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Strategic Surrogates or Sad Sinners: U.S. Taxation of Bartering in Digital Services

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Abstract

The COVID-19 pandemic caused both a surge in technology use and a deterioration in government finances. At the same time, big tech companies are under scrutiny by lawmakers for tax avoidance, antitrust issues, and other concerns. These realities call for governments to reassess tax policy towards tech companies and for tech companies to reassess legal strategy towards taxes. State and federal governments' tax bases are eroding because of the non-cash, barter nature of modern transactions. When a taxpayer uses "free" digital services like email, social media, or search engines, she pays via access to her personal data or attention. From a legal and policy standpoint, these barter transactions should be taxed just as if cash had changed hands, but because it is not practicable to identify, value, and tax the data and time of each user, they have escaped taxation, giving many tech companies an unintended tax advantage. To address this unfairness, this article proposes a surrogate tax, where the tech company acts as a proxy to pay the tax that is technically the liability of its users. In contrast to Digital Services Taxes (DSTs), which have been the main focus of policymakers and the extant literature, surrogate taxes adhere closely to standards of good tax policy, providing an administrable means of capturing untaxed digital barter while advancing fairness across the industry's business models. From a legal strategy standpoint, this article argues that tech companies themselves should support surrogate taxes, to avoid facing more onerous, "sin"-like taxes, such as DSTs.

Introduction

The COVID-19 pandemic caused both a deterioration in government finances and a surge in technology use. Efforts to fight the coronavirus and address the associated economic downturn caused the U.S. federal deficit to triple between fiscal years 2019 and 2020.¹ Likewise, many state governments have seen increased expenditures with a decline in tax revenue.² In contrast, large technology companies have benefited from the pandemic.³ Those same companies,

¹ See CONGRESSIONAL BUDGET OFFICE, MONTHLY BUDGET REVIEW, SUMMARY FOR FISCAL YEAR 2020 (Nov. 9, 2020).

² See Heather Gillers & Gujan Banerji, *U.S. States Face Biggest Cash Crisis Since the Great Depression*, WALL STREET J. (Oct. 28, 2020, 2:45 pm), <https://www.wsj.com/articles/u-s-states-face-biggest-cash-crisis-since-the-great-depression-11603910750>; see also Louise Sheiner & Sophia Campbell, *How Much is COVID-19 Hurting State and Local Revenues?*, BROOKINGS REPORT (Sept. 24, 2020), <https://www.brookings.edu/blog/up-front/2020/09/24/how-much-is-covid-19-hurting-state-and-local-revenues/>.

³ See Dana Mattioli, *Big Tech Companies Reap Gains as COVID-19 Fuels Shift in Demand*, WALL STREET J. (Oct. 29, 2020, 9:15 pm), <https://www.wsj.com/articles/amazon-sales-surge-amid-pandemic-driven-online-shopping-11604003107>.

like Alphabet (Google), Amazon, Apple, and Facebook, are under scrutiny by lawmakers concerned about antitrust issues and the industry's impact on society.⁴ Once lauded as providing amazing technological advances, technology companies are increasingly being viewed as data miners invading our privacy, exploiting our behavior, and making a lot of money along the way.⁵ The pandemic has exacerbated the negative views of the industry and added urgency to the debate over how large technology companies should be taxed. In this post-2020 reality, governments must reassess their tax policy towards technology companies and technology companies must reassess their legal strategy towards taxes.

The debate over taxing technology companies began in non-U.S. jurisdictions and the Organisation for Economic Co-operation and Development (OECD).⁶ Many countries feel that they are not getting a fair share of the revenue from the industry based on the substantial user bases they provide.⁷ These "market" countries feel that technology companies can easily shift income to low- or no-tax jurisdictions by the careful placement of their intellectual property.⁸ In response, several countries have proposed, or have adopted, Digital Service Taxes (DSTs) on the gross revenue from digital services (like advertising) of companies that meet certain global revenue and in-country revenue thresholds.⁹ Some in the U.S. have complained that DSTs are unfairly targeted at U.S.-based companies like Google, Facebook, and Amazon,¹⁰ creating diplomatic issues.¹¹

A DST arrived in the U.S. in February of 2021, when the Maryland General Assembly enacted a gross receipts tax on digital advertising over stiff industry opposition, the state attorney general's concerns, and the governor's veto.¹² The technology industry challenged the new tax in court within days of its enactment.¹³ Although Maryland's tax is clouded by policy and legal problems,¹⁴ several other states, including Connecticut, Massachusetts, Montana, and New York, are considering enacting similar taxes.¹⁵

⁴ See, e.g., SUBCOMMITTEE ON ANTITRUST, COMMERCIAL, AND ADMINISTRATIVE LAW OF THE COMMITTEE ON THE JUDICIARY, INVESTIGATION OF COMPETITION IN DIGITAL MARKETS: MAJORITY STAFF REPORT AND RECOMMENDATIONS 132–376 (Oct. 6, 2020) (providing general overviews of "dominant online platforms" and explaining their societal influence). Societal issues include concerns about user privacy, the spread of misinformation, suppression of free speech, foreign government interference in U.S. elections, the segmentation of society, the modification of behavior, addiction to smartphones and applications, and the impact on mental health. See generally TIM WU, THE ATTENTION MERCHANTS: THE EPIC SCRAMBLE TO GET INSIDE OUR HEADS (2016); SHOSHANA ZUBOFF, THE AGE OF SURVEILLANCE CAPITALISM: THE FIGHT FOR A HUMAN FUTURE AT THE NEW FRONTIER OF POWER (2019); *The Social Dilemma* (Netflix, 2020).

⁵ See TIM HARFORD, THE DATA DETECTIVE: TEN EASY RULES TO MAKE SENSE OF STATISTICS 158 (2021) (noting the "change in the zeitgeist between 2013 and 2016" when "[c]heerleading gave way to doomsaying" and "[b]ig data went from seeming transformative to sinister").

⁶ A major OECD project, the Inclusive Framework on Base Erosion and Profit Shifting (BEPS), focuses broadly on multinational enterprises. The OECD defines BEPS as "tax planning strategies that exploit gaps and mismatches in tax rules to artificially shift profits to low or no-tax locations where there is little or no economic activity or to erode tax bases through deductible payments such as interest or royalties." *What is BEPS?*, ORG. FOR ECON. CORP. AND DEV., <http://www.oecd.org/tax/beps/about/> (last visited Aug. 20, 2021). BEPS includes fifteen "action items." The most relevant here is "Action 1: Tax Challenges Arising from Digitalisation." *Action 1: Tax Challenges Arising from Digitalisation*, ORG. FOR ECON. CORP. AND DEV., <http://www.oecd.org/tax/beps/beps-actions/action1/> (last visited Aug. 20, 2021). Action 1 is concerned with how the international tax system should address that a local physical presence (previously the touchstone of government taxing ability) is no longer required when goods and services are delivered digitally. *Id.*

⁷ See generally CONGRESSIONAL RESEARCH SERVICE, DIGITAL SERVICE TAXES (DSTs): POLICY AND ECONOMIC ANALYSIS 4–5 (Feb. 25, 2019) [hereinafter CRS DST REPORT].

⁸ See *id.* at 1–3. Governments police shifting by reviewing cross-border transactions between related parties to ensure they are charging each other fair market value, arm's length prices. E.g., I.R.C. § 482. The traditional arm's length approach can be hard to apply to modern technology companies because their valuable intellectual property (software, algorithms, etc.) is proprietary and lacks the comparable goods or services needed to establish an arm's length price. CRS DST REPORT, *supra* note 7, at 2–3.

⁹ CRS DST REPORT, *supra* note 7, at 3–8.

¹⁰ *Id.*

¹¹ See Jad Chamseddine, *Senators Want Digital Services Tax Resolution*, 2021 TAX NOTES TODAY FEDERAL 36-3 (Feb. 24, 2021); Stephanie Soong Johnston, *Yellen and EU Trade Chief Talk Digital Taxation*, 2021 TAX NOTES TODAY FEDERAL 32-5 (Feb. 18, 2021). Since our focus is on U.S. taxation (federal and state), discussion of international issues is beyond the scope of this article. The existing literature addresses these international issues in detail. See, e.g., Arthur J. Cockfield, *Tax Wars: How to End the Conflict Over Taxing Global Digital Commerce*, 17 BERKELEY BUS. L. J. 347 (2020); Lilian V. Faulhaber, *Taxing Tech: The Future of Digital Taxation*, 39 VA. TAX REV. 145 (2019); Itai Grinberg, *International Taxation in an Era of Digital Disruption: Analyzing the Current Debate*, 45 INT'L TAX J. 39 (2019); Ruth Mason & Leopoldo Parada, *The Legality of Digital Taxes in Europe*, 40 VA. TAX REV. 175 (2020).

¹² See *infra* Part III.

¹³ See *infra* Part III.B.2.

¹⁴ See *infra* Part III.B.

¹⁵ Carolina Vargas, *Massachusetts Lawmakers Propose Digital Advertising Tax*, 2021 TAX NOTES TODAY STATE 35-4 (Feb. 23, 2021).

Both the government's appetite to increase taxes on technology companies and the industry's strategy of litigating the new taxes, while understandable, are not ideal in a post-2020 world. Thus, this article proposes an alternative way of yielding more revenue from large technology companies and argues that the technology industry should adopt a legal strategy of supporting our, or a similar, proposed tax. Our proposal, grounded in normative tax policy, addresses unfairness in the current system by targeting activity that is escaping tax because of the non-cash nature of many digital exchanges. At the same time, our proposed tax protects technology companies from punitive or discriminatory taxation because it is tied to existing tax instruments that apply broadly—and thus would be difficult to increase on any one group. In contrast, other thoughtful proposals involve new and sometimes narrowly targeted tax instruments—like taxes on data itself or on data mining—untethered from existing tax systems.¹⁶

Specifically, this article examines how governments in the U.S. (state and federal) can use surrogate taxes, where one taxpayer pays a tax on behalf of another,¹⁷ embedded in the existing income and sales tax systems, to capture revenue from untaxed digital barter transactions.¹⁸ Surrogate taxes should be more palatable to the industry than DSTs, which are essentially excise taxes on services with inelastic demand. Thus, DSTs pose two problems for the industry: 1) their rates can easily be increased with little resistance and 2) they have the potential to be viewed as “sin” taxes on disfavored industries. And it is not in the best interests of technology companies to be labeled sinners.

To our knowledge, this is the first article to propose a surrogate tax tied to the barter transactions between technology companies and their users and the first to argue that the industry should follow a legal strategy of embracing such a tax. The extant literature has, however, persuasively established that digital transactions are often based on barter—which should be taxed in theory, but is not in practice.¹⁹ In addition, the scholarship on surrogate taxes informs our analysis.²⁰

We acknowledge that there are potential political and legal barriers to our proposal.²¹ But they are not insuperable, and removing them will be easier if technology companies and the federal and state governments realize it is in their best strategic interests to embrace a well-designed tax like the one we propose. If embraced by governments and the technology industry, our proposal can generate much-needed governmental revenue while protecting the technology industry from onerous taxation.

This article is organized as follows. Part I reviews key tax policy design principles. Part II then briefly reviews the relevant features of the federal and state tax systems. Part III examines Maryland's new DST to illustrate the policy and legal problems with such instruments. Part IV presents our proposed surrogate tax. First, we describe the business model of technology companies that offer “free” services and show the role of barter in the digital environment. Then, we suggest how surrogate taxes may be imposed on the industry to capture the revenue losses resulting from digital barter and review potential objections to our proposal. Part V then argues that technology companies should adopt a legal strategy that embraces a surrogate tax.

¹⁶ For promising and well-considered proposals whose analyses are outside the scope of this article's focus on a surrogate tax tied to existing tax instruments, see Omri Y. Marian, *Taxing Data* (UC Irvine Sch. of L. Rsch. Paper No. 2021-17, 2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3793892 (proposing a tax on data that does not rely on knowing the value of the data at issue); see also Andrew D. Appleby, *Subnational Digital Services Taxation*, 81 MD. L. REV. (forthcoming 2021) (arguing for a data mining tax—like that proposed in New York as the best available tax instrument to tax large technology companies).

¹⁷ See *infra* Part IV.E.

¹⁸ See *infra* Part IV.C.

¹⁹ See generally Adam B. Thimmesch, *Transacting in Data: Tax, Privacy, and the New Economy*, 94 DENV. L. REV. 145 (2016) (arguing that digital transactions often constitute barter that should be taxed, but that administrative difficulties prevent such taxation); Leilani Taula, *Bartering with Big Tech: A Theoretical Application of GST to the Digital Economy* (Victoria Univ. of Wellington Legal Rsch. Paper No. 9/2020, 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3563892 (arguing that digital transactions should be subject to New Zealand's Goods and Services tax, which is similar to sales taxes imposed by U.S. states); David R. Agrawal & William Fox, *Taxing Goods and Services in a Digital Era*, NAT'L TAX J. (forthcoming 2021) (noting the value lost to digital bartering); see also Aqib Aslam & Alpa Shah, *Tec(h)tonic Shifts: Taxing the “Digital Economy,”* (IMF Working Paper /20/76, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3638523 (thoughtfully analyzing the barter issue).

²⁰ See generally Julie Roin, *The Case for (and against) Surrogate Taxation*, 39 VA. TAX REV. 239 (2019); Jay A. Soled, *Surrogate Taxation and the Second-Best Answer to the In-Kind Benefit Valuation Riddle*, 2012 BYU L. REV. 153 (2012).

²¹ See *infra* Part IV.I.

I. Principles of Tax Policy Design

In general, the broadly accepted principles of tax policy seek to foster both a productive economy and fairness in the distribution and collection of the tax burden. Below we provide a brief overview of five tax policy principles that are critical to the discussion which follows: equality, certainty, convenience of payment, economy in collection, and neutrality.

A. Equality

The burden of a tax should be distributed fairly. Adam Smith called this equality²² and it endorses two ways of allocating the tax burden.²³ First is “the ability to pay principle.”²⁴ Taxpayers with greater ability to pay (like those with higher incomes), should shoulder more of the tax burden.²⁵ Second is the “benefit principle.”²⁶ It holds that individuals should pay taxes based on the benefits they receive from the government.²⁷ The benefit principle is problematic, since it is impossible to determine how much each taxpayer benefits from governmental services.²⁸ Both principles have been invoked to support the principle of vertical equity—which holds that “taxpayers with different incomes should pay different amounts of tax.”²⁹

The flip side of vertical equity is horizontal equity: the idea that taxpayers in similar situations should pay the same tax.³⁰ With an income tax, for example, those with the same income should pay the same tax. With a sales tax, purchasers of similar products should pay the same tax. Horizontal equity is critical; as one observer put it: “Perhaps the most widely accepted principle of equity in taxation is that people in equal positions should be treated equally.”³¹ A tax cannot be considered fair when two similarly-situated taxpayers have different tax bills. When horizontal equity is absent taxpayers will perceive a tax system as unfair, be less likely to respect the tax system, and be more likely to rationalize gaming the system. A tax system cannot generate adequate revenues under these conditions.

B. Certainty

Taxing statutes must be clear about who is taxed and in what amount.³² If there is ambiguity over who is taxed and who is exempt, or multiple bodies of law (state tax law, federal law, constitutional law) at issue, costly litigation results. Tax uncertainty also makes it difficult or impossible for businesses and individuals to make forward-looking decisions about spending and investment.

C. Convenience of Payment

A tax should be levied at a time when it is convenient for the taxpayer to pay.³³ Convenience, in this context, means taxes should be collected when the taxpayer has the “wherewithal to pay.”³⁴ Income tax is collected on salaries, for example, via withholding—when the cash is readily available. Wherewithal to pay can be lacking in noncash exchanges—where the transaction itself does not generate cash to pay the resulting tax. But, in general, a taxpayer still must pay the tax resulting from a taxable exchange even if the transaction produced no cash.³⁵

²² See ADAM SMITH, *THE WEALTH OF NATIONS* 1043 (5th ed. Edwin Cannan Editor, 2003) (1776).

²³ Richard A. Musgrave, *Fairness in Taxation*, in *THE ENCYCLOPEDIA OF TAXATION AND TAX POLICY* 135, 135 (Joseph J. Cordes et al. eds., 2d ed. 2005).

²⁴ Richard A. Musgrave, *Ability to Pay*, in *THE ENCYCLOPEDIA OF TAXATION AND TAX POLICY* 1, 1 (Joseph J. Cordes et al. eds., 2d ed. 2005).

²⁵ *Id.*

²⁶ Joseph J. Cordes, *Benefit Principle*, in *THE ENCYCLOPEDIA OF TAXATION AND TAX POLICY* 24, 24 (Joseph J. Cordes et al. eds., 2d ed. 2005).

²⁷ *Id.*

²⁸ JOEL SLEMIROD & JON BAKIJA, *TAXING OURSELVES: A CITIZEN’S GUIDE TO THE DEBATE OVER TAXES* 62 (4th ed. 2008).

²⁹ Joseph J. Cordes, *Vertical Equity*, in *THE ENCYCLOPEDIA OF TAXATION AND TAX POLICY* 467, 467 (Joseph J. Cordes et al. eds., 2d ed. 2005).

³⁰ See Joseph J. Cordes, *Horizontal Equity*, in *THE ENCYCLOPEDIA OF TAXATION AND TAX POLICY* 183, 183–84 (Joseph J. Cordes et al. eds., 2d ed. 2005) The idea of horizontal equity is similar to the justice system principle that that “like cases should be decided alike” See BRYAN A. GARNER, ET AL., *THE LAW OF JUDICIAL PRECEDENT* 21 (2016).

³¹ RICHARD A. MUSGRAVE, *THE THEORY OF PUBLIC FINANCE* 160 (1959).

³² SMITH, *supra* note 22, at 1043–44.

³³ SMITH, *supra* note 22, at 1044.

³⁴ *Id.*

³⁵ See *infra* Part IV.B.1.

D. Economy in Collection

Economy in collection is concerned with administrative costs. The cost of administering a tax, for both the government and the taxpayer, should be small in relation to the revenue it generates.³⁶ Smith advises that the relevant costs are not limited to monetary ones: “[B]y subjecting the people to the frequent visits and the odious examination of the tax-gatherers, it may expose them to much unnecessary trouble, vexation, and oppression: and though vexation is not, strictly speaking, expense, it is certainly equivalent to the expense.”³⁷

Smith is admonishing us to limit the inquisitorial nature of taxes. Thus, taxes on business entities, like corporations, are sometimes preferred to taxes on individuals.³⁸ The former involves government agents interacting with business people who are used to dealing with government authorities and have sophisticated accounting systems. The latter requires government agents to look into the lives of individuals, who perhaps don’t keep good records and are less used to dealing with government authorities.

E. Neutrality

In an ideal world, a tax would not affect the behavior of taxpayers.³⁹ Taxpayers should make decisions based on their personal preferences or market conditions, not tax consequences.⁴⁰ When a tax changes our behavior, market distortions and deadweight losses result.⁴¹ Of course, no tax avoids affecting behavior.⁴² And many taxes explicitly try to influence behavior.⁴³ Still, neutrality should be an aspiration when designing new taxes or reforming existing ones.⁴⁴

A tax system that aspires to the above principles will be more likely to be fair, less burdensome, and less susceptible to abuse.

II. Tax Law Background

To provide background for the material which follows, this Part provides a brief overview of U.S. taxes. We first introduce some of the most important types of taxes used by the federal and state governments, then discuss relevant constitutional and statutory limits on state taxation.

A. Income Taxes

The federal government imposes a broad-based tax on net income.⁴⁵ The law takes an “all inclusive” approach, whereby every item of income is taxable unless Congress itself has provided a specific exemption.⁴⁶ Deductions are only available by the “legislative grace” of Congress and are interpreted narrowly.⁴⁷

Most states impose their own income taxes, using federal taxable income as a starting point.⁴⁸ A change in the federal tax law will thus affect state tax coffers—unless the state decides to decouple from the change.⁴⁹

³⁶ SMITH, *supra* note 22, at 1044.

³⁷ *Id.* at 1045.

³⁸ *See, e.g.*, STEVEN A. BANK, FROM SWORD TO SHIELD: THE TRANSFORMATION OF THE CORPORATE INCOME TAX, 1861 TO PRESENT 44–45 (2010) (noting that the U.S. enacted a corporate income tax in part because it was less inquisitorial than other options—like an individual income tax).

³⁹ *See* DAVID BRUNORI, STATE TAX POLICY: A POLITICAL PERSPECTIVE 15 (3rd ed. 2011).

⁴⁰ *Id.*

⁴¹ SLEMROD & BAKIJA, *supra* note 28, at 131.

⁴² *Id.*

⁴³ SLEMROD & BAKIJA, *supra* note 28, at 131; *see, e.g.*, I.R.C. § 170 (creating a deduction for charitable contributions).

⁴⁴ SLEMROD & BAKIJA, *supra* note 28, at 131.

⁴⁵ I.R.C. §§ 1 (applying to individuals), 11 (applying to corporations).

⁴⁶ *See* I.R.C. § 61 (defining gross income as “all income from whatever source derived” unless another provision of the Internal Revenue Code provides otherwise).

⁴⁷ *New Colonial Ice Co. v. Helvering*, 292 U.S. 435, 440 (1934).

⁴⁸ *See* JEROME R. HELLERSTEIN ET AL., STATE TAXATION ¶ 7.02 (3rd ed. 2001 & Supp. 2020-3) [hereinafter HELLERSTEIN].

⁴⁹ *Id.* at ¶ 7.02[1].

B. Excise Taxes: Pigouvian and Sin

The federal and state governments impose a variety of excise taxes, which are narrowly-focused taxes on transactions rather than individuals or corporations.⁵⁰ Some excise taxes are Pigouvian,⁵¹ meaning they are designed to force taxpayers producing negative externalities to internalize the costs they are imposing on society.⁵² Examples would be taxes on “gas-guzzling” cars or polluters.⁵³ A pure Pigouvian tax should equal the marginal damage done by the activity subject to tax.⁵⁴ In practice, this is difficult to achieve because excise taxes are often based on consumption of the taxed product, which may not correlate with the damage the product is causing.⁵⁵

Some excise taxes that are labeled Pigouvian use a rate higher than necessary to address the negative externalities of the taxed products. Such taxes are often on activities with inelastic demand that are considered harmful or undesirable, like tobacco, alcohol, and gambling.⁵⁶ These “sumptuary” or “sin” taxes are politically popular and easily increased in times of fiscal distress.⁵⁷ Many citizens support sin taxes because only a segment of the population engages in the taxed activities.⁵⁸

C. Sales Taxes

Most states rely heavily on retail sales taxes.⁵⁹ Sales taxes are generally imposed on the sales price of tangible personal property sold at retail.⁶⁰ Purchases by businesses for resale to customers are generally exempt.⁶¹ In most states, the tax is the liability of the purchaser.⁶² But if the seller should have collected the tax but failed to do so, the seller becomes liable for the tax.⁶³

Sales tax commentators generally agree that an ideal or normative sales tax would tax all purchases by consumers and exempt all purchases by businesses.⁶⁴ Most state sales taxes fall short of these ideals.

The tax base of the ideal sales tax should be broad and include all purchases of tangible personal property and services by consumers/households.⁶⁵ By extension, this should include purchases of property and services whether in physical or digital form.⁶⁶ Exemptions force the state to have a higher sales tax rate to raise the needed amount of revenue, especially as overall consumer spending has shifted in recent years from tangible property to digital services.⁶⁷ A higher rate results in lower income consumers paying more tax on their non-exempt purchases.⁶⁸ Exemptions also violate neutrality by distorting consumer choices.⁶⁹

⁵⁰ See Fred Giertz, *Excise Taxes*, in THE ENCYCLOPEDIA OF TAXATION AND TAX POLICY 125, 125 (Joseph J. Cordes et al. eds., 2d ed. 2005).

⁵¹ Thomas A. Barthold, *Environmental Taxes, Federal*, in THE ENCYCLOPEDIA OF TAXATION AND TAX POLICY 113, 113 (Joseph J. Cordes et al. eds., 2d ed. 2005) (attributing namesake to British economist Arthur C. Pigou).

⁵² Giertz, *supra* note 50, at 125.

⁵³ *Id.*

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ See Victor Fleischer, *Curb Your Enthusiasm for Pigovian Taxes*, 68 VAND. L. REV. 1673, 1687, 1691 (2015).

⁵⁷ See *id.*

⁵⁸ *Id.*

⁵⁹ RICHARD D. POMP, STATE & LOCAL TAXATION 6-1 (9th ed. 2019).

⁶⁰ HELLERSTEIN, *supra* note 48, at ¶ 12.04[1].

⁶¹ *Id.* at ¶ 12.04[3].

⁶² POMP, *supra* note 59, at 7–2.

⁶³ *Id.*

⁶⁴ See, e.g., BRUNORI, *supra* note 39, at 72–75; HELLERSTEIN, *supra* note 48, at ¶ 12.01, 12.04, 12.06; POMP, *supra* note 59, at 6-31–40; Charles E. McLure, Jr., *The Nuttiness of State and Local Taxes—And the Nuttiness of Responses Thereto*, 25 STATE TAX NOTES 841 (Sept. 16, 2002).

⁶⁵ BRUNORI, *supra* note 39, at 67.

⁶⁶ See McLure, *supra* note 64, at 844. McLure argued for parity in sales tax treatment between local purchases and remote (online) purchase. Now that goods and services can be purchased in digital form, the same parity in treatment should apply.

⁶⁷ *Id.*

⁶⁸ POMP, *supra* note 59, at 6–26.

⁶⁹ McLure, *supra* note 64, at 845.

An ideal sales tax would also exempt all purchases by businesses.⁷⁰ Although often breached, “it remains one of the most powerful tax principles we have.”⁷¹ If business inputs are taxed, the business will pass on the cost of the tax to their customers via higher sales prices.⁷² These higher prices, in turn, will increase the sales tax paid by the customers on their purchases.⁷³ This phenomenon, called “pyramiding,” leads to at least two adverse consequences.⁷⁴ First, pyramiding hides the cost of government, making it more difficult for consumers to gauge the taxes they are really paying and for policymakers to gauge how the sales tax burden is distributed among taxpayers and across income groups.⁷⁵ Second, pyramiding violates the principle of neutrality by encouraging businesses to self-produce intermediate goods internally rather than buying them from outside firms.⁷⁶ Firms that cannot efficiently self-produce (such as smaller firms) incur higher costs when business inputs are taxed, raising horizontal equity concerns.⁷⁷

D. Limits on State Taxing Power

The sovereign power of the states to tax is limited by federal law. The relevant limits, for purposes of this article, derive from the Commerce Clause of the U.S. Constitution⁷⁸ and the Permanent Internet Tax Freedom Act.

1. Commerce Clause Limits

The U.S. Supreme Court interprets the Commerce Clause (which grants Congress the power to regulate interstate commerce)⁷⁹ as containing a “dormant” component, which restricts state taxation of interstate commerce even when Congress has not spoken.⁸⁰ Among other requirements, the dormant Commerce Clause prohibits states from imposing taxes that discriminate against interstate commerce.⁸¹ A tax law that is discriminatory on its face is “virtually per se” unconstitutional.⁸² But if a tax applies the same rate to in-state and interstate activity, it will be upheld even if the burden of the tax falls more heavily on interstate activity.⁸³ Because Congress has the ultimate authority to regulate interstate commerce, it can overturn the Court’s dormant Commerce Clause rulings.⁸⁴

2. The Permanent Internet Tax Freedom Act

The Permanent Internet Tax Freedom Act (PITFA) limits the ability of states to tax electronic commerce.⁸⁵ PITFA, historically little-used in litigation, is now getting renewed attention.⁸⁶ PITFA prohibits states from imposing 1) taxes on internet access or 2) multiple or discriminatory taxes on electronic commerce.⁸⁷ The first ban extends broadly to include incidental services like email, instant messaging, personal home pages, and personal electronic storage

⁷⁰ BRUNORI, *supra* note 39, at 73.

⁷¹ MICHAEL KEEN & JOEL SLEMRD, REBELLION, RASCALS, AND REVENUE: TAX FOLLIES AND WISDOM THROUGH THE AGES 242 (2021).

⁷² POMP, *supra* note 59, at 6–37.

⁷³ *See id.*

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ For provisions of the Constitution that are sometimes invoked in the debate over DTS, but so far, have not played starring roles, see U.S. CONST. amend. XIV, § 1 (due process clause); U.S. CONST. art. I, § 8, cl. 3 (foreign commerce clause); U.S. CONST. amend. I (freedom of speech and freedom of the press).

⁷⁹ U.S. CONST. art. I, § 8, cl. 3.

⁸⁰ *See Quill Corp. v. North Dakota*, 504 U.S. 298, 307–09 (1992).

⁸¹ *See Complete Auto Transit v. Brady*, 430 U.S. 274, 279–81 (1977).

⁸² *Fulton Corp. v. Faulkner*, 516 U.S. 325, 331 (1996).

⁸³ *See, e.g., Commonwealth Edison Co. v. Montana*, 453 U.S. 609, 618–19 (1981) (upholding a Montana severance tax on coal even though 90% of the coal was shipped out of state, because the tax rate was the same on in-state and out-of-state shipments).

⁸⁴ *See Quill*, 504 U.S. at 318 (where the Court noted that, in dormant Commerce Clause cases, “Congress remains free to disagree with our conclusions”).

⁸⁵ Permanent Internet Tax Freedom Act, 47 U.S.C. § 151 note (2021).

⁸⁶ *See generally* Amy Hamilton, *Apple Tests New Approach to Internet Tax Freedom Act in Texas*, 2021 TAX NOTES TODAY STATE 40–1, 1518–24 (Mar. 2, 2021).

⁸⁷ Permanent Internet Tax Freedom Act, 47 U.S.C. § 151 note, at § 1101(a).

capacity.⁸⁸ The second ban prohibits a state from imposing a tax on electronic commerce that is different from a tax it generally applies to similar transactions accomplished by other means.⁸⁹ PITFA is broad, complex, and ambiguous. Its scope is currently being tested in various courts.⁹⁰

III. Maryland's DST

Shifts in consumer spending, further fueled by the recent pandemic, have resulted in states losing revenues. In this Part, we look at Maryland's new DST as an example of how many states are currently thinking about taxing large technology companies to increase revenues.⁹¹

A. Maryland's Tax

On February 12, 2021, Maryland became the first state to enact a tax on digital advertising, when the state's legislature overrode the governor's veto of the new tax.⁹² The "Digital Advertising Gross Revenues Tax" was included in legislation, H.B. 732,⁹³ which also increased the state's excise tax on tobacco⁹⁴ and vaping products.⁹⁵

The tax is imposed at various rates from 2.5% (for companies with global annual gross revenues of at least \$100 million) through 10% (for companies with global annual gross revenues over \$15 billion)⁹⁶ on the "annual gross revenues derived from digital advertising services" in Maryland.⁹⁷ "Digital advertising services" include banner, search engine, interstitial, or similar advertisements that appear to users on software, a website, or an application.⁹⁸ The gross revenue from these services is apportioned to Maryland via a fraction: Annual gross revenues derived from digital advertising services in Maryland divided by annual gross revenues derived from such services throughout the U.S.⁹⁹ H.B. 732 does not say how the numerator will be determined; instead it delegates the responsibility to the state's comptroller.¹⁰⁰ The tax does not apply to smaller companies (with less than \$100 million in global revenue). Nor does it apply to non-digital advertising, like ads in newspapers and magazines, on billboards, or on radio or television broadcasts.

B. Problems with the New Tax

Maryland's pioneering tax is a useful illustration of the problems likely to arise with any attempt to tax digital transactions based on gross receipts. Gross receipts-type taxes like Maryland's are problematic for two broad reasons. First, they violate tax policy principles, creating inequities and economic distortions. Second, they face legal problems, as they potentially violate constitutional and statutory provisions.

⁸⁸ *Id.* at § 1105(5).

⁸⁹ Permanent Internet Tax Freedom Act, 47 U.S.C. § 151 note, at § 1105(2)(A).

⁹⁰ See Hamilton, *supra* note 86.

⁹¹ As noted earlier, other scholars have proposed more thoughtful tax instruments than Maryland's. See *supra* note 16. It is impossible to analyze all of the proposals here. Instead, we review Maryland's new tax since it has actually been enacted and other states are considering similar measures.

⁹² See Lauren Loricchio, *Maryland Becomes First State to Adopt Digital Ad Tax*, TAX NOTES TODAY STATE (Feb. 16, 2021), <https://www.taxnotes.com/tax-notes-today-state/litigation-and-appeals/maryland-becomes-first-state-adopt-digital-ad-tax/2021/02/16/2zdbp>. The idea came from an op ed by a Nobel Prize winning economist. See Paul Romer, *A Tax That Could Fix Big Tech*, N.Y. TIMES, (May 8, 2019), <https://www.nytimes.com/2019/05/06/opinion/tax-facebook-google.html>.

⁹³ H.B. 732, 2021 Leg., 442nd Sess. (Md. 2021).

⁹⁴ *Id.* at § 12-105(a)(1).

⁹⁵ *Id.* at § 11-104((J)(1)(3).

⁹⁶ *Id.* at § 7.5-103.

⁹⁷ *Id.* at §§ 7.5-101(C); 7.5-103.

⁹⁸ *Id.* at § 7.5-101(D)-(F).

⁹⁹ *Id.* at § 7.5-102(B)(1).

¹⁰⁰ *Id.* at § 7.5-102(B)(2). Internet Protocol (IP) addresses or geofencing might be used to source revenue. See John D. McKinnon & Alexandra Bruell, *Tech Industry Challenges Maryland Online Ad Tax*, WALL STREET J. (Feb. 18, 2021, 5:26 pm), <https://www.wsj.com/articles/tech-industry-challenges-maryland-online-ad-tax-11613679371>.

1. Policy Issues

Maryland's new tax poses several policy problems. First, it is a gross receipts tax on business inputs. The academic literature shows that gross receipts taxes are suboptimal at best.¹⁰¹ Taxing business inputs, as noted above, creates several problems.¹⁰² One of the key problems is that the cost of the tax would get passed on to small businesses that are purchasing online ads—raising issues of vertical equity.¹⁰³ Another shortcoming of gross receipts taxes is that they are not based on either the ability to pay principle or the benefits principle.¹⁰⁴ A business with high turnover and low profit margins will pay a much higher effective tax rate than a low-turnover, high profit margin business.¹⁰⁵

Second, since the statute does not specify how revenue will be sourced to Maryland, it violates the certainty maxim.¹⁰⁶ Third, by excluding non-internet advertising revenue, the tax creates a horizontal equity problem.¹⁰⁷ Fourth, while some argued that the tax would address externalities,¹⁰⁸ there was no study of the costs that technology companies may be imposing on the state. Thus, the tax fails as a Pigouvian tax and looks more like a sin tax.¹⁰⁹ That the tax on digital advertising was enacted in the same law that increased tobacco taxes speaks volumes.

2. Legal Issues

As Maryland's Attorney General has pointed out, there are significant legal issues with the new law.¹¹⁰ While the Attorney General's analysis concludes that H.B. 732 is "not clearly preempted by federal law" and "not clearly unconstitutional," it notes there is a risk a court might disagree.¹¹¹

Consistent with technology companies' existing legal strategy to challenge new digital taxes, only six days after H.B. 732 was enacted, four trade associations, representing companies including Facebook, Alphabet's Google, and Amazon.com,¹¹² filed a complaint in federal court, asking the court to declare the tax invalid.¹¹³ The complaint quoted Maryland Senate President Bill Ferguson, who said the tax was targeted at large technology companies because their growth "has resulted in negative externalities socialized and borne by the public. . . ."¹¹⁴

The complaint claims that the Maryland tax violates PITFA because it is imposed on digital, and not on non-digital, advertising.¹¹⁵ Further, the complaint argues that the tax violates the dormant Commerce Clause by discriminating against interstate commerce.¹¹⁶ Because the tax rate on digital advertising in Maryland increases as the taxpayer's global revenues (most of which are earned outside of Maryland) increase, the complaint argues that the tax discriminates against interstate commerce.¹¹⁷

¹⁰¹ See, e.g., John L. Mikesell, *Gross Receipts Taxes in State Government Finances: A Review of Their History and Performance*, TAX FOUNDATION BACKGROUND PAPER 53 (2007); Thomas F. Pogue, *The Gross Receipts Tax: A New Approach to Business Taxation?*, NAT'L TAX J. 799–819 (2007); William A. Testa & Richard H. Mattoon, *Is There a Role for Gross Receipts Taxation?* NAT'L TAX J. 821–40 (2007).

¹⁰² See *supra* Part II.C.

¹⁰³ See *supra* Part I.A.

¹⁰⁴ Mikesell, *supra* note 101, at 13; Pogue, *supra* note 101, at 799; see *supra* Part I.A. (discussing these principles).

¹⁰⁵ Mikesell, *supra* note 101, at 13.

¹⁰⁶ See *supra* Part I.B.

¹⁰⁷ See *supra* Part I.A.

¹⁰⁸ See *infra* note 114 and accompanying text.

¹⁰⁹ See *supra* Part II.B.

¹¹⁰ See LETTER FROM BRIAN E. FROSH, ATT'Y GEN. OF MD., TO LAWRENCE J. HOGAN, JR., GOVERNOR OF MD., HOUSE BILL 732 (Apr. 22, 2020), http://mgaleg.maryland.gov/2020RS/ag_letters/hb0732.pdf.

¹¹¹ *Id.*

¹¹² McKinnon & Bruell, *supra* note 100.

¹¹³ See Complaint for Injunctive and Declarative Relief, Chamber of Com. of the U.S. v. Franchot, Civ. No. 21-cv-410, at 3 (D. Md. N. Div., Feb. 18, 2021) (noting that the Chamber of Commerce was joined by fellow trade groups the Internet Association, NetChoice, and the Computer & Communications Industry Association).

¹¹⁴ *Id.* at 10.

¹¹⁵ *Id.* at 17.

¹¹⁶ *Id.* at 18.

¹¹⁷ *Id.* at 8. If a tax increases as a company does more business out of state, there is discrimination and the tax will be invalid. See, e.g., *Fulton v. Faulkner*, 516 U.S. 325 (1996) (striking down a North Carolina property tax on stock in corporations that increased the more the corporation did business outside of the state).

One of plaintiffs' lawyers said, shortly after the law was passed, "it will not be long before they're in court being challenged. The tax is so blatantly illegal it's surprising that legislators were willing to adopt it. . ." ¹¹⁸

C. Is Maryland Case Baiting

Given widespread acknowledgement that the new tax likely violates federal law, it is possible that Maryland is using a strategy known as "case-baiting," which is a deliberate attempt to have the U.S. Supreme Court overturn either established precedent or enacted laws. ¹¹⁹ Two recent examples of case-baiting are South Dakota's enactment of a bill requiring sellers with no physical presence in the state to collect sales tax on sales to state residents, in direct conflict with Supreme Court precedent, ¹²⁰ and New Jersey's amendment of its state constitution to pass a bill legalizing sports betting in the state, an intentional violation of an act of Congress. ¹²¹ Both efforts succeeded in luring the U.S. Supreme Court into overturning prior law. ¹²²

Maryland's DST in some respects resembles these case-baiting efforts, but also has stark differences. Like the South Dakota and New Jersey examples, the Maryland law responds to a perceived inequity created by existing federal law, in this case the inability to tax corporations deriving significant revenue from the state's residents. ¹²³ It could be that Maryland wanted to challenge the constitutionality of PITFA itself, much like New Jersey successfully challenged the federal law that prohibited states from legalizing sports gambling. ¹²⁴ Indeed, some have questioned, in the wake of New Jersey's success, whether laws that limit state taxing authority, like PITFA, are unconstitutional ¹²⁵ per the anti-commandeering doctrine, which prevents Congress from ordering state legislatures to enact or refrain from enacting laws. ¹²⁶

However, previous case-baiting efforts have also involved a significant alignment of interests within a state that allowed for quick, coordinated action by the legislature and governor. ¹²⁷ This element was decidedly not present in Maryland, where the governor and legislature were opposed, resulting in a delayed process where the governor vetoed the bill, followed later by a legislative override. Another important difference is that in the South Dakota and New Jersey cases, Supreme Court justices had invited a challenge, while no such invitation exists for Maryland's DST. ¹²⁸

IV. Taxing Digital Barter

Given the problems with DSTs like Maryland's, we suggest an alternative, centered on bringing the huge, yet untaxed, digital barter economy into the tax base. Section A reviews the business model of technology companies that provide "free" services in exchange for data or attention. Section B explains how barter transactions are taxed under current law. Section C shows how scholars have established that the use of digital products for "free" is in fact barter—and thus should be in the tax base. Section D explains why we cannot ignore the revenue loss from digital barter. Section E reviews the notion of surrogate taxes and why a surrogate tax is workable here. Section F then reviews how a surrogate tax on barter would work. Section G reviews how the barter can be valued. Section H then shows how our proposal conforms to accepted tax policy principles. Finally, Section I reviews potential objections to our proposed tax.

¹¹⁸ Loricchio, *supra* note 92 (quoting Stephen Kranz with McDermott Will & Emery).

¹¹⁹ Kathryn Kiska-Schulze et al., *Case Baiting*, 57 AM. BUS. L.J. 321, 322 (2020).

¹²⁰ *Id.* at 326–31.

¹²¹ *Id.* at 331–34.

¹²² See *South Dakota v. Wayfair*, 138 S. Ct. 2080 (2018); *Murphy v. National Collegiate Athletic Ass'n*, 138 S. Ct. 1461 (2018).

¹²³ See Kiska-Schulze et al., *supra* note 119, at 344–46.

¹²⁴ *Id.*

¹²⁵ Lauren Loricchio, *Digital Ad Taxes Can Be Changed to Withstand Litigation, Experts Say*, 99 TAX NOTES STATE 846, 847 (Feb. 22, 2021) (quoting Nancy Prosser, general counsel for the Multistate Tax Commission, on the prospect of a constitutional challenge to PITFA).

¹²⁶ See *Murphy*, 138 S. Ct. 1461, 1471 (2018).

¹²⁷ Kiska-Schulze et al., *supra* note 119, at 346–49.

¹²⁸ *Id.* at 329, 333.

A. Business Models in the Technology Industry

The technology industry uses a variety of business models. If placed on a continuum, at one end would be “customer pricing” companies¹²⁹ like Netflix and Apple, that operate much like their industrial predecessors: they charge customers for goods (like iPhones) and services (like the streaming of films). The transactions of such companies can be more readily taxed, since the tax base is salient and stated in dollars.¹³⁰ At the other end of the continuum would be “advertising pricing” companies¹³¹ like Facebook, that don’t charge users for access to digital services (like a social media platform), but rather sell users’ targeted attention to advertisers. Amazon, as a retailer that also sells advertising, would fall close to the customer pricing end of the continuum. Google (Alphabet), as a company that provides free email, search services, maps, storage space, and video access, but also offers upgraded ad-free services for a fee, would be closer to the advertising pricing end of the continuum. Many other technology companies would fall somewhere in between the customer pricing and advertising pricing ends of the continuum.

Our focus is on those companies, like Facebook, Google, and Twitter, that primarily use the advertising-pricing model. However, we believe our proposal could be adapted to tax companies at other points on the continuum, which are arguably bartering in at least some of their business lines.¹³² As will be seen, it is fundamentally unfair to tax cash transactions under the customer-pricing model but not barter transactions under advertising-pricing model.

B. How the Tax Law Treats Barter

Our surrogate tax is essentially a mechanism for enforcing existing income and sales taxes with respect to barter transactions, which are already generally taxable under existing law. Therefore, it is helpful to briefly describe how current tax laws apply to barter transactions.

1. Income Tax

Under the federal tax law, income is taxable if “realized in any form, whether in money, property, or services.”¹³³ Thus, barter transactions are taxable even though no cash changes hands.¹³⁴ The taxpayer is effectively treated as engaging in two cash transactions: 1) selling the property they are giving up for cash and 2) using the cash from the sale to buy the property from the other party in the exchange.¹³⁵ The gain or loss on the exchange is calculated by taking the value of cash or property the taxpayer receives less the basis in the property the taxpayer gives up.¹³⁶ Property is valued using the “barter-equation method, which assumes that the properties exchanged in an arm’s length transaction are of equal value[.]”¹³⁷ Under this approach, the value used to calculate gain or loss is equal to value of the property received.¹³⁸ But, because what is given up and what is received are assumed to be of equal value, if the value of the property received is difficult to determine, then the value of the property given up in the exchange may be used instead.¹³⁹ In digital barter, users have no ascertainable basis in the time or data they are giving up in exchange for digital services. Thus, the tax base should be the value of the technology received or the value of the time or data surrendered.¹⁴⁰

¹²⁹ See Agrawal & Fox, *supra* note 19, at n.45.

¹³⁰ The taxation of digital goods and services for which a price is charged raise many of the same issues as the taxation of “free” services noted in this article. Litigation abounds, for example, over how PITFA restricts the ability of states to tax these goods and services. See, e.g., Hamilton, *supra* note 86. But at least digital products and services for which a price is charged can be valued and taxed by existing tax instruments. Our focus in this article is on the additional, unique challenges implicated by barter in digital goods and services.

¹³¹ See Agrawal & Fox, *supra* note 19, at n.45.

¹³² In taking this approach, we are putting to the side companies that engage in “freemium” transactions, in which the company offers a product for free but will then attempt to sell the user a premium version. Companies using this model are likely profiting by selling the upgraded product, rather than selling ad space on the inferior, free product.

¹³³ 26 C.F.R. § 1.61-1, Treas. Reg. § 1.61-1(a) (1957).

¹³⁴ See, e.g., Robert I. Keller, *The Taxation of Barter Transactions*, 67 MINN. L. REV. 441, 445 (1982) (setting forth the basic tax principles that apply to barter transactions).

¹³⁵ *Id.* at 443.

¹³⁶ I.R.C. § 1001.

¹³⁷ BORIS I. BITTKER & LAWRENCE LOKKEN, FEDERAL TAXATION OF INCOME, ESTATES, AND GIFTS 135.2.5 (3rd Ed. 2020).

¹³⁸ *Id.*

¹³⁹ *Id.*

¹⁴⁰ See *infra* Part IV.G..

Taxing barter as if cash had been exchanged seems to violate the convenience maxim.¹⁴¹ But if the tax system taxed cash transactions and exempted barter transactions, taxpayers would use barter whenever possible—even if it didn’t make any business sense to do so. And that would violate neutrality.¹⁴²

Barter is fairly easy to identify and tax in certain situations. Deals done through a barter exchange, for example, are easy to track.¹⁴³ Likewise, when taxpayers pay their property taxes by providing services to the local government, as is possible in Massachusetts, it should be fairly easy to identify and tax the barter.¹⁴⁴

In less formal settings, there are administrative problems in enforcing the taxation of barter. One scholar, discussing ranchers in rural Shasta County, California, suggests that when neighbors barter with tacit understandings rather than formal, written agreements, they should be taxed on such exchanges—but concludes that it is not administratively feasible to do so.¹⁴⁵ The transactions are too difficult to identify, costly to audit, the value involved is uncertain, and the revenue at stake is small.¹⁴⁶ The bartering in Shasta County is part of the culture, and it is not aimed at saving taxes.¹⁴⁷ Outside of tacit cultural norms, however, barter should be taxed. Otherwise, taxpayers would be incentivized to deal in barter rather than in cash.¹⁴⁸

2. Sales Tax

Most states apply their sales tax to barter transactions.¹⁴⁹ Idaho, for example, defines a “sale” for tax purposes as “any transfer of title, exchange or barter. . . .”¹⁵⁰ The sales tax treatment of barter is necessary to ensure parity with cash sales. For example, if a Vermont ski resort exchanges \$1,000 worth of lift tickets for radio advertising, the resort must remit the Vermont sales tax on the sale of the lift tickets, just as if they had been sold for cash.¹⁵¹

C. “Free” Means Barter

As author Gillian Tett has observed:

There is no easy word to describe [the] data-service exchange [between tech companies and users], Using the word ‘free’ expresses the situation in terms of a negative (i.e., the *absence* of money). This means it tends to be ignored in a world obsessed with money However, one word that could be used to describe these exchanges is “barter.” . . . [W]hile . . . techies might shun the word “barter,” these exchanges are central to how Silicon Valley works. And until policy makers start discussing barter in an explicit manner, it will be difficult to create a tech sector that feels ethical to consumers . . . or even just get an accurate vision of how the economy works and how to value tech companies.¹⁵²

Thus, when we use the “free” services of companies using the advertising-pricing model, we are really engaging in barter.¹⁵³ It is clear what we are getting—email, search, navigation, a social network, or other service. What is in dispute is exactly what we are giving up. Some say we are giving up our data, or digital exhaust, which helps technology company algorithms better anticipate (or perhaps modify) our behavior so we become better targets for

¹⁴¹ See *supra* Part I.C.

¹⁴² See *supra* Part I.E.

¹⁴³ Keller, *supra* note 134, at 480–81.

¹⁴⁴ See Jeremy Bearer-Friend, *Tax Without Cash*, 106 MINN. L. REV. (forthcoming 2021).

¹⁴⁵ See Alex Raskolinikov, *The Cost of Norms: Tax Effects of Tacit Understandings*, 74 U. CHI. L. REV. 601, 684 (2007).

¹⁴⁶ *Id.* at 682 n.335.

¹⁴⁷ *Id.* at 629.

¹⁴⁸ *Id.* at 644 (noting that taxpayers “will flock to activities and groups that are subject to lower tax rates”).

¹⁴⁹ Checkpoint State Tax Chart (run Feb. 19, 2021) (on file with author).

¹⁵⁰ ID. CODE ANN. § 63-3612 (2020).

¹⁵¹ Vermont Technical Bulletin No. TB-27, July 21, 2003 (adapted from Example 6).

¹⁵² GILLIAN TETT, ANTHRO-VISION: A NEW WAY TO SEE IN BUSINESS AND LIFE 157–58 (2021).

¹⁵³ E.g., Gillian Tett, *How Big Tech Revived the Ancient Art of Bartering*, FIN. TIMES (Apr. 18, 2018), <https://www.ft.com/content/7b1c79fe-4296-11e8-93cf-67ac3a6482fd>.

digital advertising.¹⁵⁴ Others say we are simply selling our time and attention—subjecting ourselves to advertisements.¹⁵⁵ Either way, we are buying something and paying in something other than cash. Indeed, in contract law subjecting ourselves to ads is consideration sufficient to establish an enforceable contract.¹⁵⁶

As supported by the literature, in selling our time in exchange for digital services, we should be subject to both income tax and, if our state has one, a sales tax.¹⁵⁷ These are not informal, Shasta County-like tacit understandings. Digital barter uses written user agreements, albeit contracts of adhesion, and a sophisticated business model. Like the Shasta County residents, technology companies presumably are not seeking to save taxes; but the advertising-pricing model nonetheless reduces tax revenue and gives an unfair tax advantage to companies that use it.

As commentators have noted, barter transactions in the digital world may well be taxable, but it is not practicable to identify, value, and tax users on the sale of their data or time. Thus, these digital barter transactions escape taxation. In particular, it would be intrusive to impose taxes on data providers.¹⁵⁸ However, it is notable that many of the problems associated with taxing digital barter arise from attempting to tax users directly, and are mitigated when a surrogate tax is collected at the company level.¹⁵⁹

D. Why Digital Barter Should Be Taxed

Digital barter represents a significant erosion in the tax base. Economists estimate that, annually, there is over \$100 billion in (untaxed) value resulting from users exchanging their data or time for digital services in the U.S.¹⁶⁰ When a taxpayer buys software like Microsoft Excel, or subscribes to a monthly service like Netflix, she pays in cash (or an equivalent). Monetized transactions like this are salient, instantly valued, and easily taxed to both parties under an income tax or a sales tax. In contrast, when a taxpayer uses “free” digital services like email, a social media account, or a search engine, she pays via access to her personal data or her attention. These barter transactions, from a legal and policy standpoint, should be taxed just as if cash had changed hands. Otherwise, similar activities would be taxed differently, violating horizontal equity.

One might argue that getting products or services in exchange for time and attention is nothing new. Newspapers have long sold ad space to allow readers to pay below cost; both radio and television embraced an advertising-pricing model from their infancies;¹⁶¹ and there was no fuss about taxing readers, listeners, or viewers.¹⁶² But just because the barter in these contexts has historically been exempt, doesn’t mean that it should always be. We have no problems taxing non-digital companies using the advertising-pricing model. Indeed, doing so would help address PITFA prohibitions on discriminating against electronic commerce.

If one wanted to exclude old media from a surrogate tax, however, there are valid reasons for doing so. Newspaper, radio, and television ads might be targeted at particular audiences based on the demographics of those expected to read or tune in to particular offerings. Beyond that, ads are deployed via “spray and pray”: put the ads out there and

¹⁵⁴ See, e.g., ZUBOFF *supra* note 4, at 8–9. A key part of the ad targeting is “profile identification,” which is the process of classifying individuals based on their characteristics. While this method of targeting predates the high-tech industry, the ability to continuously update these profiles through ongoing behavioral activity is much more sophisticated. For example, Google publishes guides on user profile analysis for customers using their analytics services. See *Mini Guides*, https://support.google.com/analytics/topic/9328240?hl=en&ref_topic=9143232 (last visited Aug. 2, 2021). Guidance includes how to utilize tracking data to profile and capture activity (like what the user clicks on and what they buy) as users navigate through a website. *Id.* While Google is currently phasing out the use of third-party cookies, it will still gather user data on a group, anonymized basis that can be used for ad targeting. See *Think with Google*, <https://www.thinkwithgoogle.com/> (last visited Aug. 2, 2021).

¹⁵⁵ See John M. Newman, *Regulating Attention Markets* 24–25 (Univ. of Miami Legal Stud. Rsch. Paper, July 21, 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3423487 (arguing that the market primarily demands our time and that the demand for data is merely an accessory to the demand for attention).

¹⁵⁶ *Id.* at 18–19; *Jennings v. Radio Station KCSC*, 708 S.W.2d 60, 61–62 (Tex. App. 1986) (holding consideration includes listening to a radio station in connection with a contest); *Harris v. Time, Inc.*, 191 Cal. App. 3d 449, 456 (Cal. Ct. App. 1978) (holding consideration includes opening junk mail in the hopes of receiving a prize).

¹⁵⁷ See *supra* note 19. Surprisingly, beyond those sources, barter is rarely mentioned in analyses of DSTs—except occasionally in passing. See, e.g. CRS DST REPORT, *supra* note 7, at 14 (noting that online transactions are non-cash barter); Dan R. Bucks et al., *Is It Time to Tax the Digital Economy?*, 99 TAX NOTES STATE 29, 33 (Jan. 4, 2021) (mentioning barter as a reason to perhaps allow a tax on advertising revenue).

¹⁵⁸ Thimmesch, *supra* note 19, at 173–82.

¹⁵⁹ See *infra* Part IV.E.

¹⁶⁰ Thimmesch, *supra* note 19, at 160 (internal citations omitted).

¹⁶¹ WU, *supra* note 4, at 14–18.

¹⁶² The history of the tax issues raised by advertising is beyond the scope of this article.

hope the target customers see them and respond.¹⁶³ Ads are not tailored to the specific reader, listener, or viewer. The advertiser can't know if the audience notices the newspaper ads, is in the room when the radio ad plays, or has the television on mute when the ads air. In that sense, the value the reader, listener, or viewer provides via their "attention" is small. In contrast, digital ads can be tailored to specific users based on their browsing history and known attributes. Digital ads are also hard to avoid; they play before videos and pop up in the middle of the screen without warning. And interaction with ads online can be tracked. The time and attention of the online user is thus worth much more, and is more easily identified, than that of newspaper readers, radio listeners, or television viewers.¹⁶⁴

When there is a vast amount of barter resulting from a business model orchestrated by sophisticated enterprises and that barter is analogous to taxable cash transactions, there will be significant tax base erosion—and significant unfairness if the situation is not addressed.

E. Surrogate Taxes

"A surrogate tax is a process by which one taxpayer nominally bears tax as a proxy for another taxpayer's receipt of income."¹⁶⁵ A surrogate tax is warranted when 1) a taxpayer has realized income; 2) taxing that taxpayer directly is not feasible; and 3) the failure to impose a tax would cause distortions in the tax system.¹⁶⁶

Digital barter meets these criteria. 1) When taxpayers use "free" digital products, they have realized income from a barter transaction.¹⁶⁷ 2) It is not feasible to tax the technology user directly. It would involve an inquisitorial inquiry into their online activity and would be costly to police—thus violating the economy in collection maxim.¹⁶⁸ It would be far easier to collect the tax on a centralized basis from technology companies. 3) If digital barter escapes tax while cash transactions do not, the business model choices of tech companies may be distorted—violating neutrality¹⁶⁹ and horizontal equity.¹⁷⁰

An example of a surrogate tax, one that coincidentally affects the technology industry, is instructive. Many Silicon Valley employers, like Google and Facebook, provide free food to employees on their campuses.¹⁷¹ Whenever an employer provides goods or services to an employee, it is considered taxable compensation unless an exclusion applies. Most of us earn our income in cash, pay tax on it, and then use what is left over after tax to pay for personal expenses—like food. If employer-provided food were tax-exempt, there would be a horizontal equity problem between those employees who are paid entirely in cash and those who are paid mostly in cash, but also in food.

Silicon Valley employers argue that they provide the food, not as compensation to the employees, but for "for the convenience of the employer," making them exempt.¹⁷² The employers argue that providing meals encourages collaboration and makes employees more productive, since they don't need to leave campus and fight traffic to go to a restaurant.¹⁷³ The IRS, however, argues that the meals are really compensation.¹⁷⁴

In 2017, Congress stepped in and limited the deduction for meals provided to employees for the convenience of the employer. For 2018 through 2025, only 50% of the costs of such employee meals are deductible.¹⁷⁵ Beginning in 2026, none of the costs of such meals are deductible.¹⁷⁶

¹⁶³ See, e.g., REBECCA TUSHNET & ERIC GOLDMAN, *ADVERTISING & MARKETING LAW: CASES AND MATERIALS* 8 (5th ed. 2020) (relaying a saying attributed to retailer John Wannamaker: "[h]alf the money I spend on advertising is wasted; the trouble is I don't know which half.>").

¹⁶⁴ See WU, *supra* note 4, at 263–64.

¹⁶⁵ Soled, *supra* note 20, at 156.

¹⁶⁶ *Id.* at 157.

¹⁶⁷ See *supra* Part IV.C.

¹⁶⁸ See *supra* Part I.D.

¹⁶⁹ See *supra* Part I.E.

¹⁷⁰ See *supra* Part I.A.; see also Soled, *supra* note 20, at 181 (suggesting surrogate taxes help the tax system achieve horizontal equity).

¹⁷¹ See Mark Maremont, *Silicon Valley's Mouthwatering Tax Break*, WALL STREET J. (Apr. 7, 2013, 7:03 pm), <https://www.wsj.com/articles/SB10001424127887324050304578408461566171752>.

¹⁷² I.R.C. § 119.

¹⁷³ Maremont, *supra* note 171.

¹⁷⁴ *Id.*

¹⁷⁵ I.R.C. § 274(o).

¹⁷⁶ § 274(o).

What Congress did was apply a surrogate tax.¹⁷⁷ The employees perhaps should be taxed on the meals they receive. Instead, Congress disallowed the employers' deduction for the meals, effectively imposing a tax equal to the cost of the meals times the employers' marginal tax rate.

The free meals surrogate tax is similar to the free technology surrogate tax we are proposing. The meals are, in substance, untaxed compensation to the employees. The free digital services are, in substance, untaxed compensation to the users for their time, attention to ads, and data. The value of each individual meal provided to an employee is likely small, but in the aggregate is significant. The value of each individual's time or data is likely small, but in the aggregate is significant. The value of the food consumed by each employee varies, and is hard to measure. Similarly, the value of time and data provided by each user varies, and is hard to measure. When value at the eater or user level is small, and in the aggregate substantial, it is appropriate to tax the value at the aggregate level.

Surrogate taxes have their drawbacks. By changing the identity of the taxpayer, they also change the tax base and rate.¹⁷⁸ If free meals are really compensation, for example, then the *fair market value* of the meals should be included in each employee's income. Instead of taxing fair market value at the employee level, Congress has chosen to tax the *cost* of the meals at the employer level (through a denial of a deduction). The cost of the meals will, presumably, be less than their fair market value. Also, by shifting the tax from the employee to the employer, the tax rate changes from the individual income tax rate (progressive rates that currently range from 10% through 37%)¹⁷⁹ to the corporate rate (currently a flat rate of 21%).¹⁸⁰

Although a surrogate tax does not perfectly align with a direct tax on the same activity, and falls short of the ideal, it allows for some tax to apply to activity that would otherwise escape taxation.

F. Our Proposed Surrogate Tax on Digital Bartering

Our proposed surrogate tax is conceptually very simple. The heart of the tax is a deduction disallowance at the federal level, which can then be easily extrapolated to generate state-level tax revenue as well.

I. Income Tax

At the federal level, we suggest Congress disallow an income tax deduction for the cost of providing free services (digital or otherwise)¹⁸¹ to users by companies using the advertising-pricing model. We explain how "cost" could be calculated below.¹⁸² As deductions are a matter of legislative grace, Congress has the power to limit deductions for these costs. To avoid imposing the tax and the compliance burden on small, fledgling enterprises with little activity, the tax would need a gross receipts threshold.¹⁸³ The threshold should be set high enough to avoid burdening small companies but low enough that it doesn't just target a handful of companies.¹⁸⁴

Since most states begin their calculation of taxable income with federal taxable income,¹⁸⁵ the states would simply piggyback on the federal disallowance—automatically restoring their lost income tax revenue from digital bartering.

¹⁷⁷ See Roin, *supra* note 20, at 252.

¹⁷⁸ See *id.* at 253–56.

¹⁷⁹ I.R.C. § 1.

¹⁸⁰ I.R.C. § 11.

¹⁸¹ See *supra* Part IV.D.

¹⁸² See *infra* Part IV.G.

¹⁸³ Gross receipts thresholds are sometimes used in the federal tax law. See, e.g., §§ 163(j); 448(c) (imposing a limit on the deductibility of interest expense for companies with more than \$25 million in gross receipts).

¹⁸⁴ If a company has a loss for the year, the surrogate tax would still affect them. The disallowed deduction would reduce the company's net operating loss carryforward—ultimately resulting in more tax paid in the future. See I.R.C. § 172.

¹⁸⁵ See *supra* II.A.

2. Sales Tax

To replace the sales tax revenue from digital bartering, we propose that states use a surrogate sales tax equal to the state's sales tax rate multiplied times the deduction disallowance, noted above, that is apportioned to the state. The apportionment formula could be the same one that taxpayers use on their state income tax returns¹⁸⁶ or could be based on the number of users of the bartered services within the state divided by the total number of users.

G. Measuring the Tax Base

The obvious barrier to imposing a surrogate tax on technology companies is valuation. At the federal level, the disallowed deduction noted above would be the tax base. At the state level, the income tax base and the sales tax base would be the disallowed federal deduction times the taxpayer's income tax apportionment percentage in the state. Below, we discuss various approaches to calculating the tax base.

1. The Base Equals the Cost of Providing the Free Digital Services

One possible measure borrows from the free meals surrogate tax: disallow the cost of the service that is provided to users without charge. Cost might be ascertained by having the technology companies detail the "cost of revenues" reported on their financial statements. For example, Alphabet (Google), breaks out cost of revenues into traffic acquisition costs (TAC) and other costs such as content acquisition (YouTube, Google Play), data center costs, and related personnel and operations expenses.¹⁸⁷ These costs cover both free and paid services, so the company would need to provide an auditable allocation of the costs between the two. Using cost obviates the need to reckon the value exchanged between users and the technology company. As noted above, however, an ideal tax base would be fair market value rather than cost.¹⁸⁸ Accordingly, we now turn to possible ways of calculating a tax base tied to value.

2. The Base Equals the Premium Product Price

Ideally, the tax base would be the amount the user would have paid in cash, instead of time or data, for the use of the digital services. In some situations, this would be ascertainable because the user is given a choice: 1) use the technology without charge but give up your data or be exposed to advertising or 2) pay a fee and enjoy a greater level of privacy and no ads.¹⁸⁹ The fee charged for the second option would be the tax base. YouTube is a good example. Users could 1) watch videos for free, but be exposed to advertisements or 2) pay \$11.99 per month to watch videos with no advertisements.¹⁹⁰ Those taking the second option can easily be taxed. They are subject to income tax because they must earn income, pay taxes on that income, and then use their after-tax income to pay the (nondeductible, assuming no business connection) fee. They could also be subject to sales tax—since the monthly payment is easily identified. The \$11.99 per month for YouTube Premium is thus the tax base that is being lost for both income and sales tax purposes for those taking the first option. In reality, the amount is likely less than \$11.99 per month because YouTube Premium includes some features other than freedom from advertising that are not available to non-subscribers.¹⁹¹

3. The Base Equals the Value of User Time on Content Consumption or Data Generation

Not all digital services offer ad-free options. Yet even here we can approximate the tax base. Under the barter-equation method,¹⁹² the value that the user would pay for the premium option, were it available, should equal the value of what the user is giving up: their time and data.

¹⁸⁶ States that have a sales tax but not a corporate income tax would need an alternative. Also, the way a state sources service revenue to the numerator of its receipts apportionment factor could impact the amount of tax they would collect. Many states use cost of performance method, which sources service revenue to the state in which most of the costs were incurred. But more states are shifting to market sourcing, which sources revenue to the state where the service is used. See HELLERSTEIN, *supra* note 48, at Table 9-8.

¹⁸⁷ See Alphabet Inc., Annual Report 38 (Form 10-K) (Feb. 3, 2021).

¹⁸⁸ See *supra* Part IV.E. Here, by "value," we mean the value the technology company is providing to the user or vice versa; not the value of users' time and data after it has been processed through algorithms and sold as advertising services.

¹⁸⁹ See Agrawal & Fox, *supra* note 19.

¹⁹⁰ See *YouTube Premium*, YOUTUBE, <https://www.youtube.com/premium> (last visited Aug. 20, 2021).

¹⁹¹ See *id.*

¹⁹² See *supra* Part IV.B.1.

Although the value and volume of time and data varies greatly by user, they can be standardized and approximated in the aggregate. Economist David Evans, for example, used the U.S. Department of Transportation's \$13.60 per hour measure of the opportunity cost of traffic congestion to value the time users spend with digital services.¹⁹³ Although Evans was looking at the value of total time spent online rather than time spent paying attention to ads, his work shows that a standard measure can be used to value user time. This approach would require determining the length of time that it takes to watch or interact with ads; information which is already being captured.¹⁹⁴

4. The Base Is Determined in Cooperation with the Technology Companies

The government should consider one or more of the above options to establish a default, standard tax base. Then, if the companies can provide auditable data to the government that shows the standard tax base is too high, they would have the option to claim the lower base. Part of the challenge of taxing technology companies fairly is the opacity of their operations and the difficulty of valuing their proprietary technology.¹⁹⁵ A tax system that encouraged the technology companies to come forward with information to establish a fair tax base would help overcome this challenge. The technology companies know the costs of providing free services, how long their users are using those services, and where the users are located when they do so. If the companies can show that their income tax apportionment percentage does not properly reflect users by state, they can refute that as well. The technology companies should also be allowed to show how much of their free services are provided to businesses, rather than households. If they can provide reliable, auditable data on this point, the tax base should be reduced by the percentage used by business users—to avoid a tax on business inputs. The tax law has many examples of allowing a taxpayer to choose between a simple, default calculation or a more cumbersome one based on taxpayer-specific data.¹⁹⁶ Our proposal is no different.¹⁹⁷

5. Any of the Above Bases is Superior to Both Maryland's and the Status Quo

Our surrogate tax, while imperfect, is a pragmatic proposal that is preferable both to Maryland's aggressive approach and to the lax, status quo approach in most other places. Maryland is taxing advertising revenue, which vastly overstates the tax base. Advertising revenue reflects the fair market value not of the raw data or of users' time, but the value after that data has been processed through algorithms that the company can sell to advertisers. On the other hand, the approach of every other state, not taxing digital barter at all, vastly understates the tax base. We are suggesting a tax that approaches the true tax base, while moderately understating it for the sake of convenience, certainty, and economy in collection. The default standard tax base ensures that digital barter is no longer untaxed, while the option for companies to rebut the standard base with auditable data ensures that the tax base is never overstated.¹⁹⁸

¹⁹³ See generally David S. Evans, *The Economics of Attention Markets* (Apr. 15, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3044858.

¹⁹⁴ See *Think with Google*, GOOGLE, <https://www.thinkwithgoogle.com/marketing-strategies/video/18-time-spent-on-youtube-statistics/> (last visited Aug. 20, 2020). The value of time spent with ads is a good measure if one views users as primarily providing time and attention in exchange for digital services. If one views user data as the more valuable currency, however, an opportunity cost approach would be underinclusive in that it would fail to capture the value users provide as they navigate the web and the technology company tracks their movements and continuously updates each user's profile to predict purchasing habits and decisions. See *supra* note 154 on profile identification. The ways of calculating a tax base that we discuss here—using cost, premium equivalents, or time—work well in the surrogate tax environment even if they are arguably underinclusive.

¹⁹⁵ See *supra* note 8.

¹⁹⁶ See IRS Notice 2021-02 (noting, for example, taxpayers using a car for business purposes can deduct their actual costs on their business miles times the standard mileage rate; the latter is easier but the former might yield a bigger deduction).

¹⁹⁷ The Advanced Pricing and Mutual Agreement Program (APMA), where the IRS works with multinational corporations to pre-review their transfer pricing methodology, could also be a model. See *Advance Pricing and Mutual Agreement Program*, INTERNAL REVENUE SERVICE, https://www.irs.gov/businesses/corporations/apma_ (last visited Aug. 20, 2021). Like digital bartering, transfer pricing can involve complex assessments of value. An APMA-like approach might be used to review a technology company's challenge of the default tax base in a surrogate tax on digital barter. The IRS charges a user fee for the APMA service, and presumably could do the same in reviewing digital barter tax bases. See *id.*

¹⁹⁸ Some might question whether our proposed tax would result in a lower tax liability than taxes like Maryland's DST. We cannot provide a concrete example, given the uncertainty surrounding the operation of the Maryland tax and the need for industry input in designing our proposed tax. But recall that we are starting from a much lower tax base (the value of the raw data or user time) than Maryland, which is looking at the much-higher value of the processed data sold to advertisers. Thus, we anticipate that our suggested tax will be significantly lower than the DSTs currently under consideration.

H. Policy Check

Our proposal adheres to normative tax principles.¹⁹⁹ It would move digital service taxation closer to horizontal equity: all transactions of a similar nature, whether in cash or time or data, would be taxed approximately the same. It would ensure certainty by reducing future litigation. It would ensure more convenience and economy. By using a surrogate tax paid by technology companies on behalf of their users, we would ensure more efficient reporting and audits. Inquisitorial reviews of individual users would not be required. By imposing the same tax burdens on advertising-pricing business models as customer-pricing business models, our proposal would make the tax system more neutral—and fairer.

At the state level, a surrogate tax would help align sales tax systems with normative principles.²⁰⁰ More sales to households would be taxed and a gross receipts tax on business inputs would be avoided.

I. Possible Objections

We now explore five possible objections to our proposal. First, one might argue that our surrogate tax is taxing business inputs. After all, technology companies following the advertising-pricing model are effectively buying ad viewing and data from users, processing it through algorithms to better predict behavior and target ads, and then selling the resulting product in the form of advertising space. The data and time of the users are the raw materials, which should be deductible for income tax purposes and not taxable for sales tax purposes. But our proposal does not focus on the purchase of the data or time *by the technology company*; instead, it focusses on the purchase of the digital services *by the user*. The user's purchase is not a business input (unless the user is a business). Also, as noted above, if a vendor fails to collect a sales tax from a customer, the vendor becomes liable.²⁰¹ We are merely taking that fallback position and suggesting it be the rule in the context of digital bartering.

Second, one might reasonably suggest that taxing digital barter is not worth the effort. Unlike the neighborly bartering in Shasta County or the gourmet food offered by some employers, nearly everyone (assuming they have internet access) can take advantage of tax-free barter in digital services. As tax scholar Boris Bittker noted: “the elimination of an exclusion would serve no purpose if it is so equally distributed that the tax burden would be unaffected by the tidier system resulting from the change.”²⁰² Our response is that governments currently need more revenue and that digital taxes are coming. We suggest it would be better to broaden the tax base to include digital barter via a surrogate tax tied to current tax instruments than to raise tax rates overall or enact new taxes.

Third, users of free technology might understandably object to our proposal, out of fear that the tech companies would start charging a fee. But technology companies have had much success with the advertising pricing model and are unlikely to jeopardize that success by attempting to charge customers a fee and yet still take their data and expose them to advertising. Thus, we doubt that the free services we currently enjoy would go away.²⁰³

Fourth, some might suggest that the technology companies could try to game the system. The tech companies might charge, say, one dollar per month for access and then claim that they are using the customer-pricing model rather than the advertising-pricing model and that the tax base is one dollar per month. The value of the barter, of course, might be much greater. While this is a valid concern, the risk is mitigated because the tax law already has rules and doctrines to prevent such gaming. State tax authorities, for example, often have the ability to re-price transactions for sales tax purposes if the price was not set at fair market value.²⁰⁴ For the income tax, doctrines like substance over form can be used to prevent these tactics.²⁰⁵

¹⁹⁹ See *supra* Part I.

²⁰⁰ See *supra* Part II.C.

²⁰¹ See *supra* note 63 and accompanying text.

²⁰² Boris I. Bittker, *A Comprehensive Tax Base as a Goal of Income Tax Reform*, 80 HARV. L. REV. 925, 984 (1967).

²⁰³ The tech companies could, if the market allowed, pass the cost of the tax on to advertisers, who would then, if the market allowed, pass the cost on to consumers—who may not be the same individuals using the free technology. The burden, or “economic incidence” of any tax is difficult to track. See, e.g., KEEN & SLEMROD, *supra* note 71, at 149–69. Unlike the Maryland DST, however, our tax would apply broadly across the U.S.—and thus would not disproportionately affect advertisers or consumers in a particular state. See *supra* note 103 and accompanying text.

²⁰⁴ See, e.g., PA. STAT. ANN. tit. 72, § 7201(g)(3) (2021) (allowing such adjustments).

²⁰⁵ See, e.g., Gregory v. Helvering, 293 U.S. 465, 467–69 (1935).

Fifth, PITFA is a barrier; one that is hard to reckon until more courts have interpreted its broad language.²⁰⁶ However, because our surrogate tax proposal is simply an application or extension of existing tax law, it should fare better than other proposed taxes against legal challenges. Regardless, we are already calling on Congress to change the tax law to disallow deductions, which would necessarily also involve clarifying or amending PITFA to allow the surrogate taxes we propose. Doing so would provide the states with the certainty they need to enact surrogate sales taxes without fear of litigation over PITFA. In addition to congressional action, the states would need to decide whether to enact a surrogate sales tax. In doing so, they may need to expand their sales tax base beyond tangible personal property to embrace digital services. All of this might seem naïve, but it is much more likely to happen if technology companies themselves advocate for the needed changes and strategically embrace a tax like the one we are proposing.

V. Legal Strategy

We now review why technology companies should support a surrogate tax, encourage legal changes that would clear a way for such a tax, and work with federal and state governments to provide the auditable information necessary to execute the tax in a fair and efficient manner. In Section A, we discuss, in general, why this is a good strategy. In Section B, we apply Robert Bird's legal strategy framework.

A. Legal Strategy in General

Currently, advertising-pricing technology companies have little choice but to challenge taxes, like Maryland's, in court. But that is not sustainable. Courts, although showing signs of becoming more legislative,²⁰⁷ are not legislatures. Courts can strike down a tax as violating a federal law (like PITFA) or a provision of the Constitution. But they can't design a replacement tax. If the Maryland tax is struck down, for example, the technology industry victory might be short-lived. Maryland can subsequently enact a similar tax with slightly different features, spawning yet another round of litigation.²⁰⁸ If the court strikes down the new tax, the process may start over again. The solution in the long run is not costly litigation, but effective legislation.

A surrogate tax should be far more palatable to the industry than a Maryland-like tax. Unless the tax is voided by a court, Maryland can increase the tax rates at will—just as it can do with taxes on tobacco companies. It is quite difficult, politically, to oppose increases in sin taxes.²⁰⁹

Even though our proposed tax would be mostly paid by the technology industry, it would be tied to existing tax instruments that apply to a wide variety of taxpayers. If technology companies paid a surrogate sales tax on digital barter, it would be an additional cost. But the cost would be certain and predictable. Anchored to the income tax or general sales tax rate, the tax could not be raised unless the rate was raised on everyone subject to the income or sales tax. That guardrail should be of tremendous value to the technology industry. Governments could still broaden the tax base over time, but proactive participation by the technology companies in setting the tax base (or challenging the default base by providing auditable data), as we suggested above, would mitigate that risk. In contrast, Maryland's DST and even thoughtfully designed taxes (like taxes on data itself or data mining)²¹⁰ are not tied to existing tax instruments. Instead, they represent new instruments that only apply, for the most part, to the technology industry. Such taxes could be raised easily since only a small number of taxpayers would be affected.

Also, with the technology industry under scrutiny, it can bolster its reputation by embracing new taxes. With some kind of tax seemingly inevitable, tech companies can work for a more favorable tax while generating goodwill. The technology industry has arguably imposed many negative externalities on society, but it has also clearly enhanced it

²⁰⁶ Given all the uncertainties surrounding PITFA, a detailed analysis of how it might affect our proposals (or any other proposals) is beyond the scope of this article. Arguments abound about how PITFA will affect DSTs. *See, e.g.,* Darien Shanske, Christopher Moran & David Gamage, *Maryland's Digital Tax and the ITFA's Catch-22*, 100 TAX NOTES STATE 141 (Apr. 12, 2021) (arguing that PITFA should not apply to taxes like Maryland's).

²⁰⁷ Kisska-Schulze et al., *supra* note 119, at 375–78.

²⁰⁸ This is precisely what happened in New Jersey. After a court struck down their first attempt at legalizing sports betting, the state simply passed a slightly modified version that was ultimately upheld. *Id.* at 333–34.

²⁰⁹ *See* Gordon Fairclough, *Smoking Can Help Czech Economy, Philip Morris-Little Report Says*, WALL STREET J. (July 16, 2001, 12:01 am), <https://www.wsj.com/articles/SB995230746855683470> (reporting how cigarette maker Philip Morris lobbied against a proposed tobacco tax increase in the Czech Republic by commissioning a report showing that the government saved about \$31 million in public pensions and health care costs because smokers die younger; an argument that failed to resonate).

²¹⁰ *See supra* note 16.

through wondrous products and services. Technology companies don't deserve to be put in the same category as tobacco companies—whose products do tremendous harm with no redeeming qualities.²¹¹ Proactively working with governments on the issue of taxation can help them avoid that fate.

B. The Bird Framework

Robert Bird has formulated a framework for understanding how firms can view the law strategically, using it to create lasting competitive advantages.²¹² Bird's framework has a hierarchy of five levels, from the lowest to the highest level of strategic legal behavior: avoidance, compliance, prevention, advantage, and transformation. Arguably, large U.S. technology companies have so far adopted an "avoidance" approach to taxation, while embracing a surrogate tax could enable them to move towards a higher-level "advantage" or "transformation" approach.

For an avoidance firm, "[l]egal requirements are merely an obstruction to be overcome as quickly and as cheaply as possible."²¹³ This approach describes U.S. tech companies' aggressive tax-minimization behavior well. In fact, tax avoidance is a prototypical example of a behavior adopted by avoidance firms. As Bird states:

Avoidance firms exploit advantages through legal arbitrage, which involves the interpretation of ambiguous law in one's favor to avoid obligations. . . . One of the most common kinds of legal arbitrage is tax planning and avoidance. Firms regularly take advantage of tax code loopholes to reduce their burden, completing transactions that lack economic or ethical substance but use the law to produce favorable tax results.²¹⁴

Like other avoidance behaviors, aggressive tax avoidance is not strategy because it is easily copied by rivals and therefore produces no lasting advantage within an industry.²¹⁵ Further, avoidance is often not sustainable over the long-term, as regulatory authorities may eventually target the behavior, impose fines and penalties, or enact new rules to prevent the behavior.²¹⁶ This seems to be the likely outcome for U.S. technology companies, whose aggressive avoidance of existing taxes has led foreign governments and U.S. state governments to enact new, harsher taxes targeted specifically at large tech firms.²¹⁷

Thus far, U.S. tech companies have responded to these new and proposed taxes by doubling-down on their avoidance approach. The enactment of a DST in France is emblematic. Despite U.S. protests, France enacted a 3 percent, turnover-based DST on large multinational technology companies.²¹⁸ With the support of industry lobbying groups, the United States Trade Representative retaliated with an investigation and a punitive 25 percent tariff on key imports from France.²¹⁹ The tariff has been postponed,²²⁰ and it's possible that large tech companies' enormous wealth and influence can successfully defeat unilateral DST taxes. But the efforts could also fail, and they run the risk of sparking a costly trade war.

In contrast, industry support for an alternative proposal such as a surrogate tax could achieve a higher-level legal strategy within the Bird framework such as "advantage" or "transformation." These levels go far beyond mere legal compliance and see the law as a source of lasting competitive advantages. An advantage firm views "legal strategy as the goal rather than the means to another end," and its "[m]anagers act proactively, without the pressure of litigation

²¹¹ Unless, of course, one takes the Philip Morris approach. See *supra* note 209.

²¹² See generally Robert C. Bird, *Pathways of Legal Strategy*, 14 STAN. J.L. BUS. & FIN. 1 (2008).

²¹³ *Id.* at 13.

²¹⁴ *Id.* at 14 (internal footnotes omitted).

²¹⁵ *Id.* at 15–17.

²¹⁶ *Id.* at 16.

²¹⁷ See *supra* Part III.

²¹⁸ See Teri Sprackland & Stephanie Soong Johnston, *French DST Signed into Law Despite U.S., Competition Concerns*, 95 TAX NOTES INT'L 444, 444 (July 29, 2019).

²¹⁹ See Stephanie Soong Johnston, *U.S. to Hit Back at French Digital Tax with New Tariffs in 2021*, 168 TAX NOTES FEDERAL 493, 493 (July 20, 2020); Stephanie Soong Johnston, *U.S. Stands Down on Tariff Retaliation Against French Digital Tax*, 101 TAX NOTES INT'L 257, 257 (Jan. 11, 2021) [hereinafter Johnston, *U.S. Stands Down*].

²²⁰ Johnston, *U.S. Stands Down*, *supra* note 219, at 257 The tariff is currently suspended as a result of the change in U.S. presidential administrations in 2021. *Id.*

or regulation, to initiate legal strategies in business plans.”²²¹ Bird offers the example of Pepsi, which rather than wait for potential litigation alleging that its products caused health problems, gained a lasting first-mover advantage by proactively creating healthier products.²²²

U.S. tech companies could adopt an advantage approach by proactively supporting a well-designed digital tax regime, such as a surrogate tax. Trends indicate that the current focus on opposing all taxes seems most likely to result in undesirable DST-type taxes enacted unilaterally in many different jurisdictions. Not only are such taxes suboptimal per se, but the fact that the taxes would differ across jurisdictions imposes a costly compliance burden. More importantly, firms that proactively support reasonable taxes in good faith are more likely to have a seat at the table where they can help shape the taxes they will bear. For example, if Google were to get behind a surrogate tax proposal first,²²³ it could negotiate for provisions that assume lower costs for search business than, say, social media businesses, creating real competitive advantages over rivals. Proactive cooperation could also benefit the U.S. technology industry as a whole beyond simply achieving a tax that is less harsh than it might be otherwise. For example, tech companies could negotiate for part of the revenue from the new tax be used for expanding internet access in rural and developing areas, thus increasing the number of users.

Firms that take a transformation approach to legal strategy go even further. Beyond creating a lasting competitive advantage, a transformation strategy “can be used to improve key mechanisms within the organization . . . and may even change the firm's mission, . . . creat[ing] value where none was thought to exist.”²²⁴ An example is Lincoln Electric Company, which voluntarily waived its legal right to dismiss employees at will and adopted a no-layoffs policy. This attracted talented employees and created exceptional employee loyalty.²²⁵ Further, the inability to lay off employees caused the company to adopt innovative practices that greatly improved worker productivity.²²⁶ Lincoln Electric’s approach to employment regulation could be analogous to U.S. technology companies’ response to taxation. Even if they see themselves as legally entitled to avoid all taxes, voluntarily supporting a reasonable proposal to pay more taxes in jurisdictions where they derive substantial revenue could create significant goodwill within those jurisdictions. Further, the tax revenue generated could cause them to be seen as essential partners to those governments and create more productive and harmonious government relationships. The need to value and measure the bartered services provided to users could also lead to knowledge and practices that transform businesses in unanticipated ways.

Conclusion

Technology companies face a stark choice. They can follow good strategy, support a surrogate tax on digital barter that is tied to existing, broadly applicable tax instruments, and cooperate with legislators in establishing a fair tax base. Or they can subject themselves to escalating sin taxes and ensuing court battles. Congress and the states face a similar choice. They can follow the lead of Maryland and try to grab revenue via an unsound tax that will be challenged. Or they can work with the technology industry to design a tax, like the one suggested in this article, that is grounded in normative tax policy principles and fosters horizontal equity across all business models.

Maryland’s DST, which is essentially a sin tax, implies that the technology industry belongs in the same category as the tobacco industry. To avert this association, technology companies should evolve into strategic surrogates. Otherwise, they may devolve into sad sinners.

²²¹ Bird, *supra* note 212, at 27.

²²² *Id.*

²²³ Google is making strategic changes in other areas, like user privacy. *See, e.g.*, Sam Schechner & Keach Hagey, *Google to Stop Selling Ads Based on Your Specific Web Browsing – Citing Privacy Concerns, Company Says it Won't Track Individuals' Paths Across Multiple Sites*, WALL STREET J., Mar. 3, 2021, at A1.

²²⁴ Bird, *supra* note 212, at 31.

²²⁵ *Id.* at 33–38.

²²⁶ *Id.* at 34–36.