State Digital Services Taxes: A Good and Permissible Idea (Despite What You Might Have Heard)

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STATE DIGITAL SERVICES TAXES:
A GOOD AND PERMISSIBLE IDEA
(DESPITE WHAT YOU MIGHT HAVE HEARD)

Young Ran (Christine) Kim* & Darien Shanske**

Tax systems have been struggling to adapt to the digitalization of the economy. At the center of the struggles is taxing digital platforms, such as Google or Facebook. These immensely profitable firms have a business model that gives away “free” services, such as searching the web. The service is not really free; it is paid for by having the users watch ads and tender data. Traditional tax systems are not designed to tax such barter transactions, leaving a gap in taxation.

One response, pioneered in Europe, has been the creation of a wholly new tax to target digital platforms: the Digital Services Tax (DST). Though controversial, ten states have entertained imposing a DST, and Maryland actually did so. Maryland’s tax was immediately challenged, with the strongest argument against the tax being that it is preempted by the Internet Tax Freedom Act. There is considerable consensus that Maryland’s tax is in serious trouble, and a judge in Maryland recently found it preempted and unconstitutional. We contend that this decision and this consensus is wrong and that states should not abandon a promising solution to a set of pressing problems.

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A DST is a tax on consumption from the barter side of platforms that is not currently taxed. With this policy goal in mind, the main legal objections to DSTs appear much weaker because those claims rely on the notion that the tax is discriminatory against internet activity. In fact, there is no discrimination; DSTs are just a different tax used to capture untaxed digital purchases in response to different business models. We further offer other normative arguments for DSTs, including that they tax digital platforms that enjoy supranormal returns. Finally, we respond to policy objections as to potential tax pyramiding, regressive tax incidence, administrative difficulties, and the use of sales tax and corporate income tax instead of imposing DSTs.

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INTRODUCTION

How to tax the digital economy is a topic that has set the world’s tax community aflutter.¹ This makes sense. Not only is the digital economy big² and growing,³ but it operates differently than the traditional brick and mortar economy, putting a strain on international and national tax systems that were designed a century ago.⁴ Accordingly, the Organization for Economic Co-operation and Development (OECD)’s global tax deal, joined by almost 140 countries in October 2021, proposes to reform the outdated tax rules for the digital economy.⁵

One challenge posed by the digital economy relates to which jurisdiction has the power to impose a tax on e-commerce transactions. A state or a country needs to establish sufficient nexus to a business in order to tax business activities associated with the state. Such a nexus traditionally required a physical presence, like an office within the taxing state, and thus a state could not tax income or consumption


²A recent—but prepandemic—study shows that the digital economy accounted for nine percent ($1,849.3 billion) of the U.S. gross domestic product (GDP) ($20,580 billion) in 2018, supporting 8.8 million jobs in the United States. JESSICA R. NICHOLSON, U.S. BUREAU OF ECON. ANALYSIS, NEW DIGITAL ECONOMY ESTIMATES 2–3 (2020).

³See id. at 3.


⁵See ORG. FOR ECON. COOP. DEV., STATEMENT ON A TWO-PILLAR SOLUTION TO ADDRESS THE TAX CHALLENGES ARISING FROM THE DIGITALISATION OF THE ECONOMY (2021) [hereinafter OECD, STATEMENT].
generated from remote sales by out-of-state businesses. This was not a big problem when a remote sale meant placing an order by phone. However, the rise of e-commerce has increased the magnitude of remote sales exponentially, punching a big hole in sales (consumption) tax bases around the world. What is needed is a shift to nexus based on significant economic presence. The recent OECD/G20’s global tax deal provides for such a change of rules at the international level. Within the United States, the states have generally already adopted substantial economic presence standards because the U.S. Supreme Court removed the main obstacle to them doing so in 2018 in a case called South Dakota v. Wayfair, Inc.

However, updating the nexus rules is not all that is necessary to update tax systems for the modern economy. Expanding the nexus rules allows states to tax traditional brick and mortar transactions (say buying a book) that have migrated to the internet. However, these rules do not help states tax new kinds of transactions made possible by the internet—and that should be subject to tax. We are particularly referring to transactions made possible by the digital platform economy, such as Google, Amazon, Facebook, and Apple. Digital platforms operate in a multisided market that connects multiple distinct user groups, such as user-consumers and user-advertisers in Google (digital advertising platforms) or user-sellers and user-buyers in Amazon (online marketplace platforms). Digital platforms provide the users with certain network benefits, meaning that the value of a product or service provided by a platform increases according to the number of others using it. The platforms have proprietary technology that allows them to offer improved services as more users participate.

To illustrate the new tax problems in the platform economy, consider the hypothetical example of Mary. Mary, a single millennial lawyer living in Maryland, wants to purchase new business attire online. Mary is particularly interested in basic business casual, not too

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7 See 138 S. Ct. 2080, 2099 (2018).
9 Digital advertising platforms differ from online marketplace platforms because in the former, there is no cash flow on one side of the market, whereas, in the latter, there can be cash flow on both sides. Although tax problems associated with untaxed barter transactions are common in both platforms, the challenge of taxing these transactions is more pressing in digital advertising platforms. Accordingly, this Article focuses on digital advertising platforms. See infra subsection I.B.2.
luxurious, and she begins “googling” key words like “business casual for women.” For no explicit charge, Google shows search results, such as suits by J. Crew, Banana Republic, and H&M. Mary clicks only on J. Crew and skips other brands. For Google, the data it collects from Mary about “business casual for women” is information that it can, and does, monetize in order to provide its “free” service. So, it is not surprising that when Mary visits her favorite YouTube channel to watch a new video clip, YouTube shows an advertisement for J. Crew, which Mary is now more likely to click on or at least not to skip.

In sum, digital platforms (Google) sell user-advertisers (J. Crew) precisely targeted, individualized, and verifiable access to user-consumers (Mary). Their business practice relies on two-sided, mutually reinforcing transactions. On one side, user-advertisers pay digital advertising platforms to place their ads in front of user-consumers. On the other, the platforms engage in a barter with user-consumers: exchanging services (e.g., social networking, search, maps, etc.) for the right to place targeted advertising in front of them and to collect enormous amounts of user data (e.g., where those users browse the web, how they use the platforms’ services, or whether they click on an ad) including by installing small bits of tracking code on user-consumers’ computers. These transactions are often conducted simultaneously, and the success of the first side of the transaction depends at every step on the barter exchange (e.g., platforms simultaneously show a user-consumer a targeted ad, collect data about that users’ activities, adapt ads in real time to increase chance of affecting user behavior, and get paid by the advertiser based on the user’s activities).

Digital platforms create the same tax challenges regarding physical presence as more traditional e-commerce does (think buying a book through Amazon) because digital platforms are not bound by geographical location of service delivery. However, there is an additional tax problem created by digital platforms due to the features associated with operating in a two-sided market. First, unlike the traditional tax problems that involve two competing tax jurisdictions, digital platforms can involve three competing tax jurisdictions where platforms (Google in California), user-advertisers (J. Crew in New York), and user-consumers (Mary in Maryland) are located. Neither international nor multistate tax rules were designed with this structure in mind. Second, the provision of data from Mary in Maryland in the barter transaction side of the platform generates extraordinary profits for

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12 See OECD, STATEMENT, supra note 5.
platforms on the advertising side. But the barter transactions are not recognized or taxed in any state, resulting in a large and growing gap in the sales (consumption) tax.

Digital advertising platforms collect an enormous amount of data about their user-customers—everything from a user’s demographics and her friend network to her web history and geolocation relative to another user. And this data is immensely valuable. Digital advertising platforms feed it all into sophisticated algorithms that allow them to precisely target users and command higher bids from advertisers. So, user data is analogized as the new “oil” in the twenty-first century, and it is reasonable for market states (Maryland) to expect to collect tax revenue from the platforms, especially from the barter transaction between platforms and its resident user-consumers (Mary).

In response to the perceived failure to tax the profits of very profitable providers of digital services, several big market nations, in particular the United Kingdom, France, and other European countries,

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13 See, e.g., Edward Fox & Zachary Liscow, A Case for Higher Corporate Tax Rates, 167 TAX NOTES FED. 2021, 2028 (2020) (“Evidence increasingly suggests that the U.S. economy suffers from growing rents, whether because of larger network effects and other returns to scale, increasing industry concentration, increases in common ownership, reduced antitrust enforcement, or other factors.” (footnotes omitted)); Laura Power & Austin Frerick, Have Excess Returns to Corporations Been Increasing over Time, 69 NAT’L TAX J. 831, 837 (2016) (“The calculations therefore suggest that industries that hold intangible assets seem to earn higher than average excess returns.”); Wei Cui, The Digital Services Tax: A Conceptual Defense, 73 TAX L. REV. 69, 70–73, 85 (2019).


15 See Spandana Singh, Special Delivery: How Internet Platforms Use Artificial Intelligence to Target and Deliver Ads, New Am. (Feb. 18, 2020, 8:44 AM), https://www.newamerica.org/oui/reports/special-delivery/ [https://perma.cc/V6PU-ZXKC]; How to Be Successful with Google Ads, GOOGLE, https://support.google.com/google-ads/about/6080949?hl=en [https://perma.cc/6FZ3-Y4Z] (“Through Google Ads, you can create online ads to reach people exactly when they’re interested in the products and services that you offer.” (emphasis added)).


have imposed a special tax on digital services, called Digital Services Taxes (DSTs).\(^{18}\) Heated debate and pushback from the United States ensued because the U.S. and the big tech firms argue that DSTs in effect target U.S. tech giants, and are thus discriminatory.\(^{19}\) There is now a tentative agreement as part of the OECD/G20 global tax deal to address the digital economy, a framework that is meant to supersede individual national DSTs. The United States supports the new global tax deal, and in return, it successfully included a provision that participating countries are required to repeal their DSTs.\(^{20}\) At the time of writing, however, the future of this tax deal, known as Pillar One, is very much in doubt.\(^{21}\)

Meanwhile, in the United States, at least ten states have considered imposing DSTs,\(^{22}\) and Maryland actually did so—over the Governor’s veto.\(^{23}\) Maryland’s DST is modeled on European DSTs in that taxes are based on the platform’s global annual gross revenue.\(^{24}\) But

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18 Elke Asen & Daniel Bunn, *What European OECD Countries Are Doing About Digital Services Taxes*, TAX FOUND. (Nov. 22, 2021), https://taxfoundation.org/digital-tax-europe-2020/ [https://perma.cc/5TIT-LRPK] (“Austria, France, Hungary, Italy, Poland, Portugal, Spain, Turkey, and the United Kingdom have implemented a DST. Belgium, the Czech Republic, and Slovakia have published proposals to enact a DST, and Latvia, Norway, and Slovenia have either officially announced or shown intentions to implement such a tax.”).


22 JARED WALCZAK, *TAX FOUND., STATES CONSIDER DIGITAL TAXES AMIDST CONFLICTING RATIONALES* 3 (2021) (indicating that Arkansas, Connecticut, Indiana, Massachusetts, Montana, New York, Texas, Washington, and West Virginia have all introduced some type of digital tax bill in 2021); *see also infra Appendix.*

23 TIMOTHY VERMEER & SAVANNA FUNKHOUSE, *TAX FOUND., STATE TAX CHANGES EFFECTIVE JANUARY 1, 2022, at 7 (2022).*

the tax rate varies from 2.5% to 10% and narrows the scope to digital advertising platforms only. To meet the tax threshold, a taxpayer must have $100 million of global annual gross revenue from all sources and at least $1 million annual gross revenues derived from digital advertising services in Maryland.

However, before the tax became effective on January 1, 2022, Maryland immediately had its tax challenged in both federal and state court. The plaintiffs in both cases make many arguments, but their strongest arguments rely on the claim that Maryland’s DST discriminates against the digital economy, which makes prima facie sense because it is a tax on digital advertising. And a state judge in Maryland sided with the plaintiffs and agreed that the DST did discriminate against electronic commerce and failed scrutiny under the Dormant Commerce Clause.

Even leading commentators sympathetic to some kind of increased digital taxation were worried that Maryland’s DST would be vulnerable to these legal attacks. Accordingly, several of these same commentators have proposed different structures that they believe are more likely to survive the inevitable legal onslaught. We think that many of these alternatives are appealing both as a matter of law and policy. Nevertheless, we argue that it is too soon to abandon the Maryland model, that the prima facie case against the tax is weaker than it seems. There are primarily two interrelated reasons for this. First, as a policy matter, the Maryland model is designed to advance the tax policy goal of taxing otherwise untaxed consumption in the barter transactions of the platforms. Second, as a legal matter, once it is understood that Maryland’s DST is designed to tax consumption that is...

25 MD. CODE ANN., TAX-GEN. § 7.5-103 (West 2022).
26 See id.
28 As of the date of this draft, the authors only have press reports about the hearing in which the judge ruled from the bench, so we cannot evaluate her reasoning in any detail. Andrea Muse, Judge Strikes Down Maryland Digital Ad Tax, 106 TAX NOTES STATE 311, 312 (2022) (“[The Judge] agreed with the plaintiffs that there were no relevant facts in dispute and the product or service at issue in this case was advertising, and ‘advertising is advertising.’”). Given the speed with which the judge sided with the plaintiffs, we suspect that the final opinion, if there is one, will track their reasoning, which we address in this Article.
31 MD. CODE ANN., TAX-GEN. § 7.5-103 (West 2022).
currently untaxed but is similar to transactions that are currently taxed, then the tax is much easier to defend from the claim that it is a discriminatory tax.

Despite the merits of Maryland’s DST, we are among the few scholars defending Maryland’s tax doctrinally and normatively.32 However, many state tax policymakers understand an important tangible benefit of DSTs—they can effectively generate substantial amounts of revenue from digital platforms.33 Digital platforms, once successful, can reach monopolistic, or near-monopolistic positions because of the distinctive features of the platforms, such as network effects and low marginal costs.34 Revenues collected from those thriving platforms can serve various public policy goals, such as social safety net programs and restoring economies harmed by the pandemic.35 Therefore, it is important to understand the reason why DSTs are a strong policy choice for addressing the platform economy and thus worth defending, which is the goal of this Article.

This Article provides various contributions to the scholarship on tax, technology, and federalism. First, it offers a comprehensive case for DSTs, building on arguments already in the literature. We think that whatever might happen with the international tax negotiations, DSTs represent sound tax policy and are not simply a negotiating tool of foreign countries. In particular, we explain that DSTs can function as a tax on currently untaxed consumption that should be subject to tax. Relatedly, we also argue that despite the traditional public finance critique of gross receipts taxes like DSTs, a gross receipt tax in this context is appropriate because it is the gross receipts that roughly measure the size of the untaxed consumption.


34 Kim, supra note 1, at 142, 178–79.

35 See Bologna, supra note 33.
Second, and building on the fact that DSTs are on solid policy ground, we further explain why they are appropriate for states. In the United States, it is the states, such as Maryland, and not the federal government, which levy consumption taxes and so it is state tax bases that are being eroded by the rise of digital barter transactions.

Finally, we connect these policy arguments to the legal arguments made against Maryland’s tax. As far as we know, no one has made these connections before and we argue they should be dispositive of the challenges against the tax (in Maryland’s favor) or, failing that, these arguments illustrate how a slightly different version of a state-level DST could pass muster.

The remainder of this Article proceeds as follows. Part I offers a brief overview of the platform economy and discusses the unique tax problems of the digital platforms. Part II provides normative policy arguments in support of DSTs as a solution to the new tax problems identified in Part I. Part III analyzes the legal issues that the Maryland’s DST faces. Part IV responds to various policy objections as to potential tax pyramiding, regressive tax incidence, administrative difficulties, and the use of existing sales tax and corporate income tax. The Article concludes that a better approach for taxing digital platforms is not to dismiss DSTs as a potential solution but rather to improve DSTs.

I. UNPACKING THE PLATFORM ECONOMY

As a general matter, we are assuming our readers do not need to be introduced to the size and importance of the digital economy, nor the major economic players that dominate it. Nevertheless, in this Part we will provide a primer on digital platforms, with a special emphasis on the unique tax challenges they pose. This Part will then summarize events at the international, federal, and state level to respond to the new tax challenges in the platform economy.

A. Defining Platforms

Many businesses are making money online. If you are an artist selling handicrafts on your personal homepage, then, in a sense, you are an online business. Yet selling tangible personal property over the internet is in many ways just shifting a traditional economic activity onto the internet. This shift has had its complicated implications for tax, but such businesses are not our focus—and are not what are giving the tax community such heartburn at the moment.

Our focus is on firms that have a business model that has less of a traditional economy analogue. In particular, certain digital firms operate within the new digital economy through connecting various
groups using online platforms. Prominent examples are Google, Apple, Facebook, and Amazon, collectively called GAFA. Thus, for example, Facebook connects you to a social network you choose while also connecting you to ads that you only sort of chose. You don’t pay money to Facebook for access to the network, but Facebook is making money through selling you ads (and likely selling your information too).

In the context of tax, the OECD defines digital platforms by delineating various features. Those include (1) network effects that generate market power, (2) two- or multisided business models involving complex pricing mechanisms for profit maximization, (3) zero or negligible marginal cost, and (4) geographic mobility in profit recognition and location of service delivery. We will further explain each of the OECD features below.

B. Distinctive Features of Multisided Platforms

1. Different User Groups and Network Effects

Typically, digital platforms conduct two-sided, mutually reinforcing transactions with two sets of participants. The first exchange is a cash exchange between the platform and advertisers. An advertiser (e.g., a shoe store) pays the platform (e.g., Google or Facebook) to place an ad in front of targeted users, either directly to the platform’s own users (e.g., inserting ads into a user’s Facebook feed) or in digital space on third-party websites or mobile apps (like the Baltimore Sun) for a cut of the platform’s fee. The second related transaction involves a barter exchange between the platform and a user (e.g., a Google user). The user allows the platform to show them advertisements and collect massive amounts of personal data in exchange for services (like web browsing, videos, or a constant stream of kitten photographs).

These two sides of the transaction are deeply intertwined in both a business and technical sense. The collection of data allows the platform to target users, which is the very service being sold to advertisers:

36 Kim, supra note 1, at 133–34; Erik Hovenkamp, Platform Antitrust, 44 J. CORP. L. 713, 720 (2019) (defining two-sided platform as a firm with two distinct customer groups where the demand for services depends on the price and the extent of the other group’s participation).
38 See Cui, supra note 13, at 73; OECD, 2018 REPORT, supra note 8, at 20–27.
39 OECD, 2018 REPORT, supra note 8, at 20–27.
40 Kim, supra note 1, at 141–45.
41 Data collection techniques fall into four general categories: web tracking, location tracking, cross-device tracking, and browser fingerprinting. Singh, supra note 15, at 11–12.
targeted and individualized access to users. It is thus not surprising that there is evidence that digital advertising is more effective than traditional advertising. Note that the very act of displaying an ad is both (1) an ad impression for which the user-advertiser pays and (2) a data collection tool for the platforms, allowing them to further refine future ad placement. In other words, the behavior of users, even while viewing an ad, allows the platform to more precisely target them, and hence make money.

By connecting various distinct user groups, digital platforms provide network effects. A network effect exists when the value of a product or service provided by a business to one group of users increases according to the number of another group of users on the other market side. Put another way, network effects create “positive feedback loops.” Value increases as more users join networks and the increase in value incentivizes other individuals to become users continuing the cycle. For example, the more user-customers use Google rather than Yahoo for searching information online, the more attractive Google becomes to the user-advertisers.

These reinforcing network effects work to increase value, and the necessity of balancing different sides of the market often results in differing pricing mechanisms, discussed in the next section.

2. Two-Sided Market and Differing Pricing Mechanisms

Many highly digitalized businesses have developed pricing mechanisms that increase users on one side in order to increase value and users on the other side. For example, a social media platform like Facebook offers services to user-customers at no cost. This decision increases the number of individuals who will use Facebook initially, and the popularity also drives increased use among peers. Conversely, on another side of their platform, more social media users also attract more digital advertising users who pay Facebook to advertise to social

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42 Singh, supra note 15, at 15.
45 Kim, supra note 1, at 142.
46 Id.
49 Hovenkamp, supra note 36, at 722.
media users. Also, many platforms that offer news magazines, music servers, and games are free to user-customers and supported by user-advertisers, although some platforms, such as Spotify or YouTube, come in both a free service that user-customers must see advertising and a premium service where the user-customers pay fees to enjoy ad-free service.51

Amazon’s pricing mechanism can be compared to that of Facebook or Google in terms of the service being offered to customers at no cost (excluding prime services), rather than attracting users for digital advertising revenue.52 However, an increase in Amazon’s users is still valuable to producers/sellers and thus beneficial for Amazon. As more producers and sellers join in response to large numbers of user-consumers on the other end, Amazon receives portions of profit from a greater number of transactions.53

Despite the differing price mechanisms, all digital platforms rely on the mobilization of user data to produce value.54 For digital advertising platforms, the user data contribution occurs in barter transactions.55 For example, Google provides search engine services to users for free in exchange for the ability to show them ads and collect user information. The user is not receiving the service at no expense; rather, the value offered by the user-customers’ contribution is collected

51 Id.; Kim, supra note 1, at 183–84.
53 Digital platforms categorized as online marketplace platforms employ different pricing mechanisms. For example, Uber and Airbnb charge the customer for the applicable service and pay the individual providing the ride or rental accommodation after taking a fee. Pricing, UBER, https://www.uber.com/us/en/marketplace/pricing/service-fee/ [https://perma.cc/P9Q2-SQHB]; Airbnb Service Fees, AIRBNB, https://www.airbnb.com/help/article/1857 [https://perma.cc/T6RA-TV3N].
55 Parsons, supra note 43, at 1812 (indicating some scholars recognize the value created by user activities as a transactional relationship outside the firm where users are consumers but exchange data for services instead of money and consider it a barter exchange). Parsons argues that treating digital laborers as producers goes a considerable way in providing appropriate taxing rights to market jurisdictions without novel and controversial reforms like Pillar One or DSTs. Id. at 1808–10. But Parsons also recognizes that there is a separate and potentially complementary argument to taxing the value created by users as consumers. Id. at 1810 n.115. However, Parsons argues that there is no barter transaction to be taxed in online marketplace platforms. See id. at 1812.
in lieu of traditional payment.\textsuperscript{56} Though far from perfect, tax regimes know how to tax payments in cash. Taxing a barter is another matter, and, thus, as economic activity conducted through digital platforms has grown, so has the problem of how to tax transactions that are in part a barter.

For online marketplace platforms like Amazon, user-buyers offer data in the form of search history and consumer ratings,\textsuperscript{57} and Amazon then uses their contribution to promote popular products generating more users, and, through network effects, more producers. Again, although the cash flow exists on both sides of the market for Amazon, an untaxed portion of the transaction exists because the users are, in part, bartering with Amazon. That is the value of user data contribution, just as described in the Google example.

Thus, though there is an untaxed portion of transactions both in the case of Google and Amazon, it would be reasonable to differentiate them. Digital advertising platforms like Google often facilitate transactions with cash flow on the advertising side of the market and not on the other services. On the other hand, online marketplaces consist of digital interfaces and intermediation like Amazon, Uber, and Airbnb, and typically involve cash flow between all user groups on multiple sides of the market.

For digital advertising platforms where there is no cash flow on one side of the market, the challenge of how to tax these transactions is more pressing because the consumption they are facilitating is not taxed at all. We thus think it is no surprise that the first generation of digital platform taxes focus on this kind of platform. Accordingly, this Article focuses on digital advertising platforms. We hope to move on to online marketplace platforms in future work.\textsuperscript{58}

3. Low Marginal Costs and Monopolies

In the current, highly digitalized platform economy, several large multinational enterprises enjoy monopolistic, or near-monopolistic positions.\textsuperscript{59} Once a platform is operational, various processes are automated.\textsuperscript{60} This automation means that placing ads, facilitating online

\textsuperscript{56} Herbert Hovenkamp, \textit{Antitrust and Platform Monopoly}, 130 Yale L.J. 1952, 1961–62 (2021) (“[I]t would be incorrect to conclude that Google provides search services below cost because the price to users is zero. Google obtains all its revenue from advertisers or paid search-engine placement.”).

\textsuperscript{57} Parsons, \textit{supra} note 43, at 1819–20; Cui, \textit{supra} note 13, at 92.

\textsuperscript{58} However, when considering that Amazon’s advertising business is larger than YouTube (Google), the distinction between digital advertising platforms and online marketplace platforms is likely blurred. \textit{See} Kaye, \textit{supra} note 52.

\textsuperscript{59} Kim, \textit{supra} note 1, at 178.

\textsuperscript{60} Cui, \textit{supra} note 13, at 103.
transactions, and providing digital services to each customer no longer require much additional labor from the platform company, resulting in the low or negligible marginal costs for supplying one additional unit. On the other hand, setting up a network can incur large start-up costs, from physical infrastructure (servers) to software engineers to advertising the platform.

The negligible marginal cost in the supply side on top of the network effects in the demand side tend to make the size of platform companies big, raising their status as being monopolistic not only in domestic market but also in the global market. Google has dominated the search engine market worldwide, maintaining a 91.86% market share as of January 2021. Facebook has dominated the social media worldwide, maintaining a 69.8% market share as of January 2021. Theoretically, other companies could benefit from low or no marginal cost, but incumbent digital platforms are uniquely positioned—through early entry in the market and barriers to entry for competitors such as high fixed costs—to expand production without sacrificing additional profit. Thus, these firms employ “mutually reinforcing processes,” such as indirect network effects, to facilitate rapid growth while these processes make it more difficult for competitors to enter the market.

Scholars have drawn parallels between the monopolistic nature of the digital economy and the rise of railroads in the late nineteenth

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61 Id. at 103–04. Marginal cost is the increased cost of supplying one additional unit. David S. Evans & Richard Schmalensee, Matchmakers: The New Economics of Multisided Platforms 93 (2016).
62 See Wu, supra note 47, at 9; Cui, supra note 13, at 73 (“[M]any digital platforms generate revenue at zero or negligible marginal cost.”); Nikolas Guggenberger, Essential Platforms, 24 Stan. Tech. L. Rev. 237, 284–86 (2021) (describing how extreme network effects based on the difficulty of attracting customers without vendors and the difficulty of attracting vendors without customers create enormous barriers to entry for competitors and reduces competition); Hovenkamp, supra note 56, at 1962 (“Both high fixed costs and network effects operate to give larger firms a big advantage over small ones.”).

65 See Guggenberger, supra note 62, at 285–86 (considering characteristics of infinitely scalable algorithms, resulting in high fixed but low marginal costs to collect and aggregate data).
66 See id. at 286 (“Data collection on the one hand and product improvements as well as rent extraction on the other hand are mutually reinforcing processes.”).
century.\textsuperscript{67} The network of railroads in the United States was foundational to commerce, and thus control over this network allowed for the gatekeeping of crucial markets.\textsuperscript{68} The digital platforms like Google, Amazon, Apple, and Facebook resembles the monopolistic rise of railroads due to the construction of “vast and efficient ecosystems.”\textsuperscript{69} Access to the ecosystems created by these digital platforms is necessary for survival in the digital economy, much like access to railroad infrastructure was requisite to success in commerce in the early twentieth century.\textsuperscript{70} In addition to the power that accompanies controlling access, digital platforms, like railroads, are thought by many to abuse gatekeeping power to promote their own services.\textsuperscript{71}

The features of digital firms discussed in this section—low marginal costs, high barriers to entry, and resulting large size of the firms—will be revisited several times throughout this Article, especially in Part IV.

4. Ease of Profit Shifting

Digital platform companies are not the only large businesses that engage in profit shifting, but the interaction of their business model with the traditional rules of income taxation has made shifting profits particularly easy for them.

Traditionally, profits have been allocated to source jurisdictions where a business generates income only if the business had a physical presence there. However, highly digitalized business models can now generate profits in foreign jurisdictions without ever having a physical presence there—thus avoiding taxation of those profits in those countries, or so-called market jurisdictions.\textsuperscript{72}

Furthermore, firms that derive significant revenue from intangible property, such as the large digital platforms, are better able to shift profits to low-tax jurisdictions and there is significant evidence that they do so.\textsuperscript{73} Thus digital platforms are part of a small class of firms that for structural reasons are well situated to earn high profits and not to pay tax on those profits.

\textsuperscript{67} Id. at 239–44 (noting that like railroads, digital platforms benefited from unregulated expansion into unmarked territory); Lina M. Khan, The Separation of Platforms and Commerce, 119 Colum. L. Rev. 973, 1037–41 (2019).

\textsuperscript{68} Guggenberger, supra note 62, at 239.

\textsuperscript{69} Id. at 240–41.

\textsuperscript{70} Id.

\textsuperscript{71} Id. at 241–42 (indicating that digital platforms, like railroads, act as both creators and umpires of the market, increasing their power).

\textsuperscript{72} See Kim, supra note 1, at 133.

\textsuperscript{73} See Power & Frerick, supra note 13.
C. What Has Happened at the International (and Federal) Level

Unable to rely on the traditional tax system, certain market countries have started imposing a new tax on the large digital platforms unilaterally, the DST.74 Maryland’s DST is modeled in part on these foreign DSTs.75

DSTs are designed as a turnover style consumption tax, levied on the gross revenue of a firm.76 DSTs are typically applied to in-scope digital businesses providing the following digital services: (1) digital advertising, (2) transmission of user data, and (3) intermediation allowing users to find and interact with other users.77 DSTs exclude the provision of digital content, payment services, online sales of goods or services, and certain regulated financial and crowdfunding services.78 Also, DSTs target globally successful platforms, so that a firm’s global revenue and local revenue from in-scope business models must exceed a specified threshold amount to trigger the DST.79

Several of the DST’s design features, such as being a gross receipts tax and its limited scope, have ignited heated policy debate across the

74 See Giuliana Polacco, Annarita De Carne, Simon Gough, Montserrat Turrado, Lara de la Rosa, Sophie Dorin & Willem Bongaerts, Digital Services Tax: Unilateral Initiatives on the Move, BLOOMBERG TAX (Feb. 15, 2021, 3:00 AM) https://news.bloombertax.com/daily-tax-report-international/digital-services-tax-unilateral-initiatives-on-the-move/ [https://perma.cc/7YC8-RGKW]; see also Kim, supra note 1, at 173 (discussing whether DSTs could be a new path toward a consumption tax in the international tax regime, and offering ways to overcome certain challenges DSTs face).


76 See Lowry, Cong. Rsch. Serv., R45532, Digital Services Taxes (DSTs): Policy and Economic Analysis 9, 24 (2019) (noting DSTs are not structured as taxes on corporate profits); Kim, supra note 1, at 159–60 (discussing DSTs as turnover taxes); see also The Difference Between Turnover and Profit, ACCOUNTINGTOOLS (May 23, 2022), https://www.accountingtools.com/articles/what-is-the-difference-between-turnover-and-profit.html [https://perma.cc/59S3-H486] (noting turnover is a business’s net sales and profit is residual earnings after all expenses are charged against net sales).


78 See id. at 24–25.

79 Kim, supra note 1, at 161; France: Digital Services Tax (3%) Is Enacted, KPMG (May 7, 2021), https://home.kpmg/us/en/home/insights/2019/07/inf-france-digital-services-tax-enacted.html [https://perma.cc/5MSH-WKJP]; HM TREASURY & HM REVENUE & CUSTOMS, DIGITAL SERVICES TAX: CONSULTATION 22 (2018) (“The thresholds are also based on an expectation that the value derived from users will be more material for large digital businesses . . . ”); European Commission, supra note 77, at 10 (supporting a global revenue threshold to limit application of tax to “companies of a certain scale, which are those which have established strong market positions that allow them to benefit relatively more from network effects and exploitation of big data”).
globe. Furthermore, the United States has opposed DSTs, arguing that they are discriminatory against U.S. tech giants, and it has even threatened to start a trade war in response. Hence, it was and is unlikely that the United States will introduce a federal-level DST in its own tax law.

As a compromise, almost 140 countries have recently agreed to the global tax deal in October 2021. One of the important agenda items of the deal, called Pillar One, aims to reward market countries by (1) eliminating physical presence requirement and (2) revising profit allocation rules.

However, note that the global tax deal is an international corporate income tax reform, taxing profits from the advertising transaction of the platforms, and thus does not address the novel consumption tax problem—the untaxed barter transactions—that this paper discusses. The need for a consumption tax capable of capturing the barter transaction in the tax base still exists under the OECD’s proposed reform.

Furthermore, a successful implementation of the OECD’s global deal, especially Pillar One that addresses the digital economy, is rather uncertain because it is expected to be implemented by a multilateral treaty. The implementation of a multilateral treaty invites many logistical challenges as almost 140 countries in the world are expected to join it. Furthermore, the United States, the United Kingdom, Germany, and other countries may resort to an executive agreement to circumvent treaty ratification processes.

The United States successfully lobbied for the inclusion of a provision specifying that countries joining the global tax deal are required to repeal any unilateral tax measures, such as DSTs. Further, the United States later made individual agreements with the United Kingdom, France, Italy, Spain, and Austria that resulted in the retention of


82 See OECD, STATEMENT, supra note 5, at 1.

83 See id. at 2–3.


86 See, e.g., OECD, STATEMENT, supra note 5, at 3.
their digital taxes for now.\textsuperscript{87} If the OECD-brokered global overhaul is implemented by 2023, the countries will offer a credit to refund any taxes collected in excess of what corporations would pay under the global tax deal.\textsuperscript{88} This means that at least five major advanced economies will preserve DSTs if the global tax deal eventually fails, and that taxpayers have to deal with DSTs for the time being.

Even if the global tax deal is broadly implemented, including by the United States, the United States is likely to implement the deal by an executive agreement to bypass official treaty ratification in Senate.\textsuperscript{89} Such irregular implementation of the global deal via executive agreement would raise questions both of international law and constitutional law.\textsuperscript{90} Crucial for our purposes is that such an irregular process weakens the case for whether there is implicit preemption of state DSTs, which will be further discussed in Section III.C.

\textbf{D. What Has Happened at the State Level}

Though there are some important differences that we will discuss in Section IV.E, taxing the digital economy poses similar issues at the state level. And, not surprisingly, the states have responded similarly. Most importantly, Maryland enacted its digital advertising tax, effective on January 1, 2022.\textsuperscript{91} The tax is imposed on global annual gross revenues from digital advertising services within the state.\textsuperscript{92} The tax

\begin{footnotesize}
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\item \textsuperscript{87} See Press Release, U.S. Dep’t of the Treasury, Joint Statement from the United States, Austria, France, Italy, Spain, and the United Kingdom, Regarding a Compromise on a Transitional Approach to Existing Unilateral Measures During the Interim Period Before Pillar 1 Is in Effect (Oct. 21, 2021), https://home.treasury.gov/news/press-releases/jy0419 [https://perma.cc/2G56-YAVU] (indicating DSTs will be removed once Pillar One is in effect).
\item \textsuperscript{88} See id.
\item \textsuperscript{89} See, e.g., Letter from Mike Crapo, Ranking Member, U.S. Senate Fin. Comm., James E. Risch, Ranking Member, U.S. Senate Foreign Rels. Comm. & Pat Toomey, Ranking Member, U.S. Senate Banking Comm., to Janet Yellen, Sec’y, U.S. Dep’t of the Treasury (Oct. 8, 2021).
\item \textsuperscript{90} Avi-Yonah et al., supra note 85, at 5.
\end{itemize}
\end{footnotesize}
consists of a progressive rate varying from 2.5% to 10% based on the taxpayer’s global annual gross revenues from all sources, not just advertising. To meet the tax threshold, a taxpayer must have $100 million of global annual gross revenue from all sources and at least $1 million annual gross revenues derived from digital advertising services in Maryland. It is estimated to generate $250 million in annual revenue, which will be dedicated to education programs. Maryland’s digital tax applies only to digital advertising platforms, whereas European DSTs apply to both digital advertising platforms and online marketplace platforms. However, as this Article focuses on the advertising platforms, we will refer to Maryland’s tax as a DST as well.

There have been several other proposed DSTs at the state level, mostly similar to Maryland’s DST. There is also an important proposal for a data mining tax in New York, further discussed in subsection III.A.2. The table in the Appendix summarizes some notable subnational state tax proposals on digital taxation.

As noted in the introduction and explained in depth in Part III, Maryland is defending its DST in court and has already lost in a state trial court. We will defend the tax’s legality in Part III, but first will explain why it is worth defending in Part II. As we will see, DSTs are not just a strategic gambit in the context of OECD negotiations, but a reasoned response to the challenges posed by digital platforms. There is thus a good reason for Maryland to have adopted the European model and for many states to be considering following Maryland.

II. POLICY ARGUMENTS IN FAVOR OF DIGITAL SERVICES TAXES (DSTs)

This Part will collect and consider some of the policy arguments made in favor of DSTs and apply them to the state context. As we noted as the outset, the first policy goal, achieving taxation of currently untaxed portions of the barter transactions between users and digital

95 Appleby, supra note 29, at 7 (citing DEP’T OF LEGIS. SERVS., FISCAL AND POLICY NOTE, H.D. 441, 2020 Reg. Sess., at 6, 9 (Md. 2020)).
96 See MD. CODE ANN., TAX—GEN. § 7.5-101 (West 2022) (stating that “[d]igital advertising services include[,] advertisement services on a digital interface, including advertisements in the form of banner advertising, search engine advertising, interstitial advertising, and other comparable advertising services’’); Asen & Bunn, supra note 18 (indicating that the DSTs of the United Kingdom and Italy include online marketplaces).
platforms (the first argument we review), can be best advanced with a DST like that of Maryland in contrast to some of the other models. And, to foreshadow once again, it is this first rationale, that DSTs operate as consumption taxes, that we think is particularly important to defang the legal attacks against Maryland’s DST that we will analyze in Part III.

Some further points of context. States, including Maryland, are bound by balanced budget rules.99 Further, states (and localities) provide most frontline governmental services, such as education, including partially paying for some services, like medical care for the poor, that get more expensive during economic downturns.100 Finally, states are in actual and perceived competition with one another and thus certain options, such as raising personal income tax rates, can be particularly challenging politically.101 Thus, when considering how to raise revenue for funding a major educational initiative (the “Blueprint for Maryland’s Future”) that, among other things, expands Pre-K,102 Maryland has to identify new revenue sources for the long term.

In a somewhat analogous situation, Oregon imposed a broad gross receipts tax to finance an education initiative103 and so did

101 The highest marginal tax rate for the personal income tax is 5.75% in both Maryland and Virginia, with Maryland’s rate higher for most taxpayers because of an additional county level income tax. Timothy Vermeer & Katherine Loughead, State Individual Income Tax Rates and Brackets for 2022, TAX FOUND. (Feb. 15, 2022), https://taxfoundation.org/publications/state-individual-income-tax-rates-and-brackets/ [https://perma.cc/DLH5-TA4U]. The Tax Foundation gave Maryland an overall tax climate index of forty-sixth in 2022, ranking forty-fifth for income taxes, thirtieth for sales taxes, thirty-third for corporate taxes, and forty-second for property taxes. Janelle Fritts & Jared Walczak, 2023 State Business Tax Climate Index, TAX FOUND. (Oct. 25, 2022), https://taxfoundation.org/2022-state-business-tax-climate-index/ [https://perma.cc/2HJ9-ZVDW]. To be clear, we don’t agree with the methodology behind the Tax Foundation’s rankings nor (most of) its policy prescriptions. We offer its analysis to demonstrate, in part, why Maryland legislators were likely drawn to a different tax base and why other states are likely to as well.
Texas. In California, new initiatives are often funded with a small increase of the sales tax or personal income tax. In 2018, New Jersey substantially increased the rate and broadened the base of its corporate income tax. Maryland had all of these options (and more). Maryland has thus far opted to fund its education program with a slice of its sales tax, the sales tax revenue from sales of digital goods and the DST. The entire initiative is estimated to cost $4 billion over 10 years, with the state contributing $2.8 billion. Thus the $250 million in annual revenue projected to be raised by the DST is a major contributor, but the state is still going to have to find revenue from some other source to fund its commitment to this initiative.

It is beyond our scope to compare the DST to all other options, especially their political economy, but we want to emphasize here that the policy arguments in favor of the DST are comparative. For example, one might think that a DST is not a great tool for reaching economic rents, or even doubt that there are significant rents or that they will last. But does that mean an increase of the state corporate tax would be a more efficient way to raise revenue? Or, perhaps one thinks that the DST is not a close enough proxy for untaxed consumption, but would it then be preferable to raise taxes on already taxed consumption (say by raising sales tax rates) instead?

Ultimately, one might be concerned that all state revenue tools are rather inefficient as currently designed, but then how is a state like Maryland going to fund a program like an extension of Pre-K? To be sure, one could reject the need for such a program or could contend

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104 Josh Haney & Bruce Wright, The History of the Texas Franchise Tax: The Complex Evolution of Our Main Business Tax, FISCALNOTES, May 2015, at 1 (describing Texas imposing modified gross receipts tax to equalize education funding after Texas Supreme Court found the previous system unconstitutional).

105 For example, in 2004, Proposition 63 imposed a 1% surcharge on incomes over $1 million to fund mental health initiatives. See CAL. SEC’Y OF STATE, OFFICIAL VOTER INFORMATION GUIDE: CALIFORNIA GENERAL ELECTION 6 (2004); CAL. WELF. & INST. CODE § 5820 (West 2022); CAL. REV. & TAX. CODE § 19602.5 (West 2022).


109 Id.

110 To be clear, it might well be, as there are ways to broaden the state corporate tax base rather than simply raise rates. See, e.g., Darien Shanske, How the States Can Tax Shifted Corporate Profits: An Application of Strategic Conformity, 94 S. C. L. REV. 251 (2021). New Jersey’s base broadening and rate raising led to dramatic increases in corporate tax revenue. STATE OF N.J., SUMMARY OF BUDGET RECOMMENDATIONS FOR THE FISCAL YEAR 2021: BUDGET IN BRIEF 42–44 (2020). However, such reforms have run into fierce political opposition and, as we argue infra in Section IV.E, there is a strong argument for broadening state corporate income taxes and imposing DSTs.
that the state could wring out the revenue from other programs, but responding to these arguments would take us far afield. In general, we follow what we take to be the conventional view that the United States funds fewer safety net programs relative to similarly wealthy nations,\textsuperscript{111} including some of which the effectiveness is fairly well-documented (like Pre-K),\textsuperscript{112} and that this is in part because the United States generally raises less revenue than these other countries. Further, though there is a compelling argument for the federal government to provide more aid to the states in funding procyclical or generally essential programs, such expansion does not appear imminent and so progress in many of these areas will depend on the states.

In sum, we think the precise state tax policy question should be whether or not a state-level DST would be a reasonable addition to the current mix of state revenue instruments given the limitations of other instruments and the significant needs of the states.

\section*{A. Fill out the Consumption Tax}\textsuperscript{113}

The economy has changed, with more and more transactions occurring through an online medium. The basic structure of state sales taxes can be traced back to the Great Depression.\textsuperscript{114} Most sales taxes apply to transactions on tangible personal property and only expand to digital products or services if a state has provided explicit authorization or a state court decision or state-level regulation treats certain digital products as tangible personal property.\textsuperscript{115} It is neither fair nor

\begin{footnotesize}
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\item See, e.g., ORG. FOR ECON. COOP. DEV., SOCIETY AT A GLANCE 2019, at 105 (2019); see also JONATHAN GRUBER, PUBLIC FINANCE AND PUBLIC POLICY 11 (7th ed. 2022); EDWARD D. KLEINBARD, WE ARE BETTER THAN THIS: HOW GOVERNMENT SHOULD SPEND OUR MONEY 63–100 (2015).
\item For a recent study, and one surveying prior literature, see Jordan S. Berne, The Long-Run Impacts of Universal Pre-K: Evidence from the First Statewide Program 2–3 (Annenberg Brown Univ., Working Paper No. 22-626) (“My findings indicate that Georgia [universal Pre-K’s (UPK)] long-run impacts are comparable to estimates from other preschool programs in the literature. . . . Overall, this suggests that large-scale UPK programs can have meaningful long-run impacts, even amidst relatively modern counterfactual environments.”).
\item See generally Kim, supra note 1; David R. Agrawal & William F. Fox, Taxing Goods and Services in a Digital Era, 74 NAT’L TAX J. 257 (2021).
\end{enumerate}
\end{footnotesize}
efficient to tax some but not all consumption. Why should the purchasers of physical books pay a tax that downloaders of e-books do not?

Now, if this were the only gap, then the solution would be for states to tax the purchases of digital products or services—and they should. But let’s consider instead a different gap. Not so long ago, one might go into a store and purchase a map if they want geographical information. And that consumption of purchasing a map would be subject to the sales tax. Now it is much more likely that one simply searches for the geographical information by googling in Google Maps. If Google charged for that search service, then that would be the consumption of a digital product or service that should be subject to the sales tax as itself the final object of consumption. But Google, like many other digital platforms, does not charge for its search service, such as Google Maps. Building and maintaining these maps for geographical information search are expensive, so how does Google do it? Simplifying a bit, Google is making its money by selling advertising to its users or selling its users’ data (presumably to the same advertisers in many cases) or both. In effect then, we might say that if Google is to retain its current business model, then the money it is earning through advertising or selling data must approximate the cost of the service it is providing.

Thus, if one wanted to protect the consumption tax base by taxing my consumption of Google Maps, a reasonable proxy would be the money Google makes through the bartering of its apps to users for

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117 It should be noted that not all digital services and products are currently taxed, but, importantly, Maryland also expanded its sales and use tax to (many) digital goods or services. See Md. CODE ANN., Tax–Gen. §§ 11-101(h)(1)(iii)–(iv) (West 2022). Thus the DST helps put a platform like Google, which barter, on a level playing field with a platform that generates cash flow, such as Netflix, as well as with a bookstore that just sells maps or encyclopedias.

What if a state imposed a DST and did not tax non-bartered digital goods and services? As a policy matter, we think a state should expand the base in both ways, and if political economy dictates the DST comes first then that is alright, if not ideal. As a legal matter, what is key is that a state imposes a sales tax on some substantial portion of analogous non-digital purchases. For instance, Maryland would tax the provision of physical maps, and it would also tax subscription lists (physical or digital), a reasonable analogue to the data going from the user to the platform. See Md. CODE ANN., Tax–Gen. § 11-109 (West 2022) (delegating the Comptroller power to maintain a list of products subject to tax); THE COMPTROLLER OF MD., LIST OF TANGIBLE PERSONAL PROPERTY AND SERVICES SUBJECT TO SALES AND USE TAX 10 (2022), https://www.marylandtaxes.gov/forms/Tax_Publications/Sales_and_Use_Tax/List_of_TPP_and_Services.pdf [https://perma.cc/8CYD-AGNP] (including subscription lists).
“free.” In Maryland’s case, gross receipts on digital advertising revenue for companies that make more than $100 million in annual gross revenues are taxed as proxy for the untaxed portion of the transaction described above. Once one understands that a state might reasonably wish to tax the missing consumption, then it is also understandable why a state would use the gross receipts of the business providing the free services as a proxy for the value of the consumption.

One might generally think it odd that we are taxing a proxy at all. We want to emphasize that taxing proxies is so endemic to taxation that two prominent tax economists have recently distilled one of the pillars of tax wisdom as “Taxation Is About Finding Good Proxies.”

Personal income taxes are conventionally justified as a proxy for “ability to pay” and corporate income taxes are justified as a proxy for the personal income tax. Going back to Hobbes, consumption taxes have been justified because “every man payeth Equally for what he useth.” The local property tax can be justified as a tax on the

118 See Agrawal & Fox, supra note 113, at 294 (indicating advertising revenue can operate as a surrogate for the implicit value of consumer services).

119 MD. CODE ANN., TAX-GEN. § 7.5-103 (West 2022); see also Jason R. Brown, The Maryland Digital Advertising Services Tax and the Expanding Map for Digital Taxes, ABA TAX TIMES, June 2021, at 6, 8 (describing a progressive tax rate increasing based on global gross revenues, 2.5% for $100 million and 10% for global annual gross revenue of more than $15 billion with two tiers in between).

120 This understanding of what the DST can accomplish is not limited to economists and tax professors; practitioners see it too. For example, one attorney at a prominent sales tax compliance firm (Avalara) has recently noted:

If free and reduced-cost streaming does take a bite out of retail receipts—and by extension, tax collections—state and local legislators may already have a model solution in front of them: tax the ads themselves. In February 2021, Maryland enacted a first-of-its-kind “digital ads tax” targeting the revenue of technology platforms that generate a substantial amount of receipts from advertising in the state.


121 Michael Keen & Joel Slemrod, Rebellion, Rascals, and Revenue 380 (2021).


imputed income enjoyed by homeowners that is otherwise not taxed.\textsuperscript{125} In none of these cases is the tax base a perfect proxy. The question is whether it is a good enough proxy. In terms of the basic business model of the digital platforms, we think it is because these digital services are expensive to provide and would not be if they did not generate substantial revenue on the other side of the transaction. That said, we observe that many of the most familiar proxies are supported by more than one type of (sound) argument. For example, the corporate income tax can independently be justified as progressive\textsuperscript{126} and as important to the regulation of corporations.\textsuperscript{127} The property tax can be justified as easy to administer at the local level, progressive and efficient in that it funds local public goods.\textsuperscript{128} We thus think it is important that there are other strong mutually supporting arguments in favor of DSTs, especially at the state level.

Up to this point, the argument for DSTs as a proxy has been generically based on efficiency and fairness. If you tax some transactions and not their equivalents, then one distorts economic activity and hurts the segments of the economy subject to the tax. But there is also a different efficiency and fairness argument in favor of base broadening at the state level. This is because the broader the base, the more stable it will be, and stability in revenue is a particular virtue for governments bound by hard budget constraints, as state and local governments are bound.\textsuperscript{129} The recent pandemic/recession illustrates this point. At the beginning of the crisis, states and local governments were forced to cut services and jobs because they anticipated steep drops in tax revenue.\textsuperscript{130} The steep drops did not generally materialize, including in the sales tax and despite the fact that a lot of ordinary consumption had ceased. A big part of the reason for this is that the sales tax was being imposed on much of the consumption that had shifted to

\textsuperscript{125} See, e.g., George R. Zodrow, Property Tax Incidence and the Mix of State and Local Finance of Local Expenditures, 48 State Tax Notes 567, 577–78 (2008) (“[A] primary distortion of the property tax is that it tends to reduce housing consumption. However, that feature of the tax may offset the tax bias favoring the consumption of housing because the federal income tax does not tax the imputed rent on owner-occupied housing although it allows deductions for home mortgage interest (and for property taxes).”).


\textsuperscript{127} See Avi-Yonah, supra note 123, at 1244–49.

\textsuperscript{128} See generally Joan Youngman, A GOOD TAX: LEGAL AND POLICY ISSUES FOR THE PROPERTY TAX IN THE UNITED STATES (2016).

\textsuperscript{129} See Shobe et al., supra note 116, at 1350–51.

\textsuperscript{130} See id. at 1350.
If the sales tax did not reach ordinary retail consumption online, then the revenue impact would have been enormous. Note that the legal power of states to require many remote vendors to collect the use tax was relatively recent, dating to the Supreme Court’s decision in *Wayfair* in 2018. Prior to *Wayfair*, states could not require remote online sellers to collect sales tax from customers in states where the business did not have a physical presence. The Court overturned the physical presence rule in *Wayfair* and adopted the economic presence rule. If the Court had not decided *Wayfair* in 2018—or the decision had gone differently—much of the shift to online consumption would not have been taxed, resulting in steep revenue losses.

One can go a step further and apply this analysis to untaxed barterers. Thanks to *Wayfair* (and other state actions), states (and localities) did not suffer huge sales tax revenues losses at the height of the pandemic because the sales tax base had been broadened. But this base had not been broadened to include the barter transactions we are discussing, which, as explained above, are also a significant part of the online economy and also likely increased during the pandemic. Thus, if states had implemented DSTs before the pandemic, then they would have been better situated to tax not only 2019-level online bartering, but also 2020-level, which would clearly have been a useful supplement, especially early in the pandemic when, among other things, it was not certain whether adequate federal support would be forthcoming.

### B. Tax Economic Rents

One might object that, in fact, the DST base is larger than the bartered consumption. Indeed, this might be so. But this raises

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132 Note that states had imposed workarounds before *Wayfair* overturned the physical presence rule and these workarounds, such as attributing nexus through affiliates, did have some impact pre-*Wayfair*. But this doesn’t change the analytic point as to the importance of the breadth of the tax base. See, e.g., South Dakota v. Wayfair, Inc., 138 S. Ct. 2080, 2103 (2018) (Roberts, C.J., dissenting) (noting the problem seemed already to be receding).

133 *Id.* at 2080.

134 *Id.* at 2088.

135 *See id.* at 2099.

136 See, e.g., CDTFA Interactive Data Visualizations, CAL. DEP’T OF TAX & FEE ADMIN., https://www.cdtfa.ca.gov/dataportal/visual.htm [https://perma.cc/F6RM-NZWW] (showing on slides 14 and 15 that California sales tax revenue did not drop precipitously during recession, though there were dramatic drops for certain industries, such as restaurants).

137 See Shanske, *infra* note 100.

138 We further discuss this issue in Section IV.B *infra*. 

another sound and complementary reason to impose a tax like the DST: these businesses, because of various factors, are earning economic rents and it is efficient to tax rents. As discussed in subsection I.B.3, supra, the combination of negligible marginal cost on the supply-side and mutually reinforcing network effects on the demand-side provides the foundation for digital platforms to grow into monopolies and monopolies can earn economic rents or supranormal returns.

A normal return should compensate an investor for the level of risk that she has taken on; a supranormal or excess return or economic rent is compensation beyond what would be required to make a certain investment given a certain amount of risk.

To flesh out the point here, consider a thumbnail sketch of the market for pizza as contrasted to the market for smart phones. No one is going to sell pizza if they do not make a reasonable return on their investment. However, if a particular pizzeria is making an extremely high return because of its location or style of pizza, then it can expect some other pizzeria to come to the neighborhood and/or copy its style so that the first pizzeria has its returns reduced. Now consider iPhones. Naturally, Apple needs to make a profit and, given the upfront costs it incurs in developing the phones, a higher profit margin than a pizzeria. Yet Apple is probably making much more than enough to compensate it for its greater risk. To see this, consider how hard it would be for a competitor to drive down Apple’s prices. After all, because of Apple’s ownership of its intellectual property, a competitor’s phone cannot be too similar. On top of that, Apple benefits from its brand and the network effect of having millions of phones already out in the market.

Taxing economic rents is desirable for many reasons, including that such a tax generates no deadweight loss. No deadweight loss results from a tax on supranormal return because, by definition, a firm cannot switch and get better returns from engaging in an untaxed activity. To return to our example, Apple is, by hypothesis, already

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139 Note that, at a higher level of abstraction, the notions that DSTs are consumption taxes and taxes on economic rents overlap. This is because a consumption tax should only tax supranormal returns. David A. Weisbach, A Guide to the GOP Tax Plan—the Way to a Better Way, 8 COLUM. J. TAX L. 171, 182–84 (2017). Thus, if DSTs are reaching either untaxed consumption or untaxed supranormal returns, they are, in effect, properly expanding the sales tax base.


141 See id. at 209–12 (indicating that relaxing the physical establishment requirement reduces the need to structure certain activities in subsidiaries to avoid tax).
charging as much as it can and, even after paying taxes, is earning more than it would from engaging in other, more competitive, businesses.142

Note that because a state might plausibly connect economic rents with the size of the network, choosing to tax only large businesses, as the Maryland tax does, makes sense. Furthermore, because a state can reasonably believe that these businesses are characterized by high startup costs, but then low marginal costs and high returns, using a gross receipts base as an approximation of the rent also makes sense.143

As noted above in subsection I.B.3, sometimes policymakers discuss the justification for DSTs by analogizing these firms to utilities. We think this analogy is another useful way to understand why a tax on this sector would be appropriate. If these firms are utilities because of their size, network effects, and the huge (and wasteful) fixed costs that would be required to duplicate their network—all plausible claims—then the traditional approach is to regulate them to prevent abuse and also to ensure access. As Richard Posner pointed out decades ago, such regulation amounts to a kind of taxation.144 To take a simple example, by limiting the returns of investors and keeping rates down, utility regulators are, in essence, engaging in redistributive taxation. They are taking income that might have been earned by investors and using it to subsidize power for those who might not otherwise be able to afford it. Taxing digital quasi utilities on their excess returns and using that revenue for programs for the less fortunate can thus be seen as rendering explicit what is implicit in most utility regulation.

Further, a tax, such as a DST, is arguably superior to regulation because of its ability to generate revenue—by taxing economic rents—that can directly contribute to the social safety net. Further, antitrust remedies, another kind of regulatory remedy require policy decisions to be made by judges and regulators refracted through complex doctrine and years of litigation, whereas a tax more directly follows from policy decisions being made by legislatures.145

Using a tax tool is also, arguably, less risky than addressing platform rents through other regulatory tools. Suppose, for instance, one does not believe there are true rents here or worries that an antitrust

142 To be sure, measuring economic rents is not a science, and a tax that did seek to tax all rents could well not be efficient because it might overshoot, but we do not think DSTs as currently structured pose such a threat. Also, plenty of other taxes have distortionary effects, and so the resulting distortions would need to be compared with the alternatives.
143 See Agrawal & Fox, supra note 113, at 294.
145 This is not to say that antitrust remedies might not be appropriate as well. See, e.g., Hovenkamp, supra note 56; Paul Romer, Opinion, *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 [https://perma.cc/3PJJ-XVVT].
response would generate huge losses because of destroyed network effects.146 Quasi rents “represent[] an ordinary return on investment, such as a competitive, risk-adjusted return to capital investment.”147 Taxing such rent does create an efficiency loss because it would discourage certain big investments. It is difficult to distinguish the two kinds of rents and, from the perspective of a government, both are relatively efficient to tax relative to other economic activity.148 From this perspective, a small tax on gross receipts is a preferable middle ground. Such a tax is not likely to be a large drag on quasi rents and is much less disruptive than (most) antitrust remedies.

C. Reduce an Externality/Other Regulatory Goals

To be sure, it might be the case that not all of the base of DSTs represents rents of any kind and/or untaxed consumption. In that case, at least one result could be that there is less of the taxed activity.149 Depending on the circumstances and the tax, a reduction in the activity is what we want a tax to achieve. All things being equal, we do not want the income tax to reduce income, but it is just fine if a tobacco tax or carbon tax reduces production/consumption of those goods. And this brings us to the famous New York Times op-ed by the Nobel laureate Paul Romer promoting a tax on platform companies to encourage them “to shift toward a healthier, more traditional model.”150 At least as currently designed, many of these social media platforms make their money through ads in ways that arguably supercharge societal harms. For example, ads for programmer jobs are only shown to young white males.151 Another example and one beyond invidious stereotypes: the big digital platforms make money from placing ads on sites spreading disinformation.152

146 Cf. Fox & Liscow, supra note 13, at 2029 (“If the returns to scale or network effects are large enough, breaking up the company can make consumers worse, rather than better, off.”).
147 Bankman et al., supra note 140, at 200.
148 Id. at 202 (reaching similar conclusion).
149 Note that given the relative scale of state taxes versus the returns, we think this is unlikely.
150 Romer, supra note 145 (indicating that digital platforms profiting from eroding shared norms and values that democracy depends on should be taxed).
A related critique of the business model is that it is essentially taking advantage of consumers through complicated terms and conditions. At this point, we rely on Google Maps and do not really have a choice to accept its adhesive contract terms. Despite negative externalities, consumers have no choice to avoid these digital platforms because of their position as natural monopolies. Some commentators suggest taxation as solution to this problem. Thus, a state could reasonably take the position that a tax on the gross receipts of certain large-networked firms can serve two related public ends beyond tax policy. First, it serves to discourage a deleterious business model, and second, it serves to give consumers as a group a better deal.

A DST is one (crude) tool to address other policy issues. Instead of identifying the cost of comprehending complicated contract terms or targeted ads, DSTs charge a special tax on platforms that target consumers and reap the benefits of contracts of adhesion, reinforcing network effects, and the untaxed revenue resulting from the barter transaction.

As with the antitrust goals noted earlier, the DST should be seen as likely a lighter touch as to these other goals, which might well be appropriate. There is, after all, a compelling and intuitive argument that in many cases these platforms are creating value through their are more likely to appear on misleading articles and websites that are in languages other than English, and that Google profits from advertising that appears next to false stories on subjects not explicitly addressed in its policy, including crime, politics, and such conspiracy theories as chemtrails.”).


154 Id.

155 The states might be wrong about this. Some have argued that these taxes could hurt consumer welfare by forcing platforms to charge for what is now “free.” See, e.g., Joe Crosby, Kendall L. Houghton, Stephen P. Kranz & Diann L. Smith, Served up on a Plattner: A Response to Big Data Tax Proposals, 100 TAX NOTES STATE 817, 818–19 (2021). Given the profitability of the current model, we are skeptical, but this is an empirical question best resolved by allowing experimentation in tax structures. Further, though there is some logic (and precedent) for allowing customers to pay a fee for more privacy, allowing privacy to become a luxury poses its own distributive questions. Stacy-Ann Elvy, Paying for Privacy and the Personal Data Economy, 117 COLUM. L. REV. 1569, 1400–04 (2017).

156 But it is not the only one and not the best one if one frames the problem differently. For instance, the base of the Maryland DST relies on gross receipts from advertising, which we think is a good proxy for consumption and an ok proxy for the value of user data. If one’s focus were on compensation for the mining of user data first of all, then one might use the extracted data as the base, as in the proposed New York data mining tax. See Plattner, supra note 29.
mobilization of data to subsidize the production of services and products that consumers want.\textsuperscript{157} A tax on digital ads is arguably taking this into account. It is unlikely that DSTs that are anything like the ones we are considering would eliminate ads or free services, and so the DST only reduces these ads at the margins, while raising revenues for other goals.

It could be objected that even if this were so the reduction in ads would not really correlate in any clear way with the externalities we are concerned about. Yet an effective tax could aid regulatory responses that are more specific.\textsuperscript{158} That is, presuming the tax has some teeth,\textsuperscript{159} then taxpayers will respond to incentives to reduce the tax. One kind of incentive to reduce a DST could be a reduction in tax “for taxpayers that implemented best practices published by the government or who provided more consumer control over their data.”\textsuperscript{160} It could be very useful to know how much some of these large platforms would be willing to pay in tax as opposed to implementing certain reforms.

\section*{D. Tax Base Diversity}

Given balanced budget requirements, we have already explained how useful it is for states to have broad tax bases. To the extent DSTs broaden the consumption tax base, a relatively stable base to begin with, this is a significant benefit for state public finance. But there is also strength in structural diversity, in having taxes that are collected in different ways and thus can be evaded (or not) in different ways. This advantage is most clear in comparing the DSTs to income taxes.

Large, profitable taxpayers have strong incentive to shift income out of the United States to reduce tax liability. Doing so avoids the U.S. corporate income tax (21\%)\textsuperscript{161} and state corporate income taxes (which average about 5\%).\textsuperscript{162} The classic ways for taxpayers to do this

\begin{thebibliography}{9}
\bibitem{} Avi-yanah, supra note 123, at 1244–45.
\bibitem{} Thimmesch, supra note 11, at 188.
\end{thebibliography}
involve the use of foreign affiliates in low-tax jurisdictions. For example, a foreign affiliate in a low-tax jurisdiction that holds a taxpayer’s intellectual property will charge a profitable domestic corporation in a high-tax jurisdiction royalties for use of the intellectual property. The domestic corporation takes deductions for the royalty payments, thus reducing tax amounts in the high-tax jurisdiction. Also, the foreign affiliate’s royalty income is taxed at low tax rate. Given that the consolidated group’s total profits remain the same, the group reduces the total income tax amounts by shifting income from a high- to a low-tax jurisdiction.

However, gross receipts tax like the DST do not permit deductions, and so most of the tax planning techniques used by major taxpayers to avoid income taxes would not work for gross receipts taxes. Consistent with this analysis, a recent study found that the market penalized digital firms that engaged in more tax avoidance more heavily than other firms in response to the imposition of DSTs in Europe, suggesting that “investors do not anticipate that firms are able to easily avoid the additional tax.”

The top rate of Maryland’s DST is 10% and Maryland’s share of GDP is about 2%, so an additional question is how much it is worth it for a taxpayer to come up with a bespoke strategy to avoid Maryland’s DST. Obviously, the incentive would increase as more states adopted similar DSTs, though, again, because of their simpler structure it is inherently more difficult to avoid DSTs.

E. Apportionment Diversity

Apportionment is a practice by which the value or income of a multijurisdictional enterprise is divided. The origins of apportionment started in the nineteenth century when states confronted the question of how to tax the value of railroad for purposes of the property tax. The Supreme Court permitted the states to look at the value of a whole railroad network and not the individual pieces within a

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state.\textsuperscript{167} Once the Court accepted the proposition that the entire railroad had a unitary value as a business, the next question became how could any one state impose a tax on its share of such a whole. Here again, the Court was pragmatic and accepted approximate formulas, such as using the ratio of track miles within a state.\textsuperscript{168} The burden on the taxpayer challenging the formula is heavy, as the taxpayer must "prove 'by "clear and cogent evidence" that the income attributed to the State is in fact "out of all appropriate proportions to the business transacted . . . in that State.""]\textsuperscript{169} Today, for purposes of the state corporate income tax, the states use several different formulas for apportionment, with the ratio of sales made within a state the most common.\textsuperscript{170}

The Maryland DST is apportioned, as it must be, so that it taxes only the gross receipts arising from transactions in Maryland.\textsuperscript{171} The regulations implementing apportionment state that digital advertising revenues are derived in Maryland "when any portion of those services are accessed through a device located within the State,"\textsuperscript{172} The choice to focus on devices, rather than users, is controversial,\textsuperscript{173} as are other parts of the regulations.\textsuperscript{174}

Now, as a matter of law, we think the Maryland approach is reasonable and passes constitutional muster. As a policy matter, we acknowledge that there might be better ways to apportion the tax, which raises a final important, if somewhat esoteric, set of reasons to

\textsuperscript{168} See Adams Express Co., 165 U.S. at 221; State R.R. Tax Cases, 92 U.S. at 611; Del. R.R. Tax, 85 U.S. (18 Wall.) at 231.
\textsuperscript{172} Md. Code Regs. 03.12.01.02(A) (2022); see also Maryland Comptroller Proposes Digital Advertising Tax Regs, TAX NOTES (Aug. 30, 2021), https://www.taxnotes.com/research/state/state-regulations-and-guidance/maryland-comptroller-adopts-digital-advertising-tax-regs/7cp0/ [https://perma.cc/TN39-NLQ7].
\textsuperscript{174} Stewart et al., supra note 32.
have a DST. The reason is that having a DST allows one to have a set of apportionment rules tailored for the DST.

As critics of Maryland’s DST point out, state corporate income taxes often look to the end users of an online service just like Maryland DST attempts to do.\(^\text{175}\) Thus, according to this critique, there is no need for the DST if we are looking to apportion the profits of these businesses to the locale of final users because the state corporate income tax already does this. This objection misses the mark for many reasons, including that there are policy reasons to have a DST base rather than just a corporate income tax base. For example, in Section II.A we explained why a DST can serve as a backup to retail sales taxes. But there is an additional point: it makes sense for the corporate income tax’s apportionment rule to be different from the DST apportionment rule.

As noted above, states have apportioned the income of multistate corporations for a long time. The formula that became standard was a blended ratio of property, payroll and sales within a state.\(^\text{176}\) The model formula promulgated by the Multistate Tax Commission (MTC) still is a blended ratio of property, payroll, and sales, but the sales factor is double-weighted.\(^\text{177}\) The policy intuition behind the different factors is that the location of the business’s workers, assets, and customers are reasonable proxies for where its income is generated.\(^\text{178}\) A justification deeper in the weeds is that using property and payroll is more difficult to game than the sales factor.\(^\text{179}\)

So let us suppose a state reasonably believes that some kind of formula using property and payroll is appropriate for their corporate income tax. If a state makes that reasonable choice, then the income generated by these barter transactions will only be partially sourced to the consumers’ jurisdiction. This is a reasonable result as to sourcing income, but an improper result relating to sourcing consumption. Therefore, one additional reason to have a DST that specifically targets lost consumption is that it allows the state to have a different formula


176 See generally HELLERSTEIN ET AL., supra note 170, at 447.

177 See MULTISTATE TAX COMPACT art. IV.9 (MULTISTATE TAX COMM’N 2017).


for that tax (the DST), namely apportion according to the location of the final consumer. Given the goal of the tax, using the destination of consumers makes sense and, at least in principle, apportionment based on sales is less likely to generate real (and wasteful) responses by taxpayers because it is hard to move one’s customers (relative to one’s payroll).\footnote{Cf. Daniel Shaviro, Mobile Intellectual Property and the Shift in International Tax Policy from Determining the Source of Income to Taxing Location-Specific Rents: Part Two, 2021 SING. J. LEGAL STUD. 154 (2021) (“DSTs in particular, whether they prove permanent or merely transitional, look like harbingers of a new era in which entity-level corporate taxation rightly focuses more on consumers’ relative immobility and on locational rents, and less on decades-old doctrinal and semantic debates concerning the supposedly ‘true’ source of economic income and value creation.”).}

However, it could be countered that the trend among the states for their corporate taxes is for single sales factor apportionment using market-based sourcing and so, in fact, there is no apportionment formula benefit. Leaving aside that this trend is not universal,\footnote{See SHEELAGH BEAULIEU, MARIA EBRELE & LIZ JANKOWSKI, LIVING WITH MARKET-BASED SOURCING—CALCULATING TODAY’S SALES FACTOR (2020), https://www2.deloitte.com/content/dam/Deloitte/us/Documents/Tax/living-with-market-based-sourcing-calculating-todays-sales-factor-12.pdf [https://perma.cc/P4Q5-JNTU]. States with market-based sales sourcing include Alabama, Arizona, California, Colorado, Connecticut, District of Columbia, Georgia, Hawaii, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, Tennessee, Utah, Vermont, Washington, and Wisconsin. Id. at 12.} could change, and is imperfect,\footnote{The DST should be apportioned by end user. Current market-based sourcing regulations are not necessarily so sourced, at least as interpreted by the courts. See Stephen P. Kranz & Lauren A. Ferrante, Market Sourcing: State’s Look-Through Approach Rejected Again, 98 TAX NOTES STATE 341, 341–42 (2020).} there are reasons to suppose that states might still want to have slightly different formulas for corporate income taxes and DSTs. As for DSTs, leaving aside the technical issues for the moment, we think it is clear that they should aim to tax final consumption.

But matters might not be so simple for a corporate income tax. Consider this scenario. A New York business (J. Crew) pays a California platform (Facebook) to advertise its services nationally, including, for example, in Maryland. Again, a DST looks to tax the consumers who are getting a free service from Facebook and so looking through to the consumers makes sense. For corporate income tax purposes though, looking through New York to the ultimate consumers is arguably not entirely right. One might take the position that the purchaser of the ads is a consumer that is also contributing to Facebook’s income. If one takes that position, then perhaps, for corporate income tax
purposes, these sales should be sourced to New York. And, in fact, many states with market-based sourcing would still source these sales to New York.\textsuperscript{183} We do not think that would be the best result, but we do not think it wholly unreasonable, especially if a state \textit{also} has a DST.

The point of this Section is not to devise the one true apportionment formula for corporate income taxation or DSTs. Rather the point is to note that states could quite reasonably choose to have a different apportionment for each. A DST is an additional tool to tax the digital economy that creates more room to diversify apportionment rules. When DSTs are combined with corporate income tax with different apportionment rules, all relevant jurisdictions can be reasonably assigned a share of these tax bases.

### III. Legal Analysis of DSTs: The Case of Maryland’s DST

As we indicated in the Introduction, Maryland’s DST is currently being challenged in both state and federal court.\textsuperscript{184} Furthermore, even friends of DSTs in theory are wary of Maryland’s DST as a matter of law. In this Part, we will argue that the Maryland DST is on fairly strong legal ground despite a setback in Maryland state court. This is not to say that this novel tax, under attack from some of the best state and local tax lawyers in the country, might not be struck down in the end anyway. Rather, we think that the better argument is that the tax should be sustained and that the ultimate disposition of the issue, perhaps before the Supreme Court, is by no means a sure thing. Furthermore, we think it likely that any decision that struck down Maryland’s tax would also leave the door open for state-level DSTs of slightly different design. This means that the many states considering DSTs should not be intimidated by the current lawsuits, though this is not to say that the states should not consider ways to fortify their taxes from the inevitable legal assault.

We think that there are two primary errors that run through the attacks on Maryland’s DST. First, the attacks misunderstand what the tax is, and this is why we started with a discussion of the policy arguments in favor of the tax. Crucially, because the DST is trying to tax

\textsuperscript{183} The MTC rules seem to source these sales to the ultimate consumer, like proposed California rules. \textit{See Model Gen. Allocation & Apportionment Regs.} regul. IV.17.(d)(3) (B)3.a., 5.d (example (iii)) (MULTISTATE TAX COMM’N 2017); Cal. Franchise Tax Bd., Draft Language Amending California Code of Regulations, Title 18, § 25136-2 (June 4, 2021). Many states’ sourcing rules effectively locate these sales in New York. \textit{See, e.g.,} Kranz & Ferrante, \textit{supra} note 182.

currently untaxed consumption, then the selection of a tax base that is a proxy for this consumption is not a discrimination against digital advertising, but filling a gap that does not exist to the same extent as with traditional print advertising.

Second, the attacks on the DST suggest that courts should be in the business of interpreting preemptive statutes or Dormant Commerce Clause jurisprudence in a manner that leans toward displacing state revenue authority. We think the rule is—and should be—that, on separation of powers and federalism grounds, courts do not look for ways to displace state revenue authority.

So many legal arguments have been made against Maryland’s DST that we can hardly go through them all. We do not think most of these arguments are particularly strong, but rather go to the “throw everything at the tax in every court possible” strategy of the plaintiffs. We are surprised there is not yet a complaint against the tax in traffic court.

We will focus on what we see as the three primary objections to Maryland’s DST: preemption under the Internet Tax Freedom Act (ITFA), discrimination under the Dormant Commerce Clause, and preemption under a doctrine relating to foreign affairs.

A. Basic Objection Based on the Internet Tax Freedom Act (ITFA)

1. Discrimination

The ITFA prohibits “discriminatory taxes on electronic commerce.”\(^{185}\) Discrimination under the ITFA requires that a tax be imposed on internet activities but not on “similar property, goods, services, or information accomplished through other means.”\(^{186}\)

The Maryland DST taxes only digital ads and, therefore, say its many critics, it is discriminating against electronic commerce.\(^{187}\) But matters are not so simple because digital ads are not altogether similar with print ads. Crucially, and as we discussed in Section II.A, supra, only digital ad revenue is a proxy for large and growing area of untaxed consumption. On the other side, there are many similar transactions that are currently taxed under Maryland law. For instance, digital

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\(^{186}\) Id. §§ 1105(2)(A)(i), (ii), (iii).

\(^{187}\) See, e.g., Complaint for Injunctive & Declaratory Relief at 17, Chamber of Com. of the U.S. v. Franchot, No. 21-cv-00410 (D. Md. Feb. 18, 2021).
goods, such as e-books, are taxed\(^{188}\) and information on customers, such as subscription lists, are also taxed.\(^{189}\)

Before proceeding with the further analysis as to the question of discrimination, we think that many of the characteristics of digital ads are relevant to the legal analysis. Digital ads, unlike other ads, can reasonably be taxed because a state may reasonably believe that they generate economic rents through extracting user data at a steep discount. Further, we think digital ads are different because of the significant evidence that the business model in which they are embedded causes externalities. These are big differences, individually and collectively. In any analysis of similarity, one must tally similarities and differences and apply judgment. To use a loose biological metaphor, one looks to the features of animals to decide how closely they are related. In some cases, a prominent feature (eating bamboo) and naming convention (use of the same word) can lead to mistakes. For instance, it turns out that giant pandas are not closely related to red pandas.\(^ {190}\) We think that relationship between digital ads and traditional ads is like the relationship between giant pandas and red pandas.

In the end, though, this is more than about tallying differences. A functional analysis focused on the use of DSTs to tax consumption should, we think, be dispositive. The ITFA’s purpose is to protect internet-based business from discriminatory taxation; understanding DSTs as backup consumption taxes illustrates why DSTs do not implicate this purpose. To take a classic example of what the ITFA sought to prevent, one can well imagine how it would have been tempting for states to tax internet purchases of books and shoes more heavily in order to protect their brick-and-mortar main street businesses. And so it was, and is, appropriate for Congress to protect an interstate industry from such protectionism.\(^ {191}\) Note the underlying assumption is that if a similar transaction is taxed at a higher rate, then consumers will move toward the less taxed alternative.

Yet in the case of so-called digital ads, this analysis breaks down. Because the goal of the tax is to tax consumption that is currently untaxed, it is actually only aiming to restore parity between transactions. Put another way, because the DST is imposing a tax on digital ads, ads


\(^{189}\) See Md. Code Ann., Tax–Gen. § 11-109 (delegating the Comptroller power to maintain a list of products subject to tax); The COMPTROLLER OF MD., supra note 118, at 13 (subscription lists included).


that are embedded in an entirely different business model, a business model that, on the consumer facing side, represents a barter paid for completely in data.\textsuperscript{192} Because digital ads are embedded in the market in data, it does not do a competitive harm to digital ads relative to print ads to take away their tax advantage.

It could be objected that broadcast ads are also a kind of barter; the television is “free” in return for watching.\textsuperscript{193} This objection helps illustrate our argument. We think a state might reasonably have opted not to tax such ads because they do not represent economic rents. Further, because they must be addressed to the general public, these ads do not generate the same externalities. There is also less untaxed consumption in relation to broadcast media because the viewers are giving less (eyeballs, not user data) and the broadcasters are getting less (no data); the broadcasters are also giving less (ready-made, one-way entertainment, not real-time interactive maps).\textsuperscript{194} In fact, to get something approximating the information digital advertisers get for “free” as a matter of course, the broadcast industry relies on services like Nielsen. Crucially, Nielsen pays its families to participate, and these payments are subject to tax.\textsuperscript{195} As a policy matter, these reasons, along with the relative size of the missed consumption, is enough to justify states only taxing some barters, treating any untaxed consumption generated by broadcast media as de minimis relative to the administrative burden of imposing such a tax.\textsuperscript{196}

\textsuperscript{192} See Thimmesch, supra note 11, at 161 (“The actual functioning of the personal-data market supports the adoption of a market-exchange model under which we recognize that firms acquire data by providing consumers with access to desirable digital products and that consumers use their data to acquire access to those products.”).

\textsuperscript{193} We should not discount the possibility that states simply apply a gross receipts tax on these barters too so as to nullify the issue completely. Cf. Mark J. Cowan, Joshua Cutler & Ryan J. Baxter, Strategic Surrogates or Sad Sinners: U.S. Taxation of Bartering in Digital Services, 58 AM. BUS. L.J. 849, 874 (2021) (“We have no problems taxing nondigital companies using the advertising-pricing model.”).

\textsuperscript{194} Cowan et al. reach a similar conclusion. Id. at 875 (“The time and attention of the online user is thus worth much more, and is more easily identified, than that of newspaper readers, radio listeners, or television viewers. When there is a vast amount of barter resulting from a business model orchestrated by sophisticated enterprises and that barter is analogous to taxable cash transactions, there will be significant tax base erosion—and significant unfairness if the situation is not addressed.” (footnote omitted)).

\textsuperscript{195} About Us, NIELSEN, https://markets.nielsen.com/us/en/about-us/panels/ratings-and-families/ [https://perma.cc/K8HW-8RUF]. Nielsen characterizes the payment as “gifts,” but such gifts are subject to income tax and, if these types of services are subject to sales tax, should be taxed as sales as well.

\textsuperscript{196} Cf. Leigh Osofsky & Kathleen DeLaney Thomas, The Surprising Significance of De Minimis Tax Rules, 78 WASH. & LEE L. REV. 773, 892 (2021) (“As a broader design point, when considering de minimis exceptions, policymakers should look for a clearly favorable tradeoff between compliance and administrative savings from the rule, relative to the resulting revenue loss.”).
But is it enough of a difference to justify the legal conclusion that there is no discrimination? We think so. In particular, digital ads extract precise user data in return for services that are in many cases (e.g., maps, email) never subject to tax. Because of the difference as to the value of the data, a digital ad, which could reasonably just be called a data-barter surcharge and not a tax on ads, is not easily substituted by an ad on broadcast television or a free newspaper.\textsuperscript{197} Electronic commerce is thus not discriminated against if we use the touchstone of competitive harm.

We do not need to speculate on whether courts are likely to address the plain meaning of discrimination in this more nuanced way because the lead Supreme Court cases on discrimination in the context of the Dormant Commerce Clause already do so,\textsuperscript{198} as does the lead Supreme Court case interpreting Congress’ use of “discrimination” in the 4R Act.\textsuperscript{199} In connection with the Dormant Commerce Clause, the Court has explained that “discrimination . . . assumes a comparison of substantially similar entities . . . [because] the difference in products may mean that the different entities serve different markets, and would continue to do so even if the supposedly discriminatory burden were removed.”\textsuperscript{200} Furthermore, the Court has explained in interpreting the word “discrimination” in a federal law preempting state tax law (the 4R Act) that “[w]e think that an alternative, roughly equivalent tax is one possible justification that renders a tax disparity nondiscriminatory.”\textsuperscript{201}

Appropriately, several state courts have interpreted the reach of the ITFA along the lines we suggest. For example, in \textit{Labell v. City of Chicago}, an Illinois appellate court declined to find that the ITFA’s nondiscrimination provision preempted a city “amusement” tax that applied to “television shows, movies, or videos,” as well as music and

\textsuperscript{197} What about ads in newspapers one pays for? It is surely the case that these ads subsidize the production of the paper for consumers, but a state in that case has reason to accept the retail price of the paper as a close enough proxy for the value of the consumption. In the digital ad context we are considering, there is no market transaction to serve as a proxy—other than the purchase of the ad on the other side of the platform.

\textsuperscript{198} Gen. Motors Corp. v. Tracy, 519 U.S. 278, 297–300 (1997); see also United Haulers Ass’n v. Oneida-Herkimer Solid Waste Mgmt. Auth., 550 U.S. 330, 338 (2007).


\textsuperscript{200} Gen. Motors Corp., 519 U.S. at 298–99 (footnote omitted).

\textsuperscript{201} CSX Transp., Inc., 575 U.S. at 30–31 (2015); see also CSX Transp., Inc. v. Ala. Dep’t of Revenue, 888 F.3d 1163, 1179 (11th Cir. 2018) (“Considering only state taxes, over a recent nine-year period, rail carriers paid $0.0985 per gallon for dyed diesel while motor carriers paid $0.19 per gallon for clear diesel. Accounting for both state and local taxes, rail carriers paid $0.2348 per gallon while motor carriers paid between $0.20 and $0.23 per gallon. During that same period, rail carriers and motor carriers each had a higher state plus local tax burden than the other one did an equal number of times (fifty-seven).” (internal citations omitted)).
games, that are “electronically delivered” to customers.\textsuperscript{202} The court compared streaming entertainment services (such as Netflix or Spotify) subject to the tax with other products and services not subject to the tax (such as physical entertainment devices like video machines, jukeboxes, or pinball machines).\textsuperscript{203} The court found substantive differences between streaming services and physical entertainment devices and concluded that the tax on streaming services was not preempted because streaming entertainment services are not “similar” to the most analogous noninternet-based products.\textsuperscript{204} Other courts have likewise rejected a finding of similarity under the ITFA when there were substantive differences between allegedly analogous products and services.\textsuperscript{205}

2. Should the DST Be Preempted Because of a Concern with Stability?

At least one prominent commentator, Richard Pomp, has suggested that all this parsing of what is truly similar undermines the value of “stability.”\textsuperscript{206} The plausible presupposition here is that parsing “similar” tax by tax will, at least for a while, make it uncertain which state digital taxes are permissible and which are not. The less plausible claim that follows from this observation is that it would be better for courts to eschew this work in favor of a bright-line advertising rule, to the detriment of Maryland’s tax because it is a tax on advertising. Again, the Maryland tax could be reasonably called a data

\textsuperscript{203} Id. at 743.
\textsuperscript{204} Id. at 747–48. The court noted that the Illinois Supreme Court did not reach the issue of sufficient similarity for purposes of discrimination in its ITFA decision in \textit{Performance Marketing Association, Inc. v. Hamer}, 998 N.E.2d 54 (Ill. 2013). See \textit{Labell}, 147 N.E.3d at 749.
\textsuperscript{205} See \textit{Village of Rosemont v. Priceline.com Inc., No. 09 C 4438}, 2011 WL 4913262, at *4 (N.D. Ill. Oct. 14, 2011) (holding that a tax resulting in higher fees for online travel companies than their brick-and-mortar counterparts did not violate the ITFA because the disparate tax rates were the result of differences in business models and fee structures rather than the fact that online travel companies conducted their business via internet); \textit{Mayor of Baltimore v. Priceline.com Inc., No. 08-3319}, 2012 WL 3043062, at *7–8 (D. Md. July 24, 2012) (similar to \textit{Rosemont}; \textit{Gartner, Inc. v. Dep’t of Revenue}, 455 P.3d 1179, 1192–93 (Wash. Ct. App. 2020) (holding that taxing internet research database sales at a different rate than the physical transmittal of research was not discriminatory under ITFA because the research database was an automated digital service using software applications that would not be used in an analogous physical setting).
barter surcharge because we are seeking to tax the untaxed barter. If it were so renamed, no doubt the industry would still object to it, and we would end up having the same argument and in that case the industry would insist (correctly) that substance is what should matter.

And thus, though stability is an important rule of law value, it is not the only one and simply erecting a bright line rule as to a tax on advertising won’t do. We think that getting the law right as a matter of text and congressional purpose is also important for the rule of law, and Congress used the notion of discrimination, legislating against a background of how the Court parses this notion. Indeed, Justice Scalia himself rejected calls to simplify discrimination in the name of stability in the context of the 4R Act.207

And, in any event, stability is going to have to be earned through a common-law process here regardless. For example, many observers, including Pomp,208 think that a state tax structured as a tax on data would pass muster under the ITFA.209 We are also intrigued by such alternative structures and see the appeal as a matter of policy and law, but we do not think that such a tax will not be met with an ITFA challenge.210 Indeed, we already have some hints of what that challenge might look like based on the challenges to Maryland’s tax. After all, brick-and-mortar businesses also collect data on consumers, the base of New York’s proposed data severance tax. These businesses are also subject to the New York tax, beyond a certain threshold—one million New York users per month,211 so there is no facial discrimination. Yet, opponents can argue that brick-and-mortar retailers are much less likely to exceed the threshold. Further, the New York levy is progressive,212 and it is surely the case as a practical matter that larger data collectors will be digital and hence face higher rates. Finally, pragmatically, taxing brick-and-mortar data collection is going to be difficult and will likely require a different set of rules. The difference in rules is likely to be attacked as discriminatory against digital data. (The merits and demerits of New York’s data tax are further discussed in Section IV.B.)

We are not suggesting that such attacks are persuasive—to the contrary. But we are suggesting that a court, in deciding an ITFA challenge against a data severance tax, is going to have to consider whether difference in treatment of digital as opposed to traditional data is justified by their underlying differences. This is the command of

208 See FORBES, supra note 206.
210 See Crosby et al., supra note 155, at 817–18.
212 See id. sec. 1, § 186-h(3).
Congress when it bars discrimination, as Justice Scalia observed in *CSX* and it should not, and cannot, be avoided by placing Maryland’s DST on one side of the line, without analysis.

3. Does the Presumption Against Preemption Apply to the ITFA?

A related attack on our perspective on the ITFA is that ours is too narrow a view of discrimination, that careful parsing of “discrimination” and “similar” is not required, that any (perceived)213 disadvantage suffered by electronic commerce is sufficient for a state tax to be preempted.

But this is not how one is supposed to read federal statutes that preempt state authority,214 particularly state revenue authority.215 Both separation of powers and federalism concerns indicate that such statutes are to be read narrowly. It is a separation of powers issue because broad preemption empowers courts over legislators. It is a federalism problem because such an approach empowers federal legislators (and ultimately the Federal Supreme Court) to preempt state tax policy.

The opponents of Maryland’s DST have no choice but to acknowledge the presumption against preemption, but argue that this presumption applies only to the question of preemption itself.216 That is, the argument goes, if a court is trying to decide an implicit preemption case, then it should presume no preemption per the presumption against preemption, but, once there is preemption, as everyone agrees there is with the ITFA, then there is no such presumption and the

213 We say “perceived” because there is a strong case that DSTs level the playing field with other consumption.

214 See, e.g., Rice v. Santa Fe Elevator Corp., 331 U.S. 218, 230 (1947) (first citing Napier v. Atl. Coast Line R.R., 272 U.S. 605, 611 (1926); and then citing Allen-Bradley Local No. 1111, 315 U.S. 740, 749 (1942)) (“[W]e start with the assumption that the historic police powers of the States were not to be superseded by the Federal Act unless that was the clear and manifest purpose of Congress.”).

215 See, e.g., Nat’l Priv. Truck Council, Inc. v. Okla. Tax Comm’n, 515 U.S. 582, 590 (1995) (explaining that there is a “strong background presumption against interference with state taxation”). Indeed, the text of the ITFA seems to accept the usual rule in section 1101(b). See Internet Tax Freedom Act, Pub. L. No. 105-277, div. C, tit. XI, § 1101(b), 112 Stat. 2719, 2719 (1998) (codified as amended at 47 U.S.C. § 151 (2018)) (“Except as provided in this section, nothing in this title [this note] shall be construed to modify, impair, or supersede, or authorize the modification, impairment, or superseding of, any State or local law pertaining to taxation that is otherwise permissible by or under the Constitution of the United States or other Federal law and in effect on the date of enactment of this Act [Oct. 21, 1998].”).

216 See Plaintiffs’ Consolidated Opposition to Motion to Dismiss and Memorandum in Support of Cross-Motion for Summary Judgment at 39, Chamber of Com. of the U.S. v. Franchot, No. 21-cv-00410 (D. Md. July 29, 2021) (“[T]here is no presumption against preemption in the context of an express-preemption clause like ITFA’s.”).
scope of the preemption should be interpreted broadly (or at least not so narrowly as to actually consider similarity in any detail).

At the level of theory, this approach does not make a lot of sense. If separation of powers and federalism principles counsel against finding preemption at all, then why should they also not counsel against finding broad preemption? Not surprisingly, caselaw from the Supreme Court and other important courts does not apply the presumption against preemption in this cramped way. For example, in *Heublein, Inc. v. South Carolina Tax Commission*, the Court upheld state regulations that had the effect of costing businesses the protection of a federal preemption statute, explaining that “[s]uch regulation is an important function of local governments in our federal scheme. . . . ‘[U]nless Congress conveys its purpose clearly, it will not be deemed to have significantly changed the Federal-State balance.’”217 As the Court explained in a different context, treating ambiguous terms as an invitation to expand preemption “would be to read Congress’s words of limitation as mere sham, and to read the presumption against preemption out of the law whenever Congress speaks to the matter with generality.”218 Not surprisingly, the lower courts have understood that preemptive statutes are not to be interpreted broadly,219 including in at least one case involving the ITFA.220

To be sure, as an analytic matter, we might want to call the presumption at issue with the ITFA, the presumption against *broad* preemption to distinguish it from the presumption against preemption in the first instance. Furthermore, and as already explained, Maryland has a strong case on the ordinary meaning of discrimination without need of the benefit of a presumption. We bring up the presumption because, as with so much else, the opponents of the DST have dismissed it too quickly.

4. Doesn’t the Legislative History Indicate That a Tax on Just Digital Commerce Is Discriminatory?

There is legislative history, and in particular a statement by Congressman Cox, one of the bill’s sponsors, to the effect that “any

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taxation of property, goods, services, or information that is inherently unique to the Internet would be discriminatory, because there is no non-Internet property, goods, services, or information that is similar and that the State generally taxes.”

Such passages suggest that Maryland cannot win. If digital ads are similar to print ads, then the DST is discriminatory; and if they are not similar, then the DST is discriminatory.

There are various responses. First, even if this interpretation of the ITFA is correct, it does not defeat the argument we have been making. Our argument is that the DST is taxing consumption that is otherwise not taxed and is, in fact, similar to the taxed consumption. Comparing whether Maryland’s tax is imposed on both print and digital ads is to miss the fact that digital ads are a proxy for similar untaxed consumption.

Second, the notion that states cannot tax “inherently unique” features of the Internet cannot mean that such features represent a tax-free zone. If that were true, then states could not impose the general sales tax on services provided over the internet, but the definition of discrimination in the ITFA clearly anticipates and permits that states impose their sales tax on internet transactions just like brick-and-mortar ones. When prominent state and local tax practitioners challenged the application of Texas’s sales tax to certain digital services, they did not argue that Apple’s iTunes Match is unlike any nondigital service; rather, they argued that the state “does not assess sales tax on sales made by offline providers that offer services similar to iTunes Match.”

But there is also reason to doubt the probative value of this particular bit of legislative history. The ITFA and its scope were controversial. Indeed, Congressman Cox associated himself with federalism concerns in a colloquy over the bill in the Senate. Furthermore, such concerns made it into the actual language of the bill in several ways. First, Congress used the notion of “discrimination” in the bill, a term with its own history which Congress is presumed to know. As we have seen, this term presupposes a meaningful look for comparators. Second, in elaborating on discrimination in the text of the bill, Congress did not use language as broad as that of Congressman Cox but rather repeatedly emphasized whether a tax was imposed on “similar”


transactions. Third, Congress included a savings clause emphasizing that the usual rules governing state power over taxation apply.

Finally, as just explained, there is a presumption against a broad scope of preemption as to state taxing power, and hence, even if this is an ambiguous case, which it is not, the presumption instructs that the statute be interpreted in a way that limits the dislocation of state taxing power.

In sum, our primary argument is that taxes like Maryland’s are trying to tax consumption that is otherwise not taxed and thus is trying to even the playing field, not discriminate against the digital. Further, it is not clear that the proxy tax on consumption through digital receipts is higher than the comparable tax on brick-and-mortar consumption, though that is a fact-intensive inquiry that is fairly debatable. If, after surviving summary judgment, the Maryland tax is ultimately found to discriminate because of the details of its structure—say its rate is too high relative to its sales tax—this would still provide a template for other states to impose similar taxes.

5. Conclusion on ITFA

Thus, the plain meanings of “similar” and “discrimination,” as used in the ITFA, along with the background caselaw interpreting the terms of which Congress is presumed to have been aware and the presumption against preemption itself all indicate that what is similar for purposes of the ITFA must be parsed carefully. We think that a court should find that the activities taxed by Maryland’s DST are not similar for purposes of the ITFA and hence not discriminatory.

B. Dormant Commerce Clause Challenge: Extraterritorial Values

Maryland’s DST applies different rates of tax to different size taxpayers—for example, the rate is 2.5% for “global annual gross revenues of $100,000,000 through $1,000,000,000.” However, the rate is 10% for taxpayers with global annual revenues over $15,000,000,000. So, say a small taxpayer in terms of Maryland sales becomes a big taxpayer by virtue of its revenue earned in the rest of the world, then that taxpayer ends up paying Maryland tax at a higher rate. Is this not the taxation of extraterritorial value because the higher rate is triggered by activity outside of the state? Thus, it is claimed, the tax should fail

225 Id. § 1101(b).
226 MD. CODE ANN., TAX–GEN. § 7.5-103(1) (West 2022).
227 Id. § 7.5-103(4).
the fair apportionment/external consistency prong of the *Complete Auto* test.\textsuperscript{228}

We acknowledge the somewhat odd result, but think it is appropriate as a policy matter and constitutional. It is appropriate as a policy matter if the states think there is a connection between the total gross receipts of the taxpayer and the appropriate level of tax. This is what states already do in the context of the income tax. That is, suppose an out-of-state taxpayer earns $10,000 in a state with a progressive income tax, say California. California does not know whether that $10,000 is part of a total income of $20,000 or $20,000,000. Given California’s progressive tax rates, it wants to know what kind of taxpayer it is dealing with and apply the right marginal tax rate to the $10,000. This is common practice, and it has been upheld by the courts as well as the leading commentators.\textsuperscript{229} Thus, though acknowledging some awkwardness in one state looking to earnings in another state, Hellerstein, Hellerstein, and Swain conclude that “[W]e cannot fairly and rationally implement the concept that those who earn more should pay taxes at an increasingly higher rate unless we determine how much the individual earns without regard to the particular political entities in which the earnings were accumulated.”\textsuperscript{230}

As we have already explained in Section I.B, it is hardly idiosyncratic or unreasonable to relate the digital platforms to network effects. Thus, Maryland can reasonably connect the size of a taxpayer’s gross receipts with a tax rate because the greater the size of the gross receipts the greater the value of the data bartered and/or the greater economic rent to be taxed.\textsuperscript{231}


\textsuperscript{230} Id. (analyzing and citing cases).

\textsuperscript{231}Interestingly, the Court of Justice of the European Union reached a similar conclusion as to a Hungarian gross receipts tax with high thresholds. Case C-325/18, Tesco-Global Áruházak Zrt. v. Nemzeti Adó- és Vámhivatal Fellebbviteli Igazgatósága, ECLI:EU:C:2020:140, ¶ 74 (Mar. 3, 2020) (“It follows from the foregoing that the steeply progressive rates of the special tax do not, inherently, create any discrimination, based on where companies have their registered office, between taxable persons owned by Hungarian natural persons or legal persons and taxable persons owned by natural persons or legal persons of other Member States.”). This decision has been criticized for, among other things, accepting a notion of “progressivity” that is not “reliable.” Ruth Mason & Leopoldo Parada, *The Legality of Digital Taxes in Europe*, 40 VA. TAX REV. 175, 213 (2020). The same
As with the case of state income taxes, Maryland did not structure its tax in this way in order to tax extraterritorial values and is not taxing such values. Rather, if it is to impose a tax at an increasing rate on the businesses most able to pay—and also plausibly causing the biggest consumption tax gap—then it needs a proxy for the size of the taxpayer’s network, which is what the gross receipts measure is. (A more direct defense of gross receipts as a proxy is discussed in Section IV.B, infra.)

C. Foreign Affairs Doctrines

1. One-Voice Prong from the Dormant Commerce Clause

The one-voice prong of the foreign Dormant Commerce Clause was established by the Court in Japan Line in 1979; it is a prong that is applied only after a state tax has passed muster under ordinary Dormant Commerce Clause analysis and thus has been found not be discriminatory. At first glance, this additional factor makes perfect sense. Of course, we do not want the states undermining international relations. Thus, as in Japan Line, if the United States has agreed with its trading partners, such as Japan, on the taxation of shipping containers, then how can California be permitted to upset this international arrangement? Ruth Mason and Richard Pomp have argued that state-level DSTs may be similarly infirm because they too will upset a carefully arranged international arrangement.

Yet, on second glance, the one-voice factor does not make very much sense. After all, there is no question that Congress can use its positive Commerce Clause power to preempt state taxation schemes that interfere with international relations. But the one-voice factor applies when Congress has not so acted. This raises serious separation

authors think the policy justifications for thresholds for digital taxes are also weak, including a form of our argument concerning network effects. Id. at 200–01. But note that Mason and Parada do not think the network effects argument is strong enough to justify (nationality) discrimination under EU law. We think the use of size thresholds is reasonable enough such that there is no discrimination to justify under U.S. law.


234 Stewart et al., supra note 32 (“If the government is unified in their views, and if we have a renegade state that’s an outlier acting inconsistently with those views, then the state tax should fall.”).

235 And this would be the better way to approach the issue. See Leanne M. Wilson, Note, The Fate of the Dormant Foreign Commerce Clause After Garamendi and Crosby, 107 COLUM. L. REV. 746, 784–88 (2007).
of powers and federalism concerns. Say the President wishes for the states to cease a certain tax practice, but fails to get Congress to preempt it. If a federal court finds that state practice unconstitutional because of an amicus brief filed by the Solicitor General or other executive branch communication, then a federal court is allowing the President to bypass Congress and accomplish through litigation what he could not accomplish through legislation.

The current controversy about Maryland’s DST illustrates the issue. According to Pomp, the current federal administration is of the opinion that Maryland’s DST is complicating its negotiating position in the global tax deal and is lobbying Maryland to abandon it. And so this would seem to be a strong case for applying the one-voice principle. Or is it? Suppose the administration does not succeed in convincing Maryland and suppose the administration does not succeed in convincing Congress to pass a bill preempting a tax like Maryland’s. Presumably, this dual failure reflects that the DST is perceived as important by the State of Maryland and, further, that Congress was not persuaded to use its positive Commerce Clause power to preempt the states. Thus, if the one-voice principle were to be found by a court to preempt Maryland’s DST, it would grant the President alone significant power to dislocate state revenue authority, quite an anomalous result and one the Court already rejected in Barclays.

236 For a more thoroughgoing critique of the doctrine on these grounds, see David H. Moore, Beyond One Voice, 98 Minn. L. Rev. 953 (2014).
238 See Stewart et al., supra note 32 (“I’m only speculating, but I would think calls should be made, and will be made, from Washington to Maryland encouraging them to put this tax on hold so that we can at least say even our own state has backed off from the DST.”); Michael J. Bologna, Digital Tax Pact with Europe May Complicate Maryland’s Ad Tax, Bloomberg Law (Oct. 21, 2021, 2:53 PM), https://www.bloomberglaw.com/product/tax/bloombergtaxnews/daily-tax-report-state/5609TCD000000/ [https://perma.cc/JLS5-VCAS].
239 Barclays Bank PLC v. Franchise Tax Bd., 512 U.S. 298, 329 (1994) (“The Constitution expressly grants Congress, not the President, the power to ‘regulate Commerce with foreign Nations.’ . . . Congress has focused its attention on this issue, but has refrained
remember, this dislocation of state revenue authority would be a result of federal constitutional common law, ultimately as determined by the federal judges of the U.S. Supreme Court.

Given its analytic difficulties, it is thus not surprising, as Pomp notes, that it has only happened once that taxpayers have won on “one-voice” grounds—in Japan Line.\textsuperscript{240} Returning to that victory, we would characterize that case as standing for the proposition that a taxpayer can win on one-voice grounds only on a very similar fact pattern to that case, one just short of preemption and where there is also in fact multiple taxation (the other prong added by Japan Line) and where there are other strong indicators of federal interests. That is, in Japan Line, there were treaties about the taxation of containers ratified by Congress, angry and threatening trading partners, and a brief from the Solicitor General.\textsuperscript{241} Further, there was actual multiple taxation because the relevant treaties gave the residence jurisdiction 100% property taxing rights.\textsuperscript{242}

A similar, but not identical, constellation failed to deprive the states of the power to impose worldwide combined reporting\textsuperscript{243} in part because of ambiguous actions by Congress and the administration, but also because there was no guaranteed multiple taxation because the state approach would not obviously lead to more or less taxation. We also think the Court shied away from the radical implications of an aggressive application of the one-voice prong.

In any event, the Court twice found that worldwide combined reporting did not violate the one-voice prong.\textsuperscript{244} Accordingly, two leading commentators have concluded that “[t]he continued relevance of

\begin{quote}

from exercising its authority to prohibit state-mandated worldwide combined reporting. That the Executive Branch proposed legislation to outlaw a state taxation practice, but encountered an unreceptive Congress, is not evidence that the practice interfered with the Nation’s ability to speak with one voice . . . .” (citations omitted) (quoting U.S. CONST. art. I, § 8, cl. 3)).

\textsuperscript{240} See Stewart et al., supra note 32 (indicating that the one voice doctrine isn’t often used, but potentially should be in this case); Michael S. Knoll & Ruth Mason, The Dormant Foreign Commerce Clause After Wynne, 39 VA. TAX REV. 357, 388 (2020).


\textsuperscript{242} Id. at 452.

\textsuperscript{243} For our purposes, worldwide combined reporting is crucial because it is a method for calculating state corporate income tax liability that (1) relies on calculations of the worldwide income of a taxpayer and (2) is not the standard method for calculating corporate tax liability at the international level. Despite the fact that worldwide combined reporting did not comport with national or international norms, the Supreme Court upheld it twice. For more on worldwide combined reporting, see Shanske, supra note 110, at 292–94.

\textsuperscript{244} Barclays, 512 U.S. at 320–30; Container Corp. of Am. v. Franchise Tax Bd., 463 U.S. 159, 193–97 (1983).
the two additional Japan Line factors is an open question”\textsuperscript{245} while another has argued that “Barclays Bank effectively eliminated it.”\textsuperscript{246} This is not to say that there is no risk to state DSTs given the plasticity of the “one-voice” prong. Our point is not that there is no risk, just that the risk is not so great that it should deter sound tax policy.

2. Foreign Affairs Preemption

Foreign affairs preemption is another related doctrine that could be argued to threaten Maryland’s tax. There are two possible versions of this doctrine. First, there is field preemption as applied in a case called \textit{Zschernig v. Miller}\textsuperscript{247} that found preemption “even absent any affirmative federal activity in the subject area of the state law, and hence without any showing of conflict.”\textsuperscript{248} The Court has never found another state law preempted under this doctrine,\textsuperscript{249} and \textit{Zschernig}, along with lower court decisions that follow it, applies preemption to state actions made for the purpose of expressing foreign policy preferences rather than “addressing a traditional state responsibility.”\textsuperscript{250} In \textit{Zschernig} itself, for instance, the State of Oregon used its probate laws to express an opinion as to inheritance laws in Communist countries.\textsuperscript{251} Because Maryland’s tax uses traditional tools of tax policy to address a traditional state responsibility—efficient and fair revenue collection—this line of cases does not apply.

That said, there is a second version of the doctrine, where preemption is found where there is an actual conflict with foreign policy as demonstrated by an executive agreement. The Court found preemption in such a case in \textit{Garamendi}. The holding of \textit{Garamendi}

\begin{itemize}
  \item \textsuperscript{245} Knoll & Mason, \textit{supra} note 240, at 390.
  \item \textsuperscript{247} 389 U.S. 429 (1968).
  \item \textsuperscript{248} Am. Ins. Ass’n v. Garamendi, 539 U.S. 396, 418 (2003) (glossing \textit{Zschernig}).
  \item \textsuperscript{250} \textit{Garamendi}, 539 U.S. at 419 n.11.
  \item \textsuperscript{251} \textit{Zschernig}, 389 U.S. at 440; \textit{see also} Von Saher v. Norton Simon Museum of Art at Pasadena, 592 F.3d 954, 965–66 (9th Cir. 2010) (“The District Court held that [the California statute] intrudes on the power to make and resolve war, a power reserved exclusively to the federal government by the Constitution. We agree.”); Shayak Sarkar, \textit{Capital Controls as Migrant Controls}, 109 Calif. L. Rev. 799, 840 (2021) (“[T]he targeting of countries, and underlying intent to send a targeted foreign relations message, weighs in favor of foreign affairs preemption.”).
\end{itemize}
and certain broad statements as to its reasoning\textsuperscript{252} could suggest that an executive agreement with foreign nations to implement the global tax deal (discussed in Section I.C) that explicitly preempts the states could preempt Maryland’s tax.

Now, attaching preemptive effect to an executive agreement raises much the same federalism and separation of powers issues we noted earlier in connection with the one-voice prong of the foreign Dormant Commerce Clause, and thus we think it is not a surprise that the Court itself has understood \textit{Garamendi} as limited to “the making of executive agreements to settle civil claims between American citizens and foreign governments or foreign nationals[,] . . . a particularly longstanding practice.”\textsuperscript{253} The significance of this practice is that it is a practice of giving power to the “national Executive to settle [claims remaining in the aftermath of hostilities] in discharging its responsibility to maintain the Nation’s relationships with other countries.”\textsuperscript{254} Needless to say, there is no similar practice, nor could there be, regarding presidential power over taxation, much less state taxation.

3. Conclusion of Foreign Affairs Doctrines

In the end, just because a common-law doctrine is in desuetude does not mean that it might not make a return. And there are broad statements and older precedents that a court could reach for in giving an executive agreement about the global tax deal preemptive force. Nevertheless, we think the better argument is that these cases and doctrines are in decline for good reason. On separation of powers and federalism grounds, it never made a lot of sense to give (most) actions by the executive alone preemptive force. Thus, we do not think the states should hold back from state-level DSTs on account of concerns with some type of foreign affairs preemption. This is all the more true given that at the time of writing this Article no formal federal action of any kind seems likely and so there will be no federal action to run through the foreign affairs preemption analysis.

\textit{D. Whither Murphy}

We will only address briefly the Supreme Court’s decision in \textit{Murphy v. NCAA}\.\textsuperscript{255} Almost immediately after it was issued, commentators

\begin{itemize}
\item \textsuperscript{252} \textit{Garamendi}, 539 U.S. at 421 (“The exercise of the federal executive authority means that state law must give way where, as here, there is evidence of clear conflict between the policies adopted by the two.”).
\item \textsuperscript{254} \textit{Garamendi}, 539 U.S. at 420.
\item \textsuperscript{255} 138 S. Ct. 1461 (2018).
\end{itemize}
noted that the Supreme Court’s decision in Murphy seemed to imply that much of Congress’s preemption of state law—including state tax laws—was itself unconstitutional.256 Maryland has turned to Murphy in its briefs257 and various leading state and local tax practitioners have vigorously challenged its relevance to the ITFA.258

The Professional and Amateur Sports Protection Act (PASPA) made it “unlawful” for a state to authorize sports betting.259 The Supreme Court concluded that PASPA’s prohibition on state authorization of sports gambling violated the anticommandeering principle.260 The Court stated that the Commerce Clause “confers upon Congress the power to regulate individuals, not States.”261 It further elaborated that the anticommandeering principle prohibits Congress from issuing “direct orders” to state legislatures.262 A congressional prohibition on state-authorized sports gambling “unequivocally dictates what a state legislature may and may not do,” and is thus an unconstitutional “direct order” to a state legislature.263

Though it seems from the passages and reasoning cited above that Murphy would undermine much congressional preemption, including of state taxation, that is generally thought not to be the case.264 Not only did the Court’s decision offer examples of acceptable preemption,265 but all the Justices in Wayfair266—decided five weeks later in the same term—thought Congress could (and should) preempt the states and impose uniform rules as to use tax collection. Somehow, according to Murphy, Congress can regulate individuals but not states. But it is unclear to us—and to many—how to apply this distinction when

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260 Murphy, 138 S. Ct. at 1473, 1475–81.
261 Id. at 1476 (quoting New York v. United States, 505 U.S. 144, 166 (1992)).
262 Id. at 1478.
263 Id.
264 For an example of a commentator asserting the consensus but not working out our particular question, see Edward Hartnett, Distinguishing Permissible Preemption from Unconstitutional Commandeering, 96 NOTRE DAME L. REV. 351, 376 (2020) (“Sure, Congress lacks the power to simply negate a state tax. But it continues to have the power to regulate interstate commerce. And as part of the power to regulate interstate commerce, it can give private parties a right to engage in certain kinds of interstate commerce free from state regulation or taxation.”).
265 Murphy, 138 S. Ct. at 1480.
Congress gives an individual a right not to be regulated by a state, which seems substantively hard to disentangle from an order to a state legislature not to regulate the individual.

Murphy’s opacity—and potential importance—has unsurprisingly spurred a lot of commentary as scholars try to decipher how Murphy should apply going forward. We cannot go through all the possible interpretations, but Murphy certainly cannot somehow increase the federal government’s power to preempt state taxes. Thus, we have focused on why Maryland should win without reliance on Murphy.

As to Murphy, we would highlight the analysis of Dean Vik Amar in particular. Amar argues that Murphy is best read as imposing a clarity requirement on conditional preemption statutes. As Amar points out, Murphy was about a statute New Jersey passed believing that it might not constitute a forbidden authorization of gambling—and it did so in at least partial reliance on an interpretation of the federal statute provided by an argument offered by the federal executive branch in opposing an earlier cert petition. Thus, argues Amar, the real issue with PASPA was that it did not make it clear what a state could or could not do. Note that the ITFA, unlike PASPA, is not a conditional preemption statute, and so arguably Murphy then has no implication at all to our case. But it might, as Amar explains:

Perhaps requiring Congress to express its intent to preempt in unmistakable terms, and also to define the scope of preemption clearly, would make sense for preemption settings more generally. But it would be a rational first step for the Court to take to harmonize conditional spending and conditional preemption by requiring particular clarity in both settings, where the applicability of federal law will depend on legislative choices states are being encouraged—indeed invited—to make.

As already explained, we think there is ample basis in law and logic to conclude that it is already the case that the scope of preemption is to be defined narrowly, and it seems only a small, if fateful, further step for the Court to require clarity lest the statute is found to be unconstitutional altogether. Given the importance of state revenue functions, we think reading Murphy to add a requirement “to define the scope of preemption clearly” is particularly apt. We think that Murphy is therefore most relevant as to those claims against the DST that rely on particularly aggressive interpretations of the notion of “discrimination” or

268 Murphy, 138 S. Ct. at 1472 (“Picking up on the suggestion that a partial repeal would be allowed, the New Jersey Legislature enacted the law now before us.” (citing 2014 N.J. Laws 602)).
“one-voice,” which subtly rely on the presumption against preemption not applying. The more an interpretation is such that it makes it hard for states to know where they stand, the more in danger they will be to reasoning derived from *Murphy*.

IV. RESPONDING TO POLICY OBJECTIONS

Part III has responded to the primary legal attacks against Maryland’s DST. We have put off our responses to the critiques of the prima facie policy arguments for DSTs because it seemed silly to defend a tax that was legally doomed. Since we do not think the tax is doomed, we will conclude in this Part by responding to common policy objections.

It is worth taking a moment to review what it means to think through state-level tax policy issues. States (and local governments) fund most frontline government services, including procyclical ones. Further, as a general rule, states cannot borrow to cover operational shortfalls and, though they have significant taxing powers, those powers are circumscribed in various fundamental ways. For instance, the United States does not have a national value-added tax, so there is no well-designed national consumption tax for states to piggyback on. States are also constrained by tax competition with other states.

It is important to understand these constraints because sometimes commentators write as if states could easily just adopt a more rigorous consumption tax or as if all state spending were frivolous, hardly worth doing if it requires levying an imperfect tax. We think the more standard case is states having to use imperfect taxes to fund highly important services and it is with this perspective that DSTs should be evaluated.

A. Expand Sales Taxes

The typical retail sales tax base is far too narrow if the goal of the tax is to reach all final consumption. As particularly relevant to DSTs, typical retail sales taxes do not reach the sale of digital goods or services. It would thus be appropriate to broaden states sales taxes to reach these transactions, and Maryland in fact did follow this prescription also in order to fund the same educational initiative.

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270 This paragraph drawn from Darien Shanske, *supra* note 100, at 589–92.
271 Id. at 90.
272 Id. at 90–91.
275 See generally id.
276 See id.
But if a state does follow this sensible prescription, then doesn’t that eliminate the need for DSTs? We do not think so. Remember, a DST is aiming to tax untaxed consumption even if sales taxes were broader. A specific example should help. Currently, many states would not tax a download from iTunes because it is a digital product even when the state would tax the same transaction if the consumer were purchasing the tangible equivalent, say a CD. This should change, but even if it did, this change in state law would not impose a tax when a consumer uses a “free” app like Google Maps instead of buying a map. DSTs are thus a further consumption base broadening measure.

It is also worth noting that plugging holes in the consumption tax base is only one of the policy rationales in favor of a tax like DSTs.

B. Difficulties of Taxing Barter Transactions

Another common policy objection to Maryland’s DST is that it is impracticable to tax barter transactions because of their lack of cash flow.277

Although the lack of cash flow makes it more difficult to assign a value to barter transactions, it is reasonable, as we have argued, to assume that the goods and services exchanged in a barter transaction are reflected in the platform’s revenue.278 Further, a gross receipts base has the merit of being relatively administrable.279

Critics of Maryland’s DST further argue that gross revenue is a poor proxy for digital barter transactions because it reflects the fair market value of the bartered-for data and ad space after it has been processed rather than its raw value at the time of the barter transaction, and so overstates the tax base.280 While we acknowledge that using gross receipts as a tax base does not perfectly reflect the value of digital barter transactions, the criticism that it vastly overstates the tax base

278 Cowan et al., supra note 193, at 870; Boris I. Bittker & Lawrence Lokken, FEDERAL TAXATION OF INCOME, ESTATES AND GIFTS ¶ 135.2.5 (2022), Westlaw (database updated July 2022).
280 Cowan et al., supra note 193, at 882; Marian, supra note 30, at 561 (arguing raw data should be the tax base because money is not the best conveyor of information about value, and it is logically incoherent to ascribe monetary value to data).
due to processing is likely an exaggeration. First, conceptually, given that the ads are in large part purchases of bartered consumer data, it is hard to see why the price paid by advertisers is so much greater than the value of the data proffered. But suppose the fair market value of the ads is significantly greater than the consumption base, what then? There could be a harm.281 For instance, in the context of fringe benefits, the tax code will use the value paid by the employer as a proxy for the value of free meals provided on site to employees.282 If this proxy overstates the benefit, then employers might reduce the provision of these meals beyond what would be economically efficient.283 With DSTs, this is a less likely scenario. For one, there is a strong argument that platforms are making supranormal profits on these sales and so they will not reduce them at all if subject to the tax. Further, because there are plausible critiques to be made about this business model, if there were reduction of digitals ads, then that is not necessarily a bad thing.

There is also the question of compared to what? If it is accepted that a state needs revenue and that taxing digital barter transactions is a sensible way to avoid inequity, economic distortion, and capture untaxed revenue, then the question arises as to what would be a better proxy for digital barter transactions? Or is there a different tax base that would cause even less distortion?

One proposed alternative is to impose an excise tax on data transfer between platforms and user-consumers.284 In theory, an excise tax may offer a more accurate account for nexus and tax base if it is imposed on the value associated with collecting and monetizing user data only from the local users in the jurisdiction.285 In reality, however, the

281 There could also be an argument that the increased value of the ads renders using them as a proxy a discrimination under the ITFA as a matter of law. We think, on balance, that a court should find gross receipts a reasonable enough proxy, but if a court did opt to conduct a fact-intensive inquiry, as lower courts did in connection with a similar issue relative to the 4R Act, see supra note 201, then this would still be a victory for state DST even if Maryland loses. Suppose, for instance, a court finds that on average the gross receipts base is 20% too large, then, going forward, states can impose a tax on 80% of the gross receipts base.

282 Interestingly, this is going to be the rule starting in 2026. See I.R.C. § 274(o). For the rationale, see generally Jay A. Soled, Surrogate Taxation and the Second-Best Answer to the In-Kind Benefit Valuation Riddle, 2012 BYU L. Rev. 153.

283 As Roin explains, this could be because the employer benefits from encouraging employees to get together and the employees benefit from the free meals and that achieving these agglomeration benefits through free meals is more efficient than the employer paying for some other “togetherness” mechanism. See Julie Roin, The Case for (and Against) Surrogate Taxation, 39 Va. Tax. Rev. 239, 259-62 (2019).

284 See S. 4959, 204th Leg., Reg. Sess. (N.Y. 2021); Marian, supra note 30, at 567-69; Avi-Yonah et al., supra note 85, at 66-71.

285 See Appleby, supra note 29, at 17.
existing data excise tax proposals have their own limitations relating to
tax base proxy and administrability. For example, a tax proposing the
tax base as volume or gigabytes of data transfer would pose a ques-
tion of whether gigabytes represent monetary value of user data. It
could also be administratively difficult to track down data usage of
every individual user per a platform, which also raises privacy concerns.
To avoid those problems, New York has proposed a data severance tax,
an excise tax on the collection of New York consumer data. The
taxpayer is the commercial data collector collecting data on over one
million New Yorkers per month, but the tax base is measured by the
number of New York residents, imposing five cents per individual per
month. This per capita measurement is also, at best, a reasonable
proxy for digital barter transactions or the volume of data extracted.

Another alternative is to impose a surrogate tax that uses the de-
nial of business deductions “for the cost of providing free services (dig-
ital or otherwise) to users . . . using the advertising-pricing model” as a
tax base. There is a lot to be said for this approach, but note that
arriving at the size of the deduction to be disallowed will not be so
simple, which is why Cowan et al. then come up with four alternative
measures. One of the draws of the DST is its simple gross receipts
structure. Cowan et al. also recognize that there will need to be ap-
portionment at the state level for such a surrogate tax and, further,
that if the tax is limited to digital ads then it will face the same legal
challenges.

In fairness, some of these proposals are in part aiming at different
aspects of the problem (e.g., taxing data extraction) and, furthermore,
these proposals are in part motivated by the judgment that a Maryland-
style DST will not pass legal muster. Our point is that, as a matter of
policy, the relatively simple design of the Maryland DST responds di-
rectly to the untaxed consumption problem and so is a tool not to be
discarded lightly in favor of other more complicated models that do
not address this issue as crisply. And thus, not to be misunderstood,

286 See e.g., Marian, supra note 30, at 561.
288 The tax rate increases to $0.50 per New York resident plus $2.25 million where
commercial data collectors are collecting data from more than ten million New York resi-
dents each month. Id.
289 Cowan et al., supra note 193, at 878 (footnote omitted).
290 Id. at 879–82.
291 For the general administrative simplicity of gross receipts taxes, see CHAMBERLAIN & FLEENOR, supra note 279, at 5–6; Pogue, supra note 279, at 806. Note that the prolifera-
tion of DSTs might provide some additional administrative benefits to taxpayers and states as
well.
292 Cowan et al., supra note 193, at 879.
we think there are merits to these other proposals as an alternative or supplement to a DST.

To summarize, the impracticability of taxing barter transactions only further justifies the use of gross receipts as the tax base for Maryland’s DST. Taxing gross receipts provides administrative simplicity and acts as an adequate proxy for the valuation of digital barter transactions. It also provides ancillary benefits—discussed in Part II and summarized above—while avoiding some of the common pitfalls of inequity and inefficiency associated with gross receipt taxes, as discussed below.

C. Economic Distortion by Tax Pyramiding

Another common policy objection to Maryland’s DST is that it will cause economic distortion through tax pyramiding.293 The DST imposes a tax on the global annual gross revenue of qualifying digital advertising services within the state. Gross receipts taxes have been consistently criticized by scholars for being inequitable and inefficient.294 At the heart of those criticisms lies the concept of tax pyramiding, which occurs when goods or services are taxed at every stage of the production process.295 Consequently, each stage of the supply chain shifts all or part of that tax forward to the next stage, creating multiple levels of taxable transactions with an ever-increasing effective tax rate.296 As a result, industries with an extensive production process are penalized, causing economic distortion by increasing prices, incentivizing vertical integration, and potentially disincentivizing domestic investment.297

The primary driver of the tax pyramiding effect is the size of a firm’s supply chain—the larger the supply chain, the greater the effect. Thus, to address the criticism that Maryland’s DST will cause economic distortion through tax pyramiding, it is first necessary to define what the supply chain looks like for digital advertising services. At its simplest, the supply chain for digital advertising services is a relationship

293 See Crosby et al., supra note 155; Richard D. Pomp, State Tax Rsch. Inst., Resisting the Siren Song of Gross Receipts Taxes: From the Middle Ages to Maryland’s Tax on Digital Advertising 74 (2022) (“As an economist, Professor Romer should have known, as this Monograph makes clear, that a sales tax should not be imposed on business inputs, such as advertising.”).
295 See Chamberlain & Fleenor, supra note 279, at 6; Ross, supra note 294, at 2, 6–8.
296 Chamberlain & Fleenor, supra note 279, at 6–7
297 See id. at 6, 8–10; Pogue, supra note 279, at 803–05.
between user-advertisers who pay publishers (or platforms) to display their ads to user-consumers. 298 This entire process takes only a fraction of a second and involves four key services, known as the “ad tech stack.” 299 Starting on the supply side, publishers (Google) use Publisher Ad Servers to manage the available space for ads on their website or app, and Supply Side Platforms (SSPs) utilize this information to auction off those spaces. 300 On the demand side, advertisers like J. Crew use Advertiser Ad Servers to store their ads, and Demand Side Platforms (DSPs) use this information to purchase available spaces from SSPs. 301 Once the matching between available space and ads is complete, the publisher (Google) displays the ad to the user-consumer.

Maryland’s DST mitigates the issue of economic distortion through tax pyramiding because it only collects tax revenue from the final stage of the digital advertising production process. The issue that tax pyramiding creates multiple levels of taxation that compound into a higher effective tax rate only occurs when the entire supply chain is subject to the same gross receipts tax. In contrast, Maryland’s DST is not imposed on the user-advertisers, user-consumers, or any of the four key services involved in the digital advertising supply chain. Further, as a narrow gross receipts tax, the DST is also not imposed on all of the other goods (e.g., computers) and services (e.g., IT support) that went into allowing these various firms to operate. Instead, it is levied only on the gross revenues of qualifying publishers, in this case, Google, at the very end of a supply chain.

To be sure, digital ads are a business input and so there would be some pyramiding if the costs are shifted back to the advertising businesses. 302 But our point is that as a tax only on one later stage of production, it should not cause great pyramiding and it is unfair to compare its economic effects to broad-based turnover taxes. 303

299 See HOPPNER et. al., supra note 298, at 2–3.
300 See id.
301 See id. at 2.
302 We discuss the uncertain incidence of the tax in the next Section.
303 Cf. POMP, supra note 293, at 74–54 (broadly critiquing Maryland’s tax, including for pyramiding).
D. Regressive Tax Incidence

Maryland’s DST is also criticized as regressive because DSTs are at least in part a consumption tax, and thus consumers rather than digital advertising platforms or other businesses could bear the tax incidence.\textsuperscript{304} However, there are reasons to be unsure about the ultimate incidence of DSTs. Even if DSTs turn out to be somewhat regressive, it is crucial to consider the overall use of the tax proceeds as part of a system of public finance.\textsuperscript{305}

A tax is considered regressive if the proportion of income that is paid in taxes decreases as income increases. Related to the issue of tax pyramiding, taxes on gross receipts are generally viewed as regressive because the end of the supply chain shifts all or part of the compounded cost of the tax onto the consumer, resulting in relatively lower-income consumers paying a more significant proportion of their income as compared to the digital advertising platforms.\textsuperscript{306} However, divergent market responses to European DSTs suggest that it is unclear whether the burden of Maryland’s DST will pass on to consumers or remain with the digital advertising platforms.\textsuperscript{307}

After France and the United Kingdom adopted a DST that is similar to Maryland’s, Amazon and Google announced their decision to pass the cost on to the consumer, while Facebook and eBay announced their decision to internalize the cost.\textsuperscript{308} To understand such differing responses, it is first necessary to understand the unique features of digital advertising platforms as well as the nature and underlying economic theory of the digital advertising market.

As discussed in Section I.A, digital platforms act as an intermediary between two subtypes of consumers: user-advertisers and user-consumers.\textsuperscript{309} Often, digital platforms will provide a service to user-consumers for low or no cost and make up for their loss in profit by

\begin{itemize}
\item \textsuperscript{304} Kim, supra note 1, at 176.
\item \textsuperscript{305} Note there is a slight tension between the pyramiding critique and the regressivity critique because if the DST is just pushed forward to user-consumers then there is little pyramiding. That said, if the DST is pushed back to advertisers and the advertisers then push the tax forward to consumers, there could be both pyramiding and regressive incidence.
\item \textsuperscript{306} See WATSON, supra note 80, at 13 (indicating price increases resulting from gross receipts taxes are regressive).
\item \textsuperscript{308} See id.
\item \textsuperscript{309} See Kim, supra note 1, at 176–78.
\end{itemize}
charging user-advertisers. Facebook and Google are good examples of this because they provide a free service to their user-consumers, but charge user-advertisers to post an ad on their site. Digital platforms have two distinct features which play a big role in determining market share. First, they benefit from the network effect, which occurs when the value of a platform increases as more people join, essentially creating a positive feedback loop. Second, they benefit from zero or negligible marginal costs, allowing them to increase output with little to no additional labor. The combination of these features creates a market where companies who enter the market early and find success continue to find success at an exponential rate, while competitors find it harder and harder to enter the market. As a result, dominant digital platforms such as Google, Facebook, and Amazon are often characterized as enjoying monopolistic positions. Nevertheless, while these companies might be monopolies in one side of the platform services, such as search engine services, social network, and online marketplace, they operate as an oligopoly in the other side of the platform services, which is the digital advertising market. The proportional market share in the digital advertising market further supports the conclusion of an oligopoly. Google, Facebook, Amazon, Alibaba, and other companies all compete to provide space for targeted ads, with Google and Facebook holding the largest share of the market while companies like Amazon and Alibaba are slowly gaining more and more traction.

Economic theory does not provide a simple prediction as to tax incidence; it depends on the relative elasticity on different sides of the market, market power as well as the long run versus the short run. To be more concrete, there is a general assumption/intuition that monopolists can just pass tax increases forward. This suggests that the large firms we are talking about, with market power, can pass on the tax. However, “textbook” economic theory indicates that monopolists

310 Cui, supra note 13, at 85.
311 Kim, supra note 1, at 142.
312 See Cui, supra note 13, at 103.
313 See Guggenberger, supra note 62, at 284–86.
314 See id. (indicating barriers created by extreme network effects that make it more difficult for new competitors to join the market); Kim, supra note 1, at 178; Hovenkamp, supra note 56, at 1962 (indicating network effects give large firms advantage over smaller firms).
316 See, e.g., LOWRY, supra note 76, at 15–17.
cannot pass on the tax because a monopolist is already charging the profit maximizing price.318 In the real world, a monopolist might not be charging this price and so might be able to increase the price—or not—depending on the monopolist’s perception of consumer behavior, and consumers might anchor on prices well below the theoretical profit maximizing price.319 On top of this complexity, standard theory predicts that taxes will be passed on in competitive markets;320 this is because the various competing firms are already operating at the margin and need to pass on the tax or exit the market. The presence of competition between the big digital platforms for digital ads could thus have (at least) two results. If the market is perfectly competitive, then all the firms should pass on their price. If the competition is imperfect because the firms have market power, then firms can absorb the cost of the tax and stay in business and thus may choose to do so for competitive reasons.

We are not economists and are not making any predictions except that the impact of a gross receipts tax on price and output in the digital advertising market is hard to predict.321 We note that investors apparently did not think that these firms would be able to completely pass off DSTs,322 and we note as well that the different public reactions to European DSTs from major platforms would seem to reflect this complexity. Google and Amazon (apparently) passed on the DST cost—perhaps because of their perception of consumer demand or perhaps to take a political stand to prevent other countries from implementing similar policies—and this perhaps created an opportunity for Facebook and eBay to increase their market share in the digital advertising market and so they absorbed the cost. Whatever the explanation, the

318 See id. at 174 (“Textbook theory suggests that monopoly firms typically bear a large share of the burden of an increase in sales taxes . . . .” (citing GARETH D. MYLES, PUBLIC ECONOMICS 358–63 (1995))). Agrawal and Fox apply this insight to DSTs. Agrawal & Fox, supra note 114, at 294 (“A tax on intermediate purchases of advertising only distorts choices between advertising on social media and other intermediate inputs and only cascades if it is forward shifted to buyers. The tax borne by social media firms may not create similar distortions. The tax likely is not forward shifted to purchasers if social media companies are maximizing marginal revenue minus zero marginal cost. Social media firms would not generate more profits by shifting advertising prices if a percent of pure profits is extracted.”).

319 See Konrad et al., at 196–97.

320 See id. at 174.

321 See LOWRY, supra note 76, at 18 (“The exact equity effects of DSTs could vary based on different abilities for intermediate firms to pass the tax along to consumers, the nature of the goods and services that they sell, and the responsiveness of consumers in those relative markets.”).

322 See Klein et al. supra note 163, at 86 (“[O]ur evidence implies that investors expect that firms will not be able to pass through all of the additional tax expenses to labor or customers . . . .”).
market’s short-term reaction to European DSTs predicts that some digital advertising platforms will internalize the cost of Maryland’s DST, while the remaining choose to pass it along to consumers. To further complicate matters, digital platforms that choose to pass the cost along to their consumers will likely shift it onto user-advertisers rather than user-consumers.\footnote{323}{See Cui, supra note 13, at 106.} Doing otherwise would reduce user-consumers’ usage of the platform, reducing user-advertiser participation and decreasing their profit.\footnote{324}{Id.} Whether and how much digital advertisers pass on the tax to consumers requires an analysis of the markets they operate in, etc.

In the end, Maryland’s DST will likely have some regressive impact because some amount of its cost will be passed on to a broad group of consumers, with the exact extent uncertain and likely different for different customers and at different times.

We agree that regressivity is not a net positive in a tax, but don’t think it should be dispositive here—leaving aside its uncertain nature. First, whereas the incidence of the tax is likely somewhat regressive, the spending of the revenue raised by the tax trends progressive. That is, the estimated $250 million in additional revenue from Maryland’s DST will be devoted to funding education programs that skew towards helping the less fortunate.\footnote{325}{See supra note 95 and accompanying text.}

Second, the mixed incidence of Maryland’s DST reflects two of the reasonable policy goals of the tax we discussed in Part II, goals reflected in some of the deliberations about the tax.

First, DSTs aims to capture previously untaxed consumption generated from the Maryland market and consumers. Since DSTs are trying to tax previously untaxed consumption, it stands to reason that consumers will pay some portion of a DST. Second, DSTs are designed to tax capture some of the supranormal profits of the most dominant digital advertising platforms in the market. As demonstrated by the market reaction to European DSTs, some companies will likely choose to pay the tax, which means the DSTs have succeeded in clawing back some of these elusive profits.\footnote{326}{See Kim, supra note 1, at 133–35, 177; Appleby, supra note 29, at 6–7.}

Thus, because the DST’s complicated incidence, including some regressivity, can be traced to its underlying and reasonable policy goals, its regressivity should not be considered disqualifying. This is especially the case since the revenues raised by the tax are to be spent progressively.
E. Use Corporate Income Taxes

In principle, a state corporate income tax should reach the profits, including the supranormal profits, of the big digital platforms. Crucially, states are not bound by a physical presence rule as to taxing the profits of out of state businesses: substantial economic presence in the state will do.\textsuperscript{327} Thus, the argument goes,\textsuperscript{328} the DST is unnecessary. Even if this claim were true in practice as to state corporate taxes, it would still be unpersuasive because of the numerous other reasons a state might opt for a DST.

However, as it is, there are numerous problems with this claim about state corporate income taxes in practice. First, the state corporate income tax is not so good at taxing corporate income, especially of large multinational companies that have a lot of valuable intellectual property.\textsuperscript{329} And, without being too snarky about this, the failure of state corporate income taxes to do their job is in part a result of lobbying by the same groups who argue that DSTs are unnecessary because of state corporate income taxes.\textsuperscript{330} And, in fact, we do think there is a strong case that a state should first shift to worldwide combined reporting and generally improve their corporate income taxes before moving to a DST.\textsuperscript{331}

But, as we have explained in subsection III.C.1, even with worldwide combined reporting, the state corporate income tax is not a perfect tool for reaching the lost consumption tax base. A nondigital retailer collects the sales tax and then also pays corporate income tax on its profits.\textsuperscript{332} Adopting worldwide combined reporting helps with the corporate income tax issue, but not the sales tax issue. There are other reasons that worldwide combined reporting and DSTs are not perfect substitutes. Some companies make profits from two-sided market transactions and other lines of business, for example. We can also

\textsuperscript{327} See Frieden & Do, \textit{supra} note 175, at 591–94.
\textsuperscript{328} See id. at 595.
\textsuperscript{329} See Power & Frerick, \textit{supra} note 13, at 835–37; Shanske, \textit{supra} note 110, at 262.
\textsuperscript{331} See Mazur & Thimmesch, \textit{supra} note 116, at 961.
\textsuperscript{332} There is also evidence that aggressive taxpayers increase their tax planning activities to one tax base when another has become more difficult to evade. Lisa De Simone & Marcel Olbert, \textit{How Do Multinational Companies Respond to Destination-Based Taxes?} (Sept. 27, 2022) (unpublished manuscript), https://ssrn.com/abstract=4125715 (demonstrating that taxpayers shifted tax planning from the VAT to the CIT in response to the VAT becoming harder to avoid).

There is thus a sound reason to buttress the corporate income tax because the consumption tax base would be strengthened.
envision, as discussed in Section II.D, that different apportionment rules might be appropriate for corporate taxes versus DSTs. Finally, even a well-designed corporate income tax will take a fixed percentage of the profits of all corporations. Governments can and do—reasonably—impose higher taxes (e.g., severance taxes) on what Cui and Hashimzade call “rent-rich sectors of their economies.” Thus, as a tax on rents, there is a strong argument for having a DST in addition to a robust corporate income tax.

CONCLUSION

The rise of the digital economy and the corresponding tax challenges require new solutions. In response to the specific obstacle of untaxed consumption in the digital platform economy, policy makers in Maryland and abroad have found a reasonable solution in the form of a DST.

Although Maryland’s DST is under legal attack, we believe that the legal arguments weigh in favor of upholding the tax. Based on the plain language of the ITFA and current caselaw, Maryland’s DST should not be struck down as discriminatory because digital advertising is substantially and relevantly different. Furthermore, using a company’s worldwide gross receipts as a basis on which to tax different firms at different rates does not violate the Dormant Commerce Clause because network size is a reasonable proxy for the value of the bartered consumption or rents.

We cannot guarantee the ultimate disposition of the lawsuits challenging Maryland’s tax, but we demonstrate that the case is much harder than the opponents of Maryland’s tax believe. Not only do we think it quite possible that Maryland will win outright, but that even a narrow fact-intensive loss could illustrate how a somewhat different version of the DST can pass muster.

We also believe that policy objections to DSTs are overblown. Critics suggest that trying to tax digital barter transactions is impracticable. However, the DSTs use gross receipts as a reasonable proxy for digital barter transactions, and thus take advantage of the relative ease of administering gross receipts taxes. Critics argue that gross receipts are inequitable and inefficient because of tax pyramiding and regressive tax incidence. Yet the narrowness of this tax and the shorter supply chain to which it applies dampens the pyramiding critique. Further, though DSTs are likely somewhat regressive, the strongly progressive use of the revenues mitigates that concern as well. Certainly, as to

inefficiency or unfairness, it is hardly clear that most other state tax instruments are clearly superior.

Therefore, a better approach to taxing digital platforms is not to dismiss DSTs as a potential solution, but rather to pursue and improve them, and we grant that the Maryland model can be improved upon. A concrete blueprint for improving DSTs is beyond the scope of this Article, but possible next steps include exploring other types of platforms, such as online marketplaces (e.g., Amazon, Uber, Airbnb) and content providers (e.g., Netflix, Spotify), and studying the applicability of DSTs to those platforms.

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335 European DSTs do not apply to content providers. See Kim, supra note 1, at 181–84 (noting that there are not significant differences between in-scope platforms and content providers). However, given that content providers are considered digital platforms, it is worth considering expanding DSTs to online. See Matt Thompson, Denmark Plans 5% Tax on Foreign Streaming Services, LAW360 TAX AUTH. (Feb. 7, 2022, 3:31 PM), https://www.law360.com/tax-authority/articles/1462572/denmark-plans-5-tax-on-foreign-streaming-services/ [https://perma.cc/86XP-DR3Z]. In the United States, Chicago has introduced the so-called “Netflix Tax” since 2015, followed by more than twenty states, by expanding sales tax base into services. See Greg Iacucci, The Netflix and Spotify Tax: States Are Making Streaming Services More Expensive, CNBC (Feb. 24, 2020, 8:00 AM), https://www.cnbc.com/2020/02/24/states-are-imposing-a-netflix-and-spotify-tax-to-raise-money.html [https://perma.cc/WJG3-B8AB].
APPENDIX

TABLE 1: NOTABLE STATE DIGITAL TAX PROPOSALS

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<tbody>
<tr>
<td>Arkansas (S.B. 558)(^{336})</td>
<td>7%</td>
<td>Annual gross revenue from social media advertising services in state</td>
<td>$500,000 of annual gross revenue in state; 500,000 account holders in state</td>
<td>Sales tax; social media providers only (failed on 10/15/2021)</td>
</tr>
<tr>
<td>Connecticut (H.B. 6187)(^{337})</td>
<td>10%</td>
<td>Annual gross revenue from digital advertising services in the state</td>
<td>$10 billion in annual worldwide gross revenues</td>
<td>Digital Advertising Tax; large multinationals only</td>
</tr>
<tr>
<td>Connecticut (H.B. 5645)(^{338})</td>
<td>Not decided</td>
<td>Annual gross revenue from social media advertising in state</td>
<td>Same as above</td>
<td>Sales tax; social media providers only</td>
</tr>
</tbody>
</table>

\(^{336}\) S. 558, 93d Gen. Assemb., Reg. Sess. (Ark. 2021). This bill failed to pass and there are no current plans by the Arkansas legislature to revisit it. See SB558—to Authorize Utilities to Recover the Cost of Restoration of Damages and Extraordinary Natural Gas, Fuel, or Purchased Power Costs Caused by Storms Through Securitization; and to Declare an Emergency, ARK. STATE LEGISLATURE https://www.arkleg.state.ar.us/Bills/Detail?id=SB558&ddBienniumSession=2021%2F2021R# [https://perma.cc/AX24-WSEB].


<table>
<thead>
<tr>
<th>State</th>
<th>Table 1 (Cont.)</th>
<th>More than 1,000,000 active Indiana account holders and has annual gross revenue derived from social media advertising services in Indiana of at least $1,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indiana</strong></td>
<td><strong>(H.B. 1312)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7%; plus the total number of the social media provider’s active Indiana account holders in a calendar year multiplied by $1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Annual gross revenue from social media advertising in state</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sales tax; social media providers only</td>
</tr>
<tr>
<td><strong>Montana</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>(H.B. 363)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Annual gross revenues derived from digital advertising services in state</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Digital Advertising Tax (failed on 4/29/2021)</td>
</tr>
<tr>
<td><strong>West Virginia</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>(S. 605)</strong></td>
<td>2.5% to 10%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Annual gross revenues derived from digital advertising services in the state</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Digital Advertising Tax</td>
</tr>
</tbody>
</table>

339 Indiana proposed a digital services tax targeted at social media advertisers. This tax has unique attributes taxing social media advertisers at 7% plus $1 for every active social media user on the providers platform. H.R. 1312, 122d Gen. Assemb., 1st Reg. Sess. (Ind. 2021); see also Indiana House Bill 1312 (Prior Session Legislation), LEGISCAN, https://legiscan.com/IN/bill/HB1312/2021/ [https://perma.cc/4T73-8YQL].


<table>
<thead>
<tr>
<th>State</th>
<th>Tax Rates</th>
<th>Definition of Advertising Services</th>
<th>Annual Gross Revenues Derived From Digital Advertising Services</th>
<th>Annual Gross Revenues From Digital Advertising Services in State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massachusetts (H. 3081)</td>
<td>5% to 15%</td>
<td>Defines “advertising services” within the state as those viewed by a user with an Internet Protocol address associated with Massachusetts, or who is known or reasonably presumed to be using the device in the state</td>
<td>$100,000 in annual gross revenues from digital advertising services in state</td>
<td></td>
</tr>
<tr>
<td>Massachusetts (H. 2894 and H. 3081)</td>
<td>5%</td>
<td>Same as above</td>
<td>Same as above</td>
<td></td>
</tr>
<tr>
<td></td>
<td>proposed a 5% excise tax</td>
<td>This would be a specific tax for local revenues from digital advertising</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State</th>
<th>Tax Name</th>
<th>Rates/Conditions</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>Digital Advertising Tax</td>
<td>2.5% to 10% $100 million of annual gross revenue</td>
<td>Defines “digital advertising services” as advertisements on a digital interface that uses personal information about the individuals to whom the ad is directed.</td>
</tr>
<tr>
<td></td>
<td>(S. 1124)</td>
<td>[-]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Data Mining Tax</td>
<td>$0.05 per individual per month; increasing depending on the number of New York consumers over 1 million New Yorkers in a month</td>
<td>“Digital advertising services” means advertisement services on a digital interface. The term includes advertisements in the form of banner advertising, search engine advertising, interstitial advertising, and other comparable advertising services.</td>
</tr>
<tr>
<td></td>
<td>(S.4959)</td>
<td>[-]</td>
<td></td>
</tr>
<tr>
<td>Texas</td>
<td>(H.B. 4467)</td>
<td>2.5%-10% depending on revenue $1 million and gross revenue for the reporting period is at least $100 million</td>
<td>“Digital advertising services” means advertisement services on a digital interface. The term includes advertisements in the form of banner advertising, search engine advertising, interstitial advertising, and other comparable advertising services.</td>
</tr>
</tbody>
</table>

---

### Table 1 (Cont.)

<table>
<thead>
<tr>
<th>Washington (H.B. 1303)</th>
<th>1.8%</th>
<th>Annual gross income of the business</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Imposed upon &quot;every person engaging within this state in the business of making sales of personal data or exchanging personal data for consideration; as to such persons, the amount of tax with respect to such business is equal to the gross income of the business multiplied by the rate of 1.8 percent.&quot;</td>
</tr>
</tbody>
</table>

“Personal data” means any information that is linked reasonably to “an identified or identifiable natural person.”

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