Maryland Law Review

Volume 81 | Issue 1 Article 2

Subnational Digital Services Taxation

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SUBNATIONAL DIGITAL SERVICES TAXATION

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Existing tax regimes fail to tax digital services appropriately. Digital services based on extracting and monetizing user data—most notably digital advertising—are particularly problematic because tax regimes do not adequately account for the enormous value derived from user data.

Internationally, taxing jurisdictions have recognized these failures and commenced a controversial push toward new digital services taxes, or DSTs. Subnational taxing jurisdictions in the United States face the same issues and are searching for solutions.

This Article begins by examining the motivations and justifications for digital service taxation at both the international and subnational levels. These justifications center on antiquated tax regimes that do not sufficiently capture profit from new business models, particularly business models that rely on valuable data extracted from users in the taxing jurisdiction.

Next, this Article presents options for subnational digital service taxation. These options range from slightly modified existing tax regimes to novel approaches that may more appropriately tax digital services, specifically those services that extract and monetize user data. This Article also analyzes the constitutional, federal preemption, and sourcing challenges facing subnational digital services taxes.

This Article concludes by examining how subnational taxing jurisdictions may most effectively tax digital services. Although states have started to embrace digital advertising taxes modeled after European digital services taxes, these taxes are narrow and susceptible to challenge. Subnational jurisdictions have several better options, including publicly traded stock-based taxes and data mining taxes.

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*Associate Professor of Law at the Stetson University College of Law. Thanks to all who have offered their time, energy, and insight to help improve this Article, especially Jeremy Bearer-Friend, Jon Choi, Walter Hellerstein, Hayes Holderness, Christine Kim, Ariel Jurow Kleiman, Shelly Layser, Zach Liscow, Ellen Podgor, Blaine Saito, and the participants in the 2020 Southeastern Association of Law Schools Conference and 2020 Junior Tax Scholars Workshop. I also greatly appreciate the support of my incredibly helpful research assistants, Noah Daiker and Tyler Willis. The sentiments expressed in this Article, along with any errors or omissions, are mine alone.

INTRODUCTION

Existing tax regimes fail to tax digital services appropriately. Digital services based on extracting and monetizing user data—most notably digital advertising—are particularly problematic because tax regimes do not adequately account for the enormous value derived from user data. The amorphous, cross-border nature of the digital economy makes adequate taxation even more difficult because there is often no clear answer as to which jurisdiction may impose tax and to what extent. Internationally, taxing jurisdictions have recognized these failures and commenced a controversial push toward new digital services taxes, or DSTs. Subnational taxing jurisdictions in the United States face the same issues and are searching for solutions.

The justifications for a new tax regime center on existing antiquated tax regimes that do not sufficiently capture profit from new business models, particularly business models that rely on valuable data extracted from users in the taxing jurisdiction.[1] In contrast to a traditional two-party transaction

1. *See* Wei Cui, *The Digital Services Tax: A Conceptual Defense*, 73 TAX L. REV. 69, 71–73 (2019); Adam B. Thimmesch, *Transacting in Data: Tax, Privacy, and the New Economy*, 94 DENV. L. REV. 145, 146–48 (2016); Omri Marian, *Taxing Data*, 47 BYU L. REV. (forthcoming 2021) (manuscript at 21, 35), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3793892; Billy Hamilton, *Will 'Techlash' Open the Door to State Taxes on Big Data?*, 100 TAX NOTES STATE 1427, 1427–30 (2021).

in which a vendor provides a service to a consumer and the consumer pays the vendor a market price, the prevailing digital service business model reflects at least a three-party transaction.[2] A digital service provider provides a service to an end user, but instead of charging that end user a market price for the service, the digital service provider charges nothing or a much lower subsidized price. The digital service provider extracts the end user's personal data and uses that valuable resource to sell targeted advertising, which the provider embeds in its services to end users. In this business model, digital service providers are monetizing user data and jurisdictions are struggling to adequately tax the value inuring to the digital service provider.[3]

These large technology companies experienced massive revenue growth during 2020 while many businesses were suffering or shuttering due to the global pandemic, greatly intensifying legislative pressure to tax these companies more appropriately.[4] The Big Five tech companies—Alphabet ("Google"), Amazon, Apple, Facebook, and Microsoft—were the largest five companies in the United States based on market value in 2020.[5] These companies are also exceedingly profitable, with Google, Microsoft, and Apple among the top five most profitable companies in the United States in 2020.[6] Arguably, a portion of any excess profit is attributable to value in these companies' business models that is not adequately taxed.

There have also been calls to use tax regimes, rather than antitrust or other regulatory means, to mitigate the monopolistic nature of large multinational technology companies such as Google and Facebook, particularly as privacy and platform censorship become greater concerns.[7]

2. *See* Cui, *supra* note 1, at 85; Thimmesch, *supra* note 1, at 150–51; Marian, *supra* note 1 (manuscript at 29–30); Hamilton, *supra* note 1.

3. *See* Cui, *supra* note 1, at 85; Thimmesch, *supra* note 1, at 150–51; Marian, *supra* note 1 (manuscript at 29–30); Hamilton, *supra* note 1, at 1427–31.

4. *See, e.g.*, Ruth Mason & Darien Shanske, *INSIGHT: The Time Has Come for State Digital Taxes*, BLOOMBERG TAX (May 29, 2020, 5:01 AM), https://news.bloombergtax.com/daily-tax-report/insight-the-time-has-come-for-state-digital-taxes-55; Cameron Faulkner, *Amazon's Latest Earnings Cap Off a Sterling 2020, Despite the Pandemic*, VERGE (Feb. 2, 2021, 5:10 PM), https://www.theverge.com/2021/2/2/22260133/amazon-q4-2020-quarterly-earnings-jeff-bezos-ceo-transition-andy-jassy; Jordan Novet & Jennifer Elias, *Alphabet Revenue Up 23% as Core Advertising Business Shows Strong Growth*, CNBC (Feb. 2, 2021, 3:31 PM), https://www.cnbc.com/2021/02/02/alphabet-googl-earnings-q4-2020.html; Press Release, Facebook, Facebook Reports Fourth Quarter and Full Year 2020 Results (Jan. 27, 2021), https://investor.fb.com/investor-news/press-release-details/2021/Facebook-Reports-Fourth-Quarter-and-Full-Year-2020-Results/default.aspx.

5. *Fortune 500*, FORTUNE, https://fortune.com/fortune500/2020/search (last visited May 19, 2021).

6. *Id.*

7. Paul Romer, *A Tax That Could Fix Big Tech*, N.Y. TIMES (May 6, 2019), https://www.nytimes.com/2019/05/06/opinion/tax-facebook-google.html; Reuven S. Avi-Yonah & Lior Frank, *Antitrust and the Corporate Tax: Why We Need Progressive Corporate Tax Rates*, 167 TAX NOTES FED. 1199, 1201 (2020); Stewart Baker, *How to Rein in Big Tech? Tax the Behemoths.*,

Implementing a new tax regime instead of a new regulatory regime may be a more feasible approach, especially at the state and local level.

Jurisdictions need to consider their approaches carefully, as there are myriad constitutional, federal preemption, and administrative obstacles they must navigate to create a viable digital services tax. Many jurisdictions do not fully understand these novel business models, which supports the assertion that current tax regimes do not adequately tax data-focused industries, but also cautions against a hasty response. Jurisdictions should embrace a diligent and deliberate approach because these tax regimes have the potential to alter the entire economy.

This Article begins by examining the motivations and justifications for digital service taxation at both the international and subnational levels.[8] This Article then presents options for subnational digital services taxation.[9] These options range from slightly modified existing tax regimes to novel approaches that may more appropriately tax digital services, specifically those services that extract and monetize user data. Next, this Article analyzes the constitutional, federal preemption,[10] and sourcing challenges[11] facing subnational digital services taxes. This Article concludes by examining how subnational taxing jurisdictions may most effectively tax digital services.

I. THE RISE OF DIGITAL SERVICES TAXES

Digital services taxes are leading the international tax and political discussions. They are most prevalent in Europe, but countries worldwide are adopting or proposing new digital services taxes.[12] Although there are

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WASH. POST (Jan. 19, 2021, 9:15 AM), https://www.washingtonpost.com/opinions/2021/01/19/rein-in-big-tech-taxes/; Paul Mozur et al., *A Global Tipping Point for Reining in Tech Has Arrived*, N.Y. TIMES (Apr. 30, 2021), https://www.nytimes.com/2021/04/20/technology/global-tipping-point-tech.html. Rather than imposing a new tax on large technology companies, and in response to social media "de-platforming," Florida enacted legislation that precludes any businesses that violate antitrust laws from receiving tax incentives. S.B. 7072, 2021 Leg., Reg. Sess. (Fla. 2021).

8. *See infra* Part I.

9. *See infra* Part II.

10. *See infra* Part III.

11. *See infra* Part IV.

12. *See, e.g.*, Elke Asen, *What European OECD Countries Are Doing About Digital Services Taxes*, TAX FOUND. (Mar. 25, 2021), https://taxfoundation.org/digital-tax-europe-2020/; Stephen Gardner, *EU Lawmakers Back Plan for Bloc-Wide Digital Tax by Year's End*, BLOOMBERG TAX (Apr. 29, 2021, 3:37 AM), https://news.bloomberglaw.com/daily-tax-report/eu-lawmakers-back-plan-for-bloc-wide-digital-tax-by-years-end; James Munson, *Canada Taxes Tech, Luxury Cars in First Full Budget Since 2019*, BLOOMBERG TAX (Apr. 19, 2021, 4:11 PM), https://news.bloombergtax.com/daily-tax-report/canada-proposes-luxury-digital-taxes-in-first-budget-since-2019; Hamza Ali, *Developing Countries Get UN Model for Taxing Tech Companies*, BLOOMBERG TAX (Apr. 20, 2021, 1:09 PM), https://news.bloombergtax.com/daily-tax-report/developing-countries-get-un-model-for-taxing-tech-companies.

several justifications for digital services taxes—primarily that large multinational technology businesses are not taxed appropriately through existing tax regimes—digital services taxes have proved quite controversial.[13]

Although digital services taxes vary by country, they share many fundamental characteristics. Importantly, the digital services taxes are imposed on the service provider, not the customer. Many providers, however, will pass these taxes through to the customers, thus shifting the incidence.[14] These taxes are structured as gross receipts or gross revenue taxes, at a rate of 1.5% to 7.5% of an applicable business's digital service gross revenues sourced to that jurisdiction.[15] The general scope of digital services taxes is revenue from online advertising, sales of collected user data, and digital platforms that facilitate interactions between users. Precisely defining the tax's scope, however, has proved challenging and produced inconsistent regimes across countries.[16] Some countries have narrowed the scope to target digital advertising services, while others have broadened the scope to encompass most digital services, including content streaming.[17] Controversially, digital services taxes generally apply only to very large multinational technology businesses, almost all of which are United States-based companies.[18] The Big Five tech companies generated nearly $900 billion in combined revenue in 2019.[19] Only seventeen countries had Gross Domestic Products ("GDPs") greater than the aggregate revenue of these five companies.[20] Many of the European nations proposing digital services taxes have GDPs that are dwarfed by these five companies' revenues.[21]

Although these five companies have massive revenues, profits, and market capitalizations, their business models vary significantly. Google and Facebook derive almost all their revenue from digital advertising, while

13. *See* Arthur J. Cockfield, *Tax Wars: How to End the Conflict over Taxing Global Digital Commerce*, 17 BERKELEY BUS. L.J. 347, 349–50 (2020); Lilian V. Faulhaber, *Taxing Tech: The Future of Digital Taxation*, 39 VA. TAX REV. 145, 147–48 (2019); Ruth Mason & Leopoldo Parada, *The Legality of Digital Taxes in Europe*, 40 VA. TAX REV. 175, 177–78 (2020); Young Ran (Christine) Kim, *Digital Services Tax: A Cross-Border Variation of the Consumption Tax Debate*, 72 ALA. L. REV. 131, 132–33 (2020); Michael J. Graetz, *A Major Simplification of the OECD's Pillar 1 Proposal*, 101 TAX NOTES INT'L 199, 199 (2021).

14. *See infra* Part II.

15. *See* Asen, *supra* note 12.

16. *Id.*

17. *Id.*

18. *Id.*

19. *See Fortune 500*, *supra* note 5 and accompanying text.

20. *GDP (Current US$)*, WORLD BANK, https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?most_recent_value_desc=true (last visited May 19, 2021).

21. *Id.*

Amazon, Apple, and Microsoft derive comparatively little revenue from digital advertising.[22] Rather, their core business models are built on online retail, hardware sales, and software sales, although Amazon's digital advertising business is growing rapidly.[23] Thus, a digital advertising focus may be less effective than other approaches discussed below.[24]

While the digital services tax movement progresses internationally, there is a corresponding subnational digital tax movement within the United States.[25] States have considered three general approaches thus far. First, the taxing jurisdiction may impose a new digital advertising gross receipts tax on digital service providers, similar to the international digital services taxes.[26] States are concerned that large digital advertising companies are collecting and monetizing their residents' user data and not paying appropriate levels of tax.[27] States are recognizing that user data is arguably the most valuable resource in the world, and large monopolistic digital service providers are

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22. *See* Jeff Desjardins, *How the Tech Giants Make Their Billions*, VISUAL CAPITALIST (Mar. 29, 2019), https://www.visualcapitalist.com/how-tech-giants-make-billions/.

23. *Id.* Amazon also has much lower average profit margins than the other four companies because of its core retail business, which makes net income taxation much less effective as applied to Amazon. *See* Isabel Gottlieb et al., *Amazon Taxation Becomes Sticking Point in Talks on Global Levies*, BLOOMBERG (Apr. 20, 2021, 6:17 PM), https://www.bloomberg.com/news/articles/2021-04-20/amazon-taxation-becomes-sticking-point-in-talks-on-global-levies.

24. *See infra* Part II.

25. At the United States federal level, however, there has been a strong rebuke of international digital services taxes. *See, e.g.*, Ruth Mason, *Maryland's Proposed Digital Tax May Be Unconstitutional*, MEDIUM (Jan. 30, 2020), https://medium.com/@ProfRuthMason/marylands-proposed-digital-tax-may-be-unconstitutional-9be58831315b; Stephanie Soong Johnston, *U.S. to Slap France with Tariffs over Digital Services Tax*, TAX NOTES (Dec. 3, 2019), https://www.taxnotes.com/tax-notes-today-federal/customs-duties/us-slap-france-tariffs-over-digital-services-tax/2019/12/03/2b5ss. It is possible that the United States could revisit its previous stance given the change in administration, although that has not been the case thus far. *See, e.g.*, Mindy Herzfeld, *Resetting Expectations for a Digital Deal Under the Biden Administration*, 101 TAX NOTES INT'L 543, 543 (2021); Isabel Gottlieb & Hamza Ali, *U.S. OECD Pitch Puts Down Opening Bid to Roll Back Digital Taxes*, BLOOMBERG TAX (Apr. 12, 2021, 11:02 AM), https://news.bloomberglaw.com/daily-tax-report-international/u-s-oecd-pitch-puts-down-opening-bid-to-roll-back-digital-taxes; Ana Monteiro, *U.S. Forges Ahead on $1 Billion Tariff Plan over Digital Taxes*, BLOOMBERG (Apr. 5, 2021, 2:00 AM), https://www.bloomberg.com/news/articles/2021-04-05/u-s-forges-ahead-on-1-billion-tariff-plan-over-digital-taxes.

26. *See, e.g.*, H.B. 732, 2020 Gen. Assemb., Reg. Sess. (Md. 2021), S.B. 787, 2021 Gen. Assemb., Reg. Sess. (Md. 2021); S. 1124, 2021–2022 Leg., Reg. Sess. (N.Y. 2021); L.C. 3237, 67th Leg., Reg. Sess. (Mont. 2021); S.B. 1106, 2021 Gen. Assemb., Reg. Sess. (Conn. 2021); H.B. 5645, 2021 Gen. Assemb., Reg. Sess. (Conn. 2021); H.B. 1312, 122d Gen. Assemb., Reg. Sess. (Ind. 2021); H. 3081, 192d Gen. Ct., Reg. Sess. (Mass. 2021); H. 2894, 192d Gen. Ct., Reg. Sess. (Mass. 2021); S.B. 605, 85th Leg., Reg. Sess. (W. Va. 2021); S.B. 558, 93d Gen. Assemb., Reg. Sess. (Ark. 2021); H.B. 4467, 87th Leg., Reg. Sess. (Tex. 2021). Only Maryland has enacted a digital advertising tax thus far, and the proposals in other states have had varying levels of support.

27. For example, a Connecticut legislator introduced a social media advertising tax bill because these companies "have in effect monetized the data of Connecticut residents." Lauren Loricchio, *Rep. Proposes Digital Ad Tax on Social Media Companies*, 99 TAX NOTES STATE 645, 645 (2021).

extracting it in exchange for free digital services or for no consideration at all.[28] Maryland legislators explicitly stated that the aim of their digital advertising tax is to ensure the state adequately taxes the top ten to twelve leading technology companies.[29] Possibly a stronger motivating factor, digital advertising taxes are enormous revenue sources at a time when many state and local governments are facing shortfalls.[30] Google, Amazon, and Facebook accounted for almost two-thirds of United States digital advertising spending in 2020.[31] The digital advertising industry has experienced momentous growth over the past decade, with gross revenue growing over nineteen percent annually to well over $100 billion in 2019.[32] Maryland estimates that its recently enacted digital advertising tax could generate $250 million annually, which would be dedicated to funding education programs.[33] If every state adopted a digital advertising tax, the aggregate annual state tax revenue could approach $14 billion, with at least $2 billion from Facebook alone.[34]

Second, the taxing jurisdiction may attempt to impose a transaction tax on digital advertising services.[35] This latter approach is generally effectuated by expanding the jurisdiction's existing sales and use tax regime to encompass digital advertising services and to impose the tax on the business

28. *See, e.g.*, *The World's Most Valuable Resource Is No Longer Oil, but Data*, ECONOMIST (May 6, 2017), https://www.economist.com/leaders/2017/05/06/the-worlds-most-valuable-resource-is-no-longer-oil-but-data; Paul M. Schwartz, *Property, Privacy, and Personal Data*, 117 HARV. L. REV. 2056, 2056 (2004).

29. Lauren Loricchio, *Groups Push Back Against Proposed Maryland Digital Ad Tax*, TAX NOTES (Jan. 31, 2021), https://www.taxnotes.com/tax-notes-today-state/gross-receipts-tax/groups-push-back-against-proposed-maryland-digital-ad-tax/2020/01/31/2c45h?highlight=%22Groups%20Push%20Back%20Against%20Proposed%20Maryland%20Digital%20Ad%20Tax%22.

30. *See* Mason & Shanske, *supra* note 4.

31. Mariel Soto Reyes, *Google, Facebook, and Amazon Will Account for Nearly Two-Thirds of Total U.S. Digital Ad Spending This Year*, INSIDER (Dec. 3, 2020, 10:16 AM), https://www.businessinsider.com/google-facebook-amazon-were-biggest-ad-revenue-winners-this-year-2020-12.

32. *See* Sam McQuillan, *Maryland to Impose First of Its Kind Digital Advertising Tax*, BLOOMBERG LAW (Feb. 16, 2021, 2:36 PM), https://news.bloomberglaw.com/tech-and-telecom-law/maryland-to-impose-first-of-its-kind-digital-ad-tax.

33. Fiscal and Policy Note, H.B. 732, 2020 Gen. Assemb., Reg. Sess. (Md. 2020), http://mgaleg.maryland.gov/2020RS/fnotes/bil_0002/hb0732.pdf.

34. Michael J. Bologna, *States Eye Amazon, Facebook, Google for Untapped Digital Ad Tax*, BLOOMBERG LAW (Dec. 14, 2020, 4:46 AM), https://news.bloomberglaw.com/tech-and-telecom-law/states-eye-amazon-facebook-google-for-untapped-digital-ad-tax (citing Professor William Fox).

35. *See, e.g.*, S. 302, 2021–2022 Leg., Reg. Sess. (N.Y. 2021); Council B. 23-760, 23d Council, Reg. Sess. (D.C. 2020); L.B. 989, 106th Leg., 2d Sess. (Neb. 2020); S.B. 1711, 87th Leg., Reg. Sess. (Tex. 2021).

paying for the advertisement.[36] Opponents assert that a tax on business inputs violates fundamental tax policy principles, while proponents justify this approach based on the distinct characteristics of the user-data-driven business model.[37] Specifically, if a jurisdiction imposes sales tax only on consumers who pay for digital services, it incentivizes consumers to favor competing service providers that provide free services and that rely on extracting user data and selling targeted advertising.[38]

Third, a few states have proposed novel data mining tax regimes.[39] These regimes are targeted directly at businesses that extract and monetize personal data from users in the respective jurisdiction. These proposals have varied in their form, ranging from an excise tax to a gross receipts tax to a natural resource severance-type tax. Because there are benefits and drawbacks to each of these digital tax approaches, and the stakes are so high for taxing jurisdictions and the technology industry, a comprehensive analysis of each option is imperative.

II. OPTIONS FOR SUBNATIONAL DIGITAL TAXATION

A subnational digital services tax similar to those in Europe is likely to encounter United States constitutional and federal preemption challenges. More targeted digital advertising gross receipts taxes, as enacted in Maryland and proposed in several states, are even more susceptible.[40] New digital

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36. This Article focuses on digital service providers and platforms that extract user data and generally monetize that data directly or indirectly through online advertising. Digital goods, content streaming services, and other services provided electronically are largely outside the scope of this Article, although jurisdictions should expand existing sales and use tax regimes to encompass these services, as discussed in Section II.B. Such an expansion is long overdue as most sales and use tax regimes fail to adequately address the broader shift to a service-based economy. In addition, many of the challenges discussed throughout this Article are applicable in the broader discussion of digital taxation, notably the sourcing challenges discussed in Part IV.

37. *See, e.g.*, Jeff Cook & Philippe Stephanny, *International and U.S. Digital Services Taxes –* Qui Vivra Verra, 96 TAX NOTES STATE 605, 608 (2020).

38. Lauren Loricchio, *States Could Look to Social Media Taxation to Shore Up Base*, 98 TAX NOTES 744, 744 (2020) (citing Professor William Fox). Professor Fox asserts that "imposing tax on the non-monetized portion of social media companies could help address this problem." *Id.*

39. *See* S. 4959, 2021–2022 Leg., Reg. Sess. (N.Y. 2021); H.B. 1303, 67th Leg., Reg. Sess. (Wash. 2021); H.B. 4898, 84th Leg., Reg. Sess. (W. Va. 2020).

40. Indeed, the first state digital advertising tax enacted was challenged immediately, with several taxpayer trade associations seeking to enjoin and invalidate the statute. Complaint at 2, Chamber of Com. v. Franchot, Civ. No. 21-cv-410 (D. Md. Feb. 18, 2021). In state court, Comcast and Verizon also filed a complaint for declaratory judgment. Complaint at 2, Comcast of Ca./Md./Pa./Va./W. Va. v. Comptroller of Treasury of Md., No. C-02-CV-21-000509 (Md. Cir. Ct. Anne Arundel Cnty. Apr. 15, 2021). Many of the arguments for declaratory judgment were undermined, however, when S.B. 787 delayed the new tax's effective date by a year. This delay gave the Maryland legislature sufficient time to refine the digital advertising tax statute to cure the current constitutional, administrative, and procedural defects—notably, to extend existing protest and refund procedures to encompass the digital advertising tax.

services tax regimes present multiple taxation concerns as well. Most jurisdictions already impose net income taxes, and in some cases gross receipts taxes, on digital service providers. Some jurisdictions already impose sales and use tax on digital services as well. Thus, a new digital services tax regime could impose multiple levels of taxation on the same receipts, which is not inherently unconstitutional but may reflect poor tax policy.[41]

One of the most significant concerns is who will bear the incidence of these new or expanded taxes.[42] The subnational legislatures are directly targeting large digital service providers, which are perceived to be not paying their fair share of taxes.[43] These digital service providers, however, may pass the tax on to customers—either end users or advertisers, many of whom are small businesses.[44] Certain tax types, such as digital advertising taxes and sales taxes, are particularly easy to pass through. Digital service providers could charge the additional tax amount to end users or advertisers directly, or increase prices for sales sourced to the jurisdiction, both of which would shift the tax incidence to end users or advertisers.[45] Almost immediately after France enacted its digital services tax, Amazon announced that it would pass the three percent gross receipts tax through to its French customers, and Google announced that it would pass through digital services taxes in France and Spain.[46] Digital service providers could instead withdraw from the

41. For example, if a state with an existing corporate income tax was to enact a digital advertising tax, digital advertisers would be subject to a new gross receipts tax on their advertising revenue and a corporate net income tax that would include that advertising revenue in gross income. The state could also impose sales tax on advertising, thus taxing the advertising payment three times. Depending on tax rates, the advertising payment could be subject to over seventeen percent tax on the gross payment amount and twelve percent on the net amount. In addition, if other states enact digital advertising taxes and their sourcing methods conflict, the taxpayer could be subject to tax in multiple states on the same advertising revenue. And all of the foregoing morass could potentially be replicated at the local level.

42. *See* Mason & Shanske, *supra* note 4.

43. Prior to Maryland passing its digital advertising tax, a state senator "argued that the bill will ensure that companies like Facebook and Google that have profited during the pandemic pay their fair share." Lauren Loricchio, *Maryland Becomes First State to Adopt Digital Ad Tax*, TAX NOTES (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.

44. In opposition, another Maryland state senator stated, "Facebook will be fine; the small businesses will be hurt." *Id.*

45. The tax statute could attempt to prevent at least a direct pass-through to end users or advertisers, although these provisions may make matters worse by reducing transparency. Maryland amended its new digital advertising tax to prohibit providers from "directly" passing on the tax to its advertising customers "by means of a separate fee, surcharge, or line-item." S.B. 787, 2021 Gen. Assemb., Reg. Sess. (Md. 2021).

46. Todd Buell, *Amazon Raising Fees on French Sellers After Digital Tax*, LAW360 (Aug. 1, 2019, 1:12 PM), https://www.law360.com/articles/1184355/amazon-raising-fees-on-french-sellers-after-digital-tax; Sam Edwards, *Google Will Pass Digital Tax on to Spanish, French Customers*,

jurisdiction altogether, which would likely have severe and immediate political repercussions when that jurisdiction's residents lose access to mainstream digital services and small businesses lose access to affordable targeted advertising.[47] Or, the digital service providers could increase the cost of their services and advertising universally to offset the respective jurisdiction's tax costs, resulting in the provider's global customer base subsidizing that jurisdiction's spending.

If the digital service provider does not shift the tax incidence to end users or advertisers, the incidence will be borne either by employees or shareholders.[48] Businesses can easily shift tax incidence to employees through lower wages or reduced benefits, which is very common.[49] The corporation's shareholders bear the balance of any new or increased tax on the corporation.

Jurisdictions have options beyond a digital advertising gross receipts tax that may more effectively achieve their goals while minimizing constitutional, federal preemption, administrative, and tax policy concerns. Jurisdictions can expand existing tax regimes—such as sales tax or corporate income tax regimes—to more appropriately tax digital services. A powerful benefit to modifying an existing tax regime is minimizing compliance and enforcement burdens, particularly at the subnational level where corporations may have filing obligations in thousands of jurisdictions.[50] Using an existing subnational corporate net income tax also raises fewer questions as to whether the taxpayer can deduct the state taxes paid for federal tax

BLOOMBERG TAX (Mar. 4, 2021, 10:53 AM), https://news.bloombergtax.com/daily-tax-report-international/google-will-pass-digital-tax-on-to-spanish-french-customers.

47. Although withdrawing from a market may appear improbable, Google threatened to withdraw from Australia when the country required payments to news organizations for their content. Nick Perry, *Google Threatens to Pull Search Engine in Australia*, AP NEWS (Jan. 22, 2021), https://apnews.com/article/international-news-australia-new-zealand-scott-morrison-bills-06e735a2f7670c35c4000ec8059cdced. Withdrawing from a subnational jurisdiction would be even easier, especially for a smaller jurisdiction like Maryland.

48. *See* Reuven S. Avi-Yonah, *A New Corporate Tax*, 99 TAX NOTES INT'L 497, 498–99 (2020). Professor Avi-Yonah recognizes that corporate taxes do not effectively impose tax on large shareholders, but rather a stock-based tax would be more effective. See *infra* Section II.D for a discussion of stock-based taxes.

49. Wiji Arulampalam, Michael P. Devereux & Giorgia Maffini, *The Direct Incidence of Corporate Income Tax on Wages*, 56 EUR. ECON. REV. 1038, 1040 (2012) (concluding that approximately fifty percent of a corporate income tax increase is passed on to employees in the long run directly through lower wages, and an additional amount may be passed on indirectly); Clemens Fuest, Andreas Peichl & Sebastian Siegloch, *Do Higher Corporate Taxes Reduce Wages? Micro Evidence from Germany*, 108 AM. ECON. REV. 393, 415 (2018) (concluding that approximately fifty-one percent of a local business tax increase is passed on to employees directly through reduced wages).

50. *See* Andrew Appleby, *Targeted Taxes: Localities Take Aim at Large Employers to Solve Homelessness and Transportation Challenges*, 98 OR. L. REV. 477, 517–19 (2020).

purposes.[51] Alternatively, jurisdictions may consider novel tax regimes that may be better suited to address the unique aspects of user-data-based digital services. This Part analyzes each option, focusing on efficacy, validity, and optimal design principles.

A. Digital Services or Advertising Gross Receipts Tax

Although digital advertising taxes are very narrow and have flaws, they are subnational jurisdictions' favored approach thus far.[52] The proclivity for these taxes likely stems from states' desperation to raise revenue and to tax large technology companies, with European digital services taxes providing a blueprint to accomplish these goals. Modeling a new state tax regime based on controversial and not yet successful international regimes is not an ideal strategy, especially considering additional constitutional and federal preemption constraints.[53] Regardless, states are pressing forward, and even if these digital advertising tax regimes are unsuccessful, they may create enough inertia and political viability for more effective tax regimes such as those discussed below.

The digital advertising tax proposals thus far have been quite similar. The definitions of key terms such as "digital advertising service," "annual gross revenue," and "user" have been refreshingly consistent. Uniformity is generally a chimera in state and local taxation, but because jurisdictions are crafting these novel provisions simultaneously, they are adopting fairly uniform definitions and operative provisions. This approach is universally beneficial because (1) it is easier for legislatures across the country to craft their respective legislation, (2) taxing jurisdictions and taxpayers can consolidate legal challenges, and (3) when an iteration of digital advertising tax is sustained, taxpayers will have uniform laws that will minimize compliance burdens and potential multiple taxation.

The digital advertising tax definitions are consistent, reasonable, and intuitive for the most part. As with any tax provision, there will certainly be disputes as to whether certain services fall within the statutory definition. And there are a few interesting deviations. Indiana's proposed tax statute has an added focus on social media providers and uses the number of Indiana

51. *See* I.R.C. § 164 (allowing a deduction for state and local income taxes). It is unclear whether some of the new taxes discussed below would fall within the scope of "[s]tate and local personal property taxes" or "[s]tate and local, and foreign, income, war profits, and excess profits taxes." *See id.* If these state and local digital taxes are allowed as deductions, the federal government is effectively subsidizing these taxes. At least under the previous administration, there was a strong apathy toward European digital services taxes, so there could be a federal initiative to deny deductions for these novel state and local taxes.

52. *See, e.g.*, *supra* note 26.

53. *See* Cook & Stephanny, *supra* note 37.

users, along with gross receipts, to trigger the tax.[54] Indiana would also impose an additional $1 tax per Indiana user.[55] New York's digital advertising tax would be limited to advertising services that use personal information about the user to whom the advertisements are being served.[56] Many digital tax proposals hypothecate the revenues for specific purposes, usually education, as does Maryland's digital advertising tax.[57]

The digital advertising tax operative provisions are very similar as well. They impose an economic nexus threshold of advertising revenues sourced to that jurisdiction that exceed $1 million.[58] The tax base is the taxpayer's digital advertising gross receipts apportioned to the jurisdiction.[59] There are, however, at least three problematic aspects in these statutes' initial designs. First, to determine the digital advertising gross receipts apportioned to the jurisdiction, the statutes use the percentage of digital advertising gross receipts in the jurisdiction over digital advertising gross receipts in the United States.[60] Significant sourcing difficulties aside, this formula is inherently problematic.[61] The pre-apportioned tax base appears to be worldwide gross digital advertising revenues, so an appropriate apportionment formula would use worldwide digital advertising gross receipts as the denominator, not just receipts from the United States.[62] Alternatively, the tax base could be

54. H.B. 1312, 122d Gen. Assemb., Reg. Sess. (Ind. 2021).

55. *Id.*

56. S. 1124, 2021–2022 Leg., Reg. Sess. (N.Y. 2021).

57. H.B. 732, 2020 Gen. Assemb., Reg. Sess. (Md. 2021).

58. *See, e.g.*, *id.* It is unclear if this economic nexus threshold satisfies constitutional standards, although the dollar amount is significantly higher than the amount recently upheld for sales and use tax purposes. *See* South Dakota v. Wayfair, Inc., 138 S. Ct. 2080, 2099 (2018).

59. *See, e.g.*, H.B. 732, 2020 Gen. Assemb., Reg. Sess. (Md. 2021).

60. *See id.*

61. An initial sourcing issue is that the statutes do not establish a sourcing methodology. Rather, they delegate to the taxing authority the responsibility to establish a viable sourcing methodology, presumably by promulgating a formal regulation. The Maryland Comptroller's proposed regulations include a sourcing methodology based on the location of each device that accesses digital advertising as a proxy for revenue, which sacrifices accuracy for administrative practicality. *See* 48:21 Md. Reg. 896 (Oct. 8, 2021). In addition, the proposed apportionment factor uses the number of devices that access the advertising and not the number of times a device accesses the advertising, so a device in Maryland that accesses an advertisement one time appears to get the same representation as a device in Maryland that accesses thousands of the taxpayer's advertisements. *Id.* The proposed regulations instruct taxpayers to determine the location of the device using the method that "most reliably identifies a device's location," and if the location cannot be determined the device is removed from both the numerator and denominator of the apportionment formula. *Id.* See *infra* Part IV for a detailed discussion of the myriad sourcing issues that taxing authorities must address.

62. For example, if a multinational digital advertising company had $20 billion in annual worldwide gross revenue and it all was designated as digital advertising revenue, its tax base would be $20 billion. If it had digital advertising revenue of $100 million sourced to Maryland and $10 billion sourced to the United States overall, its Maryland apportionment formula would be one percent. The company's Maryland digital advertising tax base would be one percent of $20 billion,

narrowed to United States digital advertising gross receipts. The current apportionment formula will almost always tax extraterritorial receipts and will often produce absurd and unconstitutional results, assuming the apportionment formula is even intended to be used.[63]

Second, once the tax base is determined, the statute imposes different tax rates based on the taxpayer's worldwide gross revenues. The rate increases are significant, ranging from 2.5% to 10%.[64] In Maryland and New York, for example, the highest rate applies to taxpayers with total worldwide gross revenues exceeding $15 billion.[65] This rate structure is itself problematic for three reasons. First, the metric is all gross revenues, not just digital advertising gross revenues. So, a large taxpayer that has a small digital advertising aspect of their business may face a ten percent tax rate on its problematically apportioned digital advertising gross revenues. Second, the Maryland rate structure imposes a notch effect. If a taxpayer has worldwide gross revenues of $1 billion, they multiply all their apportioned digital advertising gross receipts by 2.5% to determine their tax liability. But if the taxpayer has worldwide gross revenues of $1 billion plus $1, they multiply their apportioned digital advertising gross receipts by five percent. Thus, one additional dollar of worldwide gross receipts may double digital advertising tax liability. These classifications based on gross revenue may also raise constitutional concerns, particularly if the state has a broad uniformity provision, as discussed below.[66]

Third, the current digital advertising tax statutes fail to properly define the taxpayer. Each imposes tax on a "person," which they define as including a "partnership, firm, association, corporation, or other entity."[67] Inexplicably, these statutes fail to define a taxpayer to include an affiliated group of entities. Under the current definitions, large multinational digital advertising companies could create separate legal entities to significantly minimize these taxes. At the simplest level, they could create two entities to bifurcate United States revenue and international revenue, thus dropping the

or $200 million. Applying Maryland's highest ten percent tax rate, the company would pay $20 million in Maryland digital advertising tax. Thus, the company is in effect paying tax at a twenty percent rate in this example.

63. *See infra* Section III.A. The Maryland Comptroller's proposed regulations use devices in Maryland over devices worldwide. 48:21 Md. Reg. 896 (Oct. 8, 2021). This apportionment formula remedies the obvious extraterritorial taxation issue, but the proposed regulations conflict with the apportionment formula in the statute itself.

64. Most digital advertising tax bills exempt entities that generate less than $100 million in annual gross receipts. *See, e.g.*, H.B. 732, 2020 Gen. Assemb., Reg. Sess. (Md. 2021).

65. *See, e.g.*, *id.*; S. 1124, 2021–2022 Leg., Reg. Sess. (N.Y. 2021).

66. *See infra* Sections III.A, III.C.

67. *See, e.g.*, H.B. 732, 2020 Gen. Assemb., Reg. Sess. (Md. 2021).

putative taxpayer into a much lower applicable tax rate.[68] Many localities made this mistake with their initial targeted tech taxes, discussed in this Part below, but subsequent localities realized the error and designed their provisions accordingly.[69] States will likely amend their statutes to include affiliated groups, although some may rely on administrative regulations to do so, an approach that could be susceptible to challenge.

Although not a specific digital advertising gross receipts tax, jurisdictions may have a more nuanced and discrete option to tax large digital advertisers using a general gross receipts tax regime.[70] Jurisdictions that have an existing general gross receipts tax could attempt to impose higher tax rates for certain broadly defined services or industries. Washington's gross receipts tax regime, for example, incorporates this feature already.[71] Indeed, Washington has proposed a new category for sales of personal data within its existing gross receipts tax, discussed further below.[72] As long as the tax rate applies equally to all services in a specified category, even if most services in that category are delivered electronically, the higher rate for that category should not discriminate against electronic commerce and would achieve the goal of additional taxation of digital services.

Many localities, particularly on the West Coast, are also targeting large digital service providers for increased taxes, but not with digital-specific taxes. Instead, these localities are imposing new or increased general gross receipts taxes only on the largest businesses operating in the jurisdiction, most of which happen to be large digital service providers.[73]

B. Sales and Use Tax

The easiest approach to tax digital services generally is for taxing jurisdictions to simply expand their existing sales and use tax regimes to include all services.[74] Several recent, thoughtful proposals have suggested

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68. In addition, this separate entity approach is problematic as applied to intercompany transactions. This approach could result in imposing tax multiple times on the same gross receipts belonging to the same federal consolidated group.

69. *See infra* note 73 and accompanying text.

70. Conversely, a nuanced and discrete approach likely lacks the signaling function of the digital advertising tax or targeted tech tax.

71. *See* WASH. REV. CODE §§ 82.04.010–.440 (2021); *infra* note 137 and accompanying text.

72. *See infra* Section II.F.

73. *See* Appleby, *supra* note 50.

74. Imposing a new or increased tax may still face procedural hurdles such as supermajority approval requirements or other tax increase limitations. *See* Andrew Appleby, *Designing the Tax Supermajority Requirement*, 71 SYRACUSE L. REV. (forthcoming 2021) (manuscript at 3–4), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3723907. Colorado is grappling with how to impose tax on digital goods and streaming services within the constraints of its constitutional tax increase limitation provisions. *See, e.g.*, Tripp Baltz, *Streaming 'Netflix Tax' in Colorado Raises Risk of Litigation*, BLOOMBERG LAW (Jan. 11, 2021, 4:45 AM),

expanding existing sales and use tax regimes to encompass services, particularly digital goods, content streaming services, and other services provided electronically.[75] If comprehensive service expansion is too extreme, a taxing jurisdiction could include in the scope of its sales and use tax enumerated digital services, as long as corresponding non-digital services are included as well. For example, a state could impose sales and use tax on all advertising services, whether digital or print.[76] Broadening the sales and use tax base is not only a viable alternative for digital service taxation, but it reflects sound tax policy and is long overdue.

Although subnational jurisdictions have tended toward digital advertising gross receipts tax proposals thus far, several have proposed taxing digital advertising under their existing sales and use tax regimes.[77] As with digital advertising tax proposals, most sales tax proposals have similar language defining the taxable digital advertising service.[78] The District of Columbia's proposal was a bit broader, in that it proposed to tax all advertising services and also the sale of personal information.[79] New York's sales tax proposal would deposit all revenue into a fund for zero interest refinancing of higher education loans.[80] Otherwise, the proposals were quite straightforward—each would impose existing sales tax on this new type of transaction.[81]

The primary argument against imposing a consumption tax on advertising, in particular, is that consumption taxes should not apply to business inputs because the end product is likely subject to consumption tax when it is eventually sold.[82] Thus, sales tax would be imposed twice, resulting in tax pyramiding. Although taxing business inputs is generally disfavored from a tax policy perspective, it is not uncommon. Approximately

https://news.bloomberglaw.com/tech-and-telecom-law/streaming-netflix-tax-in-colorado-raises-risk-of-litigation.

75. *See, e.g.*, Orly Mazur & Adam Thimmesch, *Closing the Digital Divide in State Taxation: A Consumption Tax Agenda*, 98 TAX NOTES STATE 961, 962–63 (2020); Gladriel Shobe et al., *Why States Should Consider Expanding Sales Taxes to Services, Part 1*, 98 TAX NOTES STATE 1349, 1351–53 (2020); Grace Stephenson Nielsen et al., *How States Should Now Consider Expanding Sales Taxes to Services, Part 2*, 99 TAX NOTES STATE 45, 45 (2021).

76. Such an approach was famously unsuccessful in the 1980s because of political pressure from the advertising industry. *See* Walter Hellerstein, *Florida's Sales Tax on Services*, 41 NAT'L TAX J. 1, 1 (1988). The rise of Internet advertising, however, has created structural changes that arguably justify this sales tax expansion.

77. *See supra* note 35.

78. *See supra* note 35.

79. Council B. 23-760, 23d Council, Reg. Sess. (D.C. 2020).

80. S. 302, 2021–2022 Leg., Reg. Sess. (N.Y. 2021).

81. Sourcing, of course, is never straightforward in the digital context. *See infra* Part IV.

82. *See, e.g.*, Cook & Stephanny, *supra* note 37.

forty percent of the average sales tax base currently consists of business inputs.[83]

In the case of digital advertising, imposing sales tax is also arguably justified. As discussed above, in the prevailing business model, a digital service provider offers a service—such as email, a search engine, or social media—to end users and collects their personal data.[84] The company provides the service either free or for a vastly subsidized price. The company then monetizes the user data to sell targeted advertisements to businesses, with these advertisements often disseminated through the free or subsidized service to end users. If the company charged end users a market price for the service and a state imposed sales tax on that charge, there would be no pyramiding problem. Here, the advertisers are effectively paying the end users' service fees.[85] Thus, imposing sales tax on the amount effectively paid for the end user service—even though it is paid by the advertiser and not the end user—functions as a consumption tax and not a tax on business inputs. Imposing sales tax on payments made by digital advertisers serves as a proxy for the sales tax that would have been imposed on the end user if the digital service provider did not extract and monetize user data but instead charged a market price for the advertising-free service.[86]

Although expanding existing sales and use tax regimes to encompass digital advertising is much easier for taxing jurisdictions, the proposed digital advertising gross receipts tax regimes discussed above will likely generate far more revenue. They may also serve a stronger signaling, or even regulatory, function because of their targeted imposition.

C. Corporate Income Tax Surcharge or Surtax

Another option within many jurisdictions' existing tax regimes is a corporate income tax surcharge or surtax.[87] For example, a jurisdiction could

83. JEROME R. HELLERSTEIN, WALTER HELLERSTEIN & ANDREW D. APPLEBY, STATE TAXATION ¶ 12.03 (3d ed. 2021 rev.). "For example, transportation equipment, office furniture, advertising catalogs, and supplies purchased by manufacturers and other businesses are usually taxable under state sales taxes." *Id.*

84. *See supra* note 2 and accompanying text.

85. For example, a user can purchase a YouTube Premium account for approximately $12 per month, which eliminates advertisements (although their user data is still being extracted). With free YouTube accounts, advertisers are effectively paying the $12 per month fee for the users to YouTube. *See, e.g.*, Robert Goulder, *Should Data Extraction Be Taxed As a Natural Resource?*, 99 TAX NOTES INT'L 559, 560 (2020); David R. Agrawal & William F. Fox, *Taxing Goods and Services in a Digital Era*, 74 NAT'L TAX J. 257, 291–93 (2021).

86. One could also make the less precise, but colorable, argument that imposing a new tax somewhere in the transaction chain is appropriate because there is so much value inuring to large digital advertisers that is going untaxed under existing tax regimes.

87. *See, e.g.*, Darien Shanske et al., *Reforming State Corporate Income Taxes Can Yield Billions*, 96 TAX NOTES STATE 1211, 1214 (2020). Yet another alternative is a minimum corporate

impose an additional five percent corporate income tax rate on corporations that derive a certain amount of revenue from digital advertising, or on corporations that generate a certain amount of overall gross revenue.[88] Jurisdictions could incorporate a progressive rate structure, particularly in a manner that avoids the notch effect present in the digital advertising tax regimes discussed in Section II.A. A jurisdiction could also adopt a more tailored approach, such as an excessive CEO compensation surtax, depending on its motivations for the tax.[89] This tailored approach serves a stronger signaling function than does a general surtax on corporations that generate a certain amount of gross revenue.[90]

There are advantages to leveraging an existing tax regime. The compliance and enforcement burdens are reduced for the taxing authority and taxpayers. There will likely be significantly less resistance from large digital service providers than with an entirely new tax regime. And subnational corporate income tax regimes have already addressed many of the mechanical difficulties discussed above, albeit imperfectly.[91] For example, many state corporate income tax regimes require combined reporting or add back certain intercompany payments, which forecloses many tax planning strategies that would easily allow digital service providers to avoid the tax.[92] Existing corporate income tax regimes have also already addressed

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tax on book income. The Biden Administration has proposed a fifteen percent minimum tax on book income, which would impact large multinational technology companies. If such a tax existed in 2020, Google would have paid an additional $847 million in federal corporate tax, while Amazon would have paid an additional $1.2 billion and Apple would have paid an additional $3.8 billion. *See* Jackie Davalos & Alistair Barr, *Big Tech $100 Billion Foreign-Profit Hoard Targeted by Tax Plan*, BLOOMBERG (Apr. 22, 2021, 7:00 AM), https://www.bloomberg.com/news/articles/2021-04-22/big-tech-100-billion-foreign-profit-hoard-targeted-by-tax-plan; *see also* Stephanie Soong Johnston, *U.S. Opens with 15 Percent Minimum Tax Rate in OECD Reform Talks*, 171 TAX NOTES FED. 1281, 1281 (2021).

88. The surtax could also analyze a taxpayer's net income tax due to the jurisdiction and simply increase that tax amount by a percentage. Portland, Oregon's excessive CEO compensation tax functions in this manner and imposes an additional ten to twenty-five percent tax. PORTLAND, OR., CITY CODE § 7.02.500(E) (2020); *Business Tax Administrative Rule 500.17-1*, CITY OF PORTLAND, https://www.portland.gov/policies/licensing-and-income-taxes/fees/lic-502-pay-ratio-surtax (last visited Oct. 24, 2021).

89. *See supra* note 88.

90. Introducing aspects of gross revenue into a net income tax is inherently problematic. A fundamental premise of a net income tax is to impose tax based on ability to pay, which must take into account costs of doing business. Gross receipts taxes violate the ability-to-pay principle, particularly as applied to low profit margin industries such as grocery stores and wholesalers, which is why many gross receipts taxes have industry-specific exemptions or lower rates. Although basing corporate net income tax rates on a taxpayer's gross receipts is less problematic than imposing a gross receipts tax, it is still a blunt approach that does not fully reflect the ability-to-pay principle.

91. *See supra* Section II.A.

92. *See, e.g.*, Shanske et al., *supra* note 87, at 1215–16 (discussing worldwide combined reporting); HELLERSTEIN ET AL., *supra* note 83, ¶¶ 8.11, 8.18.

apportionment and sourcing, often with detailed statutes and regulations that took years to refine.[93]

With that said, many jurisdictions may not find a corporate income tax surcharge very compelling. Although it is likely the easiest approach to adopt and administer, it is not ideally suited to achieve the jurisdictions' goals. The underlying justification for the subnational digital advertising tax movement is that existing corporate net income tax regimes do not adequately tax large technology companies, specifically digital advertising companies.[94] Simply increasing the rate of an ineffective tax is unlikely to remedy that perceived problem.[95] Subnational corporate net income taxes are easy to manipulate, and even if a state imposes a higher tax rate, the tax base may still be nominal, certainly when compared to a gross receipts tax. Digital service providers could withdraw from the jurisdiction, especially if the jurisdiction utilizes a single sales factor apportionment formula with market-based sourcing. And for better or worse, it is more difficult for a taxing jurisdiction to target specific taxpayers using their existing corporate income tax.[96] Jurisdictions must consider constitutional and federal preemption limitations as well.[97] But if the other options discussed in this Part are not politically viable, a jurisdiction may want to consider a corporate net income tax surcharge or surtax, which would provide at least some level of additional revenue and signaling.

93. *See, e.g.*, HELLERSTEIN ET AL., *supra* note 83, ¶¶ 8.05, 8.14, 9.18.

94. *See* Marian, *supra* note 1 (manuscript at 5) (asserting that with the current global economy, an income tax should not be the prevailing mode of taxation, but that "data" would be the preferred—or at least a supplemental—tax base).

95. Indeed, large multinational technology companies are counterintuitively supporting a higher federal corporate net income tax rate, which improves optics without meaningful economic impact. *See* Lydia O'Neal & David Hood, *New Tech Lobby Curries Favor with Rare Embrace of Higher Taxes*, BLOOMBERG TAX (May 17, 2021, 4:46 AM), https://news.bloombergtax.com/daily-tax-report/new-tech-lobby-curries-favor-with-rare-embrace-of-higher-taxes.

96. For example, it may be difficult to impose the higher rate just on the portion of net income from digital advertising. If a jurisdiction imposes a surtax based on gross revenue, it will be imposing the higher rate on all the corporation's activities, not just digital advertising. With that said, despite the political ire directed toward digital advertising, many of the targeted corporations derive very little revenue from digital advertising. Thus, a less tailored approach may generate more revenue and tax the targeted corporations more effectively.

97. Although the Internet Tax Freedom Act (ITFA) typically arises in transaction tax or gross receipts tax contexts, ITFA's broad language encompasses corporate net income taxes. The discrimination analysis, however, is much more difficult in the corporate net income tax context because there is not a direct tax imposition on a transaction that can be classified as electronic or traditional. *See infra* Section III.E.

D. Stock-Based Tax

An intriguing alternative is to impose tax on corporations based on the value of their stock.[98] Although digital advertising companies have been the specific target of subnational jurisdictions recently, the jurisdictions' underlying motivations may be better served with a focus toward publicly traded corporations that enjoy excessive market valuations. If taxing jurisdictions are correct that the largest corporations are not paying their fair share of taxes under existing regimes, the stock market will reflect that additional profitability through increased stock prices. Those stock prices will also theoretically reflect the corporation's asset value plus the corporation's discounted future earnings potential.[99]

One option is to impose an annual tax on publicly traded corporations based on the market price of each share of outstanding stock.[100] For example, a jurisdiction could impose a one percent tax on the average value of outstanding shares over the course of the taxable year. Another option is an annual tax on publicly traded corporations based on the increase of the market price of each share of outstanding stock over the course of the taxable year.[101] This increase approach, however, would introduce volatility into the tax base and would reduce tax revenues during recessions when subnational jurisdictions need revenue most. Jurisdictions could also use more sophisticated metrics, such as a stock's price-to-earnings or price-to-sales ratio, to tailor the tax base or rate to accomplish more specific goals.[102] Because the tax base is determined by public markets, the opportunity for tax planning and minimization is essentially eliminated.[103]

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98. *See, e.g.*, Mark P. Gergen, *How to Tax Capital*, 70 TAX L. REV. 1, 1 (2016); Michael S. Knoll, *An Accretion Corporate Income Tax*, 49 STAN. L. REV. 1, 1 (1996); *see also* Joseph M. Dodge, *A Combined Mark-to-Market and Pass-Through Corporate-Shareholder Integration Proposal*, 50 TAX L. REV. 265, 266–67 (1995); Joseph Bankman, *A Market-Value Based Corporate Income Tax*, 68 TAX NOTES 1347, 1347–48 (1995). Another alternative is requiring large technology companies to capitalize, rather than expense, their intangible costs. *See* Calvin H. Johnson, *A Fair Income Tax on the Trillion-Dollar Behemoths*, 171 TAX NOTES FED. 1199, 1199 (2021).

99. It is unclear if the current stock market is pricing stocks rationally or if there are other motivations that may be altering stock prices. *See, e.g.*, Jason Gewirtz, *GameStop Head-Spinning Volatility May Be Only the Beginning of a New Wave*, CNBC (Jan. 28, 2021, 2:47 PM), https://www.cnbc.com/2021/01/28/gamestop-head-spinning-volatility-may-be-only-the-beginning.html. The corporation benefits from its increased stock price, however, regardless of purchasers' motivations. *See, e.g.*, Chris Isidore, *Tesla, Already Worth $600 Billion, Wants to Raise Another $5 Billion in Stock*, CNN BUS. (Dec. 8, 2020, 8:04 AM), https://www.cnn.com/2020/12/08/investing/tesla-stock-sale/index.html.

100. Gergen, *supra* note 98, at 1–2.

101. Knoll, *supra* note 98.

102. Either of these ratios may indicate that independent investors value the business model more than reflected in a net income tax regime.

103. *See* Gergen, *supra* note 98, at 5.

Stock-based taxes are intuitive, logical, and can be easy to administer. The tax base can be straightforward and based on objective publicly available information. It would be very easy to draw a cutoff point or implement progressive rates, thus reducing or eliminating the tax burden for smaller corporations. These taxes would also be effective, as a market capitalization-based tax would most directly impact the Big Five tech companies, plus other common targets such as Tesla.[104] With stock-based taxes, the incidence will likely be borne by shareholders because of the nature of the tax, which may provide an added benefit in the context of recent stock trading behavior.[105]

In addition, states have been imposing capital stock taxes for decades, so corporate taxpayers and taxing authorities have familiarity with the concept. A market-based stock tax would differ from existing capital stock taxes and present several advantages. Capital stock taxes were popular with states a half century ago when three-quarters of the states imposed capital stock taxes and they produced substantial revenue.[106] Their role was diminished greatly over time, and now fewer than half the states impose capital stock taxes. They are often limited in scope and amount, and several states are phasing out or replacing capital stock taxes with other taxes.[107] Existing capital stock taxes are plagued by complex valuation methods—as opposed to simply looking at publicly traded stock prices—and many exemptions.[108] Most importantly, current capital stock tax rates are miniscule, with many just over 0.1% of apportioned value, and with many incorporating low annual tax caps.[109]

A jurisdiction could easily replace its existing or former capital stock tax with a simpler and more effective version. The jurisdiction could impose the tax only on publicly traded corporations and use market pricing to determine the tax base. If a jurisdiction were to eliminate its corporate net income tax and replace it with a stock-based tax, the jurisdiction could reverse engineer a rate that roughly approximates the tax revenue it generated under the prior regime and adjust accordingly. Alternatively, because this approach would be limited in that it imposes tax only on publicly traded

104. *See supra* note 5 and accompanying text.

105. *See supra* note 99.

106. HELLERSTEIN ET AL., *supra* note 83, ¶ 11.01.

107. *Id.*; *see, e.g.*, Jared Walczak, *Trends in State Tax Policy, 2018*, 87 TAX NOTES STATE 577, 578 (2018).

108. Because these taxes generally apply to privately held corporations and even pass-through entities, the valuation procedure is necessarily more complex and less verifiable. *See* HELLERSTEIN ET AL., *supra* note 83, ¶ 11.04.

109. GA. CODE ANN. § 48-13-73(a) (West 2021) (capping capital stock tax at $5,000); ALA. CODE § 40-14A-22(d) (West 2021) (capping capital stock tax at $15,000); *see, e.g.*, N.C. GEN. STAT. ANN. § 105-122(d2) (West 2021) (imposing a 0.15% capital stock tax rate).

corporations, a jurisdiction may prefer to use the stock-based tax in addition to its existing corporate net income tax.

As a general matter, subnational capital stock taxes are constitutional, although they must incorporate a fair apportionment methodology for multistate taxpayers because the tax base is a corporation's entire value.[110] States have used various apportionment methods, including three-factor formulas of property, payroll, and receipts.[111] The United States Supreme Court has also upheld a single receipts factor for apportioning a capital stock tax.[112] A single receipts factor, particularly with a market-based sourcing method, is the easiest option and is consistent with the broader trend of apportionment for corporate net income taxes. An annual tax on the market value of publicly traded stock represents a simple approach that would generate substantial revenue and accomplish jurisdictions' goals of taxing large corporations that arguably have excess profits and market valuation, including the largest digital advertisers and many other companies that profit from user data.

E. Data Ad Valorem Tax

If a jurisdiction's primary goal is to tax the value of the data that businesses extract—generally without direct payment—from the jurisdiction's residents, an ad valorem tax on the data would accomplish this goal. Property taxes based on the property value, or ad valorem taxes, are incredibly common in the United States, especially at the local level.[113] Although real property ad valorem taxes are the most prevalent and economically significant, many subnational taxing jurisdictions also impose ad valorem taxes on personal property.[114] Many fewer jurisdictions, however, impose ad valorem tax on intangible personal property.[115] It is not completely clear if data constitutes tangible or intangible property, and that determination could vary based on the specific facts. Regardless, a jurisdiction could enact a data ad valorem tax and avoid the issue as long as

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110. *See* HELLERSTEIN ET AL., *supra* note 83, ¶¶ 11.02, 11.05. At the national level, the United States may face different constitutional challenges to a stock-based tax. *See* Gergen, *supra* note 98, at 1 n.3.

111. HELLERSTEIN ET AL., *supra* note 83, ¶ 11.05[4].

112. Ford Motor Co. v. Beauchamp, 308 U.S. 331, 335 (1939); *see also* HELLERSTEIN ET AL., *supra* note 83, ¶ 11.05[4][a][i].

113. *See* HELLERSTEIN ET AL., *supra* note 83, ¶¶ 1.01–.02.

114. *See, e.g.*, CAL. CONST. art. XIII, § 1; FLA. STAT. ANN. § 196.001 (West 2021); TEX. TAX CODE ANN. § 11.01(a) (West 2021); MASS. GEN. L. ANN. ch. 59, § 2 (West 2021) (imposing property tax on real and personal property). Many jurisdictions allow significant exemptions to their personal property ad valorem taxes. *See, e.g.*, FLA. STAT. ANN. § 196.183 (West 2021).

115. Some state constitutions expressly bar intangible property ad valorem taxes. *See, e.g.*, N.Y. CONST. art. XVI, § 3.

the state's constitution did not prohibit such a tax.[116] In addition, many states impose ad valorem taxes on natural resources, which have many similarities to data.[117]

The most significant challenge is valuing the data for ad valorem tax purposes. Valuation is always a challenge, but even more so in the context of data.[118] Data is not fungible and there is no market price for data as a commodity. In some business models a jurisdiction could use advertising revenue as a proxy for the value of the data, but advertisers pay for aspects beyond just the data, including processing, analytics, and the actual advertising placement. Another possible valuation method is determining the price of a service through a pay-for-privacy model. If a digital service provider charged a user a certain fee in return for not tracking the user's data, the provider would essentially be selling its "ability to commercially exploit user data in return for a fixed price."[119] Although this approach is logical, it is not a practical option for most data mining business models. Another difficulty is how frequently to assess the value of the property and impose the tax.

Beyond valuation difficulties, many states have constitutional provisions that impose stringent requirements on property taxes. The most relevant are uniformity provisions that require uniform ad valorem property taxation, although most state constitutions do permit property classification.[120] Some state constitutions allow for more flexibility with classifications than others, but at the very least, the tax rates and assessment methodologies should be uniform within the classification.[121]

Although data ad valorem taxes are the most direct approach to tax the value of user data, there are myriad obstacles, constitutional and practical, for jurisdictions to navigate. Nevertheless, data ad valorem taxes may be a viable option for localities if their taxing jurisdiction is limited to property taxes.

F. Data Mining Tax

If a jurisdiction's primary motivation is to impose tax on the value associated with collecting and monetizing user data, a direct tax on data collection is an optimal approach. A data mining tax will more effectively

116. *See id.*
117. *See infra* Section II.F; *see, e.g.*, W. Va. State Tax Dep't, Admin. Notice 2021-02 (Jan. 29, 2021), https://tax.wv.gov/Documents/AdministrativeNotices/2021/AdministrativeNotice.2021-02.pdf.
118. A better alternative may be a tax based solely on the volume of data (e.g., per gigabyte). *See* Marian, *supra* note 1 (manuscript at 46).
119. Goulder, *supra* note 85.
120. *See* HELLERSTEIN ET AL., *supra* note 83, ¶¶ 2.01–.02.
121. *Id.*

reach the value of the user data than a tax using some other activity, such as digital advertising, as a proxy.

New York recently proposed a data mining tax structured as a monthly excise tax.[122] New York's proposal is well-designed and remedies many of the drafting errors and concerns associated with most digital advertising tax proposals discussed above. The proposal defines the taxpayer by referencing the federal consolidated return group, thus aggregating related entities, which is crucial for determining tax rates and thresholds with a progressive rate structure.[123] The proposal carves out certain user data to avoid imposing the tax on normal online retail activity in which a seller must collect shipping address and payment data to process a transaction.[124] The proposal expressly defines data collection to include electronic and non-electronic methods, and provides a credit for data mining taxes paid to other jurisdictions.[125] These provisions strongly reduce any Internet Tax Freedom Act (ITFA) discriminatory and multiple tax concerns.[126] The proposal is not perfect, however. The draft language has ambiguity in a crucial provision that states: "A New York consumer shall be counted only once in the calculation of the monthly excise tax imposed on a commercial data collector."[127] It is unclear if this provision means a consumer is counted only once *per month*, or once ever. If the latter, this provision would essentially convert the data mining tax to a one-time imposition, which does not appear to reflect the legislative intent or structure of the bill.[128]

Assuming the legislature intended the former interpretation, the data mining tax would generate enormous revenue. The provision uses a progressive rate structure that eliminates notch issues and protects smaller businesses.[129] But the provision would impose significant tax amounts on large data collectors. Data collectors who collect data on more than ten million New York consumers in a month would pay a monthly tax of $2.25 million plus $0.50 for each New York consumer above ten million. Thus, a data collector's tax could approach $7 million each month, or $84 million annually, if they consistently collect data on essentially all New York residents.[130] If every state adopted a similar tax, large data collectors such as Google could face aggregate state data mining taxes exceeding $1 billion

122. S. 4959, 2021–2022 Leg., Reg. Sess. (N.Y. 2021).
123. *Id.*
124. *Id.*
125. *Id.*
126. *See infra* Section III.E.
127. S. 4959, 2021–2022 Leg., Reg. Sess. (N.Y. 2021).
128. *See id*.
129. *Id.*
130. *See Quick Facts: N.Y.*, U.S. CENSUS BUREAU, https://www.census.gov/quickfacts/NY (last visited Oct. 24, 2021).

annually.[131] Although those revenue projections may appeal to states initially, they may be so severe that they elicit meaningful negative responses from businesses that rely on data collection and otherwise benefit those jurisdictions.[132] These businesses could withdraw from certain jurisdictions, although New York is likely significant enough to avoid that response even if it is the only state to enact such a tax. These businesses, however, will likely pass at least a portion of these new taxes to their customers.[133]

Washington also proposed a new category for sales of personal data within its existing general gross receipts tax.[134] The legislature's justification for the new tax category and rate is that businesses are aggregating and compiling personal data and reselling it without any compensation to the people of the state.[135] Although the sourcing methodology is similar to New York's data mining tax, Washington's gross receipts tax is a flat rate of 1.8% of gross receipts.[136] This rate is higher than Washington's current highest rate, imposed on services at 1.5%, and much higher than the general retail rate of less than 0.5%.[137]

An overarching challenge is the complexity and opacity of the data industry. In addition to the obvious market leaders such as Google and Facebook, there are data aggregators and brokers, cutting-edge technologies that often use proprietary trade secrets, and significant effort to convert raw data to useful and saleable information.[138] Taxing jurisdictions may not fully

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131. *See U.S. and World Population Clock*, U.S. CENSUS BUREAU, https://www.census.gov/popclock/ (last visited May 25, 2021).

132. These exorbitant measures of tax may also violate the Commerce Clause. *See infra* Section III.A.

133. "It would be ironic if the users of digital services were the ones who ultimately paid the price for the harvesting of their own digital data." Goulder, *supra* note 85, at 561.

134. H.B. 1303, 67th Leg., Reg. Sess. (Wash. 2021).

135. The proposed bill explains its underlying motivations:

> The legislature finds that there are various businesses engaged in accumulating the personal data that is available to be collected on Washingtonians, aggregating or compiling that information, and reselling it without any compensation to the people of the state. This is a new business model that has flourished and is anticipated to grow as more people and more devices are connected with ever-increasing frequency for an ever greater number of innovative applications. As such, the legislature intends to have this unique and growing industry set apart with its own individual tax rate. This will provide transparency on the number of businesses and volume of activity in this industry, and fairly generate revenue to be used for the benefit of the state of Washington and its people.

Id.

136. *Id.* Businesses engaged in personal data collection already pay tax under Washington's gross receipts tax regime, just at a lower rate and with less transparency.

137. *See Business & Occupation Tax Classifications*, WASH. DEP'T OF REVENUE, https://dor.wa.gov/taxes-rates/business-occupation-tax/business-occupation-tax-classifications (last visited Feb. 21, 2021).

138. *See, e.g.*, Michael J. Semes, *Maryland's Proposed Digital Advertising Gross Revenues Tax Should Not Be Enacted*, BLOOMBERG LAW (Feb. 4, 2021, 4:00 AM),

understand these business models, which supports the assertion that current tax regimes do not adequately tax data-focused industries but also cautions against a hasty response. States and localities must be diligent in structuring any new regime to tax sufficiently without killing an industry or harming unintended participants, such as consumers in the jurisdiction. To that end, Washington's proposed bill incorporates information reporting requirements.[139] Although most businesses will disapprove because of the additional compliance burden, Washington is at least ostensibly incorporating the reporting requirement to learn more about the industry so it can design an optimal tax regime and protect its residents.[140]

There are robust theoretical justifications for a data mining tax.[141] In addition, both national and subnational taxing jurisdictions have decades of experience with natural resource extraction or severance taxes.[142] Arguably, extracting a valuable resource such as data falls within these same constructs.[143] Many coal severance taxes dedicate a portion of the imposition to mine reclamation. Perhaps these data mining taxes could be characterized as privacy reclamation charges. The United States Supreme Court has decided constitutional challenges specific to severance taxes, although the data mining taxes proposed above do not appear to impermissibly export the tax burden out of state because the resource is generally used in the respective state.[144]

Data mining taxes are gaining political traction and would effectively impose tax on the value derived from collecting and monetizing user data. Their primary drawback, depending on one's perspective, is that because they are so effective they are likely to disrupt the entire industry and could have significant consequences.

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https://news.bloomberglaw.com/daily-tax-report-state/marylands-proposed-digital-advertising-gross-revenues-tax-should-not-be-enacted; Goulder, *supra* note 85, at 559–60.

139. Reporting requirements often raise privacy and First Amendment concerns, but these concerns are largely mitigated when the report is generic and does not include personal identifying information.

140. *See* H.B. 1303, 67th Leg., Reg. Sess. (Wash. 2021).

141. *See* Cui, *supra* note 1, at 71; Thimmesch, *supra* note 1, at 149; Zach Noble, *User Data as State Quasi Property: A Model for Taxing Platforms*, 89 STATE TAX NOTES 777, 777–78 (2018).

142. *See* HELLERSTEIN ET AL., *supra* note 83, ¶ 4.18; Walter Hellerstein, *Political Perspectives of State and Local Taxation of Natural Resources*, 19 GA. L. REV. 31, 32–35 (1984).

143. Goulder, *supra* note 85, at 559; Thimmesch, *supra* note 1, at 188 n.204. West Virginia's proposed data mining tax bill incorporates many aspects of natural resource severance taxes. *See* H.B. 4898, 84th Leg., Reg. Sess. (W. Va. 2020).

144. *See* Commonwealth Edison Co. v. Montana, 453 U.S. 609, 612 (1981).

III. CONSTITUTIONAL CONCERNS AND FEDERAL PREEMPTION

The approaches discussed in Part II face varying levels of constitutional and federal preemption vulnerability. New tax regimes targeted at a very specific subset of taxpayers are most suspect, particularly Maryland's digital advertising tax as currently conceived.[145] All the potential approaches must be analyzed within the constitutional limitations on state taxation, however, as this Part discusses.

Despite genuine constitutional concerns, in practice it can be difficult to invalidate a state tax statute on constitutional grounds. State and local tax disputes must generally be litigated in the respective state's court system pursuant to the Tax Injunction Act.[146] But state court judges may be less comfortable analyzing federal constitutional issues, and most states' tax trial courts are administrative bodies, many of which do not have jurisdiction to decide constitutional questions.[147] Taxpayers frequently attempt to circumvent the Tax Injunction Act, although these attempts are rarely successful when addressing actual tax impositions.[148]

A. Commerce Clause

The United States Supreme Court established the analytical framework for addressing dormant Commerce Clause challenges to state and local taxes in *Complete Auto Transit v. Brady*.[149] The four-prong *Complete Auto* test provides that the tax must: (1) be applied to an activity that has a substantial nexus with the jurisdiction; (2) be fairly apportioned to activities carried on by the taxpayer in the jurisdiction; (3) not discriminate against interstate commerce; and (4) be fairly related to services provided by the jurisdiction.[150] Depending on their design, digital services taxes could violate some, none, or all of the prongs.

145. The benefit for taxing jurisdictions of leading the subnational digital services tax movement with the most suspect version possible is that if it is upheld as constitutional, essentially any of the other approaches discussed herein would likely be upheld as constitutional as well.

146. 28 U.S.C. § 1341.

147. *See* W. Scott Wright, Jonathan A. Feldman & Andrew D. Appleby, *Courting Independence: The Rise of Effective State Tax Courts and Tribunals*, 63 STATE TAX NOTES 475, 476–77 (2012).

148. *See, e.g.*, Clear Channel Outdoor, Inc. v. Mayor of Baltimore, 153 F. Supp. 3d 865, 875 (D. Md. 2015) (holding that the dispute must be heard in state court because it was a tax and not a fee); Complaint at 8, Chamber of Com. v. Franchot, Civ. No. 21-cv-410 (D. Md. Feb. 18, 2021) (asserting, in a complaint filed in federal court, that the Maryland digital advertising tax is not a tax subject to the Tax Injunction Act but rather a punitive fee or assessment). *Cf.* Direct Mktg. Ass'n v. Brohl, 135 S. Ct. 1124, 1131 (2015) (holding that the Tax Injunction Act did not apply to a reporting requirement because it was not the collection of tax).

149. 430 U.S. 274, 279 (1977).

150. *Id.*

The substantial nexus prong has been the subject of considerable dispute in the past. The United States Supreme Court's decision in *South Dakota v. Wayfair, Inc.*[151] reduces the likelihood of substantial nexus challenges.[152] In the context of digital services that involve collecting user data from residents in the jurisdiction and then directly or indirectly facilitating advertisements to those residents, there appears to be a significant enough connection with the jurisdiction to constitute substantial nexus.[153] The taxpayer arguably has an economic presence in the jurisdiction and may even have a physical presence if a state court were to adopt an expansive interpretation of that concept.[154] There are attenuated scenarios that could raise nexus concerns. For example, a digital advertising broker that contracts with an advertising customer and then places an advertisement with a digital service provider that serves the advertisement throughout the country.[155] The digital advertising broker would have a very limited connection with any particular state.

Essentially all the digital tax proposals discussed thus far have significant fair apportionment deficiencies, mainly because most proposals, and even Maryland's enacted bill, do not provide sourcing rules. Maryland's initial digital advertising tax proposal would have sourced digital advertising gross receipts to Maryland if the user's IP address was in Maryland or if there was knowledge or reasonable suspicion that a user was using their device in the state.[156] This approach would have likely violated the internal consistency test under the fair apportionment prong because it would have often resulted in multiple taxation. For example, if both Maryland and New York adopted this sourcing methodology, both states could tax a digital advertiser's gross receipts if the user's device has an IP address that indicates it is located in one of those states and the user is known or reasonably suspected to be using that device in the other state. With digital advertising, a user could be using their device in every state within the tax year.[157] Maryland could have implemented a credit mechanism, as the New York data mining tax proposal does. But instead, Maryland removed the sourcing

151. 138 S. Ct. 2080 (2018).

152. *Id.* at 2099.

153. Most state digital advertising tax proposals essentially incorporate a $1 million digital advertising gross receipt economic nexus threshold through their reporting requirement provisions. *See, e.g.*, H.B. 732, 2020 Gen. Assemb., Reg. Sess. (Md. 2021).

154. *See, e.g.*, U.S. Auto Parts Network, Inc. v. Comm'r of Revenue, No. C339523 (Mass. App. Tax Bd. Jan. 28, 2021) (granting summary judgment in favor of the taxpayer that challenged the Massachusetts pre-*Wayfair* regulation that established web "cookies" as physical presence); Billy Hamilton, *Goodbye,* Quill *– One Way or the Other*, 83 STATE TAX NOTES 379, 381–82 (2017).

155. *See* Cook & Stephanny, *supra* note 37.

156. S.B. 2, 2020 Gen. Assemb., Reg. Sess. (Md. 2020).

157. *See, e.g.*, Complaint at 10–11, Apple Inc. v. City of Chicago, No. 2018L050514 (Ill. Cir. Ct. Cook Cnty. Aug. 27, 2018) (asserting that a digital tax sourcing regime is unconstitutional because it taxes extraterritorial values).

methodology entirely and inexplicably created an apportionment formula in its place.[158] It is unclear why an apportionment formula is necessary in this gross receipts tax context. Determining the numerator of the formula, which is Maryland digital advertising gross receipts, still requires a valid sourcing methodology.[159] Making matters worse, the statute uses the taxpayer's digital advertising gross receipts in the United States as a denominator. Although the mechanics are unclear, it appears that the apportionment formula may then be applied to the taxpayer's worldwide digital advertising gross receipts.[160] If so, it is difficult to see how the apportionment methodology satisfies either the internal or external consistency tests, although straightforward amendments could cure the aforementioned deficiencies.[161]

Even if Maryland remedies its sourcing issues with a coherent internally and externally consistent sourcing methodology, taxpayers may assert that the basis for the tax rate increases violates the external consistency test. First, the tax rate increases are based on worldwide gross receipts, not Maryland gross receipts.[162] Second, the tax rate increases are based on gross receipts from all activities, not just digital advertising gross receipts.[163] Thus, a tax rate four times higher may apply to taxpayers based on non-advertising activities that have no connection with Maryland. Taxpayers have not found great success, however, when asserting that a tax rate increase based on extraterritorial income is unconstitutional.[164] Several states, including California and New York, impose higher personal income tax rates based on the taxpayer's federal taxable income rather than state taxable income.[165] This approach has been sustained and arguably better reflects a taxpayer's ability to pay.[166] As to external consistency specifically, when the Court first

158. The Maryland Comptroller's proposed regulations implement a throw-out rule that removes a device from both the numerator and denominator of the apportionment formula if its location is indeterminate. 48:21 Md. Reg. 896 (Oct. 8, 2021).

159. *See supra* Section II.A.

160. It is actually unclear why there is an apportionment formula at all, as the assessable base appears to be defined identically as the numerator of the apportionment formula.

161. Indeed, the Maryland Comptroller's proposed regulations use devices in Maryland over devices worldwide. 48:21 Md. Reg. 896 (Oct. 8, 2021). This apportionment formula remedies the obvious extraterritorial taxation issue, but the proposed regulations conflict with the apportionment formula in the statute itself.

162. H.B. 732, 2020 Gen. Assemb., Reg. Sess. (Md. 2021).

163. *Id.*

164. *See* HELLERSTEIN ET AL., *supra* note 83, ¶ 20.06[3] ("As we noted, courts have uniformly rejected the contention that the states engage in extraterritorial taxation when they determine the rate at which a nonresident pays tax by reference to all of the nonresident's income, including income beyond the state's taxing power.").

165. *See id.* ¶¶ 20.05[1][b], 20.06[3] (discussing Wheeler v. State, 249 A.2d 887 (Vt. 1969), *appeal dismissed*, 396 U.S. 4 (1969)).

166. *Id.* This ability to pay argument is less applicable, however, in a gross receipts tax regime than in a net income tax regime.

articulated the test it analyzed whether "*income attributed to the State* is in fact 'out of all appropriate proportions to the business transacted . . . in that State.'"[167] In this case, assuming an appropriate sourcing methodology, Maryland is taxing only Maryland source revenue. As initially conceived, the external consistency test does not readily apply to determining tax rates but applies only to apportionment, which is intuitive because it falls within the fair apportionment prong.[168] The anti-discrimination prong is more pertinent for challenges to the progressive tax rate structure.

Indeed, the anti-discrimination prong is quite relevant to digital services taxes. Digital services taxes arguably violate the anti-discrimination prong if they have high gross receipts application thresholds because the taxes will apply only to large national or international businesses and not to local businesses. In effect, the tax will apply only to businesses engaged in interstate commerce and not to businesses engaged solely in intrastate commerce.[169] In addition, graduated rate structures that impose a severe notch effect exacerbate potential discrimination concerns.

Maryland's digital advertising tax is particularly suspect. Because of the tax's high application threshold—over $100 million in global annual gross receipts—it will apply primarily to large national or international businesses and not to local Maryland-based businesses.[170] In effect, the tax will apply only to businesses engaged in interstate commerce and not to businesses engaged solely in intrastate commerce. In addition, the tax's rate structure imposes a severe notch effect that imposes a vastly greater tax burden on large international taxpayers than smaller local taxpayers. A taxpayer with less than $1 billion in global annual gross receipts will pay a 2.5% tax on all their Maryland-sourced digital advertising receipts. A taxpayer with greater than $15 billion in global annual gross receipts will pay ten percent on all their Maryland-sourced digital advertising receipts. Thus,

167. Container Corp. of Am. v. Franchise Tax Bd., 463 U.S. 159, 169–70 (1983) (emphasis added) (quoting Hans Rees' Sons, Inc. v. North Carolina *ex rel.* Maxwell, 283 U.S. 123, 135 (1931)).

168. The Court has articulated the external consistency test a bit more broadly, although the test is still focused on apportionment: "External consistency . . . looks . . . to the economic justification for the [s]tate's claim upon the value taxed, to discover whether a [s]tate's tax reaches beyond that *portion of value that is fairly attributable* to economic activity within the taxing [s]tate." Okla. Tax Comm'n v. Jefferson Lines, Inc., 514 U.S. 175, 185 (1995) (emphasis added).

169. This discrepancy does not inherently violate the anti-discrimination prong because all taxpayers within a certain revenue band pay the same tax rate regardless of whether they operate entirely intrastate or not. *See, e.g.*, HELLERSTEIN ET AL., *supra* note 83, ¶ 4.14[3][t] (recognizing that "taxes falling disproportionately on nonresidents may pass muster under the Commerce Clause if they are imposed evenhandedly on residents and nonresidents, even if nonresidents engage in the taxed activity more frequently than do residents").

170. In addition, the gross receipt threshold is based on all the taxpayer's gross receipts, not just their digital advertising receipts.

the effective tax rate for large interstate taxpayers is four times greater than for smaller local taxpayers.

In contrast, New York's data mining tax proposal is designed in a much less discriminatory manner. The application threshold would be based on the number of users, not gross receipts.[171] The proposal begins to impose tax on data collectors who collect personal data from at least one million New York consumers in a given month. In the digital realm, even small, local data-focused companies can easily exceed that threshold. Crucially, the proposal also incorporates a conventional progressive rate structure that eliminates a severe notch effect. Every taxpayer would pay the exact same amount of tax, for example, for collecting data on up to ten million New York consumers during the tax period.[172] The largest taxpayers would be subject to a higher rate, but only on each New York consumer beyond each threshold. Thus, taxpayers' effective tax rates would be much closer under New York's data mining proposal than under Maryland's digital advertising tax.

Depending on a digital service tax's design, it may also violate the fairly-related prong. Successful challenges under *Complete Auto*'s fourth prong are rare.[173] The United States Supreme Court does not look to the "*amount* of the tax or the *value* of the benefits" provided.[174] Rather, the Court looks to whether "the *measure* of the tax [is] reasonably related to the extent of the contact, since it is the activities or presence of the taxpayer in the State that may properly be made to bear a 'just share of state tax burden.'"[175] This framework incorporates the fundamental assumption that "the measure of a tax is reasonably related to the taxpayer's activities or presence in the [s]tate—*from which it derives some benefit* such as the substantial privilege of [doing business]."[176]

Although digital service providers derive significant economic benefit from the jurisdiction in which the end user is located, the measure of tax may be problematic. The Maryland digital advertising tax imposes a ten percent gross receipt tax on the largest taxpayers, which is many magnitudes greater than traditional gross receipt tax rates that are often one percent or less.[177]

171. S. 4959, 2021–2022 Leg., Reg. Sess. (N.Y. 2021).

172. For example, every taxpayer would pay the same $2.25 million in monthly tax for collecting data on up to ten million New York consumers during the tax period. If larger companies collected data on more than ten million New York consumers, the company would pay an additional tax of $0.50 for each additional New York consumer.

173. *See* HELLERSTEIN ET AL., *supra* note 83, ¶ 4.18[2][d].

174. Commonwealth Edison Co. v. Montana, 453 U.S. 609, 625 (1981).

175. *Id.* at 626 (quoting W. Live Stock v. Bureau of Revenue, 303 U.S. 250, 254 (1938)).

176. *Id.* at 628–29 (emphasis added). The Court designed this standard in the context of general taxes. *Id.* at 622–24. The purpose of the general taxes at issue were to provide "police and fire protection and other advantages of civilized society." *Id.* at 628.

177. Even Maryland's lowest rate of 2.5% is more than double typical gross receipts tax rates. *See* H.B. 732, 2020 Gen. Assemb., Reg. Sess. (Md. 2021).

Washington's data mining tax proposal, for example, would impose a flat rate of 1.8% of gross receipts, which would be the highest rate in its regime.[178] Although New York's data mining tax is well designed in many ways, its measure of tax leaves it susceptible to a Commerce Clause challenge as well. The measure of New York's tax is a monthly, per-user amount.[179] The highest marginal rate is $0.50 per New York user per month. This measure of tax could far exceed the profit, or even gross revenue, that the taxpayer generates in a particular month. In such a case, the exorbitant measure of tax is arguably not fairly related to the benefit the taxpayer receives from extracting data from users in the jurisdiction.

Taxpayers could also assert that each of the taxes discussed above unduly burden interstate commerce under the reinvigorated *Pike* balancing test.[180] Although the *Wayfair* court suggested that the *Pike* balancing test may play a larger role in dormant Commerce Clause challenges moving forward, it has been traditionally eschewed in state and local tax jurisprudence and diminished generally.[181] In *Pike*, the Court established the following balancing framework to analyze Commerce Clause challenges:

> Where the statute regulates even-handedly to effectuate a legitimate local public interest, and its effects on interstate commerce are only incidental, it will be upheld unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits. If a legitimate local purpose is found, then the question becomes one of degree. And the extent of the burden that will be tolerated will of course depend on the nature of the local interest involved, and on whether it could be promoted as well with a lesser impact on interstate activities.[182]

As a threshold matter, some of the tax approaches—such as Maryland's digital advertising tax—may not regulate in an even-handed manner and may have more than incidental effects on interstate commerce, as discussed above.[183] If a tax regime does satisfy those requirements, however, a court would need to analyze potential local public interests. In addition to raising revenue for essential underfunded state programs, each of the digital taxes discussed in Part II arguably have the legitimate local purpose of accounting for valuable data currently being extracted from users in their jurisdictions

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178. *See supra* Section II.F.

179. S. 4959, 2021–2022 Leg., Reg. Sess. (N.Y. 2021).

180. Pike v. Bruce Church, Inc., 397 U.S. 137, 142 (1970).

181. *See, e.g.*, Walter Hellerstein & Andrew Appleby, *Substantive and Enforcement Jurisdiction in a Post-*Wayfair *World*, 90 STATE TAX NOTES 283, 292 (2018); Brannon P. Denning, *Reconstructing the Dormant Commerce Clause Doctrine*, 50 WM. & MARY L. REV. 417, 493–94 (2008).

182. *Pike*, 397 U.S. at 142 (citation omitted).

183. *See supra* Section II.A.

without direct payment or transparency. The resulting inquiry is then twofold: whether the burdens imposed on taxpayers outweigh the respective purpose; and, if not, whether the state's purpose could be accomplished just as well in a less burdensome manner.

In the context of digital services taxes, the most significant and realistic burden relates to compliance. As discussed below, there are significant administrative burdens related to determining the proper source of the receipt in the digital context.[184] These burdens are compounded when taxpayers must comply with multiple digital taxes, whether within one jurisdiction or across many. The cumulative compliance burdens could potentially outweigh the local benefits—that argument is tenuous, however, especially for large multinational businesses.[185] In addition, depending on the digital tax approach being analyzed, taxing jurisdictions may be able to accomplish their stated purpose just as well with a lesser impact on interstate commerce, such as with other options discussed above.[186] For example, Maryland could expand its existing sales tax to include all advertising and to impose a higher rate instead of creating a new digital advertising gross receipts tax regime. Based on longstanding judicial reluctance to apply the inherently nuanced *Pike* balancing framework in the tax context, especially in a state court, it may be difficult for a taxpayer to succeed on this basis.

Digital services taxes also raise an unconventional Commerce Clause argument: whether subnational digital services taxes violate the "one voice" principle if the federal government is actively opposing international digital services taxes.[187] In such a case, if a subnational taxing jurisdiction were allowed to impose a similar tax, it would severely undercut the federal government's power to speak with one voice against these taxes internationally. The federal government could change course and reluctantly permit international digital service taxes, even though it is unlikely to ever embrace them.[188] Such a policy shift would severely weaken the already novel "one voice" argument against subnational digital services taxes.[189]

184. *See infra* Part IV.

185. One could also argue that these cumulative compliance burdens' effect on interstate commerce is beyond "incidental." For example, if the world's largest digital service providers were to withdraw from the Maryland market because of the compliance burdens associated with the digital advertising tax, there would be a significant effect on interstate commerce.

186. *See supra* Part II.

187. Mason, *supra* note 25.

188. The overwhelming target of these taxes are United States-based companies, so there is political pressure to condemn these taxes. In addition, the United States is one of the only developed nations without a federal consumption or transaction tax, so the United States does not currently stand to benefit directly with its own digital services tax at the federal level.

189. *See* Mason, *supra* note 25. States that adopt approaches other than digital advertising taxes could also assert that their tax regimes differ significantly from European-style digital services taxes.

B. Equal Protection Clause

The Equal Protection Clause prohibits states from making unreasonable tax classifications, which is a fairly lenient standard for taxing jurisdictions.[190] The United States Supreme Court will generally analyze whether "the State's classification is 'rationally related to the State's objective.'"[191] If the taxing jurisdiction presents a reasonable justification, the United States Supreme Court will generally sustain the tax even if it is discriminatory.[192] Although there is some mixed precedent, the United States Supreme Court would likely uphold an Equal Protection Clause challenge of a tax distinction based on a business's number of locations or amount of gross receipts.[193] Thus, an equal protection argument based on a state imposing a higher tax burden on digital advertisers with greater gross receipts than those with fewer gross receipts is unlikely to be successful. An argument premised on the digital distinction is more viable, but still doubtful. Digital advertisers and traditional print or billboard advertisers are arguably not similarly situated taxpayers and their business models vary significantly in crucial ways. A state could present several colorable justifications for imposing a higher tax burden on digital advertisers, notably the extraction and monetization of user data, which would likely satisfy the lenient equal protection standard.

With that said, state courts have been more likely than the United States Supreme Court to find that taxes violate the state Equal Protection Clause.[194] A state court may be more comfortable analyzing the state constitution rather than the United States Constitution, which also allows the state court to deviate from United States Supreme Court Equal Protection Clause precedent.[195] And, although some state courts may assert that the Uniformity and Equal Protection Clause standards are essentially identical, it appears taxpayers may have more success with state uniformity clause challenges.[196]

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190. *See* U.S. CONST. art. XIV, § 1; HELLERSTEIN ET AL., *supra* note 83, ¶ 3.02. A state imposing a higher rate of tax based on a taxpayer's overall income or revenue would also likely satisfy the Equal Protection Clause. *See* HELLERSTEIN ET AL., *supra* note 83, ¶ 20.06[3].

191. Harrah Indep. Sch. Dist. v. Martin, 440 U.S. 194, 199 (1979) (quoting Mass. Bd. of Ret. v. Murgia, 427 U.S. 307, 315 (1976)).

192. Allied Stores of Ohio, Inc. v. Bowers, 358 U.S. 522, 526–27 (1959).

193. *See* HELLERSTEIN ET AL., *supra* note 83, ¶ 3.03[5]–[6].

194. *Id.* ¶ 2.06[2]. "[S]ome state courts appear to be more sympathetic than the U.S. Supreme Court to equal protection challenges to state tax classifications." *Id.* ¶ 3.04[1].

195. State courts are bound by United States Supreme Court precedent while applying the United States Constitution but are not so bound when applying the state's constitution. *Id.* ¶ 3.04[1]. *See generally* Robert F. Williams, *Equality Guarantees in State Constitutional Law*, 63 TEX. L. REV. 1195, 1195–97 (1985).

196. *See* HELLERSTEIN ET AL., *supra* note 83, ¶ 3.04[1][c]; Arangold Corp. v. Zehnder, 787 N.E.2d 786, 793 (Ill. 2003) (recognizing that "[t]he uniformity clause was intended to be a broader limitation on legislative power to classify for nonproperty tax purposes than the limitation of the

C. State Uniformity Clause

The most powerful constitutional restriction in certain states is uniform taxation. Most state constitutions include some type of tax uniformity clause.[197] These uniformity clauses vary considerably across the states, and many apply only to property taxes.[198] State courts tend to interpret uniformity clauses broadly, and although taxpayers may also raise State and Federal Equal Protection Clause challenges, taxpayers are more likely to be successful with a state uniformity clause challenge to these digital taxes.[199] The overarching uniformity and equal protection inquiries are whether the taxing jurisdiction properly determined each taxpayer class, and whether it applies the tax uniformly across that class.[200]

Most relevant to the digital taxes discussed above, it is unclear whether a taxing jurisdiction can justify disparate tax treatment based on taxpayer size without violating the state constitution's uniformity clause.[201] Both Georgia and Pennsylvania, which have broad uniformity provisions that apply beyond property taxes, have addressed the issue.[202] The Georgia Supreme Court held that a business license tax violated the state constitution's uniformity provision because the tax imposed a greater flat charge if a business reached a certain employee threshold.[203] The court did, however, recognize that a reasonable justification for a size-based class is that larger businesses have greater ability to pay and produce greater regulatory costs for the locality.[204] Both the Georgia Supreme Court and the Pennsylvania Supreme Court struck

equal protection clause" (citing Searle Pharms., Inc. v. Dep't of Revenue, 512 N.E.2d 1240 (Ill. 1987))).

197. HELLERSTEIN ET AL., *supra* note 83, ¶ 2.01. Neither New York nor Connecticut have constitutional tax uniformity provisions. *Id.*

198. *Id.* ¶¶ 2.01, 2.06. Importantly, some courts have characterized net income taxes as a type of property tax. *See* Kunath v. City of Seattle, 444 P.3d 1235, 1239 (Wash. Ct. App., Div. 1 2019) (citing Culliton v. Chase, 25 P.2d 81 (Wash. 1933)).

199. *See* HELLERSTEIN ET AL., *supra* note 83, ¶ 3.04[1][c].

200. *Id.* ¶ 2.06; *Arangold Corp.*, 787 N.E.2d at 793.

201. The New Hampshire Supreme Court issued an advisory opinion to the New Hampshire legislature concluding that imposing different property tax rates based on taxpayer size would violate the state's uniformity clause unless there was a "valid reason" justifying the disparate treatment. Op. of the Justs., 386 A.2d 1273, 1275 (N.H. 1978).

202. GA. CONST. art. VII, § 1, ¶ III; PA. CONST. art. VIII, § 1. These broad provisions require that taxes be imposed uniformly upon the same class of *subjects* rather than property.

203. Pharr Road Inv. Co. v. City of Atlanta, 162 S.E.2d 333, 335–36 (Ga. 1968). The court suggested that a tax that imposed a certain rate per employee up to a threshold, and then a higher amount per employee that exceeds that threshold, would pass muster. *Id.*; *see also* Ping v. City of Cortez, 342 P.2d 657, 659 (Colo. 1959) (holding that a uniform per-employee business license tax did not violate the Equal Protection Clause).

204. *Pharr Road Inv. Co.*, 162 S.E.2d at 335.

down business license taxes because the provisions exempted taxpayers that had gross receipts below a certain threshold.[205]

With digital taxes that draw harsh distinctions and impose a severe notch effect on taxpayers that have greater gross receipts, taxpayers may have a viable uniformity argument. Taxpayers could also base a uniformity challenge on the digital versus traditional distinction, as discussed in Section III.B, for equal protection purposes. Although these are cogent arguments, a state court could easily deem these classifications to be reasonable. Regardless, most states do not have broad uniformity provisions that apply to all tax types.[206] Thus, the digital tax approaches that are most vulnerable to a uniformity challenge are stock-based taxes and data ad valorem taxes because they could fall within the scope of most state constitutional uniformity clauses.

D. First Amendment

The First Amendment prohibits taxes that discriminate against the press or impermissibly restrain free speech.[207] A recent dispute in Maryland regarding Baltimore's billboard excise tax is instructive for digital tax proposals.[208] The Maryland Court of Appeals determined that the First Amendment was not implicated because the billboard provider was being taxed on providing the medium for speech but was not being taxed on its speech, and that the tax did not regulate or ban speech and was content neutral.[209] The appellate court then stated that, even if the First Amendment was implicated, the tax was permissible.[210] The court analyzed the relevant United States Supreme Court precedent in this area and concluded that "[t]o be struck down on First Amendment grounds, a tax must, therefore, threaten 'to suppress the expression of particular ideas or viewpoints,' target 'a small group of speakers,' or discriminate 'on the basis of the content of taxpayer speech.'"[211] The Maryland Court of Appeals agreed, holding that heightened

205. *Id.* at 336; Saulsbury v. Bethlehem Steel Co., 196 A.2d 664, 666–67 (Pa. 1964); *cf.* City & Cnty. of Denver v. Duffy Storage & Moving Co., 450 P.2d 339, 344 (Colo. 1969) (en banc) (determining that under the Equal Protection Clause a similar exemption "is not arbitrary and is reasonable").

206. *See* HELLERSTEIN ET AL., *supra* note 83, ¶ 2.01.

207. *See id.* ¶ 13.11[4].

208. Clear Channel Outdoor, Inc. v. Dir., Dep't of Fin., 244 Md. App. 304, 223 A.3d 1050 (Md. Ct. Spec. App. 2020), *cert. granted*, 468 Md. 543, 228 A.3d 163 (2020), *aff'd*, 472 Md. 444, 247 A.3d 740 (2021).

209. *Id.* at 317, 223 A.3d at 1058.

210. *Id.* at 317–18, 223 A.3d at 1058.

211. *Id.* at 322, 223 A.3d at 1060 (quoting Leathers v. Medlock, 499 U.S. 439, 447 (1991)). *But cf.* City of Baltimore v. A.S. Abell Co., 218 Md. 273, 288–89, 145 A.2d 111, 119 (1958) (holding that municipal taxes on advertising media were unconstitutional for singling out newspapers and radio and television stations for taxation).

scrutiny under the First Amendment applies only "when a tax suppresses or threatens to suppress particular ideas or viewpoints by (1) singling out the press, (2) targeting a small group of speakers, or (3) discriminating on the basis of the content of taxpayer speech."[212]

Digital tax opponents will likely assert a First Amendment challenge, although courts may be reluctant to invalidate most digital tax proposals on these grounds. None of the digital tax approaches discussed above overwhelmingly violate any of the three bases to invalidate a tax on the press on First Amendment grounds, and Maryland's exemption for broadcast and news media entities weakens a First Amendment challenge.[213]

E. Internet Tax Freedom Act

Federal preemption may be the most likely barrier for digital services taxes, specifically preemption based on ITFA.[214] ITFA contains two operative provisions. The first prohibits states and localities from imposing any tax on "Internet access."[215] This operative provision is important because it was a primary justification for Congress making ITFA permanent and it may preclude any ITFA repeal efforts, as discussed below. Although this provision may not initially appear to impact most digital services tax proposals, some digital services taxes could potentially fall within this operative provision because ITFA defines "Internet access" much more broadly than its commonly understood definition.[216]

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212. Clear Channel Outdoor, Inc. v. Dir., Dep't of Fin., 472 Md. 444, 477–78, 247 A.3d 740, 759–60 (2021). *But see* Lamar Advantage GP Co., L.L.C. v. City of Cincinnati, No. 2021-Ohio-3155, 2021 WL 4201656, at *19–20 (Ohio Sept. 16, 2021) (holding that a billboard tax violated the First Amendment and stating that the reasoning in *Clear Channel Outdoor* was not persuasive).

213. The Maryland legislature amended its digital advertising tax to exempt advertising hosted by broadcast or news media entities, although not necessarily to preempt a First Amendment challenge. S.B. 787, 2021 Gen. Assemb., Reg. Sess. (Md. 2021).

214. Internet Tax Freedom Act (ITFA) of 1998, Pub. L. No. 105-277, 112 Stat. 2681–719 (creating 47 U.S.C. § 151 note, ITFA §§ 1100–09); Trade Facilitation and Trade Enforcement Act of 2015, Pub. L. No. 114-125, § 922, 130 Stat. 122 (2016) (making ITFA permanent). Pursuant to the Supremacy Clause of the United States Constitution, Article VI, clause 2, the laws of the United States are the supreme law of the country. U.S. CONST. art. VI, § 2.

215. ITFA § 1101(a)(1).

216. ITFA defines "Internet access" to include "a homepage, electronic mail and instant messaging (including voice- and video-capable electronic mail and instant messaging), video clips, and personal electronic storage capacity, that are provided independently or not packaged with Internet access." *Id.* § 1105(5)(E). But "Internet access" does not include "voice, audio or video programming." *Id.* § 1105(5)(D). Apple is asserting that Chicago's streaming video tax violates ITFA because it imposes tax on video clips, which fall under ITFA's definition of "Internet access." Complaint, *supra* note 157, at 4, 8, 14–15. In separate litigation, Apple is also asserting that Texas cannot impose tax on its iCloud storage service because it qualifies as "personal electronic storage capacity" under ITFA. Complaint at 1, 5, Apple Inc. v. Hegar, No. D-1-GN-20-004108 (Tex. Dist. Ct. Travis Cnty. Aug. 7, 2020). Both cases focus on the confusing statutory language that considers these services to be protected "Internet access" even if not packaged with "Internet access." Another

ITFA's second operative provision prohibits states and localities from imposing multiple or discriminatory taxes on electronic commerce.[217] This provision's broad language may prohibit digital-specific state and local tax proposals. ITFA defines "[e]lectronic commerce" as "any transaction conducted over the Internet or through Internet access, comprising the sale, lease, license, offer, or delivery of property, goods, services, or information, whether or not for consideration, and includes the provision of Internet access."[218] And ITFA defines "tax" broadly as "any charge imposed by any governmental entity for the purpose of generating revenues for governmental purposes, and . . . not a fee imposed for a specific privilege, service, or benefit conferred" or a sales and use tax collection obligation.[219]

ITFA's "discriminatory tax" definition includes several alternatives, although the most applicable is any state or local tax imposed on "electronic commerce" that is not imposed, or is imposed at a lower rate, on "transactions involving similar property, goods, services, or information accomplished through other means."[220] A tax on "electronic commerce" is also discriminatory if it "imposes an obligation to collect or pay the tax on a different person or entity than in the case of transactions involving similar property, goods, services, or information accomplished through other means."[221]

There are few cases interpreting ITFA's anti-discrimination provision. If a state were to impose a tax on a provider's digital advertising receipts but not on a provider's non-digital advertising receipts—as is the case with Maryland's digital advertising tax—at first glance it seems clear the tax would discriminate against electronic commerce. The same analysis applies to a sales tax imposed on digital advertising but not print advertising. A jurisdiction could assert, however, that digital advertising is not "similar" to non-digital advertising.[222] Although both accomplish the same end result,

potential complication stemming from ITFA's imprecise drafting is that ITFA preemption applies to an "Internet [A]ccess [P]rovider" only if it offers screening software to protect minors. *See, e.g.*, New Cingular Wireless PCS LLC v. Comm'r of Revenue, 154 N.E.3d 947, 955 (Mass. App. Ct. 2020).

217. ITFA § 1101(a)(2).

218. *Id.* § 1105(3).

219. *Id.* § 1105(8)(A).

220. *Id.* § 1105(2)(A)(i)–(ii).

221. *Id.* § 1105(2)(A)(iii).

222. *See, e.g.*, Labell v. City of Chicago, 147 N.E.3d 732, 747 (Ill. App. 1st 2019), *appeal denied*, 144 N.E.3d 1175 (Ill. 2020) (holding that streaming services are not "similar" to live performances for ITFA, and suggesting that ITFA applies only when the services are "identical"); Gartner, Inc. v. Dep't of Revenue, 455 P.3d 1179, 1193 (Wash. Ct. App., Div. 2 2020) (holding that an online research library is not "equivalent" to research delivered via CD or email for ITFA purposes); Darien Shanske, Christopher Moran & David Gamage *Maryland's Digital Tax and the ITFA's Catch-22*, 100 TAX NOTES STATE 141, 142–43 (2021); Dan R. Bucks et al., *The Maryland and New York Approaches to Taxing the Data Economy*, 100 TAX NOTES STATE 147, 148–49 (2021).

they do so in very different ways. Digital advertising relies heavily on extracting user data, using advanced analytics to process that data into useful information, and then serving the targeted advertisements through a free or subsidized digital service.[223] Traditional advertising incorporates some rudimentary versions of these processes, but printing a static graphic on a billboard is arguably dissimilar from serving a targeted video advertisement on a user's Facebook feed or Google search result webpage. In addition, non-electronic advertising may soon cease to exist in a meaningful way.[224] This progression advances the argument that there are not similar non-electronic services and also allows jurisdictions to define the scope of their taxes broadly to include all advertising or all data extraction, regardless of electronic or non-electronic, because of the minor impact on non-electronic service providers in those industries.[225]

ITFA's "multiple tax" definition is also quite broad:

> [A]ny tax that is imposed by one State or political subdivision thereof on the same or essentially the same electronic commerce that is also subject to another tax imposed by another State or political subdivision thereof (whether or not at the same rate or on the same basis), without a credit . . . for taxes paid in other jurisdictions.[226]

A congressional report provided an example of the intent underlying the multiple tax provision:

> [A] resident of Virginia downloads a movie from a company based in Seattle while waiting at the airport in Chicago. Three states could claim the right to tax it; Virginia, Washington and Illinois. The statute . . . requires credits so the customer is not subject to three separate tax levies.[227]

Any digital services tax proposal must incorporate a sourcing regime that avoids ITFA's multiple tax prohibition, as discussed in greater detail below.[228]

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223. *See, e.g.*, *supra* note 2.

224. Many billboards are now electronic video boards that may fall within the scope of digital advertising taxes. Print newspaper circulation has dwindled dramatically, and telephone directories such as the Yellow Pages have gone from a preeminent advertising tool to a historical afterthought.

225. The tax impact is mitigated further with progressive rates, as smaller traditional advertising businesses would be subject to much lower rates than the world's largest technology companies.

226. ITFA § 1105(6)(A). ITFA provides an exception to the "multiple tax" definition that could be construed to exempt all sales and use taxes from the definition. *Id.* § 1105(6)(B). The purpose of this exception, however, was much different and such an interpretation would contradict legislative history and undermine the provision substantially. This exception originally addressed grandfathered taxes on Internet access, which are no longer applicable, so the cross-reference was deleted, which resulted in this ambiguous and potentially misleading language.

227. H.R. REP. NO. 113-510, at 3 (2014).

228. *See infra* Part IV.

Despite ITFA's broad language, there are several scenarios that may circumvent preemption. First, a jurisdiction could design its digital services tax in a manner that complies with ITFA, as discussed in this Section, or impose a non-digital-specific tax such as the corporate income tax surcharge or stock-based taxes discussed above.[229] Second, a federal, rather than subnational, digital services tax would not be preempted. Third, even if a subnational digital services tax appeared to violate ITFA, state courts may be hesitant to preempt the tax for several reasons. State courts and administrative tribunals may be reluctant to address federal preemption generally and may strive to decide a case on state statutory grounds instead.[230] State courts may interpret ITFA's preemption very narrowly despite its broad language,[231] or simply misinterpret ITFA's technically complex and imprecisely drafted provisions, in favor of the taxing jurisdiction.[232] And United States Supreme Court precedent imposes a presumption against federal preemption, basing the analysis on congressional intent.[233] A state court could determine that Congress's original intent, discussed below, was not to preempt taxes on substantial revenue derived from extracting user data, which may have been nominal or unforeseeable in 1998 or even 2014.

Finally, even if a state court invalidated a subnational digital services tax based on ITFA preemption, Congress could reasonably repeal at least ITFA's electronic commerce provision.[234] When Congress was deciding whether to make ITFA permanent, the House Judiciary Committee provided valuable insight into the original intent of ITFA and why at least some aspects of ITFA were no longer appropriate.[235]

229. *See supra* Sections II.C, II.D.

230. *See, e.g.*, *In re* Expedia, Inc., DTA Nos. 825025 and 825026, at 19 (N.Y.S. Div. Tax App. Feb. 5, 2015) (finding in favor of the taxpayer on a state statutory basis and declining to address the taxpayer's ITFA discrimination argument).

231. *See supra* note 222. State courts are even less likely than federal courts to strike down their own state's tax regime, colloquially deemed the "home cooking" doctrine. *See* Hellerstein & Appleby, *supra* note 181, at 292. Digital advertising tax opponents recognize this difficulty and are attempting to challenge these taxes in federal court despite the Tax Injunction Act. *See* Complaint at 4, Chamber of Com. v. Franchot, Civ. No. 21-cv-410 (D. Md. Feb. 18, 2021).

232. *See, e.g.*, City of Chicago v. StubHub!, Inc., 624 F.3d 363, 366 (7th Cir. 2010) (misinterpreting ITFA's multiple tax provision in favor of the state taxing authority).

233. *See, e.g.*, Riegel v. Medtronic, Inc., 552 U.S. 312, 334–35 (2008) (Ginsburg, J., dissenting); Cipollone v. Liggett Grp., Inc., 505 U.S. 504, 516 (1992). The Illinois Supreme Court held that ITFA preempted the state's "click-through" nexus law, although a well-reasoned dissent presented a strong case against preemption. Performance Mktg. Ass'n, Inc. v. Hamer, 998 N.E.2d 54, 55 (Ill. 2013).

234. Recently, scholars asserted that ITFA should be repealed in its entirety and that there may be political viability to do so. *See, e.g.*, Dan R. Bucks et al., *Is It Time to Tax the Digital Economy?*, 99 TAX NOTES STATE 29, 31, 33 (2021).

235. H.R. REP. NO. 113-510, at 5–10 (2014).

ITFA's first operative provision, which prohibits taxes on Internet access, is perhaps more important today than in 1998. Congress described the Internet as "the greatest gateway to knowledge and self-help that has ever existed."[236] Removing barriers to Internet access, particularly making it more affordable by exempting it from taxation, serves many governmental goals, including mitigating income inequality. Although states are permitted to tax other fundamental services such as electricity and telephone, it appears unlikely that Congress would repeal ITFA's prohibition on Internet access taxes in the near future.

ITFA's second operative provision, however, is no longer achieving its intended purpose. The original intent of this discriminatory or multiple tax prohibition was to "foster the growth of electronic commerce."[237] That Congress included a sunset provision in the original ITFA, and then only extended ITFA reluctantly several times until finally making it permanent in 2014, reflects ITFA's intended temporary nature.[238] ITFA was intended to incubate electronic commerce, not to provide an enduring advantage over traditional commerce.[239] In 2014, members of Congress opposed making ITFA permanent because "[t]he Internet is no longer a nascent development in need of Federal tax protection to grow. It is now a prosperous sector of the global economy."[240] Congress recognized that by 2014, "one of the original goals of the ITFA—to foster electronic commerce by protecting it from multiple and discriminatory taxation—has already been met as evidenced by the explosion of commercial transactions over the Internet."[241] The veracity of that sentiment has strengthened since 2014, as electronic commerce has continued its exponential growth. Congress recognized that ITFA's "economic commerce" provision "will restrain the states' ability to cope with economic downturns" and "will burden taxpayers while excluding an entire industry from paying their fair share of taxes."[242] These statements proved prescient and undergird the current digital services tax movement. In addition, states may assert that ITFA violates the Tenth Amendment because it unconstitutionally restrains states' rights.[243] Repealing ITFA's "electronic commerce" provision would be a logical response and would allow subnational jurisdictions the flexibility to respond to a rapidly evolving economy.

236. *Id.* at 7.
237. *Id.* at 17.
238. *Id.* at 2–3.
239. *See id.*
240. *Id.* at 18.
241. *Id.*
242. *Id.* at 19.
243. *See* Shanske et al., *supra* note 222, at 144.

IV. SOURCING CHALLENGES

The most challenging aspect of any digital tax is determining the source of the receipt, transaction, or property, especially considering the constitutional limitations discussed in Part III. Even with most jurisdictions adopting a market-based, destination sourcing approach for most tax types, tax statutes must precisely define the "destination" for purposes of the specific tax.[244] In the traditional retail economy, a customer would physically visit a retailer and purchase tangible personal property. Sourcing that transaction to the location where the physical transaction occurred was fairly easy. Sourcing digital transactions is much more difficult, especially when analyzing complex business models beyond simple retail sales.

If no physical product is delivered, states generally look to where the benefit of the service was received.[245] Determining that location will vary with each type of service, although none are straightforward. With a digital content streaming service, the benefit is received where the customer consumes the content. But that customer may pay a monthly subscription fee and consume the content on a mobile device in multiple jurisdictions during that month. Using a proxy such as a billing address is imprecise and allows for customers to manipulate their address to minimize or avoid tax. Using billing addresses may be acceptable at the state level given lack of alternatives and the large percentage of consumption that occurs within a customer's home state, but it is more problematic at the local level. Using the customer's IP address is much more precise but imposes an enormous compliance burden on the service provider and consumers can easily manipulate their IP address. Even if the service provider tracked the IP address of each device streaming content on each account, the service provider would then need to allocate a portion of the monthly charge to each

244. *See* HELLERSTEIN ET AL., *supra* note 83, ¶¶ 9.18[3], 18.05. Although unconventional, some jurisdictions may prefer an origination sourcing method if the large digital service providers have an inordinate presence in that particular jurisdiction. Determining where the service is being performed, however, is also challenging. Even if a large digital service provider is headquartered in a particular locality, the service is generally provided through an integrated global enterprise, so it is inappropriate to source all receipts to the headquarters location. Further, an origination sourcing methodology makes the jurisdiction less attractive to businesses because the business's tax liability increases when its presence in the jurisdiction increases, which is why most jurisdictions have shifted to market sourcing. Regardless, it would not be a complete surprise to see a West Coast locality attempt this sourcing approach. *See* Appleby, *supra* note 50, at 480–81 (discussing local taxes measured by a taxpayer's employees or receipts in that locality). In addition, an origination approach for a consumption tax is inappropriate because the transaction should be sourced to where the consumption occurred. *See, e.g.*, Mazur & Thimmesch, *supra* note 75, at 964.

245. *See, e.g.*, STREAMLINED SALES TAX GOVERNING BD., INC., STREAMLINED SALES AND USE TAX AGREEMENT (SSUTA) §§ 310.A, 311.B (2020), https://www.streamlinedsalestax.org/docs/default-source/agreement/ssuta/ssuta-as-amended-through-12-18-20.pdf?sfvrsn=4b26a714_8.

relevant jurisdiction, which could be hundreds or even thousands of jurisdictions per month per customer.

Sourcing digital advertising receipts is even more difficult. The advertising customer, the business that pays for the advertising service, receives the benefit of the advertisement everywhere that it is observed by potential customers. Digital advertisements often have a global reach so the benefit may be received in hundreds of jurisdictions. This analysis shifts from focusing on the customer to the customer's potential customers, often called a look-through approach.[246] The attenuated nature of the inquiry presents many practical difficulties. The digital advertising service provider may be able to track audience location based on IP address, either viewing or clicking through, but that is a difficult and still imprecise measure. In the corporate income tax context, many state tax authorities have at least informally allowed audience sourcing, using population as a proxy.[247] For example, if a digital advertisement was delivered only within the United States, and California accounted for ten percent of the United States population, then ten percent of the digital advertising receipts would be sourced to California. This approach sacrifices accuracy for administrative ease.[248] One could argue that this approach is so inaccurate that it would fail constitutional scrutiny. A taxing jurisdiction could attempt to mitigate the compliance burden by allowing taxpayers two alternative sourcing options, which was Maryland's initial proposed digital advertising tax approach.[249]

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246. *See* HELLERSTEIN ET AL., *supra* note 83, ¶ 10.07; *see, e.g.*, MULTISTATE TAX COMM'N, MODEL GEN. ALLOCATION AND APPORTIONMENT REG. IV.17(d)(3)(B)3.a (2017), https://www.mtc.gov/Uniformity/Project-Teams/Section-17-Model-Market-Sourcing-Regulations (noting that for corporate income tax purposes, "in the case of the direct or indirect delivery of advertising on behalf of a customer to the customer's intended audience by electronic means, the service is delivered in [state] to the extent that the audience for the advertising is in [state]"); *id.* at IV.17(d)(3)(B)3.d Example iii (explaining Internet advertising is assigned to the state "to the extent that the viewers of the Internet content are in [state], as measured by viewings or clicks"); N.Y. TAX LAW § 210-A.8(c) (McKinney 2019) (adopting audience-based sourcing for advertisers for corporate income tax); Advisory Op., TSB-A-09(5)C (2009), 2009 WL 799456, at *1–2 (N.Y. Dept. of Tax'n & Fin. 2009) (addressing audience-based sourcing specifically in the context of Internet advertising).

247. *See* HELLERSTEIN ET AL., *supra* note 83, ¶¶ 10.05, 10.04.

248. In an ideal world, states would agree on a simple uniform sourcing methodology such as sourcing all digital advertising tax revenues based on market share or population.

249. Maryland's initial proposed digital advertising tax bill established the following sourcing methodology: (1) a user's IP address; or (2) the knowledge or reasonable suspicion that a user is using their device in the state. S.B. 2, 2020 Gen. Assemb., Reg. Sess. (Md. 2020). Many opponents pointed out the likely unconstitutional nature of this proposed methodology, so the enacted bill simply eliminated any sourcing methodology and delegated to the taxing authority the responsibility to establish a viable sourcing methodology, presumably by promulgating a formal regulation. *See, e.g.*, Charlie Kearns & Charles Capouet, *Why Md.'s Digital Advertising Tax Proposal May Be Unlawful*, LAW360 (Jan. 15, 2020, 5:52 PM), https://www.law360.com/articles/1234069/why-md-s-digital-advertising-tax-proposal-may-be-unlawful.

For example, the sourcing rule could default to end user IP address but allow for another reasonable method if the IP address method is impractical.[250] This approach, however, may violate the Commerce Clause, as discussed in Section III.A.

Novel proposals such as a data ad valorem tax or data mining tax present additional sourcing considerations. These taxes should arguably use a sourcing methodology based on the location of the end user from whom the taxpayer extracted the data. The actual value of the data is realized, however, only when sold directly or through advertising. Thus, there is an argument that these taxes should be sourced to the advertising customer's location, and if using an audience-based method to do so, would look to the end user location. In the case of targeted advertising, the result may effectively be the same because data is extracted from a user and then used to deliver targeted advertising back to them.

Although determining how to source digital services is difficult, it is necessary given the shift toward a digital economy. Indeed, many states began updating their sales tax regimes over a decade ago to tax digital goods and services and have reached workable sourcing rules, even if they are not ideal.[251] The Streamlined Sales and Use Tax Agreement (SSUTA) adopts a standard sourcing approach for tangible personal property and digital goods.[252] There are cascading sourcing rules that generally source transactions "to the location where the purchaser takes possession or first makes use of digital goods."[253] Although the SSUTA sourcing rules may not be perfect, at least SSUTA promotes uniformity, which would aid greatly as jurisdictions expand further into digital taxation.[254] Although unlikely, the importance of sourcing for digital services could also result in federal legislation. In 2019, a proposed federal bill would have established a mandatory sourcing methodology for digital goods and services.[255] Thus far,

250. The Maryland Comptroller's proposed regulations provide a non-exhaustive list of five technologies that may be used to determine a device's location and requires the taxpayer to use "information within their possession or control which most reliably identifies a device's location." 48:21 Md. Reg. 896 (Oct. 8, 2021). This ambiguous standard will likely result in controversy, as will the proposed regulation's throw-out rule for devices with an "indeterminate" location. *See, e.g.*, Ulrik Boesen & Jared Walczak, *Three Issues with Proposed Regulations for Maryland's Digital Advertising Tax*, TAX FOUND. (Sept. 9, 2021), https://taxfoundation.org/maryland-digital-advertising-tax-regulations/.

251. *See* HELLERSTEIN ET AL., *supra* note 83, ¶¶ 13.06, 13.07.

252. *See* SSUTA, *supra* note 245, § 309.A.

253. Mazur & Thimmesch, *supra* note 75, at 965; *see also* SSUTA, *supra* note 245, §§ 310.A, 311.B.

254. *See* Mazur & Thimmesch, *supra* note 75, at 966–67.

255. *See* Digital Goods and Services Tax Fairness Act of 2019, H.R. 1725, 116th Cong. (2019). A more extreme federal preemptory approach could establish much more straightforward, but less precise, sourcing rules. For example, a federal statute could mirror the Nonadmitted and Reinsurance Reform Act of 2010 and provide that only a customer's home state, based either on

there has been substantial uniformity with states' digital advertising bills, although most fail to address the difficult but crucial sourcing issue. States should work diligently, with one another and the business community, to develop thoughtful sourcing rules instead of delegating that crucial function to the taxing authority.

CONCLUSION

Although subnational taxing jurisdictions face many challenges in their pursuit of adequate digital service taxation, certain approaches are more viable than others. States have favored digital advertising taxes, but these taxes are narrow and susceptible to challenge.

Jurisdictions can modify existing tax regimes to more adequately address digital services. Jurisdictions can expand their existing sales and use tax regimes to include services, particularly digital services, to the furthest extent possible. This expansion is long overdue and would allow antiquated state and local transaction tax regimes to more appropriately address the shift toward a service-based, and increasingly digital-service-based, economy. Alternatively, states can impose a corporate net income tax surcharge tailored toward certain corporations that may not be taxed adequately under the existing regime because of the corporations' dynamic business models.

If jurisdictions have the foresight and political will to embrace a novel tax regime, there are several compelling options. An annual tax on the market value of publicly traded stock represents a simple approach that would generate substantial revenue and accomplish jurisdictions' goals of taxing large corporations that arguably have excess profits and market valuation, including the largest digital advertisers and many other companies that profit from user data. A data ad valorem tax would directly tax the value of user data, although determining the valuation is difficult and many states have constitutional property tax restrictions, particularly for intangible property.

This Article suggests that a data mining tax is the most effective approach if a jurisdiction is attempting to tax the value derived from extracting and monetizing user data. Rather than using a proxy for this value, such as digital advertising, a data mining tax has the most direct connection to the value corporations derive from user data. Although there are still valuation questions, there are many fewer constitutional and practical concerns than with other options. Because a data mining tax has such immense potential to raise revenue and effectively target the value derived from these activities, taxing jurisdictions must be mindful of shifting the tax

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domicile or principal place of business, could impose tax on a digital good or service transaction. *See* 15 U.S.C. § 8201(a). This rule could be extended to digital advertising and data mining taxes using a look-through approach discussed above. *See supra* note 246 and accompanying text.

incidence to consumers or employees and of other potential repercussions. If subnational jurisdictions craft data mining taxes carefully and thoughtfully, the resulting tax regimes will provide a national and international blueprint for effectively taxing the digital service economy.