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How to Tax Capital

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I. Introduction

It is well known that the existing system in the U.S. for taxing capital income is a mess. It collects a small amount of revenue relative to capital income with high administrative and compliance costs while distorting the behavior of owners and users of capital on numerous margins.[1] This paper proposes a new system for taxing capital that can collect the same amount of revenue with much lower public administrative and private compliance costs, and with somewhat lower distortionary impact. The new system's pillar is a flat annual tax assessed on the market value of publicly traded securities.[2] The tax will cover around 60 percent of the wealth of U.S. households and

[1] See, e.g., Edward D. Kleinbard, Reimagining Capital Income Taxation (June 5, 2015), at 33-34 ("The U.S. system for taxing capital income is thus fundamentally rotten at its core: it can neither measure nor tax consistently the most straightforward returns to real or financial capital.")

[2] The securities tax and the complementary tax are in the general family of wealth taxes. There is a substantial body of literature on wealth taxes, including several handfuls of pieces collected in two issues of the Tax Law Review published in 2000. These include a well-thought out proposal for a comprehensive wealth tax in David Shakow and Reed Shuldiner, A Comprehensive Wealth Tax, 53 Tax. L. Rev. 499 (2000). Thomas Piketty proposes a wealth tax in Thomas Piketty, *Capital in the 21st Century* (Harvard 2014). Section II draws a great deal on Piketty's book because his way of thinking about capital is useful to understanding the logic behind the securities tax and the complementary tax. Section V-A explains why

around 75 to 80 percent of income producing capital that is presently subject to the individual and corporate income taxes. Income producing capital that is not subject to the securities tax, such as interests in closely held businesses and directly owned real estate (other than owner occupied housing), is covered by a complementary tax that is designed to have a similar incidence in order to minimize distortions from having two systems for taxing capital. Equity in owner-occupied housing and consumer durables will not be subject to the tax, though equity in owner-occupied housing could be covered by the complementary tax.

Under the securities tax an issuer of a publicly traded security pays an annual tax equal to a small percentage of the market price of a security, perhaps on the order of eight tenths of a cent on the dollar. The tax is assessed on the market price of a security. It is not a tax on investment income or gain. The tax is in the nature of a wealth tax or a tax on the imputed normal return on capital. The issuer's tax obligation is a remittance obligation. If the issuer fails to remit the tax, then the ultimate owner of the capital represented by the security is obligated to pay the tax. Crucially, wealth represented by a string of publicly traded securities is taxed once. This is done by a credit mechanism. An issuer is given a credit against its withholding obligation with respect to publicly traded securities it issues for amounts remitted with respect to publicly traded securities it owns. For example, a mutual fund is subject to a withholding obligation with respect to its shares only if and to the extent the market value of its shares exceeds the market value of publicly traded securities in its portfolio.

For capital not intermediated through public financial markets I propose a complementary tax in the form of a flat tax at the same rate as the securities tax on the estimated value of an asset. The complementary tax applies to real and financial assets other than publicly traded securities that are held directly or indirectly by households and

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the complementary tax is superior to a wealth tax as a mechanism for taxing capital that is not represented by a publicly traded security.

This paper does not address the question of the constitutionality of the securities tax and the complementary tax. Formally the constitutional question turns on whether the taxes are considered to be a "direct tax" under Art. I, Section 9, clause 4, and not to be "taxes on income" under the 16th Amendment. There is a large literature on the meaning of a "direct tax" much of which argues that the Supreme Court's interpretation of the term Pollock v. Farmers' Loan & Trust Co., 157 U.S. 429 (1895), to cover a tax assessed against the owner on income from land and other capital to be lexically and historically untenable. Even if the securities tax and the complementary tax are defined to be a "direct tax" there is an argument they are "taxes on income," and so permitted under the 16th Amendment, because the securities tax and the complementary tax are a tax on the normal return on capital. Joseph Bankman & Daniel Shaviro, Piketty in American: A Tale of Two Literatures, 68 Tax L. Rev. 453 (2015), review the literature on the constitutional questions.

There are many proposals to replace the corporate income tax with an income tax assessed on the changes in the market value of interests in a corporation. See, e.g., Joseph Bankman, A Market-Value Based Corporate Income Tax, 68 Tax Notes 1347 (1995)(proposing tax based on change in value of outstanding corporate equity, plus current distributions, minus current and past contributions); Joseph M. Dodge, A Combined Mark-to-Market and Pass-Through Corporate Shareholder Integration Proposal, 50 Tax L. Rev. 265 (1995); Michael Knoll, An Accretion Corporate Income Tax, 49 Stan. L. Rev. 1 (1996)(proposing an accretion corporate tax on the change in the total market value of a corporation's outstanding equity and debt). The securities tax resembles these proposals only in using the price of a publicly traded security to determine the tax due. The securities tax is not a tax on corporate income. It is a tax on capital represented by a publicly traded security.

nonprofits.[3] Asset value is estimated using a rule that assumes all investments yield a normal return. Under this rule the estimated value of asset is increased each period by a statutory rate that is based on the average normal return. Cash paid out with respect to an asset during a period is then subtracted to determine an asset's estimated value at the end of the end of the period, which determines the tax due for the period and is the base for determining estimated value in the next period. For financial assets that represent an interest in an entity with multiple owners, the entity is obligated to remit the tax, and to determine the estimated value of the interest. Crucially, if an interest is of a kind, such as a unit in a private equity fund, then an entity is required to revalue all interests of a kind, if there is a price-setting event involving any interest of a kind, such as redemption or trade of an interest. This rule brings the incidence of the complementary tax roughly into line with the incidence of the securities tax with respect to relatively liquid assets, like interests in hedge funds, through periodic revaluations.

The securities tax and the complementary tax are intended to replace the entire existing patchwork system for taxing capital income. This includes the corporate income tax; the individual income tax on all income from securities, including interest, dividends, and capital gains; and the individual income tax on all other investment or business income, including income from partnerships and sole proprietorships and both rental income and capital gain from real estate. The taxes also are intended to replace the existing systems for taxing outbound and inbound investment. A companion article will address the taxation of global capital under the two taxes. The taxes are designed to work alongside a tax on labor income. Ideally this would be in the form of a cash-flow consumption tax or a value added tax, because these forms of a labor income tax largely eliminate the need to distinguish labor income and capital income, unlike a wage tax.

If desired, the distribution of the tax burden on owners of capital can be kept roughly the same as it is under the existing patchwork system by paying a partial rebate of remitted amounts to owners of capital who benefit from a tax preference under the existing system. This includes individuals who own capital through pension funds and tax-deferred accounts, nonprofits, and foreign portfolio investors. Only a partial rebate is justified because some of this capital now is subject to tax through the corporate income tax. If progressivity is desired, then a larger or smaller rebate can be conditioned on a household's income or wealth.

I estimate that with an annual rate of .8 percent (.008) the securities tax and the complementary tax will impose a tax burden on capital roughly comparable to the burden imposed by the existing patchwork system for taxing capital that the two taxes are intended to replace. At a .8 percent rate an issuer of a security with a $100 market price will pay 80 cents per share annually. If the average real rate of return on capital is 4

[3] I take key features of the complementary tax from Edward Kleinbard's proposed "Business Enterprise Income Tax" with a "Cost of Capital Allowance." Edward D. Kleinbard, The New Political Economy of Capital Income Taxation (Jan. 2016), and Edward D. Kleinbard, Reimagining Capital Income Taxation (June 5, 2015), are the most recent iterations of his system. The complementary tax basically is Kleinbard's system for imposing an investor-level tax on normal returns, but using his system to estimate the value of assets subject to the tax and then imposing a flat tax on estimated value. I also borrow Kleinbard's rule to separate labor income from capital income, if the form of the tax on labor income makes this necessary

percent, then a tax on the value of capital with a rate of .8 percent is equivalent to an income tax with a rate of 20 percent on the average real rate of return. From the perspective of a firm that raises capital by issuing a security a .8 percent tax raises the cost of capital by .8 percent or 80 basis points.

The securities tax clearly is superior to the existing system in taxing capital that is intermediated through public financial markets, and so is represented at some point by a publicly traded security. It involves much lower public administrative costs and private compliance costs than the existing system.[4] An issuer's withholding obligation is based on the market price of a security. This is public information that is difficult for an issuer to manipulate. To the extent an issuer is able to manipulate the price of a security, its managers will have strong non-tax incentives to inflate price to boost their own compensation, satisfy investors, and lower the firm's cost of capital. The only other information required to administer the tax involves ownership of a publicly traded security when this information bears on the eligibility of a security issuer for a credit for taxes paid on securities it owns, or when the information bears on the eligibility of an individual, nonprofit, or foreign investor for a partial rebate. Ownership of publicly traded securities can be determined in the aggregate using the total value of publicly traded securities held by a person entitled to the credit or rebate.

The securities tax greatly reduces incentives and opportunities for tax planning, avoidance, and evasion when capital is intermediated through public markets. Under the existing patchwork system for taxing capital income the tax burden borne by capital can vary based on the form of a business enterprise or financial intermediary, the character of an asset, the marginal tax clientele for a security, and other factors. The system encourages people to expend a great deal of effort in lawful tax planning to minimize taxes. Under the securities tax all publicly traded securities will bear the same relative tax price. The securities tax will largely end tax planning involving capital owned by U.S. individuals and nonprofits and used by U.S. business enterprises, once the decision is made to intermediate the capital through public financial markets.

The securities tax also is an enormous improvement over the status quo with respect to taxing cross-border investment.[5] It makes the source of income of a U.S. multinational corporation largely irrelevant to a corporation's tax obligation. Capital invested abroad by U.S. households and nonprofits is subject to the tax whether an investment is through a U.S. multinational corporation or through portfolio investments

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[4] Joel B. Slemrod and Marsh Blumenthal, 24 Public Finance Q. 411 (1996), estimates the personnel costs incurred by corporations to comply with the corporate income tax alone were over $2 billion, or around 2.5 to 3.5% of corporate tax revenues. This is based on a survey of Fortune 500 corporations. Only a small percentage of this amount (10 to 14%) was reported to be for tax planning. This figure does not include non-corporate private compliance and planning costs. And it does not include transaction costs incurred to avoid taxes. And it does not include losses from the distortionary impacts of the tax.

[5] If other wealthy nations adopt the securities tax, then collection of the tax could be coordinated and revenue transferred between governments. This would permit even greater simplification because it would eliminate the need to collect the tax on cross-border investment intermediated through public financial markets. A securities issuer would be responsible for paying the tax to the tax authority in the nation in which it is organized. States could then negotiate how to divide revenues associated with cross-border investment.

in foreign issued securities.[6] In addition, collecting the tax from issuers largely eliminates the ability of U.S. individuals to evade the tax on capital by intermediating an investment through a tax haven.[7] I will address the taxation of cross-border investment in a companion article.

II. Capital and Wealth Ownership

A tax on capital represented by publicly traded securities would have covered less than one-quarter of privately owned wealth in the U.S. in the early years of the 20th Century.[8] Today it will cover around 65 percent of the wealth owned by U.S. households and nonprofits. The securities tax will cover around 75 percent to 80 percent of income-producing capital in the U.S., i.e., excluding owner-occupied housing and consumer durables. Section IV.A provides the basis for these estimates. This Section sets the stage by sketching the general landscape of capital and wealth ownership while explaining these two basic concepts.

The existing system for taxing capital is a product of an old way of thinking about capital that stopped making sense decades ago. The old way of thinking equates capital with real assets like land, buildings, and equipment, which generally are used by business enterprises to produce returns that are paid over to the firm's owners. The old way of thinking is embodied in tax rules that largely focus on measuring income generated by real assets, typically at the firm level. If a firm is organized as a corporation, then the firm pays the corporate income tax on its business enterprise income.[9] If a firm is organized as a partnership, then it calculates its business enterprise income much as would a corporation or an individual, and then the firm reports this income to its partners, who are responsible for paying the tax on the partnership's business enterprise income.[10] To tax capital sensibly we need to break the shackles the old way of thinking about capital. The goal is to tax capital, not real assets or business enterprises.

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[6] The proposed taxes create two major distortions in global capital markets. One results from taxing foreign capital invested in U.S. multinational corporations, which then invest this capital abroad. This creates an incentive for multinationals that raise significant capital from non-U.S. owners to arrange their affairs so this capital avoids tax. For example, a U.S. multinational that raises significant capital outside the U.S. may elect to reorganize outside the U.S., and to run its U.S. operations through a subsidiary, so foreign capital invested in the firm that is not invested in the U.S. is not subject to U.S. tax. The other major distortion involves direct foreign investment in the U.S. A foreign firm that wants to expand operations in the U.S. can reduce taxes by creating a separate U.S. firm, which raises capital in U.S. capital markets, and then licensing its intellectual property to the U.S. firm, or otherwise entering into contractual arrangements with the U.S. to transfer capacities essential to the U.S. operations.

[7] Gabriel Zucman, The Hidden Wealth of Nations (2015), estimates that around 8 percent of the world's wealth is intermediated through a tax haven.

[8] Emmanuel Saez and Gabriel Zucman estimate that in 1913 U.S. households had a net worth of $148 billion in current U.S. dollars. This comprised $28 billion in housing net of mortgages, $29 billion in corporate equities, $25 billion in fixed income assets, $62 billion in sole proprietorships and partnerships, and $4 billion in life insurance. Table A1, line 1. Almost two-thirds of household wealth was in housing, sole proprietorships, or partnerships.

[9] IRC § 11.

[10] IRC § 701, 702, and 703.

Thomas Piketty, *Capital in the Twenty-First Century*, is a good place to start, if we are looking for an account of capital that breaks away from the old way of thinking. Piketty defines capital broadly to include "all forms of wealth that individuals (or groups of individuals) can own and that can be transferred or traded through the market on a permanent basis."[11] Piketty says his definition of capital generally excludes human capital because it has not been possible to buy and sell humans since the abolition of slavery.[12] This over-simplifies in a way that may lead readers to misunderstand how Piketty defines capital and ownership. It is more accurate to say his definition of capital excludes much of the value of human capital because much of humanity's earning capacity is not subject to financial claims that can be purchased or sold in the market place. There are significant counter-examples in the form of financial assets that represent a claim upon an individual's earning capacity. These include student loan debt and much consumer debt.[13] A trenchant counter-example is public debt when a debtor-government is constrained to repay the debt by taxing labor. Today much of the value of human capital in Greece and Puerto Rico is foreign owned, if these polities are obligated to repay the debt by taxing labor income.[14]

By saying his definition of capital excludes human earning capacity, Piketty invites readers to equate capital with real assets such as land, buildings, and machinery.[15] This is to slip back into the old way of thinking. It is closer to the mark to define capital as wealth an individual can pass on to others when he or she dies. This wealth includes financial claims on the earning capacity of other individuals. What the definition excludes is a decedent's own capacity to earn income from his or her own labor. Recognizing some humans have claims on the earning capacity of other humans is important because it reminds us of the important contribution made to human liberty by bankruptcy laws and laws that protect against coercive debt collection.

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[11] Thomas Piketty, Capital in the Twenty-First Century, at 46.

[12] Piketty at 46.

[13] There are more exotic counter-examples. Shu-Yi Oei and Diane M. Ring, The New "Human Equity" Transactions, 5 Cal. L. Rev. Circuit 266 (2014), describe new securities that represent explicit claims upon an individual's earning capacity. Thus Fantax Inc. has created a trading platform that enables professional athletes to obtain cash by issuing securities that entitle the owner to a share of the athlete's earnings.

[14] It follows that human capital is subject to the securities tax and the complementary tax when another person has a financial claim against an individual's earning capacity. Public debt should be exempted from the securities tax.

[15] Measures of national and global wealth or capital generally include only nonfinancial assets and generally exclude financial assets. Nonfinancial assets are sometimes referred to as "real assets," such as land, buildings and other improvements, machinery, and certain intellectual property like patents. Financial assets are excluded in the measure of national and global wealth because a financial asset typically represents a financial claim against another person. Within the global economy a financial asset often is offset by a corresponding financial liability and so the asset does not figure into global wealth. (Gold is an exception to this when it is classified as a financial asset.)

The same is true of financial assets within a national economy when a financial asset represents a claim against a fellow countryman. Financial assets do figure into the measure of national wealth when an asset represents a claim against a foreign person or a claim held by a foreign person. These financial assets appear in Piketty's accounts as "net foreign capital." This is the net of a foreign owned claims against a nation's assets and income and domestically owned claims against foreign assets and earnings. Piketty finds net foreign capital has "played only a relatively minor role" in the growth of national capital in rich countries since 1970. Id. at 191-192.

Recognizing capital and wealth do not equate with real assets is vitally important to taxing capital sensibly. In the modern world much wealth is represented by intangible assets, such as good will and trade secrets, which are owned by large publicly traded corporations. These intangible assets often are inseparable from a corporation's business enterprise, and so the assets cannot be transferred or traded, but they add value to interests in the corporation, which are traded. The securities tax is well suited for taxing wealth represented by intangible assets like good will and trade secrets when the assets are owned by publicly traded corporations.

The securities tax also is well suited for taxing wealth created by financial intermediation.[16] For example, the pooling and "securitization" of financial assets creates financial wealth when the market value of securities issued by a pooling entity exceeds the market value of financial assets in a pool. The wealth created by securitizing financial assets is not always a mirage, the recent financial debacle involving mortgage back securities notwithstanding. Securitizing a pool of financial assets can increase the value of the assets in the pool by making it possible to create new types of financial assets that have desirable risk and cash flow characteristics.[17] When wealth is created by financial intermediation, and the wealth is embodied in the difference between the value of assets held by an intermediary and the value of interests in an intermediary, then the securities tax operates something like a value-added tax. You might think of it as a financial value-added tax.[18]

Piketty describes a "Metamorphoses of Capital" in wealthy nations between 1700 and 2010 resulting from population growth, industrialization, and urbanization. It is this historic change that makes it possible to tax most wealth through a tax on publicly traded securities. The value of agricultural land used to represent a large share of total capital. Today it is a trivial share. This transformation is particularly pronounced in France and England, where Piketty estimates "the total value of farmland represented . . . two-thirds of national total capital [in 1700]. Three centuries later farmland . . . accounted for less than two percent of total wealth."[19] It is not that agricultural land became less valuable. People generally did quite well by investing in real estate, including agricultural land, over the last three centuries. What happened is that the combination of population growth

[16] Views on how financial intermediation creates value have changed over time. The old view emphasizes the benefits active financial intermediaries like banks and insurance companies provide by overcoming informative asymmetries and reducing transaction costs. The new view emphasizes the benefits both active and passive financial intermediaries provide by enabling capital owners and capital users to manage risk by trading risk. See Franklin Allen and Anthony M. Santomero, The Theory of Financial Intermediation 21 Journal of Banking & Finance 1461 (1998), and Franklin Allen and Anthony M. Santomero, What Do Financial Intermediaries Do?, 25 Journal of Banking & Finance 271 (2001).

[17] W. Alexander Roever & Frank J. Fabozzi, A Primer on Securitization, 9 Journal of Structured Finance 5 (2003).

[18] The point is purely rhetorical. Actually the securities tax is not at all like a value added tax for a value added tax is a tax on consumption while the securities tax is a tax on capital in the nature of a wealth tax or a tax on the normal return on capital. This paper will not address how the securities tax and the complementary tax function alongside a value added tax in which financial services are not taxed.

[19] Piketty at 119. Farmland represented a somewhat smaller share of wealth in the US prior to the industrial revolution because of the surplus of land.

and productivity growth (particularly growth in manufactured goods) greatly increased non-agricultural income and capital.

According to Piketty, the decline in the share of wealth represented by agricultural land is matched by a moderate increase in the share of wealth represented by housing[20] and an enormous increase in the share of wealth represented by what Piketty defines as "other domestic capital." This includes "the capital of firms and government organizations (including buildings used for business and the associated land, infrastructure, machinery, computers, patents, etc.)."[21] Today in the U.S. and Western Europe "other domestic capital" is almost entirely privately owned.[22] Much of this capital—and around half of national and global wealth[23]—is represented by claims on privately-owned firms and is embodied in financial assets that represent direct and indirect claims upon firms, including "stocks, bonds, mutual funds, and long-term financial contracts such as annuities or pension funds."[24] Most of the rest of national wealth also is privately owned. Much of this consists of financial assets representing claims against governments or against other households. What is left is wealth represented by household equity in housing and consumer durables and direct ownership of real assets.

It follows that in the modern world financial assets are of critical importance to ownership of wealth. In the modern world ownership of capital or wealth usually is not a matter of an individual or a firm having possession of a real asset. The owner of wealth represented by a real asset is the person who has the ultimate right through a string of financial claims to the wealth and earning capacity represented by an asset. This way of thinking is second nature when we think about assets owned by firms. A firm often owns "buildings used for business and the associated land, infrastructure, machinery, computers, patents, etc."[25] But we understand a firm's bondholders and shareholders own the wealth represented by these assets. When the value of an asset is subject to a string of financial claims the owner of the wealth is the person at the end of the string. The same point applies to real assets individuals possess when there is a financial claim against the individual and/or the asset, such as an automobile financed with a loan.

The goal of the securities tax and the complementary tax is to tax capital once and only once. Under the securities tax, capital is taxed at the first point in the string at which

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[20] Critics of Piketty argue he overstates the value of housing. Odran Bonnet, Pierre-Henri Bono, Guillaume Chapelle, and Etienne Wasmer, Does housing capital contribute to inequality? A comment on Thomas Piketty's Capital in the 21st Century, Sciences Po Economics Discussion Paper (May 5, 2014). The gist of the argument is that the value of housing should be derived from rental prices and not housing prices, and that the rise in housing prices has not been accompanied by a rise in rents.

[21] Piketty at 119.

[22] Piketty includes capital owned by nonprofit entitles like private universities and foundations in privately owned wealth. Piketty observes that while governments own a great deal of land and buildings the share of wealth owned by governments in Western Europe and the U.S. has steadily declined to near zero as a result of privatization and an increase in public debt.

[23] Piketty at 209 ("[W]ealth in rich countries is divided into two approximately equal (or comparable) parts: real estate and financial assets.")

[24] Piketty at 209.

[25] Piketty at 119.

it is represented by a publicly traded security. A credit mechanism ensures the capital is not taxed again at a later point in the string. The complementary tax is designed to tax capital not caught by the securities tax by imposing a tax at the same rate as the securities tax on the estimated value of non-publicly traded real and financial assets held by households and nonprofits.

Piketty's primary concerns are the division of national and global income between labor and capital and the distribution of income and capital. He observes capital's share of national and global income necessarily is a function of the "the capital/income ratio" and the average return on capital, assuming it is possible to measure capital, income, and the average return on capital. "The capital/income ratio" of a nation is the ratio of the value of a nation's capital stock to national income. Piketty estimates that for rich nations this ratio was 6 or 7-to-1 at the beginning of the 20th Century; the ratio dropped to around 3-to-1 at mid-century as a result of cataclysmic events in the first half of the century, including two world wars, the great depression, and periods of high inflation; and the ratio returned to around 6-to-1 by the end of the 20th Century. Thus Piketty argues the capital/income ratio at the end of the 20th century is close to what it was at the beginning of the century.

The capital/income ratio is important because capital's share of national and global income necessarily is a product of this ratio and the average return on capital. Piketty argues the average return on capital has been fairly constant over the last three hundred years, concluding that it "has oscillated around a central value of 4-5 percent a year, or more generally in an interval from 3-6 percent a year."[26] If Piketty is correct about the increase in the capital/income ratio since the mid-20th century, and if he is correct about the average return on capital hovering around 4.5 percent, then it necessarily follows that capital's share of national and global income has roughly doubled during the last 50 to 60 years. More concretely, Piketty estimates that in 1975 capital claimed between 15 and 25 percent of national income in rich nations while in 2000-2010 it claimed between 25 to 30 percent of national income.[27]

Capital is distributed very unequally. Because of this even a flat tax on capital has a quite progressive impact.[28] Piketty estimates that in the U.S. in 2010 the top 1 percent of wealth holders owned about 35 percent of wealth and that the next 9 percent owned about 40 percent of wealth.[29] He estimates the remaining 90 percent of US households owned 25 percent of the nation's wealth. A recent paper by Emmanuel Saez and Gabriel Zucman estimates that in 2012 the top 1 percent of families owned 42 percent of wealth in the U.S. and that the next 9 percent owned 35.4 percent of wealth. They estimate that in 2012 the top .1 percent of wealth holders, i.e. the wealthiest of the

[26] Piketty at 206.
[27] Piketty at 222.
[28] David Shakow and Reed Shuldiner, A Comprehensive Wealth Tax, 53 Tax. L. Rev. 499, 503 (2000)(and adding the point that the wealthy may have greater ability to avoid the income tax on capital).
[29] Piketty at 348. Federal Reserve Bulletin, Changes in U.S. Family Finances from 2010 to 2013: Evidence from the Survey of Consumer Finances (Sept. 2014), has similar estimates. It estimates that the top 3% of wealth holders owned about 54.4% of the wealth in the U.S. in 2013, and that the top 10% of wealth holders owned about 75.3% of the wealth. See pp. 10-11.

wealthy, owned 22 percent of the wealth in the U.S., which is as much as the bottom 90 percent.[30] Saez and Zucman find wealth to be slightly more concentrated than does Piketty because they include estimates of wealth that is usually omitted in national accounts on the ground that it is difficult to measure accurately, such as wealth held through tax havens.

If the normal real return on capital hovers around a rate of 4.5 percent, as Piketty estimates, then a .8 percent tax on the value of capital is equivalent to a tax at a 17.7 percent on the normal real return on capital. A tax at this rate is in the ballpark of estimates of the effective tax rate on capital income under the existing system.[31] The normal real return should not be confused with the risk-free interest rate. When the rate of inflation is low, the normal real return on capital is significantly higher than the risk-free interest rate. For example, since 2008, and in the aftermath of the great recession, the interest on short-term U.S. Treasury securities has been less than 1 percent.[32] The difference between the risk-free interest rate and the normal real return rate reflects that much of the return to capital is a return for taking risk and foregoing liquidity.[33]

The concentration of wealth bears on a political or fairness objection to basing the tax on the normal real return on capital, when achieving a normal return requires taking significant risk. The objection is that actual returns vary, and so basing the tax on a normal return leads to an outcome in which the relative tax burdens borne by households may vary significantly from their relative ability to pay based on income. This objection does not hold for very wealthy households with large, diversified portfolios for differences in return will generally even out. For less wealthy household the answer to the objection is that the combination of the mall amounts of wealth involved, the low annual tax rate, and the quick adjustment of asset-values to reflect actual returns means that variations in return across households will be reflected in small, short-lived differences in tax burden relative to income. [34]

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[30] Emmanuel Saez and Gabriel Zucman, Wealth Inequality in the United States Since 1913: Evidence from the Capitalized Income Tax Data, NBER Working Paper 20625 (Oct. 2014), at 22.

[31] In a 2007 paper, Joel Slemrod estimates the effective marginal rate on capital income to be in the range of 14 to 23 percent. Joel Slemrod, Does the United States Tax Capital Income?, in Taxing Capital Income (2007), 3, 15. Jane Gravelle estimates the effective marginal tax rate on capital income to be slightly higher than this during the period studied by Slemrod, in the range of 20 to 30 percent, while adding that changes in tax law in 2001 to 2003 reduced these rates by 3 to 5 percentage points. Jane Gravelle, Comment, in Taxing Capital Income (2007), 39, 45. See also Michael P. Devereux, Measuring Taxes on Income from Capital, Measuring the Tax Burden on Capital and Labor, 35 (2004).

[32] There is a debate over whether the federal short-term borrowing rate is a good proxy for the risk free rate of return. See John R. Brooks II, Taxation, Risk, and Portfolio Choice: The Treatment of Returns to Risk Under a Normative Income Tax, 66 Tax. L. Rev. 255, 291-295 (2013)(arguing risk-free rate is considerably higher than short-term federal borrowing rate).

[33] Piketty at 200-201.

[34] David Shakow and Reed Shuldiner, A Comprehensive Wealth Tax, 53 Tax. L. Rev. 499, 510-511 (2000), explain how adjusting asset value to reflect real returns preserves the correlation between the tax burden and ability to pay under a wealth tax, even if ability to pay is defined in terms of income, and notwithstanding a variance in return.

III. Why Tax Capital?

This Section briefly states the reasons for taxing capital that I find to be persuasive. Some justification is necessary for the dominant view among tax legal scholars is that it is mistake to tax capital even if the existing system is cleaned up. This view grounds on the so-called double-distortion argument.[35] The argument is that taxing capital in addition to labor income doubly distorts behavior at the labor-leisure margin by imposing an additional tax on savings for future consumption. The basic idea is that people will substitute present consumption for future consumption because the tax on savings raises the price of future consumption relative to present consumption. Meanwhile the lower value people place on the substitute present consumption will induce people to work less, substituting leisure for labor. There are two welfare losses here: the welfare loss from substituting present for future consumption (which is embodied in reduced savings) and the welfare loss from substituting leisure for labor. Both are a deadweight loss, meaning they are a welfare loss to the individual from making these substitutions that yields no offsetting benefit in tax revenue to fund public goods. As a rule of thumb the deadweight loss of a tax increases with the square of the tax rate. Thus the cumulative deadweight loss of stacking a tax on capital income on top of a tax on labor income when individuals choose whether to forgo leisure to labor in order to save for future consumption (the so-called double distortion) may be quite large. To put the same point somewhat differently, while eliminating a tax on capital would require increasing the tax rate on labor income across the board (to raise the same revenue), the deadweight loss of what would be a small across the board increase in the tax rate at the general labor-leisure margin will be significantly smaller than the cumulative deadweight loss of stacking a targeted and therefore larger tax on capital on top of a tax on labor income when people choose whether to forgo leisure to labor in order to save for future consumption.

The securities tax and the complementary tax are indistinguishable from any tax on capital with respect to the double distortion concern. The taxes reduce the expected yield on savings by the tax rate and so they impose an additional tax on savings. The securities tax and the complementary tax perform marginally better than the existing system for taxing capital income in this respect, but only because of their relative efficiency in taxing capital income. The taxes involve significantly lower private transaction and compliance costs, and somewhat lower distortionary impacts on capital markets, reducing deadweight losses within the capital sector. Thus the taxes will impose a lower "all-in" tax price on saving for future consumption than the existing system for taxing capital income while raising equivalent revenue. But inevitably, like any tax on capital, they impose an additional tax on saving labor income for future consumption, and so the combination of these taxes and a tax on labor income may well cause a greater distortion on the labor-leisure margin than would a stand-alone tax on labor income raising equivalent revenue.

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[35] Joseph Bankman and David A. Weisbach, The Superiority of an Ideal Consumption Tax Over and Ideal Income Tax, 58 Stanford L. Rev. 1413 (2006).

So why tax capital? Part of the answer to this question is political necessity. It is politically infeasible to impose a tax on labor income at a sufficiently high rate to meet the revenue needs of government, including servicing a large public debt.[36] A point Piketty makes bears special mention in this regard.[37] The U.S. now has a very large public debt. The holders of this debt have a large claim on national income. If capital is not taxed, then there are two options for satisfying this claim. One option is to tax labor income. This will increase capital's share of national income and reduce labor's share. The other option is inflation, which reduces the real cost of satisfying the claim. Inflation is essentially a tax on capital that is represented by fixed-income claims, which is what almost all government debt is. Inflation is an especially pernicious tax because it creates price uncertainty and requires frequent price adjustments, which has broad and generally negative systemic effects on labor markets, products markets, commodity markets, and capital markets. Inflation also hits retirees living on fixed incomes the hardest. An explicit tax on capital clearly is superior to an implicit tax on capital through inflation, if we are not willing to tax labor income at a sufficient rate to satisfy the large claim holders of the nation's debt have on national income while also satisfying government's other revenue needs.

The argument from political necessity does not respond to the double distortion argument. David Gamage provides an argument for taxing capital that sounds in welfare economics and is a partial answer to the double distortion argument.[38] The argument proceeds from the premise that some part of the distortionary impact of a tax is on behavior that is uniquely responsive to that tax. Using multiple taxes makes it possible to have a lower rate under each tax, which can produce significant welfare gains insofar as the premise is correct—i.e., the taxes are causing welfare losses by distorting different types of behavior—because the distortionary impact of a tax generally increases at the square of the tax rate.

Thus a labor income tax distorts the structure of compensation within labor markets, in addition to inducing people to substitute leisure for labor. In particular, the tax induces people to substitute untaxed forms of compensation (colloquially known as fringe benefits) for taxed forms of compensation. A tax on capital has little or no effect on this margin. Within capital markets, a principal concern is that the securities tax will distort the flow of capital from public markets to private markets, and that the complementary tax will distort the flow of capital in private markets to less liquid types

[36] See Edward D. Kleinbard, The New Political Economy of Capital Income Taxation, makes a sophisticated version of the argument from political necessity. Kleinbard argues a tax on labor income in the form of a consumption tax would have to be steeply progressive because of government's revenue needs, including the need for greater expenditures on public goods and the need for greater redistribution, and that a rate structure with a top marginal rate sufficiently high to satisfy these expenditure and distributional objectives not only is politically infeasible, but also "vitiates many of the efficiency claims made for ideal consumption taxes." Meanwhile a tax on capital income at a flat rate, which can be considerably lower than the tax rate on labor income, ends up being quite progressive, particularly over time, making it possible to make the top marginal rate of the consumption tax much lower, while achieving the same expenditure and distributional objectives.

[37] Piketty at 131-134.

[38] David Gamage, The Case for Taxing (All of) Labor Income, Consumption, Capital Income, and Wealth, 68 Tax L. Rev. 355 (2015).

of investments. The two taxes are designed to reduce these distortions, but some distortion is inevitable, particularly on the illiquidity margin. A labor income tax has little or no effect on this margin.

Combining a capital tax with a labor income tax makes it possible to lower the tax rate on labor income, reducing the social welfare loss from the substitution of untaxed labor income for taxed labor income. Meanwhile keeping the securities tax and the complementary tax at a low rate minimizes the distortions these taxes cause within capital markets on the flow of capital between public and private markets, and towards illiquidity. Because the distortionary impact of a tax generally increases at a square of the tax rate, the welfare gains that result from reducing the tax on labor income on margins of behavior affected by the labor income tax will exceed the welfare losses that result from taxing capital at a low rate on margins of behavior affected by the capital income tax, when these margins of behavior are independent.

To be clear, this argument does not prove a combination of a labor income tax and a capital tax can raise the same revenue as a stand-alone labor income tax at a lower social welfare cost. This depends on the magnitude of the impact of the capital tax on margins of behavior that are influenced by both taxes, in particular the effect of a tax on savings on the substitution of leisure for labor. The double distortion concern remains. Ultimately the question is empirical: do the welfare gains from reducing distortions when a labor income tax and a capital tax distort behavior at different margins exceed the welfare losses from increasing distortions when the two taxes distort behavior at the same margins? This is an open question. Nevertheless Gamage's argument is important because it calls into question the principal argument for not taxing capital (apart from the mess made by the existing system).

Piketty makes a normative political argument for taxing capital.[39] He predicts ownership of capital is on a path to become even more concentrated in the 21st Century. His prediction is based in part on a finding that the average return on capital generally exceeds the economic growth rate and a finding that the very wealthy get significantly better than average returns on their capital. Piketty warns that the U.S. and other rich nations may be becoming "patrimonial societies" where a large share of capital is owned by and a large share of national income flows to families that have built up significant capital endowments. He fears "a drift towards oligarchy."[40]

The securities tax and the complementary tax will not halt the drift towards oligarchy, if this is where we drifting, so long as the tax rate is set to impose a tax burden

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[39] Joseph Bankman & Daniel Shaviro, Piketty in American: A Tale of Two Literatures, 68 Tax. L. Rev. 453 (2015), explain some respects in which Piketty's work may warrant rethinking the case made in the optimal tax literature against taxing capital income. They observe that "if Piketty is correct about [the return to capital exceeding the growth rate, leading to growing high-end wealth concentration], then the literature has erred in so strongly emphasizing a framework based on 'ability' or human capital to explain rising high-end wealth concentration." Id. at 454. And Piketty warnings about "adverse political economy effects and impact on opportunity" of high-end wealth concentration and rising inequality raise the possibility that "saving has negative distributional externalities that the literature has largely ignored." Id. at 455.
[40] Piketty at 514.

on capital comparable to the existing taxes they replace. The argument for the change is that the securities tax and the complementary tax have much lower administrative and compliance costs, and have a somewhat lower distortionary impact, than the existing patchwork system for taxing capital income. These features make these taxes much better mechanisms for increasing the tax burden on capital, should this ever become possible politically feasible. As a political matter, progressives could condition support for replacing the income tax with some form of wage or consumption tax on enactment of the securities tax and the complementary tax. Rhetorically the securities tax and the complementary tax may be described as flat taxes on the normal real return on capital that do not grab a share of rewards for risk-taking.

IV. The Securities Tax

This Section explains the securities tax. It also briefly explains why the securities tax is superior to the existing system for taxing capital represented by publicly traded securities owned by U.S. households. I will do both of these things in the course of describing the composition and size of the base of the tax. Section A covers the tax base's core: publicly traded securities issued by U.S. firms that are owned directly or indirectly by U.S. households. Section B explains the mechanics of the tax.

The securities tax and the complementary tax do not tax wealth represented by equity in owner-occupied housing or consumer durables. These assets comprised somewhat less than 20 percent of the wealth of U.S. households in the first quarter of 2015, according to the Federal Reserve Board's Flow of Funds Accounts ("FFA") Balance Sheet of Households and Nonprofits Organizations.[41] Excluding these assets from the tax enhances the progressivity of the tax because the share of household wealth represented by equity in owner-occupied housing and consumer durables decreases significantly with household wealth.[42] Edward Wolff summarizes the general pattern:

[41] For the first quarter of 2015 the Fed estimates that U.S. households and nonprofits owned $99 trillion in assets and had a net worth of $84.9 trillion. This $99 trillion figure includes $69.4 trillion in financial assets and $29.7 trillion in nonfinancial or real assets, which include household owned real estate ($21.1 trillion) and consumer durables ($5.1 trillion). Board of Governors of the Federal Reserve System, Financial Accounts of the United States, First Quarter 2015. Table B.101. The figures for household owned real estate and consumer durables do not subtract mortgage and financing debt. The FFA estimates that during the first quarter of 2015 U.S. households had home mortgage liabilities of $13.5 trillion and owed $9.4 trillion in consumer credit. These household liabilities are over 85% of the estimated value of household capital in owner-occupied housing ($21.1 trillion) and consumer durables ($5.1). If one subtracts the value of liabilities for home mortgages and consumer credit from the value of household nonfinancial assets, and uses this lower figure to calculate total assets and the percentage of nonfinancial assets, then financial assets comprise slightly more than 80% of household wealth.

[42] This pattern holds for Europe as well as the U.S. See Piketty at 260 ("Nearly everyone in the top decile owns his or her own home, but the importance of real estate decreases sharply as one moves higher in the wealth hierarchy. In the top '9 percent' group, at around 1 million euros, real estate accounts for half of total wealth and for some individuals more than three quarters. In the top centile, by contrast, financial and business assets clearly predominate over real estate. In particular, shares of stock or partnerships constitute nearly the totality of large fortunes.")

> [T]he richest 1 percent of households (as ranked by wealth) invested over three-quarters of their savings in investment real estate, businesses, corporate stock, and financial securities in 2007. Corporate stocks . . . comprised 21 percent by themselves. Housing accounted for only 10 percent of their wealth (and net equity in housing 9 percent), liquid assets another 5 percent, and pension accounts another 6 percent.[43]

Turning to the middle class, Wolff estimates that in 2007 "housing, liquid assets, and pension assets accounted for 86 percent of the total assets of the middle class."[44] These same assets comprised only 20 percent of the wealth of the richest 1 percent of households on average. Wolff lumps liquid assets (e.g., bank accounts and money market accounts) and pension accounts with owner-occupied housing because these financial assets represent a substantial share of the wealth of middle class households. Some of these assets will be subject to the securities tax and the complementary tax. Some of the tax can be rebated when an individual holds a security through a tax-deferred account or pension fund. This will further enhance progressivity and ameliorate the double distortion concern with respect to a type of savings that are generally for future consumption. Politically, a partial rebate can be justified as rough proxy for the existing system, which imposes some tax on this capital through the corporate income tax.

A) Tax base

The World Bank compiles and publishes annual data on the size of financial markets, including the total value of listed securities relative to GDP.[45] The total value of listed securities in U.S. stock markets is estimated to be 110% of U.S. GDP ($1,651 trillion) in 2011. The total value of listed securities in private U.S. bond markets is 92% of U.S. GDP ($1,377 trillion) in 2011. While this data demonstrates a great deal of wealth is represented by publicly traded securities it tells one little about the amount or share of wealth that is represented by publicly traded securities. This is because wealth often is held through a string of securities. The sum of the values of the securities in the string is a multiple of the actual value of wealth represented by the securities.

The securities tax is basically a wealth tax or an imputed income tax on the normal return on capital represented by a publicly traded security. The tax is assessed and collected from security issuers for administrative reasons. The tax is designed to tax wealth once and only once when wealth is held through a string of securities. This is achieved by giving a security issuer a credit against its remittance obligation for amounts withheld on securities it holds. Thus to determine the size of the tax base we must answer the question: How much of the wealth of U.S. households is represented by publicly traded securities?

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[43] Edward N. Wolff, Recent Trends in Household Wealth in the United States: Rising Debt and the Middle-Class Squeeze-An Update to 2007, Working Paper No. 589, Levy Economics Institute (March 2010), p. 17. See also James B. Davies & Anthony F. Shorrocks, The Distribution of Wealth, Handbook of Income Distribution, Vol. I, Chapter 11, 605, 644, who report other empirical studies covering the U.S. and other wealthy nations that find similar patterns.
[44] Id. at 18.
[45] The data can be found online in the Financial Development and Structure Dataset. The figure used for GDP is found in the Global Financial Development Database.

Data recently compiled by Emmanuel Saez and Gabriel Zucman makes it possible to give an approximate answer to this question.[46] Their methodology addresses some of the shortcomings of the data in the Flow of Funds Balance Sheet for Households and Nonprofits.[47] A brief word about their methodology is in order before I report their estimates. Saez and Zucman use the capitalization method to link income tax return data with Flow of Funds data. The general idea is that linking the two data sets makes it possible to estimate the size and composition of household wealth though this information is found in neither data set. Income tax returns provide household level data on the annual reported returns on assets by asset class. The flow of funds data provides aggregate data on the value of assets by asset class. The capitalization method links these data sets to estimate the size of household wealth and its composition by asset class. Basically reported income is used to determine total income and average return in an asset class. Households are then assumed to own a share of the aggregate value of assets in the class that would yield the amount of reported income, assuming households got the average return. While actual returns will vary a great deal across households the authors' interest is to identify the aggregate composition and distribution of household wealth. They assume individual differences in return even out across large numbers of households.[48]

Table 1 shows Saez and Zucman's estimate of the aggregate size and composition of household wealth in 2013. The numbers are from an Appendix posted on-line by the authors.[49]

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[46] Emmanuel Saez & Gabriel Zucman, Wealth Inequality in the United States Since 1913: Evidence from Capitalized Income Tax Data, NBER Working Paper No. 20625 (2014). Saez and Zucman compile the data to measure changes in wealth inequality in the U.S. from 1913 to the present. They find that wealth inequality in the U.S. decreased from 1929 to 1978 and increased after 1978 and that the increase "is almost entirely due to the rise of the top 0.1% wealth share."

[47] The FFA balance sheet lumps publicly traded stock with closely held stock, including S corporation stock. Saez and Zucman ("S&Z") disaggregate S corporation stock. Households often own financial assets through financial intermediaries like mutual funds and pension funds. The FFA balance sheet reports the value of these assets by intermediary and not by the underlying asset class. S&Z report holdings by underlying asset class. The FFA balance sheet does not report U.S. household ownership of foreign equity. S&Z include foreign equity. The FFA balance sheet does not estimate wealth held through offshore tax havens. S&Z provide an estimate. The FFA balance sheet reports debt at its face value not its fair market value. S&Z use fair market value.

[48] S&Z use other data sets and methods to estimate wealth represented by assets for which taxpayers do not report income (e.g., wealth held through offshore tax havens) and assets that do not appear in FFA data (e.g., wealth represented by foreign equity). They also cross check their estimates of the size and composition of household wealth with estimates derived from the Annual Survey of Consumer Finances and from studies using estate tax returns.

[49] All the amounts are from Table A1 line 110 except the asset breakdown for pensions and life insurance, which are from Table A4 line 110. S&Z estimate that in 2013 the net wealth of U.S. households was $62,651 billion. In addition to the assets shown here this includes $11,375 billion wealth in housing (net of mortgages) and $3,550 billion in liabilities for non-mortgage debt. This is mostly consumer credit. The authors do not include consumer durables in wealth. They estimate the value of these to be $4,929 billion in 2013.

2013	Amount (Billions of dollars)	Percent of total income producing assets
Total income producing assets (financial assets + tenant occupied housing)	57,210	
Equities	12,498	21.8%
Other than S corporations	10,315	18.0%
S corporations	2,183	3.8%
Fixed income assets	13,338	23.3%
Taxable bonds, deposits and other fixed income	11,939	20.9%
Munis	1,399	2.4%
Non-interest bearing deposits and currency	951	1.7%
Sole prop. and partnerships	6,015	10.5%
Pensions & life insurance	22,023	38.5%
Equities	10,472	18.3%
Bonds	8,802	15.4%
Other	2,479	4.3%
Tenant-occupied housing	2,385	4.2%

Four of the above asset categories are roughly co-extensive with publicly traded securities owned directly or indirectly U.S. households. They are: equities other than S corporations ($10,315 billion in 2013); taxable bonds, deposits and other fixed income assets ($11,939 billion); equities held through pensions and life insurance ($10,472 billion); and bonds held through pensions and life insurance ($8,802 billion). The total estimated value of assets in these four asset categories was $41,528 billion in 2013, which was 72.6% of the total value of income-producing assets.

This figure can be used to roughly approximate the revenue-generating capacity of a flat tax that is assessed only on the market value of publicly traded securities owned by U.S. households. A tax with a rate of .8% (.008) on $41,528 billion would yield $332 billion. By comparison, the corporate income tax raised $273.5 billion in revenue in 2013 while the individual income tax raised $1,316.4 billion.[50] Adding the complementary tax, and excluding public debt,[51] the two taxes together would have raised around $506 billion in 2013,[52] assuming half of the tax is rebated to individuals who own financial assets

[50] Office of Management and Budget, Historical Tables, Table 2.1, at: https://www.whitehouse.gov/omb/budget/Historicals.

[51] Public debt should not be subject to the tax to avoid a harmful tax clientele effect similar to that which now exists in markets for municipal bonds. Using FFA data, I estimate the amount of Treasury securities included in the $41,258 billion figure is $2,300 billion in 2013.

[52] The $506 billion estimate simply applies a .8 percent tax rate to Saez and Zucman's figure for total income producing assets, minus the value of pensions and life insurance, and minus $2,300 billion representing public debt. A .4 percent tax rate is applied to the value of pensions and life insurance and Saez and Zucman's estimate of the capital held by nonprofits.

This estimate assumes bank deposits and cash accounts are subject to the tax. Saez and Zucman estimate U.S. households had $951 billion in non-interest bearing deposits and currency in 2013, which was 1.7% of the estimated value of total financial assets. Banks should not be required to withhold the tax

through tax-deferred accounts and pension funds, and that capital held by nonprofits is subject to the tax with half of the tax being rebated.[53] This figure is almost one-third of total revenue raised by federal income taxes in 2013.[54]

Returning to the question of the share of national wealth captured by the securities tax, the $41,528 billion figure is only a rough approximation of the value of publicly traded securities that are owned directly or indirectly by U.S. households in 2013. The figure includes some financial assets that are not publicly traded securities. Thus the $10,315 billion value for equities other than S corporations includes stock in closely held C corporations, which is not public traded. Many of these closely held C corporations are family-owned businesses.

The amount of wealth represented by stock in closely held family owned C corporations should be fairly small, subject to one important qualification. It generally is not in the interest of business owners to structure a closely held business as a C corporation because this creates unnecessary exposure to the corporate income tax. Despite this tax disadvantage a large number of family-owned businesses are organized as C corporations. This is not irrational for typically the owners of these closely held businesses expect to pay no corporate income tax because they expect to take earnings out as compensation or as interest on debt, both of which are deducted from corporate income. The residual returns to equity will generally be small if the owners are mindful of the corporate income tax and so the share of household wealth represented by non-

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on small balances in individual checking and savings accounts. The purpose of this is to avoid making low balance accounts an even less attractive source of capital to banks than they are currently. The hope is to avoid further discouraging banks from offering financial products designed to attract deposits from low and middle-households, many of which now suffer from being "unbanked," meaning they have neither a checking nor a savings account. "Unbanked" households pay significantly more for financial services like cashing a check. They also have no cash reserves to deal with financial shocks. One factor contributing to this is the failure of banks to offer products that appeal to low and middle-income households. See Michael Barr, No Slack 3 (Brookings 2012).

[53] S&Z estimate that nonprofits owned $3,876 billion in financial assets in 2013. Id. at 449. Nonprofit financial wealth is highly concentrated in the hands of a relatively small number of universities, medical institutions, and private foundations. According to the Statistics of Income in the 2012 tax year 501(c)(3) organizations had net assets of $1,963.7 billion. The wealthiest 3.6 percent of organizations held $1,590.5 billion in assets. This included $683 billion invested in public securities, $555 billion in other securities, and $141.8 billion in short term interest-bearing accounts. Domestic private foundations held $645 billion in investment assets. This data is found at: http://www.irs.gov/uac/SOI-Tax-Stats-Charities-and-Other-Tax-Exempt-Organizations-Statistics.

[54] Roger Gordon, Laura Kalambokidis, and Joel Slemrod, Do We Now Collect Any Revenue From Taxing Capital Income?, 88 Journal of Public Economics 981 (2004), make the arresting claim that a very small share of federal tax revenue is collected from taxing capital income. This claim is based on a heuristic that measures the amount of revenue collected from taxing capital income as the amount of revenue that would be lost by switching from the existing income tax to a cash flow consumption tax. The 2004 paper is a follow on to a 1988 paper by two of the authors that argued, using this same "switching cost" heuristic, "this switch would cost little or no revenue at all, suggesting the tax burden on capital was at that time small or non-existent." Id. at 1001, citing Roger Gordon & Joel Slemrod, Do We Collect Any Revenue from Taxing Capital Income, in Summers, L., Tax Policy and the Economic, vol. 2, pp. 89-130. The 2004 paper redoes the analysis using data from 1995 to find a switching cost of $108.1 billion in tax revenues in 1995. Using this heuristic, the securities tax and the complementary tax would raise significantly more revenue than existing taxes if they were deployed alongside a cash-flow consumption tax with rates similar to existing tax rates.

publicly traded C corporation stock in family-owned businesses is likely to be small.[55] This is subject to one important qualification. Some C corporations that began as family owned are publicly traded but preserve family control through a dual-class stock structure with a substantial part of the value of the firm is represented by the stock held by the family, which typically is not publicly traded.[56]

The $41,528 billion figure is under inclusive as well. The most significant omissions involve capital owned through partnerships. The $41,528 billion figure omits publicly traded securities held by U.S. households through partnerships. A very rough sense of the amount of public traded securities held through partnerships can be derived from tax return data. I conservatively estimate somewhere between five and ten percent of the value of partnership assets is represented by publicly traded securities, which translates to $300 billion to $600 billion in 2013.[57]

The $41,528 billion figure also omits equity in publicly traded partnerships.[58] Publicly traded partnerships are possible because of an exception to a general rule that taxes a non-corporate entity that has publicly traded equity as a corporation.[59] Equity in

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[55] Data from estate tax returns is consistent with this hypothesis. The IRS publishes data from estate tax returns that breaks down stock reported in a decedent's estate between publicly traded stock and closely held stock, which includes both stock in S corporation stock and C corporation stock that is not publicly traded. See IRS SOI Tax Stats at http://www.irs.gov/uac/SOI-Tax-Stats-Estate-Tax-Statistics-Year-of-Death-Table-1. Taxpayers are required to identify the CUSIP number of stocks and bonds that are part of the estate in Schedule B of Form 706. Stock with a CUSIP number is classified as publicly traded. In 2011, 20.6% of the value of stock reported in a decedent's estate was represented by non-publicly traded stock. This is somewhat higher than Saez and Zucman's estimate of the share of household wealth in equities represented by S corporation stock in 2011 (17.5%). Some of this difference can be attributed to Saez and Zucman including equities held through noncharitable trusts and offshore accounts in equities. This stock should almost entirely be publicly traded. This stock would not appear in the estate tax returns data.

[56] Belen Villalonga and Raphael Amit, How Are U.S. Family Firms Controlled?, 22 Review of Financial Studies 3047 (2009), explain the structure and provide examples, which include Tyson Foods, Inc., and Ford Motor Company. Paul A. Gompers, Extreme Governance: An Analysis of Dual-Class Firms in the United States, 23 Review of Financial Studies 1051 (2010), compile a database that the authors believe includes all dual-class firms. They find "Overall, dual-class firms comprise about 6% of the number of public companies and 8% of the market capitalization," id. at 1057, with insiders controlling "40% of the cash flow rights" of these firms on average. Id. at 1084. The authors also find "dual-class firms are significantly more levered than single-class firms." Id. at 1059.

[57] The most recent figures are from 2012. Dividends were slightly more than 3% of reported gross income reported by partnerships (portfolio income represented 17.8% of gross income and dividends represented 17.5% of portfolio income). We may safely infer from this that dividend-paying stock was at least 3% of partnership assets. We may also infer this is publicly traded stock. Partnerships are not permitted to own equity in an S corporation. And closely held C corporations should rarely pay dividends since dividends generally are paid out of income subject to the corporate income tax. A further 61.5% of portfolio income was capital gains. While presumably some of this represents further gains on stock in publicly traded corporations it also includes gains on closely held stock and investment assets (e.g. real estate held for investment). These numbers are from SOI Tax Stats at SOI-Tax-Stats-Partnership-Data-by-Size-of-Total-Assets.

[58] The Flow of Funds and Statistics of Income data sets do not make it possible to distinguish between closely held and publicly traded business entities when an entity is taxed as a partnership.

[59] Mark P. Gergen, Subchapter K and Passive Financial Intermediation, 51 S.M.U.L. Rev. 37, 41-50 (1997), explains the exception as well as the universe of assets covered by the REMIC and FASIT rules.

publicly traded partnerships represents a significant and growing share of total publicly traded equity. Many publicly traded partnerships are in the oil and gas business and are organized as Master Limited Partnerships (MLPs). In 2001 there were a large handful of MLPs with a total market capitalization of $27 billion. In 2013 there were 107 MLPs with a total market capitalization of firm equity of $464 billion. U.S. individuals hold around two-thirds of this equity. U.S. institutions, presumably nonprofits and financial intermediaries, hold most of the rest.[60] There are also publicly traded partnerships in coal, nitrogen, other natural resources, real estate, and investment and financial services.[61] The private equity firm Blackstone Group L.P.[62] reorganized so it would be taxed as a publicly traded partnership in 2008. It had a market capitalization of $45.7 billion on August 14, 2015.

Turning from equity to fixed income assets, most wealth represented by fixed income assets is caught by the securities tax. In the modern financial world business and household[63] borrowing generally is intermediated through securities markets, bringing the wealth represented by these claims within the securities tax. This is a product of several developments. As a result of consolidation of the banking industry large publicly traded bank now own almost all banking assets.[64] Meanwhile banks provide a diminishing share of loans.[65] Banks have been replaced as financial intermediaries by money market mutual funds and pension funds.[66] These funds invest in fixed income securities through the bond market, the commercial paper market,[67] the repurchase agreement ("repo") market,[68] and markets for asset-backed securities, in particular mortgage-backed securities.

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[60] These numbers are from CBRE Clarion Securities, Master Limited Partnerships Key Role in the U.S. Energy Renaissance (January 2014).

[61] A list may be found broken down by industry category at the website of the National Association of Publicly Traded Partnerships, at http://www.naptp.org/PTP101/CurrentPTPs.htm.

[62] Victor Flesicher, Taxing Blackstone, 61 Tax L. Rev. 89 (2008).

[63] Over two-thirds of all home mortgages are securitized along with a large share of consumer loans and credit card debt.

[64] Davna Avraham, Patricia Slevaggi, and James Vickery, A Structural View of US Bank Holding Companies, FRBNY Economic Policy Review (July 2012); David C. Wheelock, Banking Industry Consolidation and Market Structure: Impact of the Financial Crisis and Recession, FRBSL Review 93(6) (Nov/Dec 2011).

[65] The term "shadow banking" has been used to define financial intermediaries that compete with banks in acquiring capital from providers who want liquidity and investing capital in relatively illiquid assets. This function is called "maturity transformation." See Bryan J. Noeth and Rajdeep Sengupta, Is Shadow Banking Really Banking?, The Regional Economist 8 (Oct. 2011), for further explanation and an estimate over time of the size of the shadow bank sector versus the size of the traditional banking sector as measured by liabilities.

[66] Jonathan Macey, Reducing Systemic Risk: The Role of Money Market Mutual Funds as Substitutes for Federally Insured Bank Deposits, 17 Stan.J.L. Bus. & Fin. 121 (2011).

[67] Richard G. Anderson and Charles S. Gascon, The Commercial Paper Market, the Fed, and the 2007-2009 Financial Crisis, FRBSL Review 91(6) (Nov/Dec 2009).

[68] Viktoria Baklanova, Adam Copeland, and Rebecca McGaughrin, Reference Guide to U.S. Repo and Securities Lending Markets, FRBNY Staff Report No. 740 (Sept. 2015). In a repo a security owner seeking to borrow cash for a short term (generally overnight to up to 30 days) obtains a loan by selling a security to a lender for cash and agreeing to repurchase the security at the loan's maturity from the lender for the cash price plus interest.

The example of mortgage-backed securities illustrates the securities tax is not limited to debt and equity issued by publicly traded corporations or to capital used in an active business enterprise. A pass-through entity such as a REMIC that owns a pool of home mortgages and issues publicly traded securities that represent claims upon cash flows from the pool is obligated to pay the tax on the market value of its securities. That a home mortgage is not a publicly traded security is irrelevant. Wealth represented by a string of financial assets is subject to the securities tax if any asset in the string is a publicly traded security.[69]

The example of mortgage-backed securities also illustrates how the securities tax will impose a tax burden on some capital that bears no tax burden at present. Under existing law, borrowers bear no tax burden on capital borrowed to purchase a home because of the home mortgage interest deduction. Meanwhile providers of capital for home mortgages bear no tax burden on the capital if the provider is a nonprofit entity, an individual holding capital through a tax deferred account or a pension fund, or a foreign person.[70] This capital will bear a tax burden under the securities tax. If a home mortgage is securitized, then the securitization vehicle will be obligated to pay the tax on the value of its securities.

Some wealth represented by fixed income assets will not be subject to the securities tax. Owners of closely held firms sometimes hold debt as well as equity in a firm. Private banks issue closely held equity to raise capital and take deposits to make loans. Some of these are boutique private banks that cater to the very wealthy. Peer-to-peer lending may be more than a fad. While presumably such debt is a small share of fixed income assets, there is little point to trying to estimate the precise share, or to worrying about the securities tax discouraging public intermediation of credit and encouraging private intermediation of credit, because there is a minimal difference between the securities tax and the complementary tax with respect to the tax burden imposed on fixed income assets.

The securities tax clearly is superior to the existing system for taxing capital represented by a publicly traded security. Different types of securities have different tax prices under the current patchwork system of exemptions and preferences for capital income.[71] On the issuer side corporate equity has a higher nominal tax price than corporate debt or partnership equity because of the corporate income tax. On the holder side, unless the holder is a nonprofit or an individual who holds through a tax-deferred account, debt has a higher nominal tax price than corporate equity because interest is

[69] This involves no difficulty when non-publicly traded financial assets are upstream from publicly traded financial assets, as is the case when household debt is securitized. The flow of the stream in the metaphor is in the direction of the return on capital. Section IV-D explains how the securities tax and the complementary tax are integrated when an private entity holds publicly traded securities.

[70] Special tax rules for Real Estate Mortgage Investment Conduits ("REMICs") were created so that capital for home mortgages could be intermediated without any of the return being subjected to the corporate income tax. This privilege is not limited to home mortgages. The tax rules on REITs and FASITs do the same thing for financial intermediation involving real estate and asset-backed securities generally.

[71] Randall K.C. Kau, Carving Up Assets and Liabilities—Integration or Bifurcation of Financial Products, 68 Taxes 1003 (1990), provides an extended typology of the different tax rules that apply to different types of financial assets.

taxed as ordinary income while dividends are taxed as capital gains. Corporate stock that pays dividends has a higher nominal tax price than non-dividend paying stock because of the loss of benefits of deferral.

These are only nominal tax prices. To make matters even more complicated, the real tax price paid by an issuer or holder of a security as a result of its tax attributes depends on the amount of the implicit tax, which is a function of the marginal tax clientele for a security. How securities markets organize around tax clienteles is of crucial important for typically positive tax attributes of a security to an issuer are offset by negative attributes to a holder, and vice versa. For example, while equity has a higher nominal tax price than debt to a corporation under the corporate income tax, from an individual investor's perspective the opposite is true—debt has a higher nominal tax price than equity under the individual income tax. If the marginal tax clientele for a corporation's debt and equity is individual investors, who bid up the price of debt to offset the higher nominal tax price to them under the individual income tax, then the implicit tax paid by a corporation for issuing debt will bring the cost of debt and equity into line from the corporation's perspective.[72]

This is insane. One reason it is insane is easy to grasp if you think of different financial assets as different commodities, like apples and oranges. A basic principle of public finance is that a commodities tax should not alter relative commodity prices because this distorts choices between commodities, multiplying the deadweight loss of the tax. Similarly a tax on capital should not alter the relative prices of financial assets because this distorts choices between financial assets, multiplying the deadweight loss of a tax on capital. For example, the corporate income tax may create a deadweight loss by making equity more expensive than debt as a source of capital, inducing corporations to be over-leveraged and so more vulnerable to economic shocks.

The current tax system is insane for another reason. The reason is easy to grasp if you stop thinking of different financial assets as different commodities. Instead think of differences in financial assets as purely matters of form, like the difference between a seller handing a purchaser an apple with his left or right hand. Some differences in financial assets are purely matters of form. Many differences are largely matters of form. The difference between a publicly traded partnership and a publicly traded corporation is largely a matter of form, tax considerations to the side. There is a real difference between debt and equity in the abstract. But debt and equity can be combined with financial derivatives (forwards, puts, and calls) to eliminate these differences.[73] The development of markets in financial derivatives reduces the cost of gaming inconsistencies in the tax treatment of different securities, calling into question the viability of the existing

[72] The point in text is famously made in Merton H. Miller, Debt and Taxes, 32 J.Fin. 261 (1977), as a possible explanation for why corporations are not more heavily leveraged then they are. Myron S. Scholes & Mark A. Wolfson, Taxes and Business Strategy 357-372 (1992), collect and analyze the evidence on implicit taxes and clientele effects in security markets. They find tax-exempt bonds bear significant implicit taxes and that it is an "open question" whether any implicit tax is borne by stock. Id. at 368-69.
[73] Alvin C. Warren, Jr., Financial Contract Innovation and Tax Policy, 107 Harv. L. Rev. 460 (1993).

system.[74] And financial engineers create new securities that provide novel combinations of positive tax attributes, such as a security that is treated like debt for tax purposes though it is equivalent to preferred stock for other purposes.[75]

To the extent differences in financial assets are only matters of form, the current patchwork system is really just a game. If owners of capital and users of capital know how to play the game, then they often can find a tax-efficient way to achieve their non-tax business and financial objectives without sacrificing these other objectives, apart from paying hefty fees for tax planning and other transaction costs. This is a particularly unattractive game, as games go. It can be a very expensive game to play so the advantage is to the wealthy. It is a dynamic game. How people play the game and the rules they play by change constantly, almost always in the direction of greater financial and tax complexity. Much of the financial complexity is tax-driven.

Publicly traded partnerships are a monument to this insanity. It is insane to encourage talented people with useful skills to create complicated financial vehicles that serve no purpose other than avoiding the corporate income tax. The securities tax largely puts an end to the game. To the extent the current patchwork system actually alters the relative prices of securities, creating a deadweight loss, the securities tax also puts and end to these distortions.

B) Tax mechanics

This Section explains the mechanics of the securities tax. I began from an issuer's perspective using IBM's capital structure as an example. In June 2015 IBM's equity and long-term debt had a total market value of $52.4 billion, consisting of $13.7 billion in equity and $38.7 in long-term debt in the form of publicly traded bonds.[76] These equity and debt securities clearly are subject to the securities tax. IBM's 2014 Annual Report shows other liabilities some of which are subject to the tax and some of which are not. For example, IBM's short-term trade paper ($5.7 billion in the Annual Report) is subject to the securities tax while IBM's accounts payable ($6.8 billion) are not subject to the securities tax. There is a public market with active trading for trade paper of the quality of IBM's trade paper. There is not a public market with active trading of financial claims that appear in accounts payable. IBM's assets include some securities on which the issuer will have paid the securities tax (assuming it is a U.S. issuer). These include publicly traded equity, long-term debt, and trade paper. IBM will get a credit for the tax the issuers paid on these securities, based on their market value.

The different tax treatment of trade paper and accounts payable does not mean one form of debt is tax-advantaged over the other so long as the holder of a debt is a publicly traded entity. When both a debtor and a debt holder are publicly traded entities

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[74] Daniel Shaviro, Risk-Based Rules and the Taxation of Capital Income, 50 Tax L. Rev. 643, 643, 645 (1995)(describing "crisis in the taxation of financial assets" and arguing that this crisis "raise[s] serious questions about the entire enterprise of taxing income from capital.").
[75] Mark P. Gergen and Paula Schmitz, The Influence of Tax Law on Securities Innovation in the United States: 1981-1997, 42 Tax L. Rev. 119, 132-136, 153-157 (1997)(telling the story of MIPS).
[76] I obtained these figures from Morningstar.

whether a debt is classified as publicly traded merely determines which of the two entities pays the tax. Thus, if IBM obtains funds to pay its expenses by issuing trade paper, then it pays the tax and the debt-holder gets a tax credit. If IBM defers payment of an expense so the liability shows up in IBM's accounts payable and another publicly traded entity's accounts receivable, then the entity holding the receivable will pay the tax through the absence of a tax credit.

When capital is held through a string of publicly traded securities the structure of serial remittance obligations and credits gives an owner of capital and every intermediary in a string an incentive to ensure when they hold a publicly traded security that the issuer accurately reports the price of the security and pays the tax. Financial claims against a publicly traded entity that are not in the form of a publicly traded security are disregarded unless a claim is held by an individual, a nonprofit, or another person subject to the complementary tax. If a financial claim against a publicly traded entity is held by an individual or nonprofit (or other person subject to the complementary tax), than the claim is subject to the complementary tax. The tax is at the same rate as the securities tax on the claim's estimated value, and the entity is under a similar remittance obligation.

IBM has substantial positions in derivatives on both the asset and liability side of its balance sheet. The derivatives are risk-management devices like interest rate swaps and currency hedges. Positions in derivatives often can be disregarded under the securities tax for the same reason the different tax treatment of trade paper and accounts payable is unimportant. A position in a derivative can come to represent a substantial asset or liability on the books of a publicly traded entity. But so long as the counter-party is not a household or nonprofit[77] the position can be disregarded, for the wealth it represents will eventually be taxed by either the securities tax or the complementary tax.

Generally, for classes of financial assets like derivatives and commercial paper that represent claims between business enterprises and financial intermediaries, and that are not held in material quantity by households or nonprofits, the most important thing is to have a clear understanding whether an asset is a publicly trade security. For borderline assets the affected industries should be allowed to decide the issue of classification, so long as the asset is not held in material quantity household or nonprofits. Section V-C will consider this topic in more detail, using commodities and derivatives to explain the relevant considerations.

The ultimate goal is to tax capital once, but only once, at some point between a user of a capital and the household or nonprofit that ultimately owns the capital. Capital that is not subject to the securities tax is subject to the complementary tax. Generally, if an household or nonprofit holds a financial asset or a real asset that is not a publicly traded security, then the asset will be subject to the complementary tax. If an asset is an interest in an entity, then generally the entity will be obligated to pay the tax with respect to the interest. While the complementary tax is designed to have the same incidence as

[77] As Section V-B explains, in addition to households and nonprofits persons subject to the complementary tax include defined benefit pension funds and personal trusts because of the difficulty of estimating the value of household claims against these entities. I refer only to households and nonprofits here in the interest of concision.

the security tax, inevitably the complementary tax involves greater complexity and compliance costs for holders and entities with interests subject to the complementary tax. Thus, many capital owners and capital users will prefer to invest and to obtain capital through public financial markets to avoid the greater complexity and higher compliance costs under the complementary tax.

When daily price information is available for a publicly traded security the tax should be assessed using a composite price based on prices reported at multiple discrete times (e.g., either the daily or weekly closing price throughout the year, assuming an annual tax period). A composite price dampens the effect of price volatility and reduces the tax payoff from manipulating the closing price of a security. For example, if the tax is based on year-end closing price, then firms might pay out a large dividend near the end of the year to reduce the price of their securities and tax liability. Further, if the tax is based on year-end closing prices, then market shifts at the end of the year could significantly alter tax payments and government receipts.

Since the securities tax is paid by an issuer changes in ownership of a security during a year through secondary market trading do not alter the tax. But changes in ownership of a security during a year can alter who is entitled to a credit or partial refund with respect to the tax paid by the issuer. When a security is transferred during the year the government is indifferent in theory as to who gets a credit or partial refund so long as only one credit or one partial refund is given with respect to a security during a year. But this cannot be left to the parties to a transfer to decide on a case-by-case basis because of private transaction and compliance costs, and the cost to the government of monitoring taxpayer reporting to ensure parties abide by an agreed allocation. A simple solution is to have a rule determining ownership of a security for purposes of determining entitlement to the credit or rebate on a specified date, such as the last day of the calendar year. This topic is examined in more detail in Section V-D in the context of hedge funds, which are well positioned to game this simple rule. I conclude a simple rule is best notwithstanding the gaming possibility.

A security is publicly traded, and so is subject to the securities tax, if it is actively traded in a public market. This includes any security listed on a public exchange like the New York Stock Exchange or NASDAQ. An interest in an open-end mutual fund also is subject to the securities tax though it is not traded in a secondary market. An open-end mutual fund is structured to provide liquidity and price information comparable to secondary-market trading by allowing investors to acquire shares, and interest-holders to redeem shares, for a price equal to the net asset value of the fund at the end of each trading day.[78]

On the other hand, an interest in a private equity fund (e.g., a venture capital fund, a leveraged buyout fund, and a hedge fund) is not subject to the securities tax. The secondary markets for these interests are private with sporadic trading.[79] And the funds

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[78] Jill Fisch, Rethinking the Regulation of Securities Intermediaries, 158 U. Pa. L.Rev. 1961 (2010).

[79] Tarun Ramadorai, The Secondary Market for Hedge Funds and the Closed Hedge Fund Premium, 61 Journal of Finance 479 (2012), provides data on the secondary market for hedge funds provided by Hedgebay. Appendix A explains how Hedgebay links interested buyers and sellers. Information on the

provide restricted opportunities for redemption. Under the complementary tax there are rules that require revaluation of interests in private equity funds based on the redemption price and the trading price in secondary markets. These rules elide the difference between the two taxes when assets subject to the complementary tax are fairly liquid because of redemption rights or the possibility of trading in a secondary market.

I close using an often-observed anomaly in market pricing of securities issued by closed-end mutual fund to illustrate how the securities tax operates.[80] A closed-end mutual fund issues a restricted number of shares, which are publicly traded. The anomaly is that securities issued by a closed-end fund often trade at a premium over or a discount below the value of securities owned by a fund.[81] When a fund's securities trade at a premium over the price of securities a fund owns the fund is liable to pay the tax on the premium. This illustrates the securities tax operates as a financial value-added tax on financial intermediation. What is curious about this particular case is that it is not clear what financial value a closed-end mutual fund adds by pooling publicly traded securities.

Sometimes when a closed end mutual fund's securities trade at a discount a possible explanation is found in a fund owning securities that are not publicly traded, with the explanation for the apparent discount being that the restricted securities are overvalued in the measure of a fund's net asset value.[82] When a publicly traded entity owns non-publicly traded assets, like restricted securities, the non-publicly traded assets are subject neither to the securities tax nor to the complementary tax. The assumption is that the value of non-publicly traded assets owned by a publicly traded entity is reflected in the market price of securities issued by the publicly traded entity.

This assumption creates a possible strategy to avoid both taxes on capital. A publicly traded entity could avoid paying the securities tax on the value of the capital used in its enterprise by including in its capital structure equity or debt that is not publicly traded, and that decreases the value of its publicly traded securities. This strategy generally will not succeed if a young firm issues non-publicly traded equity or undertakes non-publicly traded debt in order to raise capital. If capital is raised from private sources like individuals and nonprofits, or through private intermediaries like private equity funds and hedge funds, then the capital will be subject to the complementary tax. In the case of private intermediaries, like private equity funds and hedge funds, an interest in the fund is subject to the complementary tax, if the interest is held by a household or nonprofit. If capital is raised from public sources like mutual funds, then it will be subject to the securities tax.

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secondary market in private equity can be found in Preqin Special Report: Private Equity Secondary Market, Challenging the Illiquidity Myth (March 2015). Preqin is a subscription service that holds itself out as providing "the most comprehensive resource" for information on "a rapidly evolving, non-transparent market." See www.preqin.com/item/private-equity-secondary-market-monitor/1/1321 (visited Dec. 17, 2015).

[80] When a closed-end mutual fund shares trade at a discount below the market value of publicly traded securities owned by a fund the difference will not refunded because the credit is nonrefundable. Section IV-D explains the reason for this rule and the response it invites.

[81] Charles M.C. Lee, Andrei Shleifer, & Richard H. Thaler, Anomalies: Closed-End Mutual Funds, 4 Journal of Econ. Perspectives 153 (1990).

[82] Id. at 157.

The major concern in this regard involves dynastic wealth represented by family-owned capital in established business enterprises, which are created and developed by founding family member and then passed on to the founder's heirs and successors. Ford Motor Co. is an example. When the Ford family took the company public they kept a second class of non-publicly traded stock, which is subject to restrictions that make the stock illiquid. The Ford family presumably used the dual class stock structure for non-tax reasons because there is no tax advantage in a dual class stock structure under existing tax law. But there is a tax advantage to a dual class stock structure under the securities tax and the complementary tax. The class of stock held by the family is not subject to the securities tax, if it is not publicly traded. If the family stock is subject to liquidity restrictions, then it is likely to be under-valued for purposes of the complementary tax.

V. A Complementary Tax on Other Capital

This Section explains the complementary tax on capital that is not subject to the securities tax. Section A explains the complementary tax and why it is superior to a universal wealth tax. Section B addresses persons subject to the complementary tax. Section C addresses commodities and derivatives, which raise the issue of how to handle assets that typically are held by businesses for productive use or risk management but sometimes are held by households and nonprofits for investment. Section D addresses the integration of the securities tax and the complementary tax.

A) Tax base and mechanics

Capital subject to the complementary tax largely consists of equity in closely held businesses and equity in real estate other than owner occupied housing. Saez and Zucman estimate U.S. households owned $57,210 billion in income producing assets in 2013. Using their figures, and making a few adjustments explained earlier, I estimate that around $10,519 of this (18.4 percent) was equity in closely held businesses and in real estate other than owner occupied housing.[83] Holdings of these assets tend to be particularly highly concentrated among the wealthiest households. Thus Arthur Kennickell estimates that in 2007 the wealthiest one percent owned 62.7 percent of total U.S. wealth represented by equity in closely held businesses while they owned 33.8 percent of U.S. wealth generally.[84]

The table below provides a more complete picture of household ownership of equity in these assets. It reports Kennickell's estimates of the share of household wealth

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[83] This is $2,183 billion equity in S Corp stock, $5,551 billion in sole proprietorships and partnerships (subtracting $464 billion for the market value of publicly traded equity), $2,385 billion in tenant occupied housing, and $400 billion in non-S Corp estimate for the estimated value on restricted stock in publicly traded corporations.

[84] Arthur B. Kennickell, Ponds and Streams: Wealth and Income in the U.S., 1989 to 2007, Table A3a, p. 63. The figures in columns A and C of the Table are derived from figures in Table A3a, p. 63, by dividing the dollar estimates for BUS and NNRESRE respectively by NETWORTH. The figures in Column B and D are from Table A2a, p. 56.

represented by these assets in 2007 for different wealth percentiles.[85] Columns A and C report the share of net household wealth represented by these assets. The share is an average for all households in a band, including households with no wealth of this type, which usually is a significant share of households. Columns B and D report Kennickell's estimates of the share of households with this type of wealth.

	Closely held businesses		Real estate except owner occupied housing	
	A. Average share of net wealth	B. Percent with such assets	C. Average share of net wealth	D. Percent with such assets
Richest 1%	42.7%	73.4%	9.3%	33.5%
1 - 5 %	22%	54.2%	5.9%	33%
5 - 10%	11.5%	32%	4.4%	21.4%
10 – 50%	5.2%	14%	2.9%	11%
Bottom 50%	3.3%	3.8%	2.1%	2%

When a household has an interest in a closely held business or nonresidential real estate the asset is likely to represent a large share of household wealth. This is particularly true with respect to households in the bottom 95 percent. For example, among households in the bottom half of the top ten percent that owned a closely held business the asset represents around one-third of household wealth on average. Closely held businesses and nonresidential real estate represent a particularly large share of the wealth of the small number of households in the bottom 90 percent that own these assets. For example, while only 3.8 percent of the bottom 50 percent of households (or approximately 2,200 households[86]) owned a closely held business in 2007, the value of the asset was over 85 percent of household wealth on average.[87]

The complementary tax is based on the estimated value of an asset, applying a rule that assumes all investments yield a normal return. For households in the bottom fifty percent that own a closely held business the variance in actual return will result in errors across households in estimating the value of a closely held business that is quite large in relationship to household wealth. The possible fairness concern this fact raises dissipates once one recognizes even a large error in estimating value has a small tax impact because of the low tax rate and the small amount of wealth involved. Using Kennickell's figures and a tax rate of .8 percent, in 2007 households in the bottom fifty percent that owned closely held businesses would have paid around $200 on average

[85] Nonresidential real estate includes rental real estate and real estate held for investment. It excludes second homes.

[86] There were around 116,000 households in the U.S. in 2007 so there are around 58,000 households in the bottom fifty percent.

[87] I calculated this figure by assuming that the 3.8 percent of households in the bottom fifty percent that owned closely held businesses owned 3.8 of the estimated total net assets owned by the bottom fifty percent ($1,611.9 million), or $61.2 million. The bottom 50 percent were estimated to hold $53.7 million in equity in closely held business. These figures are from Kennickell, supra n. , Figure A3a.

under the complementary tax on the value of a small business.[88] Even a very large error in estimating the value of a small business will result in a small differential in tax paid.

As for the nonprofit sector, Piketty finds wealthier nonprofits tend to have a larger portfolio represented by assets other than publicly traded securities. Piketty examines university endowments in the U.S. to test his hypothesis that the average return on wealth increases with wealth. The evidence confirms the hypothesis: the richer a university the higher the average real return on the endowment from 1980 to 2010.[89] Looking for an explanation for these higher returns, Piketty finds "the higher we go in the endowment hierarchy, the more often we find 'alternative investment strategies,' that is very high yield investments such as shares in private equity and unlisted foreign stocks . . . hedge funds, derivatives, real estate, and raw materials . . . ."[90] Piketty suggests "economies of scale in portfolio management" may explain this pattern.[91] We might infer from Piketty's findings that the very wealthiest households—e.g., the top .1 percent or the top .01 percent—have similarly large holdings in assets other than publicly traded securities. Very wealthy households benefit from the same economies of scale as wealthy universities. Often wealthy individuals sit on the boards of wealthy universities and have the same investment advisors.

The normative criteria or desiderata the tax must satisfy are straightforward. The "all in" tax burden (including implicit taxes and private compliance costs) on capital not covered by the securities tax should be as close as possible to the burden imposed by the securities tax on capital intermediated through public markets to minimize distorting the choice of capital owners (e.g., individuals and nonprofits) and capital users (e.g., firm managers) between private and public capital markets as a place to invest or to obtain capital. In addition, the complementary tax should not distort the capital structure of firms funded with private equity and debt. The tax consequences of taking a private firm public (or taking a public firm private) should be minimal so as to minimize distorting these choices. Finally, the complementary tax should be simple and easy to administer.

A universal wealth tax performs poorly with respect to these normative criteria because of the problem of taxpayers under-reporting asset values.[92] When taxpayers are asked to report the value of tax items with uncertain values they tend to aggressively under-value income items and over-value deduction items.[93] Experience has shown taxpayers will structure transactions to create uncertainty in order to facilitate under or

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[88] Kennickell estimates households in the bottom 50 percent held $53.7 million in wealth represented by closely held businesses. At a .8 tax rate, they would have paid $429,000 in taxes. Averaged across 2,200 households this comes to slightly more than $195 per household.

[89] Piketty 448.

[90] Id. at 449.

[91] Id. at 450.

[92] James R. Repetti, It's All About Valuation, 54 Tax L. Rev. 607 (2000), concludes "the practical problems of annual valuation make the wealth tax unimagineable."

[93] Mark P. Gergen, Uncertainty and Tax Enforcement: A Case for Moderate Fault-Based Penalties, 64 Tax L. Rev. 453 (2011), shows that a risk-neutral taxpayer will be aggressive in valuing an item of uncertain value even if the penalty for inaccurate valuation is set at a rate as high as the inverse of the expected probability of detection because of the asymmetric treatment of over-payments and under-payments.

over-valuation.[94] As a result under a universal wealth tax interests in firms that obtain capital through private capital markets are likely to be systematically undervalued, resulting in a lower tax burden than is borne by capital obtained through public capital markets at the same tax rate. This creates a tax advantage for private capital markets over public capital markets as a place to invest and to obtain capital. It creates an incentive to arrange the capital structure of firms funded with private equity and debt to make the value of interests in a firm uncertain in order to facilitate under-valuation. This creates a bias in favor of equity over debt, in favor of high-risk debt over low-risk debt, and in favor of variegated and complex capital structures over uniform and simple capital structures. When a private firm goes public it will be tempting to impose a tax on the difference between the reported value of the equity and its revealed value to deter this sort of thing. But this response imposes an additional tax price on going public over and above the price of losing the ability to under value capital. Under-valuing equity compensation in a private firm makes it possible to convert labor income into capital income. Finally, auditing reported values is administratively costly.

Edward Kleinbard has worked out a system for taxing normal returns on capital that satisfies the criteria for the complementary tax fairly well.[95] Kleinbard's system taxes the normal return on capital using an investor's adjusted cost (or basis) in an investment as the basis for imputing a normal return. I will call this figure the estimated value of an asset rather than an asset's adjusted cost (or basis) for reasons that will become apparent. I will use the example of a simple investment in a building that produces rental income to explain the basic mechanics of Kleinbard's system for taxing normal returns, the problems created by the system (these involve investors cherry-picking or using value-erasing strategies to amass a portfolio of under-valued assets), and why these problems are not sufficiently grave to justify abandoning the enterprise of taxing capital.

Begin with the case in which an individual pays cash for a building that produces rental income. The price paid for the building is its initial value. Each year the investment in the building is assumed to yield a normal return on the investment's estimated value at the beginning of the year. The normal return is determined using a benchmark rate that is a composite of the rate of inflation and the real normal rate of return. This rate is higher than the federal borrowing rate because a normal return includes a return for taking risk. Kleinbard suggests 200 basis points above the federal borrowing rate as a possible benchmark. If Piketty's estimate of the average normal real return on capital is correct, then the rate will usually be in the 3 to 5 percent range plus inflation.[96] The estimated value of the building is increased each year by a percentage

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[94] James R. Repetti, It's All About Valuation, 54 Tax L. Rev. at 612-613 (discussing use of family limited partnerships to reduce reported value for estate tax purposes).

[95] Edward D. Kleinbard, Reimaging Capital Income Taxation, 55-58, explains the tax on normal returns on capital. See also Edward D. Kleinbard, The Business Enterprise Income Tax: A Prospectus, Tax Notes 97, 101-103 (2005). Under Kleinbard's system the tax on normal returns is imposed at the investor level. The investor tax is supplemented by a business enterprise tax on above normal returns. The business enterprise tax is similar to the current corporate income tax in that it is assessed on the net income of a business enterprise. An important difference with the corporate income tax is that a business enterprise is given a cost of capital allowance so that normal returns are taxed only at the investor level and not at the enterprise level. Another important difference is the tax rate is around half the tax rate on labor income.

[96] Piketty at 206-208.

equal to the normal return for the year and decreased by the net cash taken out of the building by the owner during the year.

The logic behind this technique for estimating asset value is easiest to grasp if you think of a financial asset, such as stock or a bond. The price paid for the asset determines its initial value. If the amount of cash paid out to a stockholder or bondholder during a year exceeds the normal return, then the excess is treated as a recovery of capital, which reduces the value of the asset. On the other hand, if the amount of cash paid out is less than the normal return, then the assumption for stock is that profits representing a normal return have been reinvested, increasing the value of the stock. For a bond the assumption is that unpaid interest is accrued, increasing the value of the bond.[97] The same logic can be applied to an investment in real assets like land and buildings. This simple rule replaces rules on amortization and depreciation that are designed to separate returns of capital from returns to capital.

Returning to the example, the complementary tax is assessed on the estimated value of the building.[98] The tax rate should be the same rate as the securities tax rate (e.g., .8 percent of estimated value). There are no further consequences to the owner under the complementary tax of taking cash from the building. If the owner sells the building for more than the estimated value, then she pays no tax on the additional return on capital. If the owner sells the building for less than the estimated value, then she gets no tax benefit for the loss. If the owner reinvests the sale proceeds in a new building, then the larger or smaller purchase price becomes the value of the new building, resetting the basis for calculating the complementary tax going forward.

Basing the tax on an asset's estimated value creates an incentive for an owner to sell an asset if the asset's market value is lower than estimated value, and to hang on to an asset if the asset's market value is higher than estimated value. This is similar to the "timing option" problem created by the realization requirement in an income tax. To be clear about the source of this defect, the tax is assessed on an asset's estimated value (which is determined using the normal return rule) rather than an asset's reported value, as it would be under a universal wealth tax, to avoid the problem of taxpayers under-

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[97] The rule does have perverse consequences with respect to long-term fixed-interest debt. Under the rule, asset values are assumed to rise with a rise in interest rates. Interests rate generally rise with the rate of inflation (or with the expected rate of inflation). An assumption that asset values increase with inflation makes sense for investments in real assets and in securities that represent an interest in real assets for the price of real assets generally increases with inflation. But this is not true with respect to fixed income assets. Indeed, the price of fixed-interest debt moves inversely with interest rates. As a consequence the rule systematically errs in valuing fixed-interest debt. The error can be quite large for long-term fixed-interest debt.

[98] The tax I propose is on an asset's estimated value, which is recalculated annually using the imputed return. The tax Kleinbard proposes is on the annual imputed return. In theory, the difference between the two taxes can be eliminated by rate adjustments if the imputed return is known. This is best explained algebraically. Define an asset's value as v, the annual return as r, and the different tax rates under the two taxes as t_r and t_v. Assume the tax on value is based on estimated value at the end of the year. The imputed return tax is vrt_r while the estimated value tax is $v(1+r)t_v$. The two taxes have the same incidence if t_v is set to equal $t_r * r/(1+r)$. If the two tax rates are set at a constant ratio, then the difference between the two taxes is a function of r (the imputed return) with the burden of the imputed return tax increasing relative to the estimated value tax with r.

reporting asset values, which is the Achilles Heel of a universal wealth tax. The normal return rule basically solves the problem of taxpayers under-reporting asset values by using the normal return rule to estimate asset value. While this goes a long towards solving the problem of taxpayers under-reporting asset values it leaves the problem of the timing option. Over time investors can exploit the variance in the return on assets to assemble a portfolio of under-valued assets by disposing of assets with lower than estimated values and retaining assets with higher than estimated values.

More complex financial arrangements can exacerbate the timing option defect. To illustrate assume an individual borrows funds to cover part of the purchase price of a building that produces rental income. If the debt is intermediated through public financial markets, then the capital represented by the debt is taxed by the securities tax. The capital represented by the owner's equity in the building is taxed as described above. If the entire cash flow generated by the building is used to service the debt, paying interest and paying down principal, then the estimated value of the owner's interest will gradually increase over time by the normal rate of return. This will capture much of the increase in the value of the owner's equity interest resulting from the gradual pay down of principal. But the presence of debt financing exacerbates the value of the timing option by increasing the volatility of the value of the owner's equity interest. For example, a wealthy individual who wants to exploit the timing option can make highly leveraged investments in a large number of assets and dispose of assets with market values below the estimated value while hanging on to assets with market values above the estimated value. By aggressively pursuing this strategy using assets with highly volatile returns an individual can quickly amass a portfolio of undervalued assets.

Financial interests in an asset can be fragmented so that interests have negatively correlated values. This can further enhance the value of the timing option. For example, two wealthy individuals acquire a rental building. *A* takes a preferred interest entitling her to all cash generated by the building until she recovers her investment plus a guaranteed rate of return. *B* takes a residual interest entitling her to all other cash generated by the building. Rental income and the market value of the building fluctuate with the inflation rate along with the general interest rate. An increase in the rate of inflation will increase the value of *B*'s residual interest and decrease the value of *A*'s preferred interest. A decrease in the rate of inflation has the opposite effect. Because both *A* and *B* enjoy the timing option the expected tax burden on capital represented by the asset is predictably less than it would be if ownership of the building was not fragmented.

Another defect in the complementary tax is that parties are able to use value-erasing tax strategies to assemble a portfolio of undervalued assets. These strategies generally require collusion by multiple parties in an exchange transaction in which the consideration on both sides of the exchange is of uncertain value. To use a crude example, *C* and *D* swap rental buildings and each report a price below the buildings' true values based on the two buildings expected cash flows. The capital tax is based on the reported price. If the net cash flow from a building exceeds the normal imputed return, then the adjusted asset value will not rise over time. Such value-erasing tax strategies can be a permanent fount of tax savings under the complementary tax.

Transactions involving contributions or distributions of assets of uncertain value in exchange for an interest in a business entity provide further opportunities for erasing value. To use another crude example, *E* and *F* are partners in an entity holding multiple parcels of real estate. *E* takes a parcel she plans to sell in a partially liquidating distribution. *E* and *F* collude to over-value the distributed parcel and to under-value *E*'s retained interest. The excess value allocated to the distributed parcel will disappear from the base of the capital tax when *E* sells the parcel. The complementary tax will not tax the predictable above normal returns on *E*'s under-valued retained interest.

These defects in the complementary tax have parallels under the existing system for taxing capital income.[99] The timing option has significant tax value under the income tax, particularly with respect to very risky investments with long-time horizons that do not pay immediate and periodic returns, such as a venture capital investment in a start up company.[100] Value-erasing strategies under the complementary tax are similar in spirit and design to tax-sheltering strategies under the income tax, particularly strategies that involve collusion in reporting artificial losses or artificial basis.[101]

The complementary tax involves greater compliance costs and administrative costs, and will have a greater distortionary impact, than the securities tax. The argument for the complementary tax is that a tax on estimated asset value involves less compliance and administrative costs, and has less distortionary impact, than a tax on reported asset value, when asset values are uncertain. The argument is that the complementary tax is clearly superior to a universal wealth tax, in these respects. The relevant question is whether the defects in the complementary tax are sufficiently grave to justify giving up entirely on the enterprise of taxing capital.

A concern is that the possibilities for gaming the complementary tax will distort capital flows from public markets to private markets. I think the distortionary effect on this margin will be fairly small. Because the complementary tax is a tax on capital with a low rate even relatively modest transaction and tax-planning costs will render gaming strategies unprofitable. The annual tax savings from amassing a portfolio of under-valued assets is equal to the difference between the estimated value of assets in the portfolio and the actual value of the portfolio multiplied by the tax rate. For example, at a .8 percent tax rate a portfolio management strategy that eliminates $1,000,000 in estimated value only yields $8,000 in annual tax savings. For this reason, the expected value of the possibilities for gaming the complementary tax is not much of a reason for owners and users of capital to prefer private capital markets to public capital markets as a

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[99] Meanwhile the complementary tax eliminates many defects in the existing system for taxing capital income. Kleinbard's list includes the realization doctrine, the debt-equity distinction, the problem of coordinating "firm and investor-level measures of real income," and "arbitrary tax depreciation and expense capitalization rules." Edward D. Kleinbard, Reimagining Capital Income Taxation, at 43-45. Kleinbard's system for taxing capital income is a huge improvement over the status quo. This is why he has devoted almost two decades refining and advocating for his system.

[100] Mark P. Gergen, The Effects of Price Volatility and Strategic Trading Under Realization, Expected Return, and Retrospective Taxation, 49 Tax L. Rev. 209 (1994).

[101] Thus most corporate tax shelters involve a taxpayer seeking to avoid taxes, a promoter or a facilitator to arrange the transaction, and a counter party. See Mark P. Gergen, The Logic of Deterrence: Corporate Tax Shelters, 55 Tax L. Rev. 255, 255-261 (2002).

place to invest or to obtain capital. Even modest transaction and tax planning costs can quickly outweigh possible tax savings from investing in private capital markets.

This only speaks to the expected value of the possibilities for gaming the complementary tax as they influence the choice between public and private capital markets as a place to invest or to obtain capital. To be clear, once capital is invested through private capital markets the complementary tax may distort decisions by capital owners and capital users when there is a large difference between an asset's estimated value and its actual value. Investors will have a tax incentive to sell significantly over-valued assets they would otherwise hold, and they will have an incentive to hold significantly under-valued assets they would otherwise sell. The latter effect is similar to the "lock-in effect" under the realization doctrine. The immediate tax cost of selling a "gain asset" is much smaller than under the income tax because of the much lower tax rate. But while generally less the long-term tax cost of selling a "gain asset" can be meaningful under the complementary tax.[102]

To limit this "lock-in effect" asset revaluation should be required when there is a transaction that provides reliable information from which the price of an asset can be inferred. The principal revaluation mechanism is a rule that applies when an asset is one of a class of interests in an entity, like a unit in an LLC. Under the rule an entity is required to revalue all interests in a class, if there is a price-setting event involving any interest in the class, such as redemption of an interest or a trade in a secondary market. Thus, if a private equity firm redeems a member's units for cash, then all member units are revalued based on the redemption price. If a partner contributes cash to a partnership to acquire an interest, then like interests of others partners are revalued based on the price paid for the acquired interest. If a partner sells an interest to a third party for cash, then like interests of other partners are revalued based on the purchase price of the interest.

Revaluation rules cast a shadow that will discourage wealthy individuals and nonprofits from pursuing strategies designed to amass a portfolio of undervalued assets and will mitigate the lock-in effect. They increase tax-planning costs in amassing a portfolio of under-valued assets for taxpayers must monitor under-valued assets to guard against a revaluation event. By increasing the probability of a future revaluation event revaluation rules also decrease the expected longevity of an asset being undervalued, which decreases the expected value of the tax benefit.

The differences between the complementary tax and the securities tax will cause some distortions. In particular, investors and managers will tend to prefer private capital markets to public capital markets for intermediating capital for investments if the expected return is greater than the normal return imputed under the complementary tax. Of particular concern in this regard is the possibility that average returns on wealth

[102] Both points can be explained with a simple example. Assume *A* holds an asset with an actual value of \$100 and a tax basis or estimated value of \$50. Under the income tax at a 15% capital gains rate, *A* will incur a tax cost of \$7.50 if she recognizes the gain. Under the complementary tax at a .008% rate, *A* will pay an additional 40 cents in taxes in the first year if she sells the asset and reinvests the proceeds. The long-term tax cost to *A* of selling the asset under the complementary tax depends on how long *A* expects to be able defer revealing the increase in wealth and the discount rate.

increase with wealth, as Piketty argues.[103] If this is true (or if wealthy investors think it is true), then wealthy investors will prefer private capital markets over public capital markets for whatever special investment opportunities offer above average returns because tax on wealth attributable to above average returns is avoided under the complementary tax until there is event requiring wealth accumulated through excess returns to be reported.

Private equity venture capital funds and hedge funds raise this concern concretely for some believe these investment opportunities provide better than normal returns on average.[104] Revaluation rules play an important role here. Hedge funds vary in the frequency of redemption windows. Some funds allow investors to withdraw at the end of a quarter provided an investor gives 30-day notice. At the other extreme, some funds require investors to commit capital for multiple years.[105] When a fund allows redemptions the redemption price will be used to revalue all interests in the fund. If the redemption price reflects better than normal returns, then these are quickly captured by the complementary tax.

Through revaluation the expected tax burden on an investment in a mutual fund under the securities tax and an investment in a hedge fund under the complementary tax will tend to converge as redemption opportunities become more frequent in a hedge fund. This suggests the major distortion caused by the complementary tax will be towards illiquidity in private capital markets. For example, if a hedge fund expects higher than normal returns, then it can reduce the tax burden on its capital by reducing the number of redemption windows and/or imposing restrictions on redemptions rights that reduce price. An extremely wealthy individual can reduce his or her tax burden by investing in a large portfolio of directly owned real estate, planning to dispose of investments that yield worse than normal returns while retaining investments that yield greater than normal returns. And a founder of a successful company who decides to take the company public can reduce the tax burden on the retained ownership interest by using a dual class of stock structure, and imposing significant restrictions on the liquidity of the restricted stock.

The fact that the major distortion is towards illiquidity creates a positive feedback effect, from the government's perspective. Illiquidity increases the cost of exploiting the principal defect in the complementary tax, which is the possibility the rule basing the tax on estimated value creates for wealthy households or nonprofits to invest in a portfolio of risky assets, planning to dispose of assets with below normal returns while retaining assets with above normal returns, and thereby assemble a portfolio of undervalued assets.

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[103] Piketty at 448-450.

[104] Ludovic Phalippou & Oliver Gottschalg, The Performance of Private Equity Funds, 22 Rev. Financ. Stud. 1747 (2009), report this belief and argue the facts may not bear it out because the average return on private equity, once fees are subtracted, is below that of the S&P 500. Conversely, Robert S. Harris, Tim Jenkinson, and Steven N. Kaplan, Private Equity Performance: What Do We Know?, 69 Journal of Finance 1851 (2014), find returns on private equity generally outperform the S&P 500.

[105] Rene M. Stulz, Hedge Funds: Past, Present and Future, 21 Journal of Econ. Perspectives 175, 179 (2007).

Illiquidity increases the cost of disposing of loss assets, making it more expensive to pursue this strategy.

B) Persons subject to the complementary tax

The complementary tax is a backup tax to ensure capital owned by households and nonprofits that is not subject to the securities tax bears a similar tax burden. Thus households and nonprofits are the principal persons subject to complementary tax. A household is subject to the tax if it owns a real asset (other than owner-occupied housing or a consumer durable) or a financial asset other than a publicly traded security, like an equity interest in a closely held business. When an asset is an interest in an entity the entity is obligated to pay the tax. The entity also is obligated to estimate the value of the interest.

A defined benefit pension fund should be subject to the complementary tax when a fund holds an asset that would be subject to tax, if a household held the asset. This is for administrative reasons. There are two options for taxing a defined benefit pension fund. One option is to treat household wealth represented by a pension claim against a defined benefit pension fund as an asset subject to the complementary tax. The other option is to ignore pension claims against a fund and to treat a defined benefit pension fund like a household with respect to the complementary tax. The second option is easier administratively for it does not require ascertaining the value of pension claims against a fund. A pension fund need concern itself with the complementary tax only if and to the extent it holds assets subject to the complementary tax. The second option also eliminates the troublesome issue of how to value pension claims against a defined benefit pension fund that is under-funded, as many are. A family trust should be subject to the complementary tax for the same reason. Imposing the tax obligation at the trust level eliminates the need to estimate the value of individual interests in the trust.

Generally, assets owned by a business firm are not subject to the complementary tax even if a firm is closely owned. The tax is assessed on interests in a firm and not assets owned by a firm. An explanation follows. The options for taxing wealth held through an entity are between what I will call outside value, inside value, or a mixture of the two as a basis for assessing the complementary tax. The concepts of outside and inside value are similar to the concepts of outside and inside basis in partnership tax,[106] substituting the estimated value of an interest or an asset for its tax basis. Outside value refers to the estimated value of interests in an entity. Inside value refers to the estimated value of an entity's assets.

Reasons of administrative simplicity strongly favor using outside value in the case of a business firm, by which I mean an entity engaged in an active business enterprise. For most business firms the right-hand side of the balance sheet showing equity and debt is much simpler than the left-hand side of the balance sheet showing a firm's assets. A firm will have many fewer holders of its equity and debt than it will have assets. Estimating the tax using items on the right-hand side of the balance sheet involves many

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[106] See Laura E. Cunningham & Noel B. Cunningham, The Logic of Subchapter K (4th ed. 2010).

fewer calculations. It eliminates the need to account for cash flows (both income and expense) at the firm level. It is only necessary to account for cash flows between a firm and holders of its equity and debt when they are persons subject to the complementary tax.

An argument for using inside value is that sometimes it is a better measure of the actual value of a business firm. For example, inside value is a better measure of the value of a successful firm when success is reflected in a positive cash flow that is reinvested within the firm. But outside value typically is a better measure of the value of a business because trading of equity in a business firm is a much more common occurrence than trading by a business firm of its core business assets, in which most of a firm's value subsists.[107] For this reason the complementary tax generally should be assessed on outside value when an entity is engaged in an active business enterprise.

A general rule basing the complementary tax on the value of interests in a business firm can be supplemented with special rules that require revaluation of interests in a firm on defined entity-level events. For example, a business firm should be required to revalue owners' equity if the entity disposes of substantially all of its assets and receives cash or a note in return. This is essentially an anti-abuse rule to complement the general rules requiring an entity to revalue owners' interest when there is a price-setting transaction involving an interest.

The rule taxing outside value rather than inside value should give way when the reasons for the rule do not apply. The line to be drawn is illustrated by a comparison of a family limited partnership that holds investment assets, including debt or equity in a closely held business firm, and a private equity "fund of funds" that is used as a conduit for investing in venture capital funds or hedge funds. A family limited partnership should be treated as a person subject to the complementary tax, meaning assets it owns are subject to the complementary tax, because there is likely to be infrequent trading of interests in the family limited partnership and frequent trading by the family limited partnership of assets in its portfolio. Moreover, a family limited partnership is likely to be structured to suppress the value of interests in the partnership. Thus, outside value is likely to be sufficiently divergent from inside value to make it worth accounting for inside value. Conversely a private equity "fund of funds" should not be treated as a person subject to the complementary tax, meaning interests in the fund will be subject to the tax while assets owned by the fund will not even though these assets are not publicly traded securities. Trading of interests in a fund will be sufficiently frequent that outside value will be sufficiently congruent with inside value to make it not worth the effort to calculate inside value.

C) Commodities and derivatives

Commodities and derivatives present the issue of how to handle assets that typically are held by businesses and financial intermediaries for use or risk management but sometimes are held by households and nonprofits for investment. Commodities and

[107] Edward D. Kleinbard, Reimaging Capital Income Taxation.

derivatives represent a small fraction of the wealth of households and nonprofits.[108] Businesses and financial intermediaries hold most of these assets. When a publicly traded entity holds commodities and derivatives their value is captured by the securities tax. Similarly the complementary tax on the estimated value of interests in an entity captures the value of these assets when they are held by closely held businesses or by private financial intermediaries, like a hedge fund. These assets need to be addressed under the securities tax or the complementary tax only when a household, a nonprofit, or another person subject to the complementary tax holds them as an investment asset.

Gold is an example of commodity that is held in significant quantity by households as an investment asset. While a fair amount of the world's gold is held for investment, it remains the case that most gold is purchased for use in a business. Thus, it is estimated that in 2007 68.2 percent of global gold purchases were for the manufacture of jewelry and 13.1 percent was for industrial and dental uses. Still a substantial amount of gold—18.6 percent in 2007—was purchased for investment. About two-thirds of this was retail investment and one-third was through funds, which includes both publicly traded funds and private funds such as hedge funds.[109]

Today when households invest in commodities they often do so by investing in a publicly traded commodity fund[110] or by purchasing a commodity exchange-traded note. An interest in a publicly traded commodity fund and a commodity exchange-traded note is a publicly traded security, so the fund or the note issuer should be required to withhold tax based on the market price of its security, like any other security issuer.

More generally, an issuer of a security that is held in material quantity by households, nonprofits, or other persons subject to the complementary tax should be required to withhold the tax even if a security is mostly held by businesses and financial intermediaries, which are not subject to the complementary tax. Requiring an issuer to pay the tax yields significant benefits with respect to securities held by households and nonprofits in reducing administrative and compliance costs involved in asking a holder to account for the security and pay the tax, and in eliminating evasion by non-reporting. With respect to securities held by businesses and financial intermediaries, there is an offsetting compliance cost in the burden imposed on an issuer to pay the tax and to report the price of a security, and in the burden imposed holder to account for security to obtain

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[108] I am unaware of a study of portfolio composition that disaggregates exotic investments with sufficient granularity to estimate the portfolio share of commodities and derivatives. Kennickell has the most granular data and he lumps together these assets with other unusual assets, including trust accounts, annuities, oil leases, and royalties. He estimates that in 2007 the larger asset categories that include commodities, derivatives, and capital invested through hedge funds comprised 3.4 percent of the wealth of all households and 3.8 percent of the wealth of the richest 1 percent. The figures are from Figure A3a, p. 63. The assets are included in OTHMA ("Equity holdings of annuities, trusts, and managed investment accounts") and OTHFIN ("Value of miscellaneous financial assets (e.g. futures contracts, oil leases, royalties, etc.)").

[109] Shahirar Shafiee and Erkan Topal, An overview of global gold market and gold price forecasting, 35 Resources Policy 178, 179 (2010).

[110] L. Christopher Planter, Commodity Markets and Commodity Mutual Funds, ICI Research Perspective 18, no. 3 (May), reports that as of December 2011, there were 52 commodity mutual funds with total assets worth $47.7 billion. There are also exchange traded commodity funds.

the credit. But this compliance burden is small and easily offset by the benefits in reduced administrative and compliance costs and in eliminating evasion, when persons subject to the complementary tax hold a security in material quantities.

People who choose to directly invest in gold and silver often do not take physical possession of bullion. Instead bullion is held by depository institutions, which issue depository receipts to represent ownership.[111] Gold and silver depositories should be required to pay the tax on the value the bullion in their vaults represented by depository receipts. This is to eliminate the tax advantage for holding gold and silver through a depository that would otherwise exist. This shifts the distortion for it encourages individuals who want to avoid paying tax to take physical possession of gold and silver. But taking possession of gold and silver involves significant insurance and storage costs.

On the other hand, warehouses that issue receipts for commodities like oil or cotton that are held in immaterial quantities by households should not be required to pay the tax on the value of their receipts. The value of this capital is close to fully captured by the securities tax and the complementary tax. To require warehouses to pay the tax and to report the assessment price to receipt-holders, and to require receipt-holders to claim the credit, imposes unwarranted administrative costs and compliance costs, given the presumably miniscule amount of wealth held by households and nonprofits through these receipts.

Derivatives raise issues similar to the issues raised by commodities. This is not surprising for commodities and derivatives are close substitutes as financial investments. The return on an investment in a commodity depends on movement in the commodity's price. An investment in commodity does not yield interest or rent. Investors and traders who seek exposure to movement in commodity prices can achieve this without making an investment in a commodity through a derivative contract. Just as commodity producers and users hold most commodities, most trading in commodity derivatives is by commodity producers and users who use commodity derivatives to hedge price risk. Investors who are considering an investment in commodities to diversify a portfolio and obtain a hedge against inflation may as well achieve these objectives by using commodity derivatives. Similarly, investors and traders who seek exposure to movement in the price of a security can achieve this objective without purchasing the security through a securities derivative.

Forward contracts and options are the basic forms of a derivative.[112] A forward contract is a contract for delivery of the underlying commodity or security and payment at a future date at the forward price. Often the obligation on a forward contract is fulfilled by the party on the losing side of a contract paying the difference between the contract price and the spot price of the underlying commodity or security on the settlement date. An option can be either a put or a call. With a call the option holder can

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[111] Comex holds an inventory of gold bars in a warehouse in New York City an issues depository receipts that are supposed to represent a claim upon a specific bar. Early in 2015 the Bank of Montreal began a gold and silver deposit receipt program to allow investors to buy and sell receipts backed by bullion in its possession. Information about the program can be found at http://www.bmobullion.com/canada/

[112] Michael Durbin, All About Derivatives 1-60 (2006).

demand delivery of the underlying commodity or security upon payment of the exercise price on the exercise date. The option writer is under the delivery obligation. With a put the option holder can demand payment of the exercise price upon delivery of the underlying commodity or security on the exercise date. The option writer is under the payment obligation. As with forward contracts, many options are settled without delivery of the underlying commodity or security by the writer paying the holder the difference between the exercise price and the market price on the exercise date.

Futures are simply exchange-traded forward contracts. Options can be exchange-traded or "over the counter." When a derivative is exchange-traded the exchange serves as clearinghouse, making payment and delivery, and the exchange bears counter-party default risk. Other more complex derivatives like swaps generally can be decomposed into a set of forward contracts and/or options. For example, a currency swap is essentially a series of forward contracts on the swapped currencies over the term of the swap. Swaps generally are over the counter, and are not exchange traded.

Derivatives create significant problems for the income tax because of the gaming opportunities they create.[113] For example, under the income tax the existence of derivatives sometimes makes it necessary to impute interest on an investment in a commodity even though the investment pays no interest. The forward price of a commodity generally equals the spot price plus interest. If interest is not imputed on an investment in a commodity, then an investor could replicate the return on a bond while avoiding the tax on interest by purchasing a commodity and entering into a forward to deliver the commodity at the forward price. Alternatively, an investor could purchase a commodity and also purchase a put at the forward price while selling a call at the forward price.

Derivatives in the pure form of a forward contract or option do not create similarly significant problems for the securities tax and the complementary tax because they do not have a material investment element.[114] In its pure form a forward contract is a bet on the future price of the underlying commodity or security. There is no investment element. There is a small investment element in an option represented by the price paid by an option holder to a writer for an option. But for most options the price is a small fraction of the value of the underlying commodity or security. The purchase price of an option is a significant share of the underlying commodity or security only if an option is "in-the-money" when purchased, or if an option is for a very long term.

Derivatives raise two general concerns under the securities tax and the complementary tax. First, a derivative may have a material investment element. For example, a commodity exchange-traded note is essentially a prepaid forward contract with the price of a commodity (or a basket of commodities) as the forward price. When

[113] There is a large literature on the problems derivatives create for the income tax. For a fuller explanation of the basic points covered in this paragraph see Alvin C. Warren, Jr., Financial Contract Innovation and Tax Policy, 107 Harv. L. Rev. 460 (1993), and David S. Miller, Reconciling Policies and Practice in the Taxation of Financial Instruments, 77 Taxes 236 (March 1999).
[114] Reed Shuldiner, General Approach to the Taxation of Financial Instruments, 71 Tex. L. Rev. 243 (1992), covers this ground.

individuals and nonprofits (or other persons subject to the complementary tax) hold these instruments the wealth the instruments represent needs to be taxed to avoid asymmetric tax treatment of financially similar instruments. Second, derivatives that are acquired without a material investment raise a concern to the extent the timing option creates an opportunity for individuals and nonprofits to amass a portfolio of undervalued assets using derivatives. For example a wealthy individual could enter into long-term forward contracts planning to settle negative positions while holding positive positions, and thereby quickly amass a portfolio of contracts that represent substantial wealth without reporting any investment. Something similar is possible with short-term forward contracts or futures if it is possible for a party to rollover a positive position without taking account of the gain on the position.

Rules to address these concerns involve some line drawing and concomitant complexity but there are fewer lines to be drawn and the rules involve significantly less complexity than the rules needed to account for derivatives under an income tax. The first and most important line is between an instrument like an option and a prepaid forward that can only be an asset and can never be a liability on a party's balance sheet and an instrument like a futures contract that can either be an asset or a liability on a party's balance sheet. An instrument that can only be an asset on a party's balance sheet raises issues similar to the issues raised by commodities. If an instrument is a publicly traded security, and persons subject to the complementary tax hold the security in material quantity, then the issuer should be required to withhold the tax on all securities of the type in question. Thus, an issuer of an exchange-traded note that is indexed to the price of a security or to the price of a basket of securities should be required to withhold the tax based on the market value of the notes.

Over-the-counter derivatives are unlike public traded securities because the dealer knows the customer's identity, and so the dealer can be required to withhold the tax if the customer is a person subject to the complementary tax. If a dealer is required to mark an instrument to market under regulatory, contractual, or accounting rules, then the tax should be based on the instrument's market price. For other instruments the dealer should be required to withhold the tax based on the estimated value of an instrument. Dealers should be required to withhold the tax on over-the-counter derivatives that are held by persons subject to the complementary tax to eliminate the tax advantage that would otherwise arise for over-the-counter derivatives over comparable publicly traded securities. To be clear, this is only with respect to a derivative like an option or a prepaid forward that can only be an asset and can never be a liability on the customer's balance sheet.

A derivative like a futures contract that can either be an asset or a liability on a party's balance sheet raise the problem of netting positive and negative positions. Futures are publicly traded securities that are backed by the exchange on which the security is traded. While futures are publicly traded securities, an exchange should not be required to withhold tax on futures it backs for the securities represent wealth held by a party only if the party has a net positive position.

Brokerage accounts are a different matter. A clearinghouse exchange guarantees performance of a contract to protect a trader from counterparty default risk.[115] Parties who trade in futures are required to trade through a broker who is a member of a clearinghouse exchange. To protect itself from default risk an exchange requires a member to purchase a position on the exchange. An exchange also monitors a member's net position and imposes margin requirements to protect against broker default risk. A broker similarly monitors a customer's net position and imposes margin requirements to protect against customer default risk. Wealth represented by exchange-traded futures should be taxed by requiring a broker to withhold the tax on the value of a positive position that is held by a person subject to the complementary tax.

D) Integrating the two taxes

Under the securities tax capital that is represented by a string of publicly traded securities is taxed only once. This is achieved by giving a security issuer a credit against tax owed with respect to its securities for tax paid with respect to publicly traded securities it owns. This Section explains how double taxation of capital is avoided when a privately held entity owns publicly traded securities as well some related issues. By a privately held entity a mean an entity with non-publicly traded interests that held by households, nonprofits, or other persons subject to the complementary tax. This includes closely held businesses and private equity.

The integration of the securities tax and the complementary tax is straightforward in most cases in which a privately held entity owns publicly traded securities. The entity gets a credit against its withholding obligation on the estimated value of interests in the entity for the value of publicly traded security it owns. For example, if a closely held business has equity with an estimated value of $5 million owned by persons subject to the complementary tax (e.g., individuals or nonprofits), no debt owed to persons subject to the complementary tax, and it holds publicly traded securities valued at $1 million for purposes of the securities tax, then it gets an $8,000 tax credit for the $1 million in publicly traded securities, and so it is obligated to withhold $32,000 under the complementary tax. If an owner is entitled to a partial rebate, then this is based on the estimated value of the owner's interest.

It is possible that a privately held entity will own publicly traded securities worth more than the estimated value of interests in the entity. When this occurs the entity should not be given a refund for the excess credits. This is a prophylactic rule. The rule discourages parties from using a private entity like a family limited partnership that is structured or managed to suppress the value of interests in the entity to avoid the

[115] Randall S. Kroszner, Central counterparty clearing: History, innovation, and regulation, Economic Perspectives 4Q/2006, succinctly explains the function and development of clearing house exchanges, focusing on Chicago Board of Trade. The short paper is his inaugural speech as a member of the Board of Governors of the Federal Reserve System. Kroszner covers the same ground in more detail in Randall S. Kroszner, Can the Financial Markets Privately Regulate Risk, 31 Journal of Money, Credit and Banking 596 (1999). A theme of both the speech and the paper is the emergence of a clearing-house exchange for standardized over-the-counter derivatives.

securities tax on publicly traded securities owned through the entity. This is an imperfect prophylactic rule for a reason explained below.

Excess credits may be allocated to a holder of a non-publicly traded interest in an entity when the interest is not subject to the complementary tax because the holder is not a person subject to the complementary tax. This possibility arises when a publicly held entity holds a non-publicly traded interest in an entity that owns publicly traded securities. For example, *ABC* partnership borrows $4 million from Commercial Bank and the partners invest $1 million in equity. The firm prospers and the partners eventually exchange its assets for $7 million in publicly trade stock, which they hold through the partnership. The partner's equity interests are valued at $3 million because the bank loan remains outstanding. The partnership will have an excess credit on $4 million. This credit should be allocated to Commercial Bank though its interest in the partnership is not subject to the complementary tax. This avoids double taxation of this capital.

What if non-publicly traded interests in an entity are held by a mix of persons who are subject to the complementary tax and persons who are not, and the entity owns a mix of publicly traded securities and other assets? It may seem necessary to have rules to allocate the credit in this case to prevent people from using the power to allocate the credit to reduce the tax burden on capital. But this generally is a non-issue for the allocation of the credit does not alter the tax burden on capital so long as the securities tax and the complementary tax are at the same rate. Nor does it become an issue if a partial rebate of the tax is paid to some persons subject to the complementary tax. The government generally is indifferent regarding to whom the credit is allocated in this case.[116]

While the government generally is indifferent regarding to whom the credit is allocated, it is important that only one person get the credit. Preventing duplicative claims of ownership of publicly traded securities may be the most significant administrative problem facing the securities tax. I will use hedge funds to illustrate the problem and explain the basic options for a solution, none of which is ideal. An equity interest in a hedge fund is subject to the complementary tax (assuming the interest is held by a person subject to the complementary tax) because it is not a publicly traded security. The value of an interest is estimated assuming a normal return on the initial capital investment in a fund, less cash distributed by the fund. An interest will be revalued based on its redemption price, if there is a redemption event, or based on its trading price, if there is a trade in a secondary market. This much is straightforward. The problem hedge funds pose is determining the credit due to a fund against its obligation to pay the tax on the estimated value of owners' equity based on the market value of publicly traded securities held by the fund.

[116] The caveat to this is that the government has an interest in suppressing the allocation of excess credits when the excess is a product of under-valuation of non-publicly traded interests in an entity. This interest can be served by requiring an entity with sufficiently illiquid interests to justify allocating the credit to an interest holder who is not subject to the complementary tax by establishing the value of the interest warrants the credit allocated.

This is a particularly difficult problem with respect to hedge funds because of two characteristics common to hedge funds: they are high frequency securities traders and they often are highly leveraged.[117] Hedge funds typically seek to profit by finding pricing mistakes in securities markets that can yield a low-risk profit if the mistake is adroitly played. Large-stake investors, including extremely wealthy individuals, well-endowed nonprofits, and large pension funds provide a fund's equity. Funds often exploit leverage to multiply an investor's return on equity.[118] They usually obtain additional capital through short-term money-market arrangements. A fund's play on a pricing mistake often will involve a massive short-term position in publicly trade securities—some representing investor's capital but most representing borrowed capital—coupled with derivatives in the form of options, futures, or swaps to eliminate risks apart from whatever risks that are inherent in the play on the mistake.

In particular, hedge funds often use securities repurchase agreements (repos) to obtain short-term financing.[119] Repos combine the two common hedge fund characteristics: high frequency security trading and leverage. To obtain capital through a repo, a fund will "sell" securities it owns to a cash-provider, such as a money market mutual fund or a pension fund with momentary excess liquidity, and promise to repurchase the securities at a future date for the cash price plus interest. A repo is basically a secured loan of the security's cash price with the lender's protection against default being possession and ownership of the underlying security. The cash providers generally are financial intermediaries that need to maintain liquidity, like money market funds or pension funds. Repos tend to be very short-term loans or open term and callable on short notice.

Financing arrangements like repos that involve a transfer of a security can make it difficult to determine ownership of a security for purposes of the credit or rebate. It is important that only one credit be taken for a security that is used in a repo, just as it important that only one credit be taken for a security that is transferred during a year. In principle this could be left to the parties to a repo to decide because the government is indifferent to who takes the credit, so long as only one credit is taken. The parties to a

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[117] Rene M. Stultz, Hedge Funds: Past, Presnet, and Future, 21 Journal of Econ. Perspectives 175 (2007), and William Fung & David A. Hsieh, A Primer on Hedge Funds. 6 Journal of Empirical Finance 309 (1999).

[118] Andrew Ang, Sergiy Gorovyy, and Gregory B. van Inwegen, Hedge fund leverage, 102 Journal of Financial Economics 102 (2011). Long-Term Capital Management illustrates. The following is based on Franklin R. Edwards, Hedge Funds and the Collapse of Long-Term Capital Management, 13 Journal of Econ. Perspectives 189 (1999). From 1994 to 1998, the fund returned large returns after fees by buying bonds it considered to be undervalued and shorting bonds it considered to be overvalued using a model that assumed the spread in yields between high-risk and low-risk bonds was excessive. At the start of 1998 it had $4.8 billion in equity. To magnify its payoff when yield spreads narrowed it is reported to have leveraged its position on some bonds 30 to 40 times. Id. at 198 n. 5. It also had large positions in derivatives with a notional value in excess of $1 trillion though it is not clear what the net exposure was on these contracts. Many of the bonds held by the fund were illiquid. As a result of several market shocks, yield spreads grew, rather than decreased during 1998, and the fund's equity dropped from $4.8 billion to $600 million by mid September. The fund was unable to meet margin calls and was rescued by a consortium of creditors organized by the Federal Reserve Bank of New York.

[119] See Tobias Adrian, Brian Begalle, Adam Copeland, and Antoine Martin, Repo and Securities Lending, NBER Working Paper 18549 (Nov. 2012).

repo could even agree to apportion the credit. But leaving this to private parties to decide on a case-by-case basis imposes transaction and compliance costs on the parties and enforcement costs on the government, which will have to monitor tax reporting to ensure compliance with an allocation agreement. A mandatory rule allocating the credit in a repo reduces transaction, compliance, and enforcement costs. For the same reasons there must be a mandatory rule designating which party is entitled to the credit when a security is transferred during the year.

What should the mandatory rule be? In Section II-B I proposed a simple rule for securities that are transferred during the year that treats the owner of the security for purposes of the credit or the rebate as the owner on a specified date, such as the last day of the calendar year. Under this simple rule, the lender in a repo that is open on the last day of the calendar year is entitled to the credit because it owns the underlying security on the relevant day. This simple rule works fine in cases in which both parties to a repo, or to a transfer of a security during the year, are in a position to use the credit because the credit is of equal value to the parties. The parties can take the rule into account in pricing the transaction. Under this rule, the price of a repo that is open on the last day of the calendar year should rise to reflect the value of the credit.

But this simple rule creates a gaming opportunity when an entity has excess credits because the value of publicly traded securities owned by the entity exceeds the value of interests in the firm. This can occur naturally as a result of market forces. Thus, sometimes securities issued by a closed-end mutual fund will trade at a discount below the value of securities owned by a fund.[120] If this occurs at year's end, then a mutual fund can "sell" its excess credits by entering into repos. While this possibility is not particularly worrisome when an entity has excess credits as a result of natural market forces, the possibility is worrisome insofar as it enables people to exploit defects in the complementary tax to avoid the tax on publicly traded securities. For example, if clever taxpayers were able to structure and manage a family limited partnership so that the estimated value of interests in the partnership was less than the value of publicly traded securities owned by the partnership, then they could use repos to sell the excess tax credits, and thereby avoid the tax on publicly traded securities.

This brings me back to hedge funds. Successful funds that earn significantly above normal returns and that do not allow frequent redemptions will be in a position where the estimated value of interests in a fund is significantly less than the value of a fund's assets. Because hedge funds are high frequency traders of publicly traded securities and because they are highly leveraged, they also are likely to be in a good position to exploit the flaw created in a securities tax by a simple rule that defines the owner of a security for purpose of the credit as the owner on the last day of the calendar year. In particular, successful hedge funds may often find themselves in an excess credit position at year's end, because of the under-estimation of the value of the interests in a fund, and because a fund is likely to hold a large portfolio of publicly traded securities.

[120] Charles M.C. Lee, Andrei Shleifer, & Richard H. Thaler, Anomalies: Closed-End Mutual Funds, 4 Journal of Econ. Perspectives 153 (1990).

Since hedge funds trade at very low costs it will be easy for a fund to cash in on this position by repos or other transactions designed to sell the excess credits.

If this turns out to be a material source of leakage of revenue from the securities tax, then there are possible solutions. For example, repos and similar short-term transfers of a security could be disregarded for purposes of determining entitlement to the credit. Of course, any solution to a problem of this nature will create complexity and may create new problems. But this problem is not a reason to reject the securities tax and the complementary tax if the alternative is to retain the existing system for taxing capital, for the problem is trivial in comparison to the problems that infect the existing system. Nor is this problem significant enough to count as a material factor in the ultimate decision whether to tax capital. It is a minor blemish on the securities tax and the complementary tax.

VI. Integrating the Taxes With a Tax on Labor Income

This Section addresses issues involving the integration of the securities tax and the complementary tax with a tax on labor income. Section A addresses ways in which eliminating the tax on business enterprise income may negatively affect the tax on labor income. Sections B and C address the problem of separating labor income from capital income. Section B addresses the problems of taxing compensation in the form of while Section C addresses the taxation of a venture in which an individual contributes a mix of labor and capital. A general theme is that the bigger problems in these areas can be eliminated by a cash flow consumption tax or a value added tax. They are specific to a wage tax.

A labor income tax can take several forms. The basic options are: a wage tax, a cash-flow consumption tax, and a value added tax. Under a wage tax labor income is taxed on receipt. Under a cash flow consumption tax labor income is taxed when it is consumed. The two taxes differ in the taxation of labor income that it is saved for future consumption. Under a wage tax labor income that is saved for future consumption is taxed when the income is received. No further tax is imposed when the savings are consumed. The current treatment of wages that are invested in a Roth-IRA account is a familiar example. Under a cash flow consumption tax labor income that is saved is taxed when the savings are consumed. The current treatment of wages invested in a traditional IRA account is a familiar example. If tax rates remain constant, then a wage tax and a cash-flow consumption tax impose the same tax burden on savings, which is zero. This is why both taxes are considered to be a tax on labor income, and not a tax on capital income.

A value added tax ("VAT") is a consumption tax that is collected from business enterprises. Under the traditional VAT a business enterprise pays tax on its gross receipts less the cost of inputs other than wages. This is similar to a sales tax on consumption goods. The major difference between a VAT and a sales tax is that under a VAT the tax on consumed goods is collected from every firm in the chain of production and distribution of a good, based on the value added by the firm, while under a sales tax the

entire tax is collected from the last firm in the chain. A VAT is functionally similar to a flat rate cash flow consumption tax so it to is a tax on labor income.

These three different forms of a labor income tax differ in how well they function alongside the securities tax and the complementary tax. A wage tax is the worse companion tax because it requires distinguishing wages, meaning labor income, from capital income.[121] These problems are discussed in Sections B and C. A cash flow consumption tax and a VAT largely avoid problems of the sort examined in Sections B and C because both tax income from all sources when the income is consumed, and without regard to whether the income derives from labor or capital. A cash flow consumption tax does this explicitly by taxing labor and capital income when the income is not reinvested. A VAT does this implicitly by taxing consumption goods. The problems that remain are fairly minor and involve difficulties equity compensation and mixed returns create in the estimation of asset value under the complementary tax.

A cash flow consumption tax and a VAT have another advantage as a companion tax to the securities tax and the complementary tax. The securities tax and the complementary tax are a tax on the normal return on capital. Thus, a fortunate investor who earns an above normal return is not taxed on the above normal return unless the returns are reinvested, and then the reinvested returns are taxed at the low rate that applies to capital generally. Gain is not taxed as such. Thus, a fortunate gambler in capital markets who cashes out and consumes her winnings will never pay tax on her winnings under the securities tax and the complementary tax. Nor will she pay tax on her winnings under a wage tax for the winnings are capital income and not labor income. Her winnings will be taxed under a cash flow consumption tax and a VAT.

This raises the question: what benefits, if any, does a wage tax offer? The principal advantage is with respect to transitional fairness.[122] Under a cash flow consumption tax and a VAT old capital—meaning capital that was amassed before the change in tax law—is taxed when it is consumed. When old capital has already been taxed under the old income tax this will seem like double-taxation since a cash flow consumption tax and a VAT replace the old income tax. The securities tax and the complementary tax are not susceptible to this objection for they basically are a tax on future returns on capital.

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[121] This point is well-known. See, e.g., Bankman & Shaviro, supra note xxx, at 464 ("While the end result of uniform commodity taxation can be achieved via either wage taxation . . . or consumption taxation, the latter is often considered superior in practice, for administrative reasons. Use of a consumption tax model eliminates the need to identify economic wages that were labeled as capital income.") The X-Tax is a VAT in which a business enterprise deducts the cost of wages, along with other inputs. Decoupling wages from the VAT makes it impossible to tax wages at progressive rates. But this makes it necessary to distinguish wages from capital income, raising the problems addressed in Sections B and C.

[122] There is a large literature on the fairness and economic considerations involved in transitioning from an income tax to a consumption tax. See, e.g., Joseph Bankman & Barbara H. Fried, Winners and Losers in the Shift to a Consumption Tax, 86 Georgetown L.J. 539 (1998); Shounak Sarkar and George R. Zodrow, Transitional Issues in Moving to a Direct Consumption Tax, 46 National Tax J. 359 (1993). For the argument that a wage tax largely eliminates these transitional issues see Mitchell L. Engler & Michael S. Knoll, Simplifying the Transition to a (Progressive) Consumption Tax, 56 S.M.U. L. Rec. 53 (2003).

A cash flow consumption tax and a VAT have different strengths and weaknesses as a companion to the securities tax and the complementary tax. Generally, a cash flow consumption tax is a better companion tax with respect to reported income while a VAT is a better companion tax with respect to unreported income. With respect to reported income, a cash flow consumption tax slightly strengthens the complementary tax by giving an individual an incentive to report that income has been invested in order to avoid paying the consumption tax on the income. An individual does not have the same incentive to report that income has been invested under a VAT.[123] This is not a problem with respect to the securities tax. But it is a problem with respect to the complementary tax. On the other hand, a VAT taxes unreported income that is consumed because the tax is included in the price of consumption goods. A cash flow consumption tax does not tax unreported income.

A) Effects of eliminating a tax on business enterprise income

There is no tax on business enterprise income under the securities tax and the complementary tax. This removes an important lever used under the existing income tax to deter firms from substituting untaxed fringe benefits for cash compensation, and to indirectly tax the consumption value to an employee of noncash benefits.[124] The lever is to deny the firm a deduction for the cost of noncash compensation. Thus, a firm is allowed to deduct only half the expense of business meals and entertainment to discourage substitution of these benefits for cash compensation, and to indirectly tax the consumption value to an employee of meals and entertainment.

Other levers are available under a labor income tax to discourage people from substituting fringe benefits for cash compensation, and to tax the consumption value of a fringe benefit, that do not require imposing a tax on business enterprise income. For example, a firm may be required to report a fraction of the cost of a fringe benefit in an employee's reported income. Thus, when a firm reimburses an employee for the cost of a business meal and entertainment, the firm could be required to report half of the reimbursement as compensation paid to the employee.

But it is likely to be politically unfeasible to tax employees directly on some fringe benefits where it would be politically feasible to tax employees indirectly by taxing business enterprise income and denying a firm-level deduction for the cost of a fringe benefit. The absence of a general business enterprise income tax also means that rules that require firms to account for specific expenses are likely to entail a greater marginal administrative cost. Some items will not be worth accounting for in the absence of a general system of income and expense accounting. For example, it is possible under the existing income tax to tax benefits of a general nature provided to employees, like an office refrigerator that is always stocked with food, by denying a firm-level deduction for

[123] This difference is diminished under a VAT to the extent firms subject to the VAT are required to report capital contributed to a firm in order to be able to treat the capital as an expense.

[124] Daniel I. Halperin, Business Deduction for Personal Living Expenses: A Uniform Approach to an Unsolved Problem, 122 U. Pa. L. Rev. 859 (1974).

the expense.[125] It is inconceivable politically and administratively to tax these benefits as reported income under a tax on labor income that is the form of a wage tax or a cash-flow consumption tax.

There is no point to saying anything further about the problem of fringe benefits under a labor income tax in the absence of a tax on business enterprise income because how the problem is handled in practice will turn on precisely how the statute is drafted and implemented in regulations.[126] My point is fairly modest. While fringe benefits are not handled very well under the existing income tax, they are likely to be handled even worse if the existing system for taxing capital income is replaced by the securities tax and the complementary tax. They will be handled worse because eliminating a business enterprise income tax takes firm-level solutions to the problem off the table. Thus we should expect greater distortions on the margin of substituting in-kind compensation for cash compensation.

Eliminating the tax on business enterprise income may weaken the tax on labor income in respects other than encouraging greater substitution of noncash compensation for cash compensation. The existing tax system is particularly successful in collecting taxes on wages, which generally is attributed to reporting and withholding requirements that are imposed on employers.[127] The employer penalties for violating the reporting and withholding requirements are reinforced by an employer's incentive to report compensation in order to claim a deduction for the expense.[128] Eliminating the tax on business enterprise income will eliminate this incentive, which may reduce employer compliance with the reporting and withholding requirements. If this effect is significant, then this is a reason to favor a VAT over other types of taxes on labor income because a VAT taxes unreported income that it is consumed.

B) Illiquid capital as compensation

This Section addresses the problems of taxing compensation when it is a form of capital other than cash or a publicly traded security.[129] I will focus on the case in which

[125] Technically the cost of an office refrigerator that is always stocked with food does not qualify as a de minimis fringe benefit, which is excluded as income, because food is not provided on an occasional basis. Reg. § 1.132-6(d). Another example is the cost of food and beverages served at a business meeting of senior employees.

[126] Joseph Bankman & Michael L. Schler, Tax Planning Under the Flat Tax, in Taxing Capital Income (2007), wisely caution (before addressing how a Flat Tax/X Tax might be gamed): "Generally it is the specific statutory language that creates loopholes. The real test comes only after drafting is complete, Congress has gone home, and the regulations have been written. At that point, armies of tax professionals devote enormous effort to interpreting the specific language of the regulations in the most taxpayer-favorable ways, and in exploiting any perceived loopholes to the fullest. The biggest danger of a flat tax/X tax are the flaws not yet identified, or even existing until the specific language is in place."

[127] Leandra Lederman, Statutory Speed Bumps: The Roles Third Parties Play in Tax Compliance, 60 Stan. L. Rev. 695 (2007).

[128] Susan C. Morse, Stewart Karlinsky, and Joseph Bankman, Cash Businesses and Tax Evasion, 20 Stanford Law & Policy Review 37, 48 (2008), report that underreporting compensation often goes hand in hand with underreporting income.

[129] When a publicly traded security is given as compensation by an issuer the security is subject to the securities tax on transfer, when the employee becomes owner of the security. If the labor income tax is in

an employer gives an employee an equity interest as compensation, such as restricted stock or stock options. The concern is that the securities tax and the complementary tax will create a distortion in favor of illiquid equity compensation over cash compensation.[130]

There is a parallel problem under the existing system: people have an incentive to substitute equity compensation with an uncertain value for cash compensation because this makes it possible to report a low value as the amount of compensation, and so convert labor income that is taxed at high rate into capital income that is taxed as a low rate. This is a common tax strategy in the venture capital industry under the existing tax system.[131] The strategy is to structure an interest given to a founder of a start up company as common stock that is illiquid and of uncertain value. This enables a founder to undervalue the stock in order to report minimal compensation for tax purposes, and to thereby pay tax on any additional value and return at capital gain rates. The prevalence of this strategy under existing tax law is curious for the employer loses a compensation deduction equal to the amount the employee undervalues the stocks. The tax cost to the employer from the lost deduction often is greater than the tax benefit to the employee from converting ordinary income into capital gain.[132]

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the form of a wage tax, then the market value of the security is also subject to the wage tax at that time. If the labor income tax is in the form of a cash-flow consumption tax or a VAT, then the income represented by a security is taxed when the security is sold, if the proceeds are used for consumption and not reinvested.

[130] Under existing tax law equity compensation raises the issue of tax deferral (along with other types of deferred compensation arrangements) as well as the issue of conversion of labor income into capital income. Existing tax law solves the problem of tax deferral in deferred compensation arrangements in much the same way it solves the problem of tax conversion in equity compensation arrangements. The tax benefit to an employee of deferring tax on compensation is offset by the tax detriment to an employer of deferring a deduction for the compensation expense. See Daniel I. Halperin, Interest in Disguise: Taxing the "Time Value of Money," 95 Yale L.J. 506, 519-524 (1986). There generally is no tax advantage to deferred compensation under the securities tax and the complementary tax, if there is a wage tax. From an employee's perspective, the benefit in deferring tax on compensation is swamped by the effect of subjecting the interest component of deferred compensation into labor income, which is taxed at a much higher rate than the normal return on capital. Under the existing system, the interest component of deferred compensation is likely to be taxed at the same rate as labor income, as both are taxed as ordinary income.

[131] Gilson & Schizer, *Understanding Venture Capital Structure: A Tax Explanation for Convertible Preferred Stock*, 116 HARV. L. REV. 874. 899 (2003). Scott Olliverre, *The Influence of Taxation on Capital Structure in Venture Capital Investments in Canada and the United States*, 68 U. TORONTO L. REV. 9 (2010), finds different capital structures dominate in Canada and that the structural differences can be explained by differences in tax law. Victor Fleischer, *Taxing Founders' Stock*, 59 UCLA L REV. 60 (2011), argues that this is a "conspicuous loophole" in the US income tax.

[132] Gregg D. Polsky & Brant J. Hellwig, *Examining the Tax Advantage of Founders' Stock*, 97 IOWA L. REV. 1085 (2012), argue that this disadvantage at the firm level justifies the advantageous tax treatment of recipients. The tax inefficiency of this arrangement is diminished by another tax inefficiency in the structure of the industry. From a tax perspective start-up companies probably should be organized as limited partnerships or as limited liability companies (LLCs), which are taxed partnerships on a pass-through basis. Start-up companies generate large net operating losses in the early years as they burn through their capital. The corporate form keeps these expenses within the firm. When a start-up fails, as most do, these net operating losses expire with the firm. If start-ups were organized as LLCs, then these losses would flow outside the firm and could be used to shield other income from tax. Joseph Bankman, *The Structure of Silicon Valley Start-Ups*, 41 UCLA L. REV. 1737 (1994), is an early treatment of the issue. Professor Bankman examines several countervailing tax and accounting considerations but finds them

The securities tax and the complementary tax eliminate the tax on business enterprise income, and so they eliminate the tax cost to an employer of being denied a deduction when equity compensation is undervalued. At the same time the complementary tax enhances the tax benefit to an employee of undervaluing equity compensation. Under the existing system the benefit is cutting the tax rate roughly in half and deferral of the tax until a realization event. Under the complementary tax a return on equity above the normal rate of return is not taxed. Thus an employee who receives equity as compensation who undervalues the equity eliminates tax on the undervalued component of the equity entirely, while also avoiding the wage tax on this component of value.

Thus, the securities tax and the complementary create a strong incentive for people to substitute equity compensation with an uncertain value for other forms of cash compensation. The solution to this problem is straightforward. It is to tax equity compensation on a cash flow basis except in cases in which the value of equity compensation is readily ascertainable. The exception would cover a compensatory grant of a publicly traded security. It would also cover a compensatory grant of an interest in a private equity fund if the value of the interest could be established by the redemption price or a secondary market price. The exception would not cover founder's common stock in the venture capital industry. The line drawn is similar to the line drawn under existing law with respect to compensatory stock options under Section 83, extending the rule for options to all forms of equity compensation.

If equity compensation is taxed on a cash flow basis, then any cash received by an employee with respect to equity compensation is taxed as labor income. This includes any cash distributions an employee receives with respect to a compensatory equity interest, and any cash an employee receives on sale of a compensatory equity interest. If an employee pays cash for the equity (for example, an employee exercises a stock option and purchases stock) then the rules explained in Section C that are used to separate labor income from capital income apply. Under these rules, any returns in excess of the normal imputed return on capital on an employee's investment are treated as labor income.[133]

This problem does not arise under cash flow consumption tax or a VAT because an employee who receives equity compensation pays the labor income tax when any returns on the equity are consumed. For example, under a cash flow consumption tax, if an employee receives stock compensation, then she will pay the labor income tax when she receives dividends that she does not reinvest, and when she sells the stock, if she does not reinvest the proceeds. And she will pay the labor income tax on the entire amount of

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insufficient to explain the phenomenon. Calvin H. Johnson, *Why Do Venture Capital Funds Burn Research and Development Deductions*, 29 VA. TAX REV. 29 (2009), concurs with Professor Bankman after considering every old and new justification. Professor Johnson also provides some useful data on success and failure rates in start-ups and on the industry structure

[133] To ameliorate the harshness of this rule, an employee might be given the power to convert a mixed-character equity interest that has a readily ascertainable value into a pure capital interest by treating all excess returns to date as labor income. The existing tax rules on nonqualified compensatory stock options illustrate how this would work. When an employee exercises a stock option the difference between the exercise price and the market price of the stock is treated as compensation.

the dividends or the sale proceeds that is not reinvested. A VAT achieves essentially the same result by increasing the price of consumption goods the employee purchases with cash proceeds she does not reinvest.

A small problem remains. It involves valuing an interest in a firm's capital an employee is given as compensation for purposes of the complementary tax. When an interest is not in the form of a publicly traded security it can be under-valued or not reported as an asset on which the complementary tax is due. For example, if a publicly traded corporation gives stock compensation, then the stock will be subject to the securities tax. On the other hand, if the corporation gives compensation in the form of long-term stock options, which are not publicly traded, then the options will not be subject to the securities tax. The grant of stock options should dilute the value of the corporation's outstanding stock, reducing the total amount of capital subject to tax. A solution to this problem is to require the complementary tax to be paid with respect to the stock options from the date of grant. But this is an imperfect solution for the parties are likely to undervalue the options. The possibility of under valuation creates a small tax advantage for illiquid equity compensation.

This is an aspect of a general flaw in the securities tax and the complementary tax. To be clear, this problem is not limited to equity compensation. Deferred cash compensation raises a similar issue because it represents a claim upon a firm's capital, which should reduce the value of other interests in the firm that are subject to the securities tax or the complementary tax. The general problem is that a firm can avoid the taxed on capital by creating interests that represent a claim upon its capital that are not reported or that are undervalued. This is similar to a problem observed earlier. A family-owned company that is thinking of going public can reduce the tax on its capital by creating a class of equity to be held by family members that is not publicly traded and that is subject to restrictions that reduce the risk that a redemption or sale of a restricted interest in the secondary market will result in the interest being accurately valued.

This is a relatively small defect because the low tax rate on capital means the annual tax savings from undervaluing illiquid equity compensation will be fairly small, and these savings are likely to be temporary, because most employees will want to convert illiquid interests into cash or into more liquid investments within a relatively short period. In addition, when a firm gives key employees equity compensation that the firm and the employees undervalue there is a risk that investors in the firm will think it is they who are being cheated. As a check against this sort of thing, publicly traded corporations are under stringent requirements to accurately report the value of compensation paid to officers, executives, and highly compensated employees.[134] Thus this problem is largely limited to closely held business enterprises.

[134] Options dominated stock as a form of equity compensation through the 1990s and into the early 2000s because of accounting rules that undervalued the cost of options to a firm. David I. Walker, *Evolving Equity Compensation and the Limits of Optimal Contracting*, 64 VAND. L. REV. 611, 632–634 (2011).

C) Mixed returns to labor and capital

This part addresses the taxation of individuals who contribute a mix of labor and capital to a venture. The general problem to be solved is separating labor income from capital income. Edward Kleinbard has devised a workable solution to this problem under a wage tax, which he adapts from a system developed for Nordic dual income taxes.[135] The term "dual income tax" refers to an income tax that taxes labor income and capital income at different rates, making it necessary to separate the two types of income. The solution is to presume all returns in excess of a normal return on capital are labor income. As with equity compensation, a cash flow consumption tax and a VAT eliminate this problem by eliminating the need to separate labor income and capital income. The only remaining problem is a small one and involves difficulties mixed returns to labor and capital create for estimating asset value under the complementary tax. Kleinbard's rule may be used here as well.

To illustrate the basic mechanics of the presumption I will use the return paid to a manager in a private equity fund. Typically a fund manager will invest around one to two percent of a fund's capital and receive in return a management fee of 2 percent of the value of the fund's assets plus a carried interest of 20 percent of profits once the limited investors receive a specified rate of return. Under the presumption all returns to a fund manager in excess of the assumed normal return on the capital invested by a manager in a fund are treated as labor income. For example, *M* invests $10 million as manager in *VC Fund*, which has $1 billion in equity. During the first year *M*'s only compensation is a $20 million management fee. Assuming a 4 percent normal return on capital, *M* will treat $400,000 as a return on capital, which is not taxed, and $19,600,000 as labor income. In addition, *M* will pay the complementary tax on the $10 million capital invested in *VC Fund*.

The reason for the presumption is that in the absence of better information, there is no choice but to assume capital yields a normal return, which leads to the conclusion that any cash received in excess of a normal return is labor income, when a person contributes a mix of labor and capital to a venture. Arguably the presumption should give way when returns to capital and labor are structured in a way that makes it possible to distinguish the two. For example, *A* and *B* each contribute $100,000 cash to a partnership, agreeing to split profits and losses evenly. *A* also contributes labor to the partnership, for which she is paid separate compensation. On these facts it is clear that any profits allocated to *A* with respect to her capital interest represent a return on capital. It seems unfair to treat these as returns to labor when they clearly are not.

Allowing exceptions to the presumption would also minimize the distortionary impact of the otherwise asymmetric tax treatment of the cases in which a person contributes either labor or capital to a venture and the case in which a person contributes a mix of labor and capital to a venture. How the asymmetric tax treatment of separated returns and mixed returns might distort behavior is apparent if you put yourself in the

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[135] Edward D. Kleinbard, An American Dual Income Tax: Nordic Precedents, 5 Northwestern J. of Law & Social Policy 42 (2010).

position of someone who has committed significant capital to a venture who is asked to contribute labor. For example, a passive investor in a firm is asked to help manage the firm. If the investor anticipates above normal returns on her investment, then she might decline the offer to join the company to avoid exposing above normal returns on her capital investment to the labor income tax.

Devising rules to distinguish labor and capital income more accurately than the simple presumption that are not unduly complicated, and that cannot be gamed by sophisticated taxpayers, is a difficult problem.[136] In this respect a cash flow consumption tax or a value added tax is clearly superior to a wage tax for they make the distinction between labor and capital income moot. For example, under a cash flow consumption tax all cash distributed by a private equity fund to individuals is subject to the tax if the cash is not reinvested, whether the cash is distributed to an individual investor or to a manager, and without regard to whether the cash represents a return to labor or a return to capital.

A minor problem remains even when the tax on labor income takes the form of a cash flow consumption tax or a VAT. The problem that remains is estimating the value of an asset that is the product of a mix of labor and capital for purposes of the complementary tax. Kleinbard's presumption can be used to solve this problem as well. Recall the example in which *M* invests $10 million in *VC Fund*. Under the presumption, fees and returns paid to *M* by *VC* are treated as a receipt on capital up to the assumed normal return. Thus, the estimated value of *M*'s interest in the fund will remain $10 million until the interest is liquidated.

The presumption has the virtue of simplicity. Its defect is that it tends to be a poor measure of the value of an investment in a venture in which a significant part of the income of the venture is the investor's labor income. The rule masks depreciation because any cash an investor-laborer receives from using an asset in a venture above the normal return is treated as received for labor, and not as a recovery of capital. For example, when a self-employed trucker buys a new truck the estimated value of the truck for purposes of the complementary tax will always be the truck's purchase price, because any income the trucker earns above the normal return is treated as a return to labor, and not as a return on the trucker's investment in the truck.

Masking depreciation is to a taxpayer's disadvantage because it overstates asset value. The other defects in the rule are to a taxpayer's advantage because they understate asset value. The rule has no mechanism for capturing the value of a venture's assets that are a product of an owner's labor. Similarly, if an owner plows labor income back into a venture, creating a business of substantial value over time, then the rule will not capture the increase in value from the investment of labor income over time.

The rule also fails to capture an increase in the value of a real asset that is attributable to inflation if the owner uses the asset in a venture in which he learns labor

[136] The example involving *A* and *B* is an easy case because the fact that *B* contributes only capital to the venture makes it possible to use the return to *B* to identify the return to *A* that is a return on capital. To make the case even easier, *A* and *B* make equal capital contributions and the partnership has a single class of capital.

income. This is because labor income is treated as return to capital up to the normal return, which includes a component for inflation. For example, *A* purchases undeveloped land intending to hold the land as a hedge against inflation. If *A* does not labor on the land, then the rule will capture the increase in the value of the land attributable to inflation because the expected rate of inflation will be included in the normal return. But if *A* labors on the land, generating income, then this income is treated as a return on capital up to the normal return, including the component of the normal return that is attributable to the expected rate of inflation.

The defects in the rule are acceptable because in the cases in which they are likely to lead to a material error in estimating the value of a capital invested in a venture the sums of tax at issue generally will be small. The defects generally affect single-person ventures (sole proprietorships) and multi-person ventures that are conducted on an informal basis. If a multi-person venture involves substantial capital and is conducted on a formal basis, then the participants usually will insist that their interests in the venture accurately reflect the value of their respective claims upon the venture's capital. For example, if a law firm invests in an office building, and the building comes to be an asset of substantial value, then the old partners generally will insist their capital accounts be credited with the value when new partners are admitted. For ventures of this type the defects in the rule are avoided by treating the partners' capital accounts as the relevant asset for purposes of the complementary tax.

The remaining cases will involve sole proprietorships and informal multi-person ventures that involve a substantial capital investment. In many of these ventures, much of the capital used in the venture will be borrowed from a commercial lender. For example, a self-employed trucker who purchases a new truck is almost certain to finance the purchase. Capital borrowed from a commercial lender is generally caught by the securities tax. What is left is the owner's equity, which is likely to be small, and the rule often is a fair approximate of the value of equity when an asset is debt-financed. Because of the small amount of wealth involved, it would make sense to exempt most capital invested in sole proprietorships and informal multi-person ventures from the tax, when most of the returns from a venture are a return to labor. This is where Kleinbard comes out on this issue.

VII. Conclusion

I believe the securities tax and the complementary tax to be the most efficient mechanisms possible for taxing capital, if we are going to tax capital. They clearly are superior to the existing patchwork system for taxing capital. The complementary tax clearly is superior to a wealth tax as a mechanism for taxing capital when it is not represented by a publicly traded security. The major problem areas involve taxing illiquid capital under the complementary tax. Today most income-producing capital is intermediated through public financial markets and will be taxed by the securities tax. The significant exceptions are equity in closely held businesses, equity in directly owned rental and investment real estate, and private equity in venture capital and hedge funds. The complementary tax is fairly effective in taxing private equity in venture capital and

hedge funds because of its liquidity. To let the problem of taxing the remaining illiquid capital invested in family-owned businesses and directly owned real estate determine how we tax capital intermediated through public markets, and liquid capital intermediated through private markets, is to let a very small tail wag a very large dog