The Digital Services Tax on the Verge of Implementation

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PRÉCIS
La France a adopté la taxe sur les services numériques (TSN) en 2019, et le Royaume-Uni, l’Espagne, l’Italie et d’autres pays sont en voie de promulguer des législations pour l’adoption de taxes semblables. La TSN peut être vue comme une taxe sur les loyers basée sur le lieu (LBL), et résulte sans doute des problèmes vraiment nouveaux en matière de fiscalité internationale. L’auteur passe brièvement en revue cette justification de la TSN et examine plus en détail la TSN à la lumière de trois critiques. La première critique est que certaines caractéristiques de la TSN la rendent semblable aux droits douaniers sur les importations créant une distorsion. La deuxième est que la TSN ne serait pas payée par les plateformes numériques, mais serait simplement transférée aux utilisateurs des plateformes. La troisième est que les gouvernements qui font la promotion de la TSN ne semblent pas la caractériser comme une taxe sur les LBL; ils ont plutôt préconisé une réforme de l’impôt sur le revenu. L’auteur propose des moyens de rationaliser les caractéristiques de la TSN qui l’apparentent à un droit douanier, réfute les arguments superficiels sur l’effet de la TSN, et offre un cadre pour comprendre pourquoi les petites économies pourraient plaider simultanément en faveur de la TSN et d’une réforme de l’imposition du revenu à l’échelle internationale.

ABSTRACT
France enacted the digital services tax (DST) in 2019, and similar legislation is pending in the United Kingdom, Spain, Italy, and other countries. The DST can be viewed as a tax on location-specific rent (LSR), and it arguably solves genuinely new problems in international taxation. The author briefly reviews this justification of the DST and further examines the DST design in light of three criticisms. The first criticism is that certain features of the DST render it similar to distortionary import tariffs. The second is that the DST would not be borne by digital platforms but would only be shifted to platform users. The third is that governments promoting the DST seem not to characterize it as a tax on LSR but, instead, have advocated reforming the income tax. The author suggests ways of rationalizing the DST’s tariff-like features, refutes casual arguments about the DST’s incidence, and offers a framework for understanding why small economies might advocate simultaneously for the DST and for the reformation of international income taxation.

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INTRODUCTION

In March 2018, the European Council and the UK government each proposed to introduce a digital services tax (DST), to be levied on the revenue that large digital platform companies earn from advertising, online intermediation, or the transmission of data. To justify their respective proposals, these governments argued that the international income tax regime currently applicable to multinational companies results in the undertaxation of such companies, and that the regime must be reformed soon in order to allocate greater taxing rights to jurisdictions where digital platform users create value. They proceeded to present the DST as a short-term remedy for the undertaxation of digital platforms, pending a new consensus on multilateral tax reform within the Organisation for Economic Co-operation and Development (OECD).

DST proposals may represent the most intriguing global development in tax policy in recent years. Most academic and policy commentators have been surprised by how quickly these proposals have followed—and now threaten to overtake—the OECD’s base erosion and profit shifting (BEPS) project, which national governments only recently began to implement. Even the basic idea of a DST, let alone a detailed idea of its design, was unheard of before late 2017, and yet the governments of numerous countries have already seized upon the idea and demonstrated substantial resolve regarding its implementation. In July 2019, France formally enacted DST legislation, with DST liabilities applicable retroactively to the beginning of 2019. In the same month, the UK government, contemplating a UK DST, released detailed

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1 United Kingdom, HM Treasury, Corporate Tax and the Digital Economy: Position Paper Update (London, UK: HM Treasury, March 2018) (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/689240/corporate_tax_and_the_digital_economy_update_web.pdf); European Commission, Taxation and Customs Union, Proposal for a Council Directive on the Common System of a Digital Services Tax on Revenues Resulting from the Provision of Certain Digital Services, COM/2018/0148 final, March 21, 2018.

2 France, République française, “Loi no 2019-759 du 24 juillet 2019 portant création d’une taxe sur les services numériques et modification de la trajectoire de baisse de l’impôt sur les sociétés,” Legifrance.gouv.fr, 24 juillet 2019 (www.legifrance.gouv.fr/affichLoiPreparation.do?idDocument=JORFDOLE000038203221&type=general&typeLoi=proj&legislature=15).
proposed legislative language, draft administrative guidance, and further policy explanations. Although the near-term future of UK policymaking is highly uncertain under Boris Johnson’s government, the DST legislation is scheduled to be included in the fall 2019 budget, which would result in the tax’s taking effect in April 2020. Spain, Austria, and the Czech Republic have also introduced DST legislation. It is widely anticipated that more countries may do the same.

Among the many fascinating features of the DST is that, prior to its delineation by various governments, it had no intellectual proponent. The DST had not been anticipated in the academic literature, and the idea of it seems to have been plucked out of thin air by bureaucrats and politicians. Partly for this reason, much of the initial commentary on the DST treated it as a policy proposal with no intellectual substance, and as motivated purely by protectionism, populism, or political opportunism. Only since 2018 have scholars begun to seriously analyze this novel policy instrument. Elsewhere, I have offered a rationalization of the DST as a tax on location-specific rent (LSR). That is, many countries already levy royalties, rent taxes, and the corporate income tax on natural resource extraction; one can think of the DST as a tax on economic rents earned by digital platform companies from particular locations. Taxes on LSR possess two highly desirable features. First, they generate tax revenue with minimal distortions to business decisions. Second, rent that can be attributed to specific locations permits a natural allocation of taxing rights: the jurisdictions in which the rent is located can reasonably claim primary taxing rights, and this in turn implies natural solutions to coordination problems in mitigating the risk of excessive taxation. Once platform rent is seen as location-specific, familiar tax policy frameworks become available for analyzing the DST. For example, the choice between a revenue-based tax and a tax defined over a rent base is familiar in the context of taxing natural resources. Revenue-based royalties on

3 United Kingdom, HM Revenue and Customs, “Introduction of the New Digital Services Tax, Draft Legislation,” July 11, 2019 (www.gov.uk/government/publications/introduction-of-the-new-digital-services-tax); United Kingdom, HM Revenue and Customs, Digital Services Tax Draft Guidance (London, UK: HM Revenue and Customs, July 11, 2019) (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/817666/20190711_-_Draft_Guidance_vfinal.pdf); and United Kingdom, HM Treasury, Digital Service Tax: Response to the Consultation (London, UK: HM Treasury, July 2019) (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/816389/DST_response_document_web.pdf).

4 For recent scholarship sympathetic to the DST, see Wolfram Richter, “The Economics of the Digital Services Tax,” July 2019 (www.wiwi.tu-dortmund.de/wiwi/de/forschung/gebiete/fp-richter/workinprogress/FPR-WORI-WIP-TheEconomicsoftheDigitalServicesTax.pdf); Daniel Shaviro, “Digital Service Taxes and the Broader Shift from Determining the Source of Income to Taxing Location-Specific Rents,” September 2019 (https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3448070).

5 Wei Cui, “The Digital Services Tax: A Conceptual Defense,” Tax Law Review (forthcoming); and Wei Cui, “The Superiority of the Digital Services Tax over ‘Significant Digital Presence’ Proposals,” National Tax Journal (forthcoming).
resource extraction are frequently adopted alongside rent taxes and income tax, and the DST can straightforwardly be analogized to resource royalties.\(^6\)

As the implementation of real-world DSTs begins, however, it is important to comment on certain discrepancies between the rationalization of the DST as a tax on LSR on the one hand, and actual DST design on the other. Such discrepancies fall into at least three categories. First, critics of the DST, while they have emphasized features of the tax that resemble import tariffs or that amount to a distortionary tax on business-to-business ("B2B") transactions, have downplayed significant applications of the DST from which these features are absent. The presentation of the DST as a tax on LSR, by contrast, has stressed these other applications. Just as it is wrong for DST critics to continue to ignore the rent-tax features of DSTs, it is arguably wrong for DST proponents to omit discussion of the tariff-like features of the DST or its potential distortions of B2B transactions. Alternative or additional justifications for the DST must be considered.

Second, the characterization of the DST as a tax on LSR provides a framework for analyzing the DST’s economic incidence. Others have predicted different incidence effects, even claiming that such predictions have been confirmed by real-world observations. It is illuminating to compare the predicted incidence effects of a tax on LSR with these actual observed price changes that seem to have followed the DST’s adoption. For example, Amazon recently announced that it would charge merchants in France a higher commission that corresponded to the DST rate.\(^7\)

Third, and finally, it must be acknowledged that the national governments that are enacting the DST have refrained from promoting it as a tax on LSR. Instead, they continue to justify the DST as an interim measure, pending the satisfactory reform of international income taxation. It is rather unlikely, however, that the corporate income tax can be converted into a tax on LSR. Indeed, the traditional expectation has been that taxes on economic rent will be imposed independently of the income tax: the two are far from being interchangeable. It is thus important to reflect on whether the conception of the DST as a tax on LSR may ultimately gain some political, as distinct from merely intellectual, purchase.

In this paper, I tackle these issues in order. In the first section, I briefly review the analysis of the DST as a tax on LSR, emphasizing central examples of the DST’s application in which it neither is tariff-like nor bears on B2B transactions. In the second section, I discuss applications of the DST in which it has a tariff-like effect or distorts B2B transactions, and I describe justifications for the DST that may be offered in spite of these effects. In the third section, I consider the perceived conflict

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\(^6\) This is elaborated in Wei Cui and Nigar Hashimzade, *The Digital Services Tax as a Tax on Location-Specific Rent*, CESifo Working Paper no. 7737 (Munich: Munich Society for the Promotion of Economic Research, 2019) (www.cesifo.org/DocDL/cesifo1_wp7737.pdf).

\(^7\) “Amazon Says French Clients To Bear Cost of France’s New Digital Tax,” *Courthouse News Service.com*, August 1, 2019 (www.courthousenews.com/amazon-says-french-clients-to-bear-cost-of-frances-new-digital-tax).
between the characterization of the DST as a tax on rent and the observation that the DST apparently leads to price changes. In the fourth and final section, I discuss the reasons for expecting the focus in the discourse on international tax reform to gradually move from income taxation to the taxation of LSR.

**THE DST AS A TAX ON LOCATION-SPECIFIC PLATFORM RENT**

Governments proposing the DST in 2018 appealed to a notion of “user value creation” that many critics have objected to as merely metaphorical and indeterminate in meaning. However, it is possible to give the phrase “user value creation” a precise interpretation: it is a matter of identifying specific locational origins of producer or consumer surplus.

Consider a hypothetical company, “Googl,” that has developed a technology (“Search Algorithm”) and thereby incurred large fixed costs and ongoing research and development (R & D) expenses. Googl designs a Web interface in country X’s language, mainly for individual users in country X; Googl has developed interfaces in many other languages for other countries. The interface requires an upfront investment and maintenance spending. Googl operates servers in a low-tax jurisdiction (country Z) in order to support Search Algorithm and multiple interfaces, consuming much of country Z’s electricity supply. Despite these very large non-marginal costs, Googl’s marginal cost from its main revenue-generating business—that is, the targeted placement of advertisements based on user searches—is almost zero. The prices that Googl is able to charge purchasers of advertising are well above marginal cost because of the market power that Googl possesses.

Consider, specifically, one line of Googl’s business: ad placement on the country X interface, targeted at users in country X. Among the purchasers of advertising space on Googl are not only country X businesses but also producers and sellers of goods and services from other countries, including country Y. Because of (nearly) zero marginal cost, the revenue that Googl earns during a given period from ads targeted at country X consumers and paid by country Y producers (this revenue is \( R_{XY} \)) is roughly its gross profit from this business. Suppose that after the allocation and deduction of the non-marginal costs (for example, electricity and server depreciation) incurred by Googl in country Z against this profit during the same period, net profit \( \pi_{XY} \) remains. (The computation of \( \pi_{XY} \) does not yet take into account Googl’s other fixed expenditures—for example, R & D.)

It seems plausible to attribute \( \pi_{XY} \) to country X, if the following two conditions are met:

1. The production functions and supply curves of producers in country Y (that is, the purchasers of ad space) do not change because of Search Algorithm or Googl’s country X interface.
2. Googl’s earning of the profit \( \pi_{XY} \) does not interfere with its deployment of Search Algorithm in other countries.
The logic of such profit attribution runs as follows. First, the satisfaction of condition 1 allows the following argument: $R_{XY}$ is extracted from additional producer surplus that producers in country $Y$ expect to earn by making sales to consumers in country $X$. But if such expected surplus arises even if production functions have not changed, it must come from an expected shift in the demand curve of the consumers in country $X$, caused by the ads placed on Googl. Nothing, however, has happened in country $Y$ to generate the possibility of the interaction between Googl and country $Y$ sellers. Second, the satisfaction of condition 2 leads to the argument that since the deployment of Search Algorithm in country $X$ has no opportunity costs, one can view the entire profit ($\pi_{XY}$) as earned from country $X$. This is the case even if the infrastructural support for the platform is located in country $Z$. The reason is that while this infrastructure is entirely mobile, $\pi_{XY}$ is immobile because it can be earned only in connection with country $X$.

Therefore, if conditions 1 and 2 both obtain, Googl’s profit, earned from country $Y$ producers, can be said to have an origin in country $X$—the origin being country $X$ consumers’ engagement with the Googl platform. It is important to note that, although advertisers and individuals doing online searches are all “users” of Googl, condition 1 articulates a situation where one can say that “user value creation” arises in one of the two user jurisdictions, but not the other. In particular, the significant value creation in this case occurs in the consumer jurisdiction. Moreover, the amount of value created can be measured (rather than being indeterminate). Before costs are taken into account, this amount is at least $R_{XY}$, since this is the least amount that producer surplus in country $Y$ is expected to increase as a result of country $X$’s users’ interactions with Googl (it is at least $\pi_{XY}$ after taking into account Googl’s fixed costs).

How can country $X$ capture a portion of Googl’s profit that reflects “value creation” in the sense just identified? One possibility is for country $X$ to impose a low-rate tax on $R_{XY}$, which would be equivalent to a higher-rate tax on $\pi_{XY}$. Since $R_{XY}$ is earned by Googl in the form of payments from country $Y$, country $X$ cannot impose such a tax by levying an import tariff or a traditional withholding tax: there is no payment from country $X$ corresponding to $R_{XY}$ for such a levy to bear on. Figure 1 illustrates this misalignment between value creation and source of payment. Instead, country $X$ must ask Googl to voluntarily report and remit the tax on $R_{XY}$. This is how a DST would apply to Googl. One of the basic innovations of the DST is that it tackles the misalignment between payment and value creation, which is made administratively possible when Googl, as a large multinational company, can be expected to comply with the DST obligation even in the absence of country $X$’s ability to track payments from country $Y$.

Even though the tax on advertising revenue earned by Googl is not a tariff in this particular case, it is a tax on B2B transactions. Does such a tax necessarily reduce production efficiency by distorting the relative costs of country $Y$ firms’ choice of inputs? The answer is no. First, it is quite conceivable that Googl would not change the price of advertising, if (1) it had already set the price of advertising at profit-maximizing levels (and its profit already allows the recovery of fixed costs),
and (2) the marginal cost of advertising is zero. In such a case, Googl’s profit-maximizing price before the application of the DST remains the profit-maximizing price after the DST. Second, if Googl changes its price of advertising in response to the DST, country Y producers may change their advertising strategies, but this is arguably still distinct from changing inputs to production. Country Y producers’ profits may decline, but it is not at all clear that the overall welfare effect of the DST is negative.

The ideas motivating the foregoing arguments can be re-enforced by a second hypothetical example. Another tech company—call it AirBB—has developed a technology, “Sharing Economy,” that intermediates between consumers in need of short-term accommodation and property owners. AirBB has a cost structure similar to Googl’s—that is, a large fixed cost of investment in technology, additional fixed costs associated with country interfaces, and zero marginal costs in facilitating transactions. The infrastructural support for AirBB’s country interfaces, which can be located in any country, is, again, located in country Z. AirBB earns revenue from charging consumers who (1) book accommodation located in country X, and (2) may reside in another country, Y. After deducting fixed costs allocable against this revenue (R_{XY}), AirBB’s profit from this line of business is \( \pi_{XY} \).

An important difference between Googl and AirBB is that the latter’s revenue is extracted from consumers, as a result of additional consumer surplus that the digital platform creates. This surplus arises thanks to the ability of AirBB to reduce transaction costs for property owners and bring them to market. Therefore, it is plausible to postulate that instead of condition 1, an analogue condition holds: condition 1*. The demand curve of country Y consumers does not change because of Sharing Economy or the country X interface. (Condition 2 continues to hold for AirBB.)

Both landlords and tourists are users of AirBB. However, condition 1* posits that “user value creation” arises mainly in the producer’s jurisdiction: changes in the supply curve are causally responsible for the increase in consumer surplus, which in turn generates revenue for AirBB. For this reason, it is plausible to attribute the latter’s profit to country X and not to country Y.
As in the Googl example, there is a misalignment between the country of value creation (country X) and the source of payment (country Y). Figure 2 illustrates this misalignment for AirBB. It is not possible for country X’s government to extract a share of AirBB’s profit earned from consumers in country Y by levying a tariff or withholding tax. Instead, a DST imposed by country X on R_{XY} must be voluntarily reported and remitted by AirBB. In AirBB’s business model, fees collected from landlords in country X may constitute an additional revenue stream subject to the DST. But at least the DST imposed on R_{XY}, collected from guests in country Y, would not be a tax on B2B transactions. There arises no issue of distortionary impact on production choices.

Might AirBB pass the cost of the DST on to its guest users? Again, two points need to be made. First, if AirBB’s marginal cost is zero, and if it has already set its price at profit-maximizing levels before the introduction of the DST, then the theoretical prediction is that AirBB cannot increase its after-tax profits by increasing its prices. Second, suppose that AirBB, in response to the DST, does for some reason increase the prices that it charges to guest users; this would result in a wealth transfer from country Y guests to country X’s government. It is not always clear why this reduces welfare, whereas the sense in which country X has claimed a greater share of the “value created” in it is rather evident.

The examples of Googl and AirBB illustrate some central applications of the DST. A prominent feature of current DST proposals is their relatively narrow scope. Platform revenue from online advertising (especially advertising on social media and search platforms) and from fees and commissions from online intermediation constitutes the main tax base. The online provision of digital content and services is generally carved out of the DST scope, as are systems of online payment and online messaging and communication. One natural interpretation of the scope of the DST’s application and exemptions is that the DST is focused on platforms that serve distinct groups of users, where (1) one group of users is subsidized while profit is made from another group of users, and (2) it is a relatively pervasive phenomenon for these groups of users to be situated in different countries. Thus, in cases of online content provision (gaming, for example, and video and music streaming), the most prominent platform users (that is, gamers, and consumers of video and music) are not the groups subsidized. These users pay for the value generated by users on the other side (that is, creators of content), so they do not represent sources of value creation that are unmatched by payment. 8 In the case of online payment and communication systems, the task of identifying which side is subsidized may be sufficiently difficult that mismatches between value creation and sources of payment raise less of a policy concern.

By contrast, online advertising and online intermediation are precisely the platforms that offer the clearest possibility of aiming different pricing strategies at

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8 And, unlike the countries of AirBB landlords, countries where creators of online content reside may feel that they already extract sufficient value from platform transactions. There is no great misalignment between value creation and payment.
different groups of users located in different countries. These examples show that the DST responds to two novel problems in international taxation. First, two-sided business models operating at a global scale create misalignments between sources of value creation and origins of payment. Second, non-rival use and remote deployment of digital technology generate a significant new class of location-specific rent. With respect to the problem of misalignment, the DST offers a solution that arguably is not feasible under the income tax or any pre-existing tax instrument. And with respect to the problem of new types of LSR, although the DST is not the only possible solution (as I discuss in the next section of this paper), it certainly comes closer to a solution than does any other existing proposal.

**ARE DSTS TARIFF-LIKE, AND IF THEY CAN BE, SO WHAT?**

Although I believe that the examples discussed above offer the most compelling illustrations of DST design, other applications of real-world DSTs (enacted or proposed) cannot be rationalized in the same way. For example, readers may have noted that in the Googl and AirBB examples, the producers purchasing advertisements from Googl and the guests booking accommodation on AirBB may come from country X—that is, the same country where users of Googl’s search engine and AirBB landlords are located. In such cases, the place of LSR is the same as the source of payment; the DST would apply even in the absence of any misalignment between the two. Indeed, it may be that real-world DSTs cover more transactions among domestic parties than transactions among users from different countries: for example, Amazon France may mainly mediate transactions among French sellers and French buyers; and Uber’s UK app may mainly facilitate rides given by UK drivers to UK passengers. Any DST imposed on the platform companies would still be conceptually and legally distinct from tariffs (and withholding taxes): conceptually, a DST imposed on revenue from advertising that is targeted at French users is distinct from a tax on revenue from French advertisers; and, legally, the obligation of DST remittance lies with the payee and not the payer. In many cases, however, the DST
would be imposed on the same transactions as hypothetical tariffs or withholding taxes on foreign providers of digital services would apply to.

Moreover, although the argument can be made, in the case of advertising, that advertising expenditures represent fixed rather than marginal costs of production and that, therefore, a tax on the purchase of advertising (a B2B transaction) would not affect marginal production decisions, there are clearly other instances in which DST does alter marginal costs. The most obvious example is fees charged on the basis of the value of online transactions. When Amazon Marketplace charges online sellers a higher commission (purportedly as a result of the introduction of the DST), the online sellers’ marginal costs clearly increase. Whether the DST is distortionary thus crucially depends on the understanding of DST incidence—of whether, and why, Amazon would pass on the DST cost.

These examples raise the following question: If the DST would have effects similar to those of tariffs on the import of services, and if it might distort production decisions, would it still be justifiable as a solution to new problems in international taxation? Certainly, opponents of the DST have rushed to compare DSTs to “protectionist” tariffs, and they have asserted that DSTs are in violation of World Trade Organization (WTO) rules (although no details have yet been offered to substantiate such comparisons). Such comparisons and assertions seem not to apply at all to the examples that I discussed in the previous section of this paper: it is not at all clear what WTO rules, if any, would apply to a tax imposed by country X on the revenue that Google or AirBB receives from country Y. However, where the DST applies to platforms that link users from the same country, or where the DST distorts decisions about business input purchases, such critiques of the DST may be relevant.

There has, in fact, been a recent surge of unilateral tax policy instruments that appear to have tariff-like effects. Many of them are independent of, and in some cases precede, the introduction of the DST. The US base erosion and anti-abuse tax (BEAT), which formed an important part of the Tax Cuts and Jobs Act of 2017, denies deductions for a wide range of services imported into the United States, purportedly to ensure a minimal tax base for US companies. The denial of a deduction has the same effect as a tariff on the input purchase generating the expense. The Indian equalization levy on foreign providers of advertising services to Indian firms is another example. One rationalization for such policies draws on the “strategic trade” literature. When countries have sufficient market power in global goods or

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9 See for example, “Trade Law Analysis of EU’s Digital Tax Proposal,” Lexology.com, September 6, 2018 (www.lexology.com/library/detail.aspx?g=3a817cf7-28c7-42fd-ad68-a5ae4b300c9c).

10 The US Tax Cuts and Jobs Act, Pub. L. no. 115-97, has introduced base erosion and anti-abuse tax (BEAT) regime. For a recent critical analysis, see Chris William Sanchirico, “Earnings Stripping Under the BEAT,” Tax Law Review (forthcoming) (https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3395416).

11 Joseph Bankman, Mitchell Kane, and Alan Sykes, “Collecting the Rent: The Global Battle To Capture MNE Profits,” Tax Law Review (forthcoming).
services markets, either as monopoly suppliers or as monopsony purchasers, they may impose import or export tariffs and raise revenue at the expense of foreign firms. Such tariffs may be optimal from the perspective of the enacting country, even if they distort trade and reduce global welfare.\textsuperscript{13} WTO rules may in principle apply to prevent the imposition of some such tariffs, although they are not always successful in doing so.

Notably, this type of rationalization of tariffs applies regardless of the types of goods or services traded. So-called optimal tariffs may be imposed on non-digital goods and services whose production requires substantial fixed and marginal costs. The only relevant factor is whether the enacting countries have market power. Given that at least some of the countries proposing to enact the DST—for example, Spain, Austria, and the Czech Republic—are unlikely to wield any kind of special market power with respect to digital services, this explanation of countries' motivation for imposing DSTs seems inapplicable.

Recently, the German economist Wolfram Richter advanced an interesting new explanation for why small countries might impose tariffs on the import of digital services.\textsuperscript{14} According to Richter, many types of digital services can be supplied remotely across the globe at zero marginal cost.\textsuperscript{15} To charge positive prices for such services, multinational companies must establish some kind of market power—for example, through intellectual property (IP) right regimes. Richter argues that, under certain conditions, it is possible for the service-importing country to enhance national welfare by imposing taxes on digital services: the tax revenue collected may outweigh the efficiency losses that result from domestic firms choosing to use less of the taxed service input. The paradigmatic case for Richter's analysis is cloud computing. An import tariff on domestic firms’ purchase of cloud computing services may make domestic firms less efficient; from a national perspective, however, this loss of efficiency may be compensated by the surplus expropriated from foreign firms.

Interestingly, Richter makes two further arguments. First, the imposition of such "optimal tariffs" by small countries may still be globally non-optimal, because, over time, it may diminish the quality, if not the quantity (given zero marginal cost), of the digital services that multinational firms offer. If each tariff-imposing country is so small that, by itself, it cannot influence the quality of technology developed elsewhere in the world, a "prisoner's dilemma" may emerge: countries are collectively better off by not enacting import tariffs, but it makes sense for each country individually to levy such tariffs. Second, WTO mechanisms may have little impact on

\textsuperscript{13} Thus the imposition of such tariffs cannot be justified from a global welfare perspective.

\textsuperscript{14} Richter, supra note 4.

\textsuperscript{15} This assumption, of course, importantly underlies the justification of the DST as a tax on rent, even though it takes the form of a tax on revenue. As discussed below, even opponents of the DST have often conceded this assumption. See, for example, Julien Pellefigue, The French Digital Service Tax: An Economic Impact Assessment (n.p.: Deloitte Taj, société d’avocats, March 21, 2019).
this type of behaviour, which is individually rational but collectively suboptimal: the most that a WTO ruling against the tariff-imposing country can bring about is retaliatory sanctions against the country. However, the trade in global technological services is already highly asymmetrical, and may become even more so in the future. The technology-exporting countries will thus lack proper instruments for retaliation.

Richter thus offers a novel explanation, though not a justification, for hypothetical DSTs imposed on B2B digital services. The explanation does not quite fit currently enacted or proposed DSTs, for at least two reasons. First, no DST currently applies to the range of B2B services (for example, cloud computing) that Richter is interested in, though it is not out of the question that the scope of the DST may in the future expand in this direction. Second, given the current design of the DST, even if one ignores the quality of technological services, the DST’s tariff-like effects may still have distortionary effects, even if it is assumed that the marginal cost of advertising is strictly zero. For example, a tariff on advertising purchases may drive up the price of advertising for producers in the tariff-imposing country (country X), if producers in country X compete with producers from other countries for advertising slots. That is, the sale of advertisements to country X producers may have opportunity costs, even if it has zero marginal cost of production. Recall that in the justification of the DST that I offered above, a basic assumption is that the simultaneous deployments of Search Algorithm and Sharing Economy by Googl and AirBnB in different countries are truly non-rival. This assumption is justified when the taxing right over advertising revenue is conditional on where the target of the advertising is located—which is generally the case for current real-world DSTs. But this assumption may not be justified for the type of DST considered by Richter.

This leads to one last justification for the DST’s tariff-like features. Earlier, I presented the DST as solving two novel problems of international taxation: (1) the misalignment between value creation and sources of payment, and (2) the emergence of a new class of LSR. It may be that ultimately, and in the long term, the latter problem is of much greater significance. The non-rival deployment of technology can be found not just in two-sided business models but also, to a significant extent, even in non-digital industries such as pharmaceuticals. The countries of LSR may want to capture such rent through tariff-like instruments, and Richter’s argument shows that when marginal costs of production are zero, even small countries might usefully deploy such instruments. What the argument based on the concept of LSR adds to Richter’s argument is the following: even when import tariffs are globally non-optimal from the perspective of pure efficiency, their justification may consist in something more than the self-interested calculation of a particular country. Import tariffs may possess an additional legitimacy: the rent is located in that country, after all.

**CAN WE PREDICT THE INCIDENCE OF THE DST?**

Economic theory suggests that when a tax is imposed on the revenue of a digital platform, the incidence of the tax depends first on the platform’s marginal cost in
producing this revenue. If the marginal cost is zero, then the tax on revenue is a tax on pure profit, and the platform itself bears the tax fully. When the platform's marginal cost in producing revenue is not zero, then a variety of outcomes are possible: the tax may be passed on partially or fully to users, or, in unusual market structures, it may still be fully borne by the platform. It is also possible for users to face a price increase higher in amount than the amount of the tax (an instance of “over-passthrough”).

Such theoretical statements naturally seem unsatisfying, because they do not offer any intuitive or empirically grounded predictions. However, they can provide backing for conclusions derived from common sense. For example, when it is reported that Amazon Marketplace has increased the commission charged to online sellers on Amazon.fr to reflect the 3 percent French DST, and that Amazon claims that it has no choice but to do so because it is not able to absorb the tax, common sense tells us that we should take Amazon’s word with a grain of salt. Platforms change their commission fees quite often, and often the reasons that they give for doing so are mere excuses. Economic theory backs up this common sense by telling us that no law of economic incidence is at play here. If Amazon’s commission were determined entirely by the marginal cost of its offering of services, as would be the case in a perfectly competitive market, then the additional cost certainly would be passed on. But a claim by Amazon that it operates in a perfectly competitive market would simply be implausible.

Is there any a priori reason to expect a platform to increase the commission it charges to merchants as a result of the introduction of the DST? An economic

16 Hans Jarle Kind and Marko Koethenbuerger, “Taxation in Digital Media Markets” (2018) 20:1 Journal of Public Economic Theory 22-39 (https://doi.org/10.1111/jpet.12257).
17 Marc Bourreau, Bernard Caillaud, and Romain De Nijs, “Taxation of A Digital Monopoly Platform” (2018) 20:1 Journal of Public Economic Theory 40-51 (https://doi.org/10.1111/jpet.12255).
18 See Mike Isaac, “How Uber Got Lost: The Once-Swaggering Company Is Losing More Money and Growing More Slowly Than Ever, What Happened?” New York Times, revised August 23, 2019 (www.nytimes.com/2019/08/23/business/how-uber-got-lost.html), reporting that Uber announced a new $1 “safe rides fee” in April 2014 that was described as necessary to fund “an industry-leading background check process, regular motor vehicle checks, driver safety education, development of safety features in the app, and insurance.” For discussion of how “the fee was devised primarily to add $1 of pure margin to each trip,” see Connie Loizos, “Uber Tries To Reassure Customers That It Takes Safety Seriously, Following NY Times Book Excerpt,” Techcrunch.com, August 24, 2019 (https://techcrunch.com/2019/08/24/uber-tries-to-reassure-customers-that-it-takes-safety-seriously-following-nytimes-book-excerpt).
19 Compare the report of Amazon’s announcement, supra note 7, to the statement in Thomson Reuters, “EXPE—Expedia Group Inc at Citi Global Technology Conference,” edited transcript from Citi 2019 Global Technology Conference, New York, September 4, 2019, at 5-6 (https://ir.expeidiagroup.com/static-files/e6ff3f65-a8fa-4ecb-a6e8-d1d5c6faad11), where the Treasurer of the Expedia Group announced that the French DST retroactively applicable to the beginning of 2019 would be booked by Expedia in Q3 of 2019 and reduce the group’s EBITTDA.
analysis of the French DST, carried out by Deloitte-Taj in April 2019, which reached a highly unfavourable assessment of the DST, attempts to articulate such an a priori reason. This analysis assumes that the platform’s marginal cost of providing intermediation services is zero and that therefore any passthrough is not caused by a change in the relationship between price and marginal costs. Deloitte-Taj offers instead a variety of explanations, to the general effect that merchants’ demand for a given online marketplace’s intermediation services is inelastic. Some merchants may be able to stay in business by having only an online presence. Others maintain multiple presences on different online platforms, so they may be indifferent to the commission increase of any particular platform. Merchants’ inelastic demand is also supposedly evidenced by users’ continuing to use the platform (that is, the lack of “user exodus”) when Esty and Uber previously increased their commission fees. No matter how much weight one might want to give to such claims and explanations, they clearly would not prove much: if merchants’ demand for platform services were inelastic, why has the platform not previously increased its commission in order to earn greater profit? And if we do not assume that firms maximize their profit where they can, why do they have to pass on the cost of taxes?

Another popular (and casual) assertion among DST opponents is that the DST will ultimately be passed on to final consumers—especially in the jurisdiction that imposes the tax. But it is often not clear what this means. Consider the case of the DST as it is applied to advertising revenue (as in the Googl example): since advertising expenditure represents a fixed and not a marginal cost, even if the DST results in higher costs for advertising, the claim that merchants would pass on such higher costs is generally implausible. Now consider the case of the DST as applied to AirBB revenue from guests’ booking accommodation: if AirBB passes on the DST cost, it would almost certainly be to final consumers, but if the consumers are foreign, the DST would be far from pointless.

Perhaps the most interesting type of DST passthrough to consumers occurs when a platform raises prices for one group of users (for example, merchants) in response to the tax, and this group of users passes the cost increase on to the other group of users (for example consumers). If Amazon Marketplace increases commissions charged to online sellers as a result of the DST (note that it is not clear why this

20 Pellefigue, supra note 15.

21 One might have expected the clients for whom Deloitte-Taj produced the study to correct the authors of the study if this assumption was demonstrably false.

22 Andrew J. Bibler, Keith F. Telster, and Mark J. Tremblay, *Inferring Tax Compliance from Pass-Through: Evidence from Airbnb Tax Enforcement Agreements*, McMaster University, Department of Economics Working Paper no. 2018-06 (Hamilton, ON: McMaster University, July 2018) (https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3117021).

23 An analogy might be to the corporate income tax. One major benefit of the corporate income tax is that it allows a country to tax domestic rent earned by foreign investors. This benefit is not negated by the fact that the corporate income tax also might be borne by domestic investors.
would be the case), would the online sellers simply increase the prices of online goods by the same amount? The Deloitte-Taj study predicts that this would indeed happen, and it not unreasonably cites empirical studies from the United States that demonstrate that the collection of state sales taxes on online sales increased online prices and reduced online sales volume. For an online merchant, a higher commission charged by Amazon seems no different from a higher sales tax on online transactions. Yet there are reasons to question even this analogy. Suppose that all online and offline sales are already subject to the sales tax (or value-added tax). If online and offline sales are perfect substitutes for each other, then online sellers cannot pass higher commission fees on to consumers, since the latter have the option of making purchases offline. And if online and offline sales are not perfect substitutes (for example, if online sellers can achieve better product differentiation through online reviews), then online sellers may already be earning some type of rent, which may then absorb at least a part of the commission increase.

Overall, although economic theory currently does not generate many useful predictions about the incidence of a tax on platforms’ revenue, it does suggest that many of the confidential predictions about such incidence are groundless and likely only rhetorical. Finally, it is worth noting that such rhetoric, coming from DST opponents, may be self-contradictory. This is because another popular line of attack on the DST is that it creates the risks of double or excessive taxation on platform companies. But if the platform doesn’t even bear the burden of the DST, how does the fear of double taxation arise?

"SEE YOU AT THE OECD!"

I believe that the characterization of the DST as a tax on LSR (akin to resource royalties) is largely consistent with the rationales that governments adopting the DST have publicly offered for it. However, it must be acknowledged that no government has presented the DST as a standalone tax on LSR. Instead, France and the United Kingdom have emphasized that the DST is an interim measure that will be replaced once multilateral agreement is reached on a reform of the international rules for corporate taxation. The claim seems to be the following: Whatever can be achieved under the DST could be better achieved through a re-design of the income tax. According to this perspective, the merit of the DST mainly lies in its utility as an instigator of a multilateral negotiation process, in particular at the OECD. This is a striking stance. Note, for instance, that when the United Kingdom unilaterally enacted the diverted profits tax (DPT) in 2015, it did not claim that the DPT was temporary and ought to be replaced by multilateral agreements. Presumably, this is because the governments promoting the DST anticipate that countries will have more interest in revising the international tax regime for digital platforms than they had in the policy objectives of the DPT.

24 See, for example, Brian Baugh, Itzhak Ben-David, and Hoonsuk Park, “Can Taxes Shape an Industry? Evidence from the Implementation of the ‘Amazon Tax’ ” (2018) 73:4 Journal of Finance 1819-55 (https://doi.org/10.1111/jofi.12687).
Ironically, the position of DST opponents can similarly be summarized as “See you at the OECD!” Their argument is that only multilateral solutions to any purported problem in taxing digital platforms are legitimate, and that DSTs ought to be non-starters. Using DSTs to force countries to come to the OECD negotiation table smacks of bad faith and, indeed, makes it much less likely that such negotiation will succeed.\textsuperscript{25} It may come as a surprise to many long-time observers of international taxation that, in 2019, multinationals and US politicians unfailingly conjure up an image of the OECD as an institution that routinely resolves tough disagreements in international taxation. To some, multinationals’ new-found faith in the OECD’s tax policy prowess is difficult to accept at face value.

Whose enthusiasm for the OECD is more genuine, the DST’s proponents or its opponents? In my view, we face a genuine puzzle here—and the solution to the puzzle shows how the conception of the DST as a tax on LSR is useful, even though it has not been embraced by any government. The puzzle is the following: typically, countries (such as the United States) that wield substantial economic power are the ones that can afford to act unilaterally and strategically, while smaller countries with less economic power are more interested in cooperation (because they are more vulnerable to the impact of strategic action). In the debate over the DST, however, smaller countries such as the United Kingdom and France appear to act unilaterally first, while the United States appears to advocate for cooperation. What explains this counterintuitive configuration?

Consider two alternative characterizations of the core problems facing the international tax regime today. According to the first characterization,\textsuperscript{26} the powers of the largest multinational companies have expanded dramatically in the last decade, as has their ability to dodge taxes on corporate profits. Individual governments face growing challenges when it comes to battling by themselves corporate titans on the taxation front; these governments must work with one another to rein in these corporate titans. The impetus for international cooperation thus issues from the

\textsuperscript{25} See Amazon, Google, and Facebook’s testimony for an investigation of the French DST: “Pursuant to the Request for Comments Published by the Office of the United States Trade Representative, Google Submits the Following Notice of Intent To Testify and Proposed Hearing Statement in Relation to Docket Number USTR-2019-0009,” available on Regulations.gov (https://beta.regulations.gov/document/USTR-2019-0009-0015); Amazon, International Tax Policy and Planning, “RE: Docket Number USTR-2019-0009—Request To Appear at Public Hearing,” submitted to Office of the United States Trade Representative, August 12, 2019, available on Regulations.gov (https://beta.regulations.gov/document/USTR-2019-0009-0014); Afep, Association of Large French Companies, “Written Comments on Section 301 Investigation Regarding the Potential Trade Distortive Impact on the French Digital Services Tax (USTR-2019-0009),” July 31, 2019, available on Regulations.gov (https://beta.regulations.gov/document/USTR-2019-0009-0004).

\textsuperscript{26} A compelling expression of this view can be found in Lawrence H. Summers, “Corporations Are Cheating the Global Tax System. World Leaders Can’t Afford To Ignore It,” Washington Post, April 10, 2019 (www.washingtonpost.com/opinions/2019/04/10/corporations-are-cheating-global-tax-system-world-leaders-cant-afford-ignore-it).
asymmetry in power between national governments and private companies. Countries such as France and the United Kingdom may have experienced such asymmetry earlier and more acutely than the United States, and therefore may be more eager for international cooperation. And since what is at stake is the ability of all govern-
ments to tax corporate profits under the income tax, the OECD is a natural forum where national governments can collectively broker a deal with businesses. From this perspective, France, the United Kingdom, and the United States should all have a genuine desire for cooperation; their respective desires for cooperation differ only in degree.

This first characterization of the fundamental problem of international taxation today cannot, of course, explain why France and the United Kingdom would resort to unilateral measures in order to instigate multilateral negotiation. A second char-
acterization is more illuminating.  

According to this view, we are entering an age in which the increasing asymmetries among countries in respect of technology ownership create a long-term bias against the majority of countries (call them the technology have-nots) because their ability to raise revenue is less than that of technology-rich countries. For example, if corporate returns increasingly accrue to intellectual property (IP), and if the ownership of such property becomes, inevitably, increasingly concentrated in companies from a few countries, then most countries that lack substantial IP ownership face the dire predicament, under the traditional income tax, of not being able to tax corporate returns at all. The countries that enjoy IP ownership, by contrast, do not face a similar predicament. When countries face asymmetrical incentives, cooperation among them may not naturally develop. In such situations, it may be individually rational for technology-poor countries to adopt, in some circumstances, unilateral measures such as tariffs, withholding taxes, or DSTs. Such unilateral actions would remain consistent with the acceptance of the superiority of a cooperative solution, whereby the technology-rich countries somehow allocate more of the corporate tax base to the technology-poor countries. In other words, two options are equally acceptable to the technology-poor countries: either unilateral measures that directly expropriate some corporate surplus from multinationals, or multilateral measures whereby the technology-rich countries help to redistribute some corporate surplus in a cooperative fashion.

The last-mentioned cooperative measures would largely be unprecedented. The technology-poor countries may offer to carry out the negotiation at the OECD—as good an institution as any other for negotiating an unprecedented form of cooperation.  

But the risk of resorting to the OECD is that governments and companies from the technology-rich countries may change the topic—for example, back to a discussion that ignores the asymmetries between countries. Indeed, it has long been

27 This view can be found in Richter, supra note 4. See also, Kai-Fu Lee, AI Superpowers: China, Silicon Valley, and the New World Order (Boston: Houghton Mifflin Harcourt, 2018).

28 And systematic redistribution among countries can perhaps be achieved through some kind of formulary apportionment under the corporate income tax. See Richter, supra note 4.
recognized that the income tax treaty framework itself first arose among developed countries, in whose advanced economies the balance of trade can be expected to even out the give and take between residence and source countries. Many scholars have argued that the income tax treaty framework is highly resistant to recognizing the asymmetries between developed and developing countries. It may thus be quite unclear whether the OECD is a good forum for all kinds of international cooperation or whether it is capable of sustaining only an old type of cooperation, which fails to acknowledge the new problem that is arising in international taxation from national asymmetries in technology ownership, and that may be the only type of cooperation in which technology-rich countries (and large multinationals) are interested.

In this kind of context, I believe that considerations of unilateral taxes on LSR, such as the DST, uniquely advance the discussion. The LSR characterization of the DST fundamentally acknowledges technological asymmetry among countries. And it proposes normative arguments that allow us to see beyond such asymmetry: even if platform technologies are invented mainly in the United States, the rent earned by the deployment of such technologies elsewhere in the world can coherently and reasonably be seen as arising in these other places. To the extent that such arguments are persuasive, they can move us closer to a language that fosters unprecedented international cooperation and redistribution, the objective of which is to undo some of the asymmetries brought about by technology.

29 For a recent critical discussion of this scholarship, see Eric Zolt, “Tax Treaties and Developing Countries,” Tax Law Review (forthcoming).

30 In Shaviro’s words, supra note 4, at 46, it is mere unreflective “market triumphalism” to dismiss the DST as a desperate policy measure pursued by countries that lag behind the United States in nurturing successful digital platforms.