might convert their existing ownership interests in businesses into more complicated hard-to-value interests so as to facilitate gaming and escape the new wealth tax.

Relatedly, for a mixture of political and policy reasons, we concluded that rules would be needed so that taxpayers who had most of their wealth tied up in start-up businesses could postpone paying tax on that wealth until they cashed out of those start-up businesses. But this might then create serious problems, especially in the context of a state-level tax reform because taxpayers able to postpone paying tax through such rules could potentially move out of state before their tax bills became due. At that point, because of possible federal constitutional limitations, California might face difficulties collecting the deferred tax liabilities.²⁵² This could potentially create problematic, perverse incentives for taxpayers to move out of state to escape the wealth tax. Moreover, these adverse incentives would be on top of the other problems related to political optionality caused by allowing too generous of a tax deferral regime.²⁵³

We designed our proposed ULTRA solution to resolve all of these related problems. For complicated ownership interests and other hard-to-value assets for which neither market trading values nor formulaic valuations would suffice, taxpayers would have the option of either attaching an ULTRA to those assets or else accepting the alternative

249. See *supra* Part II.B.

250. See Lederman, *supra* note 13, at 1497 (discussing the challenges of taxpayer valuation).

251. See *supra* Part II.B.

252. See *supra* notes 248–249 and accompanying text.

253. See Gamage & Brooks, *Tax Now or Tax Never*, *supra* note 3, at 491 (discussing the issues with tax deferral in the U.S. tax system).

take-it-or-leave-it valuation.²⁵⁴ For qualifying liquidity-constrained taxpayers opting for an ULTRA, no tax payments would then be required until cash withdrawals from the ULTRA.²⁵⁵ But any taxpayer opting for an ULTRA instead of the alternative take-it-or-leave-it valuation would thereby be required to grant California a notional equity interest in the assets to which the ULTRA is attached, thus generating a contractual claim that California's tax authorities could enforce even if the taxpayer might subsequently leave the state. The ULTRA solution thus resolves the valuation and liquidity problems for hard-to-value assets without creating perverse incentives for qualifying taxpayers to move out of state to escape deferred tax liabilities.

For the most part, the ULTRA solution works within the proposed California Tax on Extreme Wealth exactly as we described for a wealth tax in Part III. The ULTRA solution is not used as a comprehensive valuation mechanism but rather only as a plug for valuation holes—that is, for assets and tax circumstances for which neither public trading valuations nor formulaic valuations would suffice.

The valuation challenge is the central problem of tax design, and numerous prior scholars and commentators have argued that valuation challenges make annual wealth taxes unworkable or undesirable.²⁵⁶ These arguments often ignore that income taxes face equivalent or even worse valuation challenges.²⁵⁷ But it is certainly correct that any proposal for an annual wealth tax reform needs some solution (or mix of solutions) for valuation challenges. Fortunately, as we have explained, in combination with market trading valuations and formulaic valuations used for tax situations for which those valuation mechanisms suffice, the proposed ULTRA solution plugs tax valuation holes to resolve the valuation challenge for comprehensive wealth tax reform proposals. The ULTRA solution thus resolves the key administrative problem of enacting comprehensive wealth tax reforms.

254. Galle et al., *supra* note 27.

255. For taxpayers not qualifying for the special allowances for liquidity constraints, prepayment of estimated taxes would be required.

256. See, e.g., Edward D. Kleinbard, *The Right Tax at the Right Time*, 21 FLA. TAX REV. 208, 345 (2017) [hereinafter Kleinbard, *The Right Tax*] (suggesting that there does not appear to be a practical advantage to implementing a wealth tax because of observation and valuation problems).

257. DAVID GAMAGE, ARI GLOGOWER & KITTY RICHARDS, ROOSEVELT INST., HOW TO MEASURE AND VALUE WEALTH FOR A FEDERAL WEALTH TAX REFORM 21 (2021).

B. Mark-to-Market Income Tax Reforms

Wealth tax reforms are only one possible approach for fixing existing tax systems to effectively reach the ultrawealthy.²⁵⁸ Another potential approach involves attempting to repair the income tax directly. Specifically, scholars have discussed replacing the income tax's realization doctrine with mark-to-market rules for nearly a century.²⁵⁹ These mark-to-market approaches to reform would tax gains or losses as they accrue, without waiting for sales or other realization events, and thereby could end the major forms of gaming that currently allow wealthy taxpayers to escape the income tax.²⁶⁰ However, the conventional wisdom among tax experts has generally concluded that mark-to-market rules can only successfully be applied to narrow categories of assets because of valuation problems.²⁶¹

That conventional wisdom has been challenged some in recent years, especially by the proponents of Senator Wyden's Billionaires Income Tax ("BIT") reform proposal, which we described in Part II.C.²⁶² Yet even that reform proposal would have only applied mark-to-market rules to publicly traded assets. For nonpublicly traded assets, the BIT would have retained the realization doctrine.²⁶³

The central problems here again are valuation and liquidity. For nonpublicly traded assets, absent a sale, how do we determine the market price for applying mark-to-market rules? As we discussed in Part II, all of the prior approaches for addressing this valuation challenge have serious limitations and weaknesses. Furthermore, a mixture of policy and political reasons caused the drafters of the BIT to conclude that they could not require liquidity-constrained taxpayers to pay tax currently on the unrealized gains from their nonpublicly traded assets.²⁶⁴

258. See Gamage & Brooks, *Tax Now or Tax Never*, *supra* note 3, at 493 (discussing various proposals to alter the existing tax system, including wealth tax reforms).

259. E.g., William Vickrey, *Averaging of Income for Income-Tax Purposes*, 47 J. POL. ECON. 379, 381 (1939).

260. Glogower, *Taxing Capital Appreciation*, *supra* note 60, at 113.

261. See Schenk, *supra* note 49, at 503.

262. John Brooks, Brian D. Galle, David Gamage, Ari D. Glogower, Emmanuel Saez & Gabriel Zucman, *219 Economists, Law Professors & Other Academics Urge Congress To Include the 'Billionaires Income Tax' in Build Back Better Act* (Ind. Univ. Maurer Sch. Of L., Legal Stud. Rsch. Paper Series, Paper No. 470, 2021).

263. *Id.*

264. *Id.*

We supported Senator Wyden’s BIT proposal based on our view that it offered a substantial improvement over the deeply flawed existing income tax.²⁶⁵ But we also thought that the proposal was insufficient with respect to nonpublicly traded assets and that it would thus have been quite vulnerable to gaming based on exploiting the undertaxation of deferred tax liabilities.²⁶⁶ As we will now explain, applying our ULTRA solution could fix these key weaknesses of the BIT or of other mark-to-market income tax reforms.

Indeed, after this Article was accepted for publication, we were asked to help draft legislation to implement another variation of a mark-to-market reform targeted at billionaires and megamillionaires—President Joe Biden’s proposed Billionaires Minimum Income Tax. President Biden proposed the broad outlines for this reform in his budget for 2022, and we were then asked to assist congressional staff with drafting legislation for this proposed reform during the spring and summer of 2022. That proposed legislation was then introduced in the House in July 2022.²⁶⁷ Building on our work for this Article, the proposed legislation uses the ULTRA mechanism to solve the valuation challenge for illiquid taxpayers and designated hard-to-value nontraded assets.²⁶⁸

In other words, this proposed legislation uses the ULTRA mechanism in a similar manner to the proposed California Tax on Extreme Wealth. However, there are some key differences between wealth tax contexts and the context of mark-to-market income tax reforms that require differences in how the ULTRA mechanism is applied. The first key difference involves the question of how to determine the government’s notional equity interest. Under a mark-to-market income tax reform, the government is only supposed to have a claim on the increase in value of assets, not on the entire value of the assets. Consequently, an additional step is needed to calculate the government’s notional equity interest as compared to wealth tax reforms.

265. *Id.*; Gamage & Brooks, *Tax Now or Tax Never*, *supra* note 3, at 540 n.238.

266. Gamage & Brooks, *Tax Now or Tax Never*, *supra* note 3, at 540 n.238 (“[W]e think that [the BIT] would have fallen short of offering a sustainable fix to the brokenness of the existing personal tax system—for that, we think a complete current-assessment reform is needed.”).

267. Billionaire Minimum Income Tax Act, H.R. 8558, 117th Cong. (2022) (as introduced July 28, 2022).

268. *Id.* § 1481(f).

To resolve this first issue, we can rely on the well-known observation that when all assets earn the same rate of return r , a wealth tax with rate t_w is economically equivalent to an income tax with rate t_w / r .²⁶⁹ Thus, from an ex ante perspective, any wealth tax method can be translated into an income tax method simply by assuming a presumptive rate of return for all assets, such as 5 percent. Algebraically, this equivalence ($t_i = t_w / r$) implies that government's notional equity interest accumulated each year should be the applicable income tax rate multiplied by the presumptive rate of return ($t_i \times r$).

In other words, we can calculate a presumptive value for the government's notional equity interest by multiplying the taxpayer's applicable income tax rate by a presumptive rate of return. To facilitate this, the tax authority can be charged with annually reporting an economy-wide presumptive rate of return for purposes of applying the ULTRA method to a mark-to-market reform. This then solves the issue of calculating the government's notional equity interest, at least on an ex ante presumptive basis.²⁷⁰ To mitigate political optionality and liquidity concerns, taxpayers could make prepayments each year equal to the incremental amount of the government's notional interest.

However, this then raises the second key question of how to apply the ULTRA method to mark-to-market income tax reforms: What to do on an ex post basis? That is, once all of the assets within an ULTRA have been sold or withdrawn, how do we then calculate the final tax assessment? Unlike with a wealth tax reform, we cannot simply apply the percentage we calculated for the government's notional equity interest because here that is just a presumptive calculation that cannot be used to measure the taxpayer's actual gains or losses on an ex post basis.

269. Ari Glogower, *Comparing Capital Income and Wealth Taxes*, 48 PEPP. L. REV. 875, 887–94 (2021).

270. Note that this is the approach for calculating how the government's notional equity interest increases annually once an ULTRA has been initiated. Policymakers also need to determine how to apply ULTRA rules at the time the ULTRA is initiated. For new acquisitions, this should be straightforward. At the time of the initiation of the ULTRA, the government's notional equity interest should start at zero if there is a recognition event, such as the purchase of the asset subject to the ULTRA, for all unrealized gains or losses of assets to which the ULTRA is to be attached. Under a newly enacted mark-to-market system, legislators must also consider how to treat existing assets that may have untaxed gains or losses. Our recommendation is that the government's notional equity interest at the time of the initiation of the ULTRA should begin with the relevant mark-to-market tax rate to preserve the government's claim on prior unrealized gains. This is explained further in the Technical Appendix.

To solve this second key issue of determining the final tax calculation upon ultimate sale or withdrawal of all assets from an ULTRA, we can integrate the ULTRA method with a retrospective reform. In this manner, the ULTRA method effectively becomes a form of withholding system for applying mark-to-market rules until such time as all of the assets in the ULTRA are sold or withdrawn. At that time, a retrospective reform can be applied for calculating the actual income earned by the assets to determine the final tax assessment.

There have been numerous prior proposals for retrospective reforms, and any of these reforms could potentially be used for this final step of applying the ULTRA method to mark-to-market reforms. A full discussion of the advantages and disadvantages of the different options is beyond the scope of this Article.²⁷¹ That said, we think that Land's retrospective reform proposal has some major advantages over alternatives and that Land's proposal synergizes especially well with applying the ULTRA method to mark-to-market reforms.

Remember that a primary advantage of Land's proposal over alternative approaches to retrospective reforms is that, "[r]ather than viewing the deferred tax as a loan from the government, Land treats it as an equity investment by the government, which would share the future earnings . . . on a pro rata basis."²⁷² Consequently, Land's proposal is the only retrospective method that "derives a formula to produce the correct amount of tax."²⁷³ That is, only Land's proposal can calculate a final tax assessment that would be exactly the same as applying accrual mark-to-market rules on an ongoing basis.²⁷⁴ By contrast, other approaches for retrospective reforms generally result in either overtaxation or, more typically, undertaxation.²⁷⁵

Despite this primary advantage, the advocates of retrospective reforms have generally disfavored Land's proposal because it cannot handle interim contributions, partial withdrawals, or deemed withdrawals without creating excessive complexity and administrative and compliance burdens.²⁷⁶ Yet integrating Land's proposal with the

271. But see Part II for a partial discussion.

272. Schenk, *supra* note 49, at 544.

273. *Id.*

274. *Id.*

275. See *supra* Part II.C (discussing other approaches and also the political optionality problem).

276. Schenk, *supra* note 49, at 545–48.

ULTRA method solves these issues. As explained in Part III, the ULTRA method readily handles interim contributions, partial withdrawals, and deemed withdrawals. Using the ULTRA method as a withholding mechanism integrated with using Land's approach for calculating the final tax assessment offers the valuation accuracy of Land's proposal while mostly solving the administrative and compliance problems that would be created by using Land's proposal without the ULTRA method. Thus, for example, taxpayers would make withholding payments in the years they receive a dividend or other distribution equal to the value of that distribution times the government's notional equity share. (We explain further in the Technical Appendix.)

Example

Marff buys Spacebook stock on January 1, 2022, for \$1 billion. The stock then increases in value so that it is estimated to be worth \$2 billion at the end of 2022. There is a 20 percent mark-to-market income tax rate on investment assets in effect, but Marff's stock is not publicly traded and qualifies for the ULTRA-withholding regime with Land's retrospective proposal then applying upon final sale or disposition. Marff opts to hold the stock subject to an ULTRA throughout 2022 and 2023. He receives a dividend of \$200 million on January 1, 2023, and then sells the stock on January 1, 2024, for \$1.8 billion and so resolves the ULTRA. The presumptive rate of return is 5 percent in each year.

Results in 2022: Marff grants the government an ULTRA equal to 1 percent ($20 \text{ percent} \times 5 \text{ percent}$), attached to the stock assets at the end of 2022.²⁷⁷ If Marff does not qualify for relief from prepaying estimated taxes due to liquidity constraints or otherwise, then Marff should be required to make a withholding prepayment of 1 percent of the estimated value of the assets, with that estimation made via a simplified approach for valuation. Assuming that estimated value at the end of 2022 is \$2 billion, Marff would then make prepayments of \$20 million (1 percent of \$2 billion).

Results in 2023: When Marff receives the dividend, the government's notional share is 1 percent. Accordingly, Marff must

277. By specifying that the stock is purchased on January 1, we abstract from partial-year issues. Also, by specifying that the stock is purchased in 2022, we additionally abstract from the issues of how to treat preexisting built-in gains at the time an ULTRA is first initiated or a new mark-to-market regime is adopted. The Technical Appendix, *infra*, offers some possible approaches for these situations.

make a prepayment of 1 percent of \$200 million, or \$2 million, with his tax return for the 2023 tax year. At the end of 2023, the government's share increases again, rising by 0.99 percent ((20 percent \times 5 percent) \times (100 percent $-$ 1 percent)), for a new total of 1.99 percent. (If Marff continued to hold the stock, he should then make a withholding prepayment for 2023 of 1.99 percent of the estimated value of the assets. However, we assume that he is relieved from this prepayment responsibility as a result of his selling all of the assets on January 1, 2024, before he files his tax return for 2023.)

Results in 2024: Applying Land's formula, Marff's final tax assessment should be about \$252.2 million.²⁷⁸ This reflects both the \$200 million in tax he should have paid in 2022 under a full mark-to-market rule and compound interest accumulating during the holding period at the asset's own (very high) rate of return. Marff also gets credit for the \$22 million in prepayments he made in 2022 and 2023, leaving him with a tax assessment of \$230.2 million left to pay.

C. *Death and Gratuitous Transfers*

If policymakers opt not to adopt a wealth tax or choose to continue to tax transfers at death in addition to wealth, an ULTRA mechanism can also solve several problems of (or could replace in part) the estate and gift tax regime. By definition, a gratuitous transfer does not result in a market valuation of the transferred assets because the recipient pays nothing (or pays an amount acknowledged to be less than the assets' value).²⁷⁹ For estates that may plausibly exceed the exemption threshold (currently \$12 million per spouse for U.S. married couples), that means an appraisal of every item.²⁸⁰ Thus, the estate tax has been the battlefield on which many of the IRS's most notable valuation losses have occurred.²⁸¹

278. That is, $(\$2 \text{ billion} - \$22 \text{ million}) \times (1 - [(\$2 \text{ billion} - \$22 \text{ million})/\$1 \text{ billion}]^{0.2})$, as derived from Land's formula, which we detail in the Technical Appendix. As we also explain there, the total sale price for the asset is treated as the sale price plus the sum of all interim dividend payments and other distributions, which is where the \$2 billion figure comes from (\$1.8 billion sale price plus \$0.2 billion in dividends). This amount is then adjusted downwards by the aggregate amount of tax prepayments, here \$22 million. \$1 billion in the formula is the basis amount, and 0.2 percent is the applicable tax rate.

279. I.R.C. §§ 2503, 2512.

280. *Estate Tax*, I.R.S. (Sept. 14, 2022), <https://www.irs.gov/businesses/small-businesses-self-employed/estate-tax> [<https://perma.cc/YWF9-EZE4>].

281. See DENNIS L. BELCHER & MARY LOUISE FELLOWS, REPORT ON REFORM OF FEDERAL WEALTH TRANSFER TAXES 101–15 (2004) (describing valuation challenges in the estate tax); see also Wendy C. Gerzog, *Toward a Reality-Based Estate Tax*, 57 B.C. L. REV. 1037, 1053 (2016) (same).

The ULTRA mechanism also makes it much more viable to impose income taxes at the time of a taxpayer's death. Again, that might not matter much to the extent that policymakers might choose to replace the current realization-based income tax with a mark-to-market system. But, as we have noted, the current U.S. combination of rules in which taxpayers pay no tax on appreciated property while holding that property during life and their heirs then receive that property with stepped-up basis at the time of their inheritance powerfully distorts both taxpayer incentives and the distribution of wealth. Reforms short of full mark-to-market that simply treat death as a realization event could thus be major improvements over the status quo.

ULTRA methods could also help with the administration of taxes triggered by gifts, which currently are part of the anti-abuse rules for the estate tax and which we would urge policymakers to expand if they made death a realization event. Otherwise, it would often be easy for a wealthy individual to escape the estate or other death-triggered tax simply by giving away all their assets on their deathbed.²⁸² Thus, the estate tax also imposes a tax on the transferor of large gratuitous transfers.²⁸³

Most dramatically, the ULTRA mechanism could simply replace the entire gift tax regime. Taxpayers have exploited the current gift tax rules in ways that allow them to minimize the total burden from the estate and gift regime.²⁸⁴ Tax advisors often urge clients to adopt a "freeze" transaction in which the wealthy individual pays gift tax now to transfer assets out of their estate.²⁸⁵ That way, any subsequent growth in value between the time of the transfer and death goes untaxed. More simply, it is mathematically preferable to pay gift taxes rather than estate taxes because any gift taxes paid during life reduce the size of the taxable estate, whereas at death the size of the estate is calculated before any tax due on it.²⁸⁶

282. Mitchell M. Gans & Jay A. Soled, *Reforming the Gift Tax and Making It Enforceable*, 87 B.U. L. REV. 759, 762 (2007).

283. *Id.* at 761–62.

284. See, e.g., Jay A. Soled & Mitchell Gans, *Sales to Grantor Trusts: A Case Study of What the IRS and Congress Can Do To Curb Aggressive Transfer Tax Techniques*, 78 TENN. L. REV. 973, 975–86 (2011) (summarizing several common techniques for minimizing transfer taxes).

285. Karen C. Burke, *Valuation Freezes After the 1988 Act: The Impact of 2036(c) on Closely-Held Businesses*, 31 WM. & MARY L. REV. 67, 70 (1989).

286. BELCHER & FELLOWS, *supra* note 281, at 115.

We suggest instead that transferees receive gifted property subject to an ULTRA. The share of the asset's value covered by the ULTRA would depend on the tax rate at the time of the transfer.²⁸⁷ As we described before, the death of the transferor could then trigger a take-it-or-leave-it system in which the transferee either accepts the government's valuation or else opts to continue the ULTRA. When the transferor dies or all the ULTRAs resolve, all assets still in the estate and all assets transferred during life and subject to ULTRAs would be added up to determine whether the estate exceeds the \$12 million exemption threshold.²⁸⁸ The exemption could be allocated chronologically, as under current law (i.e., gifts early in life use up the exemption before those passed at death), but also might be divided either pro rata among assets or according to the decedent's wishes (as would currently be the case for individuals who leave fixed amounts to some heirs and a residual after-tax estate to others).²⁸⁹

Short of this dramatic change, ULTRAs could also play other roles in gratuitous transfers, such as providing an important anti-abuse option in the income tax system. Currently, the U.S. income tax exempts gifts from income, and giving a gift is not a realization event.²⁹⁰ If death were a realization event, such as in the Billionaire Income Tax bill, it would again be easy to escape that rule through deathbed transfers. Under current rules, a transfer during life would have some potential tax costs (the recipient is still liable for any untaxed gains in assets gifted during the life of the giver), but these costs can be eliminated through structured borrowing or indefinitely postponed via repeated intergenerational transfers and long-lived trusts.²⁹¹ To solve this, either the receipt of gifts should be included in taxable income or

287. This approach prevents income shifting by a high-bracket decedent to a low-bracket heir. See Dodge, *supra* note 62, at 434.

288. In the case of gifted assets that are disposed of by the recipients before the death of the giver, where the giver has already exceeded their lifetime exemption amount, the ULTRA could be resolved at the time of disposition. Admittedly, determining the best treatment in cases where it is not yet certain whether giver will ultimately transfer more than \$12 million is not straightforward. Our tentative recommendation would be that the disposition would still trigger resolution of the ULTRA and payment of any tax as though none of the transferred value were covered by the exemption. When the giver eventually dies, the heir could receive a rebate in the amount of any exemption amount that would have been credited to the sold property, plus interest.

289. See Dodge, *supra* note 62, at 441 (noting that most state inheritance laws apportion death tax liability pro rata among bequeathed assets, unless decedent elects otherwise).

290. I.R.C. § 102; Treas. Reg. § 1.1001-1(e).

291. Dodge, *supra* note 62, at 442.

the giving of the gift should be made a realization event for the giver.²⁹² However, the absence of market prices and the potential illiquidity of the parties have historically been barriers to treating gifts as realization events.²⁹³ The ULTRA mechanism can resolve both of these concerns.

In addition, tax authorities could use ULTRAs to shore up some other weak points of the estate tax system. Well-counseled wealthy taxpayers currently use a variety of arguably legal schemes to minimize their estate's tax bill.²⁹⁴ We, of course, would prefer that most or all of these schemes simply be made illegal. Our argument here is that the existence of an ULTRA system for resolving valuation disputes would undercut some of the legal and policy rationales that defenders of these schemes now rely on.

Valuation discounts on privately held businesses are among the biggest current estate-tax dodges.²⁹⁵ If available, an ULTRA could essentially end debate about these kinds of discounts. Each interest passed through the estate could be made subject to an ULTRA claim in the amount of the estate tax rate at the time of the inheritance (currently 40 percent).

Another technique where valuation uncertainty now plays a key role, and where an ULTRA would effectively close the loophole, is transfers to so-called grantor-retained annuity trusts ("GRATs").²⁹⁶ Simplifying a bit, the wealthy taxpayer takes an asset they expect to grow substantially in value and transfers it to a trust they effectively control, receiving in exchange a promise of a future stream of payments.²⁹⁷ As long as the trust's payment is considered to be equal in value to the asset's, the swap is not gratuitous and thus not taxable.²⁹⁸ Since the taxpayer effectively controls both sides of the swap, there is little reason to believe that equal value is actually exchanged, however,

292. *Id.* at 461, 463, 479.

293. *See id.* at 446–48 (noting these arguments but suggesting they are overstated).

294. Paul L. Caron & James R. Repetti, *The Estate Tax Non-Gap: Why Repeal a "Voluntary" Tax?*, 20 STAN. L. & POL'Y REV. 153, 159–62 (2009) (surveying some common techniques).

295. Brant J. Hellwig, *On Discounted Partnership Interests and Adequate Consideration*, 28 VA. TAX REV. 531, 533 (2009); Note, *Importing a Trade or Business Requirement to 2036: Toward a Regulatory Solution to FLP-Driven Transfer Tax Avoidance*, 126 HARV. L. REV. 1326, 1329 (2013).

296. The reasons for that name are deeper in the weeds than we need to wade here. For details, see Soled & Gans, *supra* note 284, at 976–81.

297. *Id.* at 977. The transaction can be structured as either a sale or a gift with a retained interest; the latter is typically called a "zeroed-out GRAT." *Id.* at 983–84.

298. *Id.* at 984.

and that problem is compounded by some very generous presumptions in current IRS regulations.²⁹⁹ Instead, taxpayers who exchange assets with trusts they contributed to (or benefit from) should have to open a gift-tax ULTRA on the transferred asset, with the ultimate taxable amount reduced by the amount of cash received from the trust.³⁰⁰

D. Property Tax Regimes

ULTRAs can also aid in administration of the property tax. Providing an ULTRA option for the payment of property taxes on residential property appears, at first, to just be a deferral option, similar to a few programs currently in existence (or proposed).³⁰¹ But an ULTRA can provide more than a solution for liquidity; it can provide a solution as to the underlying value of the asset. Thus, a homeowner and the local assessor need not dispute valuations in front of the local assessment appeals board but could instead mutually agree, or perhaps be required, to enter into an ULTRA as to the disputed part of the valuation. There is evidence that the current appeal process does not lead to more accurate results.³⁰²

Note that in the residential context, the availability of an ULTRA requirement could have equalizing effects, as a significant body of research shows that it is wealthy and white homeowners who are more likely to successfully challenge their assessments, thereby shifting the property tax burden onto those with less wherewithal.³⁰³ Somewhat

299. See Gans & Soled, *supra* note 282, at 772.

300. However, the GRAT transaction would still serve as a freeze to lock in the value of the asset at the price paid when the ULTRA is resolved. Our gift-tax ULTRA proposal could eliminate this advantage in many cases.

301. See DAVID BAER, AARP, AWARENESS AND POPULARITY OF PROPERTY TAX RELIEF PROGRAMS 2 (1998), http://assets.aarp.org/rgcenter/econ/9803_tax.pdf [<https://perma.cc/68E3-TAPS>] (describing various state government benefits intended to lessen property tax burdens); see also Darien Shanske, *Revitalizing Local Political Economy Through Modernizing the Property Tax*, 68 TAX. L. REV. 143, 145 (2014) (suggesting that property tax should be collected via withholding).

302. See, e.g., William M. Doerner & Keith R. Ihlanfeldt, *An Empirical Analysis of the Property Tax Appeals Process*, 11 J. PROP. TAX ASSESSMENT & ADMIN. 5, 12 (2014).

303. Carlos F. Avenancio-León & Troup Howard, *The Assessment Gap: Racial Inequalities in Property Taxation*, 137 Q.J. ECON. 1383, 1398–1412 (2022); Doerner & Ihlanfeldt, *supra* note 302, at 13; Andrew T. Hayashi, *The Legal Salience of Taxation*, 81 U. CHI. L. REV. 1443, 1498 (2014); see Bernadette Atuahene, *Our Taxes Are Too Damn High: Institutional Racism, Property Tax Assessments, and the Fair Housing Act*, 112 NW. U. L. REV. 1501, 1547–53 (2017); Brad C. Nathan, Ricardo Perez-Truglia & Alejandro Zentner, *My Taxes Are Too Damn High: Why Do Households Protest Their Tax?* 23–24 (Nat'l Bureau of Econ. Rsch., Working Paper No. 27816,

more speculatively, a better and more equitable solution could allow for further and more progressive reforms to property taxes because voters might feel less need to protect themselves with overprotective regimes like Proposition 13.³⁰⁴

The availability of an ULTRA option or requirement is likely even more important in the commercial context. It is in that context that properties are most likely to engender expensive disputes because of their high value and, in many cases, unique characteristics. Further, a straight deferral-until-sale option might be less workable for some commercial properties if they are transferred as part of a larger transaction that might not yield a fair market value for the property. Yet, just as complicated market transactions can provide data for ULTRAs in a mark-to-market or wealth tax context, they can also provide this data as to commercial property. Roughly, the government could be given a notional interest until there is a valuation event, with required prepayments. Thus, ULTRAs could both help resolve thorny valuation results and generally improve the administration of the property tax for hard-to-value properties.

E. Other Income Tax Reforms

By now we suspect the reader has understood our central point: the ULTRA mechanism can be used virtually anywhere that tax valuation problems arise. In addition to the major structural reforms we have described so far, ULTRAs could also be used in somewhat less ambitious, but still productive, reform projects. Here we sketch a few of what we see as the most significant places ULTRAs could improve the individual income tax, assuming that policymakers opt not to implement a mark-to-market system or other more transformative reforms.

1. *Carried Interest and Other Deferred Compensation.* Although the carried interest loophole has come as close to popular attention as any highly technical tax provision can, many readers may be unaware that it is in essence a valuation problem.³⁰⁵ Private equity managers are

2022), <https://www.nber.org/papers/w27816> [<https://perma.cc/C3WU-X24E>] (summarizing evidence suggesting that complexity of appeal system causes some households to overpay).

304. See Shanske, *supra* note 301, at 178–81.

305. Note, *Taxing Partnership Profits Interests: The Carried Interest Problem*, 124 HARV. L. REV. 1773, 1774 (2011).

typically paid in part with a share (often 20 percent) of the profits (or profits in excess of some “hurdle” amount, such as 8 percent) of the fund that they manage.³⁰⁶ Under current rules, managers are not taxed when they perform the services but instead can defer tax until the fund realizes any gains in its investment portfolio, which is often as long as ten years after the manager chooses the investments.³⁰⁷ In addition, even though the initial award of the profits interest is plainly compensation for the manager’s services, managers are able to treat the entire amount as capital gain, paying roughly half the rate they would otherwise face.³⁰⁸

This generous treatment results from a valuation dilemma. At the time the profits interest is awarded, its value may be relatively uncertain.³⁰⁹ The judicial decisions on which the IRS’s position draws all turn on the difficulty of measuring the value of partnership interests.³¹⁰

Framed this way, it’s now obvious that ULTRAs could readily close the carried interest loophole. With an ULTRA available, the underlying judicial reluctance to tax compensatory awards of partnership interests should evaporate. The IRS could thus revise its legal position to require a service-providing partner to open an ULTRA, payable at the time the value of the partnership interest is realized, to measure the value of her compensation income. Since this ULTRA would in fact represent payment for services, the percentage amount it awards the government would depend on the PE manager’s ordinary income rate. To the extent that the private equity industry is departing from the optimal incentive contract in order to maximize its tax benefits,³¹¹ closing the loophole would make start-ups and hedge funds more efficient. Closing the loophole in this manner would also end the strange modern practice of allowing many of America’s highest earners to pay its lowest tax on labor earnings.

306. Fleischer, *Two and Twenty*, *supra* note 29, at 8, 22; Gregg D. Polsky, *A Compendium of Private Equity Tax Games*, 146 TAX NOTES 615, 615 & n.2 (2015).

307. Fleischer, *Two and Twenty*, *supra* note 29, at 10–14.

308. *Id.* at 14–15.

309. *Id.* at 12.

310. *Diamond v. Comm’r*, 492 F.2d 286, 291–92 (7th Cir. 1974) (summarizing and affirming the Tax Court’s reasoning).

311. Fleischer, *Two and Twenty*, *supra* note 29, at 24–26.

For similar reasons, we would also extend this ULTRA treatment to most other forms of “nonqualified deferred compensation.”³¹² Most workers have access to tax-favored retirement savings through “qualified” plans, such as IRAs and 401(k)s, whose contribution limits are fairly strictly capped (albeit subject to an abusive loophole that Congress is working to close).³¹³ In addition, many executives can take advantage of other rules that in effect allow unlimited and tax-favored retirement savings.³¹⁴ An executive can perform services today but not pay tax on their compensation until they withdraw it from their pension account as long as the pension savings are within the reach of their employer’s creditors (and certain other technicalities are observed).³¹⁵ Over time, permissive IRS rulings and inattention have extended this generous treatment to some surprising other groups, including plaintiffs’ lawyers and freelance physicians.³¹⁶

Again, it is valuation problems that have opened the door for these nonqualified pensions. Courts have reasoned that a payment today in exchange for a promise tomorrow should not be taxed today if we cannot be sure how much the promise is really worth.³¹⁷ As long as there is some risk that the promisor cannot keep its promise—for instance, because it might go bankrupt and other creditors have superior claims on its assets—we cannot be sure that the employee will

312. David I. Walker, *The Practice and Tax Consequences of Nonqualified Deferred Compensation*, 75 WASH. & LEE L. REV. 2065, 2068 (2018). Our proposal includes equity-based compensation, although standard industry usage of the term typically excludes equity arrangements. *See id.* at 2068 n.2.

313. Justin Elliot, Patricia Callahan & James Bandler, *Lord of the Roths: How Tech Mogul Peter Thiel Turned a Retirement Account for the Middle Class into a \$5 Billion Tax-Free Piggy Bank*, PROPUBLICA (June 24, 2021, 5:00 AM), <https://www.propublica.org/article/lord-of-the-roths-how-tech-mogul-peter-thiel-turned-a-retirement-account-for-the-middle-class-into-a-5-billion-dollar-tax-free-piggy-bank> [https://perma.cc/4YJY-PBGK]; Justin Elliot, Patricia Callahan & James Bandler, *House Bill Would Blow Up the Massive IRAs of the Superwealthy*, PROPUBLICA (Sept. 21, 2021, 1:00 PM), <https://www.propublica.org/article/house-bill-would-blow-up-the-massive-iras-of-the-superwealthy> [https://perma.cc/G9WE-37VP]. For brief overviews of “qualified” retirement savings, see Brendan S. Maher, *Regulating Employment-Based Anything*, 100 MINN. L. REV. 1257, 1268–70 (2016); Eric D. Chason, *Deferred Compensation Reform: Taxing the Fruit of the Trees in Its Proper Season*, 67 OHIO ST. L.J. 347, 360–63 (2006).

314. Robert J. Jackson, Jr. & Colleen Honigsberg, *The Hidden Nature of Executive Retirement Pay*, 100 VA. L. REV. 479, 491–93, 506 (2014).

315. Walker, *supra* note 312, at 2081. On the technicalities, see I.R.C. § 409A.

316. Gregg D. Polsky & Brant J. Hellwig, *Taxing the Promise To Pay*, 89 MINN. L. REV. 1092, 1134–37 (2004).

317. *Casale v. Comm’r*, 247 F.2d 440, 443–44 (2d Cir. 1957); *see* Polsky & Hellwig, *supra* note 316, at 1123–24 (explaining how insolvency risk affects realization analysis).

actually receive the value they have been promised.³¹⁸ But because it would be unadministrable, in the IRS's view, to make an individual assessment of the insolvency risk of every firm, we instead have a blanket rule that any theoretical exposure of the pension assets to bankruptcy often allows for deferral of the taxable income.³¹⁹

ULTRAs are a ready solution. As with carried interest, we could simply require workers who receive deferred compensation to open an ULTRA once the award "vests"—that is, as soon as time (and theoretical bankruptcy risk) are the only things standing between the executive and their money. The employer would receive a mirror-image ULTRA: a tax deduction of uncertain value. When the executive receives their deferred payment, the firm's deduction would then trigger, in an amount equal to the firm's marginal rate (determined at the time the compensation was earned) times the amount of the payment received by the employee. Workers would thus get no net benefit from deferral. Some firms might be slightly disadvantaged but probably would still be better off than under current practices in which their shareholders are unwittingly made to eat tax losses.³²⁰

318. *Casale*, 247 F.2d at 444 ("[T]here is no warrant for calling the benefit 'immediate' for at best it was only tentative."); Eric D. Chason, *Executive Compensation and Tax Neutrality: Taxing the Investment Component of Deferred Compensation*, 31 CARDOZO L. REV. 1667, 1687, 1689–90 (2010); see *Sproull v. Comm'r*, 16 T.C. 244, 247 (1951) (suggesting that the promisee would not have income where there was a risk funds would be returned to employer), *aff'd per curiam*, 194 F.2d 541 (6th Cir. 1952).

319. I.R.S. G.C.M. 39,230 (May 7, 1984); cf. Rev. Rul. 60-31, 1960-1 C.B. 174, 178 ("[T]he statute cannot be administered by speculating whether the payor would have been willing to agree to an earlier payment."); Carter G. Bishop & Marian McMahon Durkin, *Nonqualified Deferred Compensation Plans: A Review and Critique*, 17 WM. MITCHELL L. REV. 43, 118–24 (1981) (summarizing law and observing that "tax law has not been concerned with how financially realistic it was to expect the employer's unsecured promise to pay to be performed according to its terms. All such obligations were treated the same regardless of the financial condition of the employer"). Professor Michael Doran has argued, however, that many of these valuation issues are overblown. See Michael Doran, *Executive Compensation Reform and the Limits of Tax Policy* 15 (Urban-Brookings Tax Pol'y Ctr., Paper No. 18, 2004).

320. The firm is potentially disadvantaged if its own investment opportunities are superior to the performance of the executive's retirement portfolio. The mirror-image ULTRA is equivalent to the government borrowing from the employer and paying interest at the internal rate of the return of the asset subject to the ULTRA, which here is the worker's investments, not the firm's. If policymakers thought this were unsatisfactory, they could instead set the firm's deduction to be equal to the amount that would have been allowed if the deferred payment had been invested in the firm's own stock instead of in the executive's portfolio.

2. *Installment Sales, Earnouts, and Open Transactions.* As we mentioned earlier, the realization rule creates considerable legal complexity because it requires the tax system to determine the date on which a “sale” has occurred. But many commercial transactions are structured so that for a period of time the transacting parties share different portions of the “bundle of sticks” that makes up ownership. A common example is an “earnout,” where instead of a fixed sale price the buyer makes a series of payments whose total is contingent on some future event.³²¹

Earnouts are commonly used to facilitate sales at a time when the value of the underlying asset is uncertain or subject to agency costs. Take a simple case of the acquisition of a gold mine when it is uncertain how much gold remains in the mine; with an earnout, the buyer pays more when they can mine more. A more modern example would involve the purchase of a start-up with a valuable but unproven technology.³²² Earnouts are also useful when the seller can make costly but hard-to-observe investments to improve the value of the enterprise after its transfer (say, by encouraging existing customers to stay on); in effect the earnout gives the selling manager an ongoing equity stake in the business, ensuring they are incentivized to keep it successful after they sell.³²³

Current approaches to earnout-type transactions may sometimes inefficiently discourage their use.³²⁴ By default, contingent pricing transactions use the installment sale method.³²⁵ Depending on taxpayer elections and how the transaction is structured, the installment method

321. See, e.g., Bates et al., *supra* note 14 (finding over 14 percent of transactions involving private firms used an earnout out of sample of over twenty-two thousand transactions over 26 years).

322. See Roberto Ragozzino & Jeffrey J. Reuer, *Contingent Earnouts in Acquisitions of Privately Held Targets*, 35 J. MGMT. 857, 868–74 (2009) (examining use of earnouts in acquisitions of start-up companies).

323. See Srikant Datar, Richard Frankel & Mark Wolfson, *Earnouts: The Effects of Adverse Selection and Agency Costs on Acquisition Technologies*, 17 J.L. ECON. & ORG. 201, 202, 225–31 (2001) (summarizing prior literature and reporting new evidence on use of earnouts to overcome asymmetric information).

324. See, e.g., Jonathan Van Loo, *Open Transaction Treatment for Earn-outs*, 22 M&A TAX REP. 1, 1, 8 (2013) (observing that “[s]ales of private companies are frequently structured as earn-outs, with the price contingent on future performance” but that a common tax treatment of earnouts, the installment method, “include[s] several unfavorable aspects”).

325. Treas. Reg. § 15a.453-1(c)(1) (as amended in 1994).

can often result in taxpayers paying tax on profits before those profits actually arrive.³²⁶

At the same time, these kinds of contingent arrangements can also be used as a tax planning tool. In some instances, taxpayers may be able to get most of their money out of an investment while deferring paying tax on the gains.³²⁷ For example, if a taxpayer is eligible to opt out of the installment method, they can rely on an appraisal,³²⁸ where they often will obtain favorable results. Other financial instruments, such as swaps and options, present similar issues.³²⁹

We think that ULTRAs provide a better solution at least as an option and likely as the default option. As in the wealth tax context, a taxpayer owes a known rate of tax on a not yet known base. Thus, the government could collect an ULTRA at the time of sale, with the seller's ultimate tax bill to be resolved when the final sale price is settled (and with an economically accurate rate of interest added).³³⁰

3. *In-Kind Donations.* Finally, ULTRAs could help combat taxpayer efforts to game the value of their charitable contribution deductions and perhaps reform the treatment of contributions more generally. Many donations allow the contributor a deduction for the fair market value of their gift, whether the gift is made in cash or in kind. Charities must then independently report to the IRS the value of large in-kind donations, allowing for a double check on what individual

326. For example, if the deal sets a range of payouts with a maximum price, then interim tax payments are calculated as if the asset were sold at the maximum. Treas. Reg. § 15a.453-1(c)(2)(i)(A) (as amended in 1994). In some cases, if there is no set time period for payments, the seller may have to recover their basis over the next fifteen years. Treas. Reg. § 15a.453-1(c)(4) (as amended in 1994).

327. See Raskolnikov, *Contextual Analysis*, *supra* note 69, at 508–14 (summarizing cases).

328. Hence, if a taxpayer opts out of the installment method:

The fair market value of a contingent payment obligation shall be determined by disregarding any restrictions on transfer imposed by agreement or under local law. The fair market value of a contingent payment obligation may be ascertained from, and in no event shall be considered to be less than, the fair market value of the property sold (less the amount of any other consideration received in the sale).

Treas. Reg. § 15a.453-1(d)(2)(iii) (as amended in 1994).

329. Daniel Shaviro, *Risk-Based Rules and the Taxation of Capital Income*, 50 TAX L. REV. 643, 679 (1995).

330. Professor Kwall proposed a similar solution as to open transactions. Jeffrey L. Kwall, *Out with the Open-Transaction Doctrine: A New Theory for Taxing Contingent Payment Sales*, 81 N.C. L. REV. 977, 1012 (2003) (“[T]he seller should be viewed as retaining a proprietary interest in the transferred business in the form of the right to contingent payments.”).

donors report.³³¹ But the charity has no reason to second-guess a donor's position because making donors happy encourages donations, and, indeed, charity managers who are paid based on their fundraising hauls would likely be only too happy to inflate the value of these hauls. This leaves substantial room for gaming.

We would rank conservation easements high in a list of the most abusive of these gaming efforts. Conservation easements are generally a promise by a property owner to maintain the property in its natural or historic state.³³² By donating this promise to a charity, the owner supposedly guarantees this promise, helping to ensure that marshlands will not be turned into malls or architectural treasures chopped into condos.³³³ But often these are unlikely to be enforced,³³⁴ are promises the owner would happily keep for their own purposes,³³⁵ or, in some high-profile instances, are promises the owner is already legally obligated to keep anyway.³³⁶ Still, donors often claim that making the promise reduces the value of their property by millions of dollars and seek charitable contribution deductions to match.³³⁷ Because almost by definition the encumbered property is not going to be sold or marketed, these claims are very hard for the IRS to verify.³³⁸ Congress

331. I.R.S., INSTRUCTIONS FOR FORM 8283 (2021), <https://www.irs.gov/pub/irs-pdf/i8283.pdf> [<https://perma.cc/83QY-A46P>].

332. Nancy A. McLaughlin, *Increasing the Tax Incentives for Conservation Easement Donations—A Responsible Approach*, 31 *ECOLOGY L.Q.* 1, 4 (2003).

333. *Id.* at 3–4.

334. Roger Colinvaux, *Conservation Easements: Design Flaws, Enforcement Challenges, and Reform*, 2013 *UTAH L. REV.* 755, 759–60 [hereinafter Colinvaux, *Conservation Easements*].

335. See *Miscellaneous Tax Bills: Hearing on H.R. 4611 Before the Subcomm. on Select Revenue Measures of the H. Comm. on Ways and Means*, 96th Cong. 12 (1979) (statement of Daniel I. Halperin, Deputy Assistant Sec'y, Treasury Dep't); McLaughlin, *supra* note 332, at 28. *But see id.* at 27–28 (noting that donors' circumstances may change).

336. Joshua Partlow, Jonathan O'Connell & David A. Fahrenthold, *Trump Got a \$21 Million Tax Break for Saving the Forest Outside His N.Y. Mansion. Now the Deal Is Under Investigation*, *WASH. POST* (Oct. 7, 2020, 8:35 AM), https://www.washingtonpost.com/politics/trump-got-a-21-million-tax-break-for-saving-the-forest-outside-his-ny-mansion-now-the-deal-is-under-investigation/2020/10/07/de84c1ba-ff6b-11ea-830c-a160b331ca62_story.html [<https://perma.cc/XDF7-QMYF>].

337. *Id.*; see Adam Looney, *Estimating the Rising Cost of a Surprising Tax Shelter: The Syndicated Conservation Easement*, *BROOKINGS* (Dec. 20, 2017), <https://www.brookings.edu/blog/up-front/2017/12/20/estimating-the-rising-cost-of-a-surprising-tax-shelter-the-syndicated-conservation-easement> [<https://perma.cc/V55X-RWDW>].

338. Colinvaux, *Conservation Easements*, *supra* note 334, at 765–66.

recently stalled in its efforts to overhaul conservation easements' tax treatment.³³⁹

Split-interest trusts are another abusive tactic current law permits. To simplify, a wealthy individual divides their estate into two pieces: a time-limited stream of payments (say, annual payments for the life of a chosen heir) and then a remainder interest that represents any value left over when the first piece is paid off. Since remainder interests are hard to value, current law uses approximations that are easy to game.³⁴⁰

ULTRAs could replace all of these regimes. In the case of conservation easements or other donations whose value is highly gameable, the donor would not get an immediate deduction but instead would receive a reverse ULTRA. Then, when the donee charity disposes of the gift, the donor would get their deduction in the full amount of the disposition value, in effect paying the donors interest on their deferred deduction at the asset's internal rate of return.³⁴¹

For split-interest trusts, ULTRAs could erase the need to rely on actuarial tables or statutory discount rates, thereby ending the games that exploit the inaccuracies of those tools. When a charity receives a remainder interest (a charitable remainder trust, or "CRT"), the donor would not be able to claim an immediate deduction (with value estimated using actuarial tables) but instead would again get a reverse ULTRA redeemable when the charitable interest finally passes to the charity. Because the assets have not yet been transferred to charity for tax purposes, the CRT could then be treated as a taxable trust, preventing tax-free diversification that mostly benefits the noncharitable beneficiaries. If it is noncharitable heirs who get the remainder, the trust's settlor could claim a full charitable contribution

339. Kaustuv Basu, *Plan To Curb Land Conservation Break Out of Tax-and-Spend Plan*, BLOOMBERG TAX (Oct. 27, 2021, 7:21 PM), <https://news.bloombergtax.com/daily-tax-report/plan-to-curb-land-conservation-break-out-of-tax-and-spend-plan> [<https://perma.cc/UYD6-MPJR>]; cf. Dominic Parker, *Congress Limits Conservation Easement Write-Offs — That's Good for Conservation and Taxpayers*, HILL (Jan. 11, 2023, 7:00 AM), <https://thehill.com/opinion/energy-environment/3806213-congress-limits-conservation-easement-write-offs-thats-good-for-conservation-and-taxpayers> [<https://perma.cc/T73R-6WZV>] (explaining that the 2023 omnibus spending bill enacted some reforms that are "a step in the right direction" but that "[m]ore fundamental reforms" are still needed).

340. See BELCHER & FELLOWS, *supra* note 281, at 291 (stating that current law "has to" rely on actuarial tables and other approximations).

341. In the case of conservation easements, the ULTRA could also be resolved when the underlying property is sold. The sale price could be compared against the value of comparable properties, and any discount for the property subject to the easement would then be the value of the donor's charitable contribution.

deduction, but any beneficiaries of the trust would also have to open an ULTRA that would trigger when they received their share. This arrangement resembles an earlier proposal by Professor Wendy Gerzog to tax split interests when actually received.³⁴² But because Gerzog's proposal omits any kind of retrospective interest charge, the remaindermen still get the tax benefits of deferral, whereas the ULTRA mechanism would remove that.

More generally, an ULTRA would facilitate treating gifts to charity as realization events. There is no convincing policy rationale for allowing donors to escape paying tax on assets they gift.³⁴³ Like the basis step-up at death, the nonrealization rule increases lock-in by offering taxpayers a zero-tax alternative to selling their assets.³⁴⁴ Thus, even if the nonrealization rule increases donations, it would be far better to repeal it and simply increase the value of the charitable contribution deduction. An ULTRA would ease any valuation and liquidity obstacles to that reform.³⁴⁵

* * *

In short, the ULTRA is a highly flexible tool that can readily be combined with other valuation tools. In combination, these valuation systems can close off the loopholes that plague the income tax and, in the minds of critics, fatally undermine many major potential reforms.

CONCLUSION

Let us retrace our steps. Though the consensus is not universal, there is considerable agreement that income and wealth inequality have grown and ought to be addressed. There is similar consensus that the current tax system does not tax the extraordinarily wealthy very well at all. At this point, consensus frays. Some would argue that the future must resemble the past, the very wealthy are just too good at

342. Gerzog, *supra* note 281, at 1051–52; *see also* BELCHER & FELLOWS, *supra* note 281, at 291 (proposing this result as part of a larger switch from an estate to an accessions tax).

343. Roger Colinvaux, *Charitable Contributions of Property: A Broken System Reimagined*, 50 HARV. J. ON LEGIS. 263, 290, 318–19 (2013) [hereinafter Colinvaux, *Charitable Contributions*]; Daniel Halperin, *A Charitable Contribution of Appreciated Property and the Realization of Built-in Gains*, 56 TAX L. REV. 1, 34 (2002).

344. Halperin, *supra* note 343, at 25–26.

345. For discussion of valuation difficulties with in-kind donations, *see* Colinvaux, *Charitable Contributions*, *supra* note 343, at 276–80 (outlining Congress's attempts to address charitable deductions); *id.* at 282–89 (outlining administrative costs).

playing valuation games for them to ever effectively be taxed, and there is thus little that can be done about this unfortunate situation. Others have offered reform proposals, yet all prior reform proposals are flawed in critical respects.

Despite its acronym, our proposed ULTRA mechanism is, in a sense, modest. It is just a specific, good-enough plug for the valuation holes in the current tax system and in prior reform proposals. Furthermore, its key analytic move—granting the government a notional equity interest—is just a concrete reflection of how many of us have long thought about income taxation: namely, that when we have an income tax the government is supposed to serve as a silent partner in our income-earning endeavors.³⁴⁶

Yet plugging tax valuation holes is critical to reform. Absent sufficient plugs, tax lawyers and financial planners can and do design gaming stratagems to enable wealthy taxpayers to squeeze most of their wealth through unplugged holes to escape tax. This is the story of how the existing income tax is broken as applied to the wealthy because key valuation holes remain unplugged.³⁴⁷ This is also a key part of the story of how many prior attempts at taxing wealth have failed, again because of the failure to plug key valuation holes.³⁴⁸

The ULTRA mechanism advances over prior reform efforts because (1) the notional equity interest it offers to the government counteracts the incentives for deferral-based tax games, (2) it alleviates the political optionality concerns of retrospective and realization-based reforms, (3) its unique separated-accounts and take-it-or-leave-it alternative valuation methodologies together readily manage the issues created by contributions, partial withdrawals, and deemed withdrawals—including personal-level borrowing, and (4) it resolves the jurisdictional issues that might otherwise interfere with state-level attempts at reaching mobile taxpayers.³⁴⁹ Together, we have argued that these innovations of the ULTRA mechanism suffice to offer a general-purpose plug for a wide variety of critical tax valuation holes.

Without a solution for plugging valuation holes, tax systems cannot effectively address rising inequality. We have argued that our proposed ULTRA mechanism answers these problems. By using

346. See *supra* note 211 and accompanying text.

347. See *supra* notes 50–71 and accompanying text.

348. See *supra* notes 72–149 and accompanying text.

349. See *supra* notes 227–245 and accompanying text.

ULTRAs to plug tax valuation holes, we can feasibly reform our tax systems to reach extreme wealth.

TECHNICAL APPENDIX

This Appendix offers additional details on the workings and math behind our proposed approach to interim distributions under a mark-to-market income tax reform. Again, our basic proposal is that each year an applicable taxpayer's assets would become subject to an ULTRA equal to the prevailing top marginal tax rate on investments times a deemed rate of return.³⁵⁰ Then, at the time of the sale of all of the assets or other resolution of the ULTRA, the taxpayer's results would be "trued up" to their actual rate of return using a retrospective formula. As we discussed previously, fully analyzing which retrospective formula should be used is beyond the scope of this Article, but we tentatively recommend the Land formula (though perhaps combined with some guardrails and/or alternative equitable adjustment methodologies), which is:

$$\text{Tax Due} = S_p(1 - (S_p/P)^{-t}) \quad (\text{Eq. 1})$$

where S_p is the pre-tax sales price, P is the assets' basis, and t is the (absolute value of the) applicable tax rate.

The main text refers readers to this Appendix for further details on our treatment of assets with interim payments. The availability of an ULTRA greatly simplifies the calculations otherwise required by Land's method. We propose that when interim payments are made, the taxpayer be treated as settling a portion of the ULTRA equal to the amount of the interim payout (but taxes due could be capped at some share of the interim payment, such as perhaps 50 percent). For example, if there is a 10 percent ULTRA in place and a \$1 million interim payout, the taxpayer would owe \$100,000 in tax. Since our proposal is limited to top-bracket taxpayers, we should not need to worry about progressive rate structures. But if the top marginal rate changes over time, the applicable tax rate for calculating the ULTRA should be the rolling average of the rates prevailing during the holding period.

350. Again, this proposal builds on the insight that—from an ex ante perspective—wealth taxes are equivalent to taxes on capital income with a deemed rate of return. Kleinbard, *The Right Tax*, *supra* note 256.

To maintain full neutrality with regard to the timing of sales, prepayments should reduce the sale price used in computing Land's formula. This is because if the government is going to hold a taxpayer's prepayments until sale, the government must pay interest at the taxpayer's internal rate of return; otherwise, taxpayers could have an incentive to sell quickly in order to claim their (potential) rebate. Luckily, this is easy to implement. A prepayment is the equivalent of a negative dividend (or, even more simply, we can define a distribution from an ULTRA account as the net amount after any tax prepayments required as a result of the distribution). At the time of sale, the sale price would thus be reduced by the amount of any prepayments.³⁵¹ This reflects only the interest the government pays on the prepayment, so taxpayers would also get a credit against their tax due in the amount of the actual prepayment. If we let W equal the prepayment or withholding amount, then Equation 2 gives the revised calculation:

$$\text{Tax Due} = [S_p - W](1 - ([S_p - W]/P)^t) \quad (\text{Eq. 2})$$

The treatment of interim distributions at the time of sale potentially depends on whether the tax rate has varied over the life of the asset. If the rate has remained fixed, the taxpayer would apply the simple Land formula from Equation 1 (not the more complex one Land offers for treatment of assets with interim payments) but would include in the sale price the sum of all the interim payments received while the taxpayer owned the asset. Again, past tax payments (or refunds) on interim payments would be credited (or debited, respectively) against this amount. If the tax rate has varied, our preferred approach, out of simplicity, is to still use this method but to calculate the tax due at sale based on the average rate prevailing over the holding period of the asset. If D is the distribution amount, then the tax liability calculation is:

$$\text{Tax Due} = [S_p - W + D](1 - ([S_p - W + D]/P)^t) \quad (\text{Eq. 3})$$

Example

Divya buys stock for \$100x in year zero when the income tax rate is 25 percent. For simplicity, we assume that the deemed rate of return

351. This is a bit of a departure from the usual tax approach, which would typically track earlier tax payments through an asset's basis. I.R.C. § 1012. It does not usually matter whether we reduce the amount realized (i.e., the sales price) or increase the basis because those are algebraically equivalent. But it matters when applying Land's formula, as sales price appears twice in the formula while basis appears only once.

is 10 percent throughout the entire holding period and that no annual prepayments are required except when there are dividends or other distributions. In year two, the income tax rate is cut to 15 percent and the stock then pays a \$20x dividend on the last day of year two. Finally, at the end of year four, the stock is sold for \$100x. The tax rate t used in the retrospective formula in year four is $(25 + 15 \times 3)/4 = 17.5$ percent.

Year Two: D's stock is subject to an ULTRA of $0.25 \times 0.1 + 0.15 \times [0.1 - (0.25 \times 0.1)] = 0.025 + 0.014625 = 0.039625$. D thus owes $0.039625 \times \$20x = \$0.7925x$ in tax on the dividend.

Year Four: At sale, D's total tax due is, per Equation 3, $[100 - .7925 + 20] \times (1 - ([100 - .7925 + 20] / 100)^{-175}) = 119.2075 \times .03028 = 3.609x$. D receives a credit of $\$0.7925x$ and thus owes an additional $\$2.8170x$.

It may seem counterintuitive that the interim payments can simply be included in the final sale price as this seems to ignore the time value of money. In fact, though, this reflects the fact that under an equity approach the timing of gains or losses is irrelevant to the tax calculation; all that matters is the proportional increase or decrease in the asset's value. Accordingly, notice that there is no time variable in Equations 1 through 3.

Our treatment of interim payments here differs from Land's, but this difference has little impact on the ultimate economic outcomes for the average taxpayer. In Land's method, taxpayers voluntarily reveal the fair market value of the taxed asset at the time of the interim distribution, and this value is used to calculate taxes both at the time of distribution and then again at sale. Land argues that taxpayers should have an incentive to reveal the true value because this maximizes their after-tax return, as he shows with a simple proof. He also suggests, however, that the assumed value at the time of distribution has almost no impact on the taxpayer's final after-tax return from the investment.

Regardless, Land's method is likely unadministrable with respect to taxpayers with portfolios of assets for which interim contributions, distributions, and/or deemed distributions may occur frequently over time, as the need to revalue the assets upon each such interim transaction would present prohibitive administrative and compliance burdens. Also, as with other retrospective solutions, Land's method only works in practice if it can be guaranteed that there would ultimately be a final sale or other resolution of all assets that would generate an accurate final valuation for reconciliation true-up purposes. However, because of political optionality concerns and the

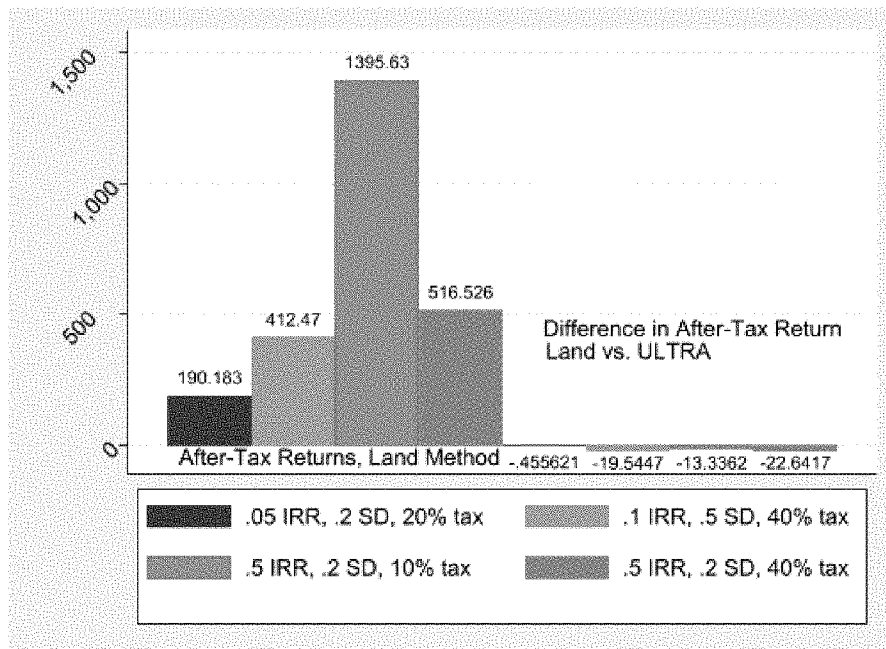
difficulty of conducting valuations for many assets upon events like death, this cannot be guaranteed. In practice, therefore, Land's method would likely be manipulated by taxpayers playing valuation games with interim distributions or with personal-level borrowing.

Integrating Land's retrospective methodology with ULTRAs as a withholding mechanism potentially solves these issues. But this then raises the question of whether Land is correct in claiming that presumed valuations at the time of distributions have almost no impact on the taxpayer's final after-tax return from the investment.

We thus test this claim with a series of simulations. In each set, we generate five hundred assets with random starting values, rates of return, sale dates, dividend dates, and dividend amounts. We then compute the after-tax return for each asset under three alternative methods for taxing interim distributions: our proposal, Land's method, and a third method in which the asset's value at the time of the dividend is assumed to be its purchase price plus the dividend amount. We repeat the exercise with rates of return centered low, moderate, and very high (0.05, 0.1, and 0.5), lower and higher variance of the rate of return (standard deviations of 0.2 and 0.5), and low, moderate, and high tax rates (10 percent, 20 percent, and 40 percent).

Across all these variations, there are only tiny differences in the final after-tax result between Land's method and ours, with a median difference of about ten dollars. The largest divergence was under 5 percent of the total after-tax return, around sixty-four dollars. Figure 1 illustrates some representative cases.

Figure 1: Simulated Differences in Alternative Approaches to Taxing Distributions



We thus propose our ULTRA valuation method as a withholding mechanism to make Land's retrospective approach feasible in terms of both administration and compliance and to combat gaming through aggressive valuation of interim distributions or through personal-level borrowing. We leave to future scholarship the tasks of more fully exploring whether Land's approach is truly the best retrospective solution for being integrated with using our ULTRA valuation method as a withholding mechanism and also of more fully exploring the details of implementing this integration. Our ULTRA valuation method could alternatively be integrated with other retrospective approaches, with our ULTRA valuation method similarly to be used as a withholding mechanism to solve otherwise vexing issues related to distributions, deemed distributions, and other interim transactions. Regardless of the retrospective approach used upon final resolution of the ULTRA, our ULTRA valuation method can manage interim distributions, contributions, and deemed distributions so as to greatly simplify administration and compliance and to combat taxpayer gaming.

Transition Rules for Implementing a Mark-to-Market Reform

So far, in our presentation of how an ULTRA might be integrated with a mark-to-market income tax reform, we have left aside the question of how to transition from our current realization-based system into the mark-to-market regime. However, lawmakers who adopt a new mark-to-market law must also decide how to treat pre-enactment unrealized gains and losses in taxpayers' existing property (which tax lawyers call "built in" gains and losses) at the time of the enactment of the new law and how to account for existing basis in such property. The ULTRA mechanism works readily with most feasible approaches to these questions.

Although we do not recommend this approach, one possibility is to implement a mark-to-market reform in a manner that would exclude pre-enactment built-in gains from the mark-to-market rules so that such gains would not be recognized until the assets are eventually sold. This approach poses risks for the government: by postponing most of the tax due until sale, it increases taxpayers' political optionality and raises the odds that the property owner will not be liquid enough to pay all the resulting tax when they sell (although our ULTRA mechanism should limit liquidity problems by ensuring that tax plus interest charges never exceeds the sale price).

In light of these concerns, the 2022 Billionaire Minimum Income Tax ("BMIT") reform took somewhat of the opposite approach. If enacted, that bill would effectively require taxpayers to prepay tax on the full value of all their ULTRA assets, regardless of basis. Taxpayers would then get basis recovery at sale—that is, taxpayers could get a refund to the extent that the taxed amounts exceeded built-in gains. More technically, for assets with pre-enactment built-in gains attached to an ULTRA in the year following enactment, the bill would impose an initial ULTRA notional equity percentage equal to 20 percent (the effective capital gains rate for the BMIT). Prepayments would then technically be due immediately (in that first year following enactment), but to ease liquidity burdens the bill would allow taxpayers to pay over a nine-year payment period. This approach was designed to alleviate political optionality and, by setting aside basis entirely, eliminate some potential complications that could otherwise arise if taxpayers had to continually recalculate their basis each year.

BMIT Transition ULTRA Example

Marff holds Facebook stock in 2022 with an estimated value of \$2 billion and a basis of \$1 billion. There is a newly adopted 20 percent mark-to-market income tax rate on investment assets effective January 1, 2022, but Marff's stock is not publicly traded and qualifies for the ULTRA withholding regime, with Land's retrospective proposal then applying upon final sale or disposition. Marff opts to hold the stock subject to an ULTRA in 2022. He then receives a dividend of \$200 million on January 1, 2023, and finally sells the stock on January 1, 2024, for \$1.8 billion. The presumptive rate of return is 5 percent annually for all years.

Results in 2022: When the new mark-to-market law is adopted, the government begins with an ULTRA equal to the tax rate, or 20 percent, attached to the stock assets. Marff then increases the ULTRA share to reflect the expected growth during 2022. The government share is only based on the growth in Marff's remaining share of the stock, so it is equal to $(20 \text{ percent} \times 5 \text{ percent}) \times (100 \text{ percent} - 20 \text{ percent}) = 0.8 \text{ percent}$, for a total of 20.8 percent. If Marff does not qualify for relief from prepaying estimated taxes due to liquidity constraints or otherwise, then Marff should be required to make a withholding prepayment of 20.8 percent of the estimated value of the assets, with that estimation made via a simplified approach for valuation. Assuming that estimated value is \$2 billion, Marff would then make prepayments of \$416 million (20.8 percent of \$2 billion).

Results in 2023: When Marff receives the dividend, the government's notional share is 20.8 percent. Accordingly, Marff must make a prepayment of 20.8 percent of \$200 million, or \$41.6 million, with his tax return for the 2023 tax year. At the end of 2023, the government's share increases again, rising by $(20 \text{ percent} \times 5 \text{ percent}) \times (100 \text{ percent} - 20.8 \text{ percent}) = 0.792 \text{ percent}$, for a new total of 21.592 percent.

Results in 2024: Applying Land's formula, Marff's final tax assessment should be about \$128 million.³⁵² He would then get credit for his 2022 and 2023 prepayments, which totaled \$457.6 million. That entitles Marff to a refund of \$329.6 million.³⁵³

352. That is, after including adjustments to the sales price for the prepayments, $(\$1.8 \text{ billion} + \$200 \text{ million} - \$457.6 \text{ million}) \times (1 - ((\$1.8 \text{ billion} + \$200 \text{ million} - \$457.6 \text{ million})/\$1 \text{ billion})^{0.2})$, as derived from Land's formula.

353. The large refund here is because basis recovery is delayed until the year of final resolution of the ULTRA (2024).