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Digital Taxation Lessons From *Wayfair* And the U.S. States' Responses

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The views expressed in this article are solely those of the authors and do not necessarily reflect those of their employers.

This article provides a detailed and structured synthesis of the discussion that took place in the context of the "fireside chat" event held by the WU Global Tax Policy Center at the Institute of Austrian and International Tax Law on December 17, 2018, at which Hellerstein was the guest speaker. The event was one of the initiatives of the Digital Economy Tax Network, a multi-stakeholder forum, which organized a workshop on the VAT/goods and services tax and the digital economy December 17-18, 2018, in Vienna.

In this article, the authors examine the lessons that the U.S. Supreme Court's *Wayfair* decision might offer for the global debate over how to tax the digital economy.

> The doctrine of the law then is this: that precedents and rules be followed, unless flatly absurd or unjust; for though their reason be not obvious at first view, yet we owe such a deference to former times as not to suppose that they acted wholly without consideration.
>
> — Blackstone, *Commentaries* 36 (1910)

Digital business models continue to grow, as do the tax challenges they create. Traditional tax nexus concepts have been questioned in the context of both corporate income and consumption taxes. In *South Dakota v. Wayfair Inc.*, 138 S. Ct. 2080 (2018), the U.S. Supreme Court repudiated the traditional physical presence nexus standard for imposing tax collection obligations over remote sellers under the U.S. retail sales tax and replaced it with a standard based on economic and virtual contacts when those contacts are sufficient to avoid undue administrative burdens. The U.S. judicial and legislative experience may prove influential in other countries and contexts despite the differences in countries' tax systems.

This article examines the lessons that *Wayfair* might offer for the global debate on taxing the digital economy. It is based on discussions from the latest in a series of "fireside chats" conducted between Jeffrey Owens and leading members of the tax community, held at the WU Institute of Austrian and International Tax Law in December 2018. This article examines proposals for tax reform embracing a virtual presence nexus standard that does not create undue compliance burdens. While recognizing that *Wayfair* is no panacea for all complex global tax issues, the article considers important parallels between the challenges confronting the U.S. states and OECD and EU members as they relate to the operation of the jurisdictions' respective tax systems.

I. Introduction

The U.S. Supreme Court is more than the ultimate arbiter of the supreme law of the land in the United States; it also wields influence globally. Although it acknowledges the limits of its jurisdiction, particularly regarding foreign tax policy, in *Wayfair* the Court effectively aligned its jurisprudence governing the nexus requirement for the collection of sales taxes by remote sellers with the contemporary reality of the digital economy, overruling precedent that adopted a physical presence nexus standard. The Court's repudiation of its previous case law and embrace of nexus rules appropriate for the digital world gained worldwide attention in view of the ongoing debate over taxation of the digital economy, a debate characterized by a lack of consensus.

Apart from the Court's noteworthy determination to overrule its decisions in *National Bellas Hess Inc. v. Department of Revenue*, 386 U.S. 753 (1967), and *Quill Corp. v. North Dakota*, 504 U.S. 298 (1992), that established and reaffirmed physical presence as the nexus requirement for the imposition of tax collection obligations on remote sellers, the significance of *Wayfair* and its potential international implications lie chiefly in the Court's rationale. That rationale is encapsulated in the Court's reformulation of the constitutional requirement that a state must have a substantial nexus with an out-of-state actor over which it seeks to impose tax-related obligations.[1] In redefining the substantial nexus standard in *Wayfair*, the Court emphasized that the test is not limited to physical presence (as reflected in earlier decisions like *Bellas Hess* and *Quill*) but encompasses economic and virtual contacts.[2]

The Court did not precisely define what constitutes an adequate threshold of virtual contacts to satisfy constitutional concerns. It did declare that the nexus in *Wayfair* was clearly sufficient based on both the economic and virtual contacts and that the remote sellers in the case were large national companies that maintained an extensive virtual presence. Even so, the substantial nexus determination based on the vague criterion articulated by the Court ("such a nexus is established when the taxpayer [or collector] 'avails itself of the substantial privilege of carrying on business' in that jurisdiction") might not be so easy in other cases. Moreover, the Court noted that any administrative costs created by the virtual presence nexus standard might give rise to an additional constitutional problem — namely, whether the existence of nexus creates a burden on interstate commerce, an issue discrete from the nexus inquiry.[3]

Against the background of the ongoing debate over the adequacy of existing nexus rules in the international tax context, the Court has added another voice to the discussion on whether the rules are fit for their purpose. In that respect, the post-*Wayfair* debate appears to focus largely on the appropriate trade-off between the goal of aligning tax rules with economic reality in the world of digital commerce and the practical implementation and effectiveness of that alignment in pursuit of that goal.

Both *Wayfair* and the U.S. subnational tax experience might contribute to the debate at the OECD and EU level regarding the nexus option that is best suited for the digital economy. Because the issues of substantive and enforcement jurisdiction[4] in the digital economy raise many

[1] Substantial nexus is the first prong of the Court's established four-prong test for determining the constitutionality of state taxes under the U.S. Constitution's commerce clause, which grants Congress the power to regulate interstate commerce but has been interpreted to impose, even in the absence of congressional legislation, implied restraints on the states' exercise of their tax (and other) powers to burden interstate commerce. The Court first articulated the substantial nexus test in *Complete Auto Transit Inc. v. Brady*, 430 U.S. 274 (1977), but noted that the test reflected long-standing doctrine embodied in earlier case law. Thus, the determinative constitutional question in *Wayfair* was whether the remote seller had a substantial nexus with South Dakota, because that nexus constituted the essential precondition for the state's exercise of its authority to require remote sellers to collect taxes on sales to South Dakota purchasers.

[2] *Wayfair*, 138 S. Ct. at 2095, 2099 ("A virtual showroom can show far more inventory, in far more detail . . . than might be possible for local stores. Yet the continuous and pervasive virtual presence today is, under *Quill*, simply irrelevant. This Court should not maintain a rule that ignores these substantial virtual connections to the State.").

[3] As the Court observed, "The question remains whether some other principle in the Court's Commerce Clause doctrine might invalidate the Act."

[4] In earlier work, one of the authors distinguished between substantive and enforcement jurisdiction. *See* Walter Hellerstein, "Jurisdiction to Tax in the Digital Economy: Permanent and Other Establishments," 68(6/7) *Bull. Int'l Tax'n* 346 (2014); "Jurisdiction to Impose and Enforce Income and Consumption Taxes: Towards a Unified Conception of Tax Nexus," in *Value Added Tax and Direct Taxation: Similarities and Differences* 545 (2009); and "Jurisdiction to Tax Income and Consumption in the New Economy: A Theoretical and Comparative Perspective," 38(1) *Geo. L. Rev.* 1 (2003). Substantive jurisdiction relates to the power of a state to impose tax on the subject matter of an exaction. Substantive jurisdiction to tax includes such questions as whether a state has the power to impose a tax on the income a nonresident earns from sources in the state, or to impose a tax on goods or services purchased outside but consumed in the state. Enforcement jurisdiction relates to the power of a state to compel collection of the tax over which it has substantive tax jurisdiction. Enforcement jurisdiction includes such questions as whether a state has the power to enforce the collection of a tax on income earned by a nonresident from sources in the state, or whether a state has the power to enforce the collection of a tax on goods or services purchased by an in-state consumer from a remote vendor.

common concerns, whether viewed from an international or U.S. subnational perspective,[5] the U.S. experience post-*Wayfair* may well be instructive in the global debate over the nexus rules not only for VAT collection on electronically supplied services and distance sales but also for international income taxation in the digital economy.[6]

II. *Wayfair* in a Nutshell

On June 21, 2018, the Court issued its long-awaited decision in *Wayfair*, holding 5 to 4 that the physical presence of out-of-state sellers shipping goods to in-state consumers is no longer required to allow U.S. states to enforce the remote sellers' legal obligation to collect sales or use tax[7] due on goods sold to in-state purchasers.[8]

Wayfair involved three large retailers — Wayfair Inc., Overstock.com Inc., and Newegg Inc. — with no employees or real estate in South Dakota. Wayfair is a leading online retailer of home goods and furniture; Overstock is one of the top U.S. online retailers, selling various products from home goods and furniture to clothing and jewelry; and Newegg is a major online retailer of consumer electronics. Each company shipped its goods directly to purchasers throughout the United States, including South Dakota; none collected the tax that was admittedly due on the sales.[9] Nor did the South Dakota consumers remit the tax due on their use of the purchased goods.[10] The Court observed that "consumer compliance rates are notoriously low," referring to a study that estimated a 4 percent collection rate.[11] As a consequence, South Dakota was losing tax revenue ranging from $48 million to $58 million annually.

To address that problem, South Dakota enacted legislation requiring an out-of-state seller to collect and remit sales taxes in South Dakota "as if the seller had a physical presence in the state" if the seller's annual gross revenue from the sale of tangible personal property or services delivered into the state exceeded $100,000 or the seller engaged in at least 200 transactions for the delivery of goods or services into the state.[12] The retailers in *Wayfair* substantially exceeded the statutory nexus thresholds and were subject to sales tax collection and remittance obligations under South Dakota law.

The retailers successfully challenged the constitutionality of the statute in the South Dakota Supreme Court, which declared that "however persuasive the State's arguments on the merits of revisiting the issue, *Quill* has not been overruled," and "we are mindful of the Supreme Court's directive to follow its precedent when it 'has direct application in a case' and to leave to the Court 'the prerogative of overruling its own decisions.'"[13] The U.S. Supreme Court accepted the South Dakota court's invitation, overruled *Quill* and *Bellas Hess* as "unsound and incorrect," and remanded the case for consideration of any commerce clause claims that may have remained in the absence of *Quill* and *Bellas Hess*.

[5] *See* Reuven S. Avi-Yonah, "Designing a 21st Century Taxing Threshold: Some International Implications of *South Dakota vs. Wayfair*," University of Michigan P.L. Research Paper No. 611 (June 25, 2018); and Walter Hellerstein and Andrew Appleby, "Substantive and Enforcement Jurisdiction in a Post-*Wayfair* World," *State Tax Notes*, Oct. 22, 2018, p. 283.

[6] That is not to suggest, however, that one should ignore the dangers of "lost in translation" problems when comparing U.S. subnational and international cross-border tax issues. *See* Walter Hellerstein and Charles E. McLure Jr., "Lost in Translation: Contextual Considerations in Evaluating the Relevance of US Experience for the European Commission's Company Tax Proposals," 58 *Bull. Int'l Fiscal Documentation* 86 (2004).

[7] Under the Court's interpretation of the commerce clause, the states lack the power to impose sales tax on goods or services purchased in other states or in interstate commerce because "to impose a tax on such a transaction would be to project its powers beyond its boundaries and to tax an interstate transaction." *McLeod v. J.E. Dilworth Co.*, 322 U.S. 327 (1944). To address that potential loss of business and revenue, states enacted complementary or compensating use taxes on goods (and, as appropriate, on services) purchased outside the state and brought into the state for use. Compensating use taxes are functionally equivalent to sales taxes. They are typically levied on the use, storage, or other consumption in the state of goods (and, as appropriate, services) that have not been subjected to a sales tax. The use tax imposes an exaction equal to the sales tax that would have been imposed on the sale of the goods or services in question if the sale had occurred in the state's taxing jurisdiction. As in the case of sales taxes, the state relies on the seller to collect the tax (whether denominated a sales tax or a use tax) on its sales to purchasers.

[8] This summary of *Wayfair* draws freely from Jerome R. Hellerstein, Walter Hellerstein, and John A. Swain, *State Taxation* Vol. II, Chapter 19, para. 19.02[c] (2018).

[9] The Court noted that "all concede that taxing the sales in question here is lawful" and that the "only question is whether the out-of-state seller can be held responsible for its payment."

[10] *See supra* note 7.

[11] The imposition of a tax collection obligation on individual consumers has often been referred to as a "tax on honesty."

[12] *Wayfair*, 138 S. Ct. at 2089 (quoting the statute).

[13] *South Dakota v. Wayfair Inc.*, 901 N.W.2d 754, 761 (S.D. 2017) (quoting *Rodriguez de Quijas v. Shearson/American Exp. Inc.*, 490 U.S. 477, 484 (1989)), *rev'd*, 138 S. Ct. 2080 (2018).

The Court's criticism of the physical presence test was three-pronged. First, the Court's earlier acceptance of the test was flawed because the test is not a necessary interpretation of the substantial nexus requirement, creates rather than resolves market distortions, and disregards the more "sensitive, case-by-case analysis" of the Court's modern commerce clause jurisprudence. Second, the physical presence test is inconsistent with modern e-commerce and other major technological and social changes that allow sellers to penetrate state markets without establishing a physical presence. Third, the Court said the test is "an extraordinary imposition by the Judiciary on States' authority to collect taxes and perform critical public functions."

In finding that *Quill* was "flawed on its own terms," the Court emphasized that the seller's physical presence (or absence) in a state was an ill-suited metric for determining whether it was appropriate to require the seller to collect taxes on its sales to in-state purchasers. Addressing the argument that the physical presence rule protects retailers from the burden of complying with tax collection obligations in thousands of different jurisdictions, the Court noted that the administrative costs of compliance "are largely unrelated to whether a company has a physical presence in a State," making the physical presence rule "a poor proxy for the compliance cost faced by companies doing business in multiple states."

The Court further observed "that the Commerce Clause was designed to prevent States from engaging in economic discrimination" and that "it is certainly not the purpose of the Commerce Clause to permit the Judiciary to create market distortions." The physical presence rule, however, "puts both local businesses and many interstate businesses with physical presence at a competitive disadvantage relative to remote sellers," according to the Court. "Remote sellers can avoid the regulatory burden of tax collection and can offer de facto lower prices caused by the widespread failure of consumers to pay the tax on their own." The physical presence rule also encourages sellers to avoid physical presence in multiple states, thereby distorting business decisions regarding the allocation of resources and giving rise to economic inefficiencies. Thus, the Court found that "rejecting the physical presence rule is necessary to ensure that artificial competitive advantages are not created by this Court's precedents."

The Court also contrasted the formalism of *Quill* with the "sensitive, case-by-case analysis of purposes and effects" embodied in modern commerce clause jurisprudence. It noted that *Quill* treated economically identical actors differently for arbitrary reasons. It demonstrated that point by comparing the compliance obligations of a small but physically present online retailer with those of a large, remote online retailer making sales nationwide. Under *Quill*, the small retailer is required to remit tax while the large retailer is not. According to the Court, that "distinction simply makes no sense," and "courts should not rely on anachronistic formalisms" to prevent a state from enforcing its tax laws so long as they avoid "any effect forbidden by the Commerce Clause."

Turning to an examination of the physical presence rule as applied to modern e-commerce and noting that in *Quill* it had characterized the rule as "artificial at its edges," the Court in *Wayfair* said it is now "all the more evident that the physical presence rule is artificial in its entirety." The Court observed:

> Between targeted advertising and instant access to most consumers via any internet-enabled device, "a business may be present in a State in a meaningful way without" that presence "being physical in the traditional sense of the term." A virtual showroom can show far more inventory, in far more detail, and with greater opportunities for consumer and seller interaction than might be possible for local stores. Yet the continuous and pervasive virtual presence of retailers today is, under *Quill*, simply irrelevant. This Court should not maintain a rule that ignores these substantial virtual connections to the State.

The Court also found that the physical presence rule "is an extraordinary imposition by the Judiciary on the States' authority to collect taxes and perform critical public functions." It described the rule as not only unfair to business competitors, but also to states seeking fair enforcement of their tax laws. Retaining the rule would allow many purchasers to escape paying "taxes that are essential to create and secure for remote sellers the market they supply with goods and services." Moreover, "it is essential to public confidence in the tax system that the Court avoid creating inequitable exceptions." While the Court recognized the legitimate concerns of small businesses without a large volume of sales to customers in many states, it did not find those concerns sufficient to justify retaining an "artificial, anachronistic rule that deprives States of vast revenues from major businesses." Rather, it pointed to other potential avenues of relief, such as legislation and developments in tax compliance software.

Finally, the Court pointed to the advent of the digital economy as a crucial factor in its conclusion that *Quill*'s physical presence rule "must give way" to a contemporary nexus standard.[14] After acknowledging that "*Quill* was wrong on its own terms when it was decided in 1992," the Court continued that "since then the Internet revolution has made its earlier error all the more egregious and harmful." It elaborated on that point, and its observations reflect the U.S. judicial perspective on the impact of the digital economy on tax collection obligations:

> The *Quill* Court did not have before it the present realities of the interstate marketplace. In 1992, less than 2 percent of Americans had Internet access. When it decided *Quill,* the Court could not have envisioned a world in which the world's largest retailer would be a remote seller.
>
> The Internet's prevalence and power have changed the dynamics of the national economy. In 1992, mail-order sales in the United States totaled $180 billion. Last year, e-commerce retail sales alone were estimated at $453.5 billion. Combined with traditional remote sellers, the total exceeds half a trillion dollars. Since the Department of Commerce first began tracking e-commerce sales, those sales have increased tenfold from 0.8 percent to 8.9 percent of total retail sales in the United States. And it is likely that this percentage will increase. Last year, e-commerce grew at four times the rate of traditional retail, and it shows no sign of any slower pace.
>
> This expansion has also increased the revenue shortfall faced by States seeking to collect their sales and use taxes. In 1992, it was estimated that the States were losing between $694 million and $3 billion per year in sales tax revenues as a result of the physical presence rule. Now estimates range from $8 to $33 billion. The South Dakota Legislature has declared an emergency, which again demonstrates urgency of overturning the physical presence rule.
>
> The argument, moreover, that the physical presence rule is clear and easy to apply is unsound. Attempts to apply the physical presence rule to online retail sales are proving unworkable. States are already confronting the complexities of defining physical presence in the Cyber Age. For example, Massachusetts proposed a regulation that would have defined physical presence to include making apps available to be downloaded by in-state residents and placing cookies on in-state residents' web browsers. Ohio recently adopted a similar standard. Some States have enacted so-called "click through" nexus statutes, which define nexus to include out-of-state sellers that contract with in-state residents who refer customers for compensation. Others still, like Colorado, have imposed notice and reporting requirements on out-of-state retailers that fall just short of actually collecting and remitting the tax. Statutes of this sort are likely to embroil courts in technical and arbitrary disputes about what counts as physical presence.

[14] In this connection, one of the authors cannot resist quoting the Court's observation that "'while nexus rules are clearly necessary,' the Court 'should focus on rules that are appropriate to the twenty-first century, not the nineteenth.'" *Id*. at 2092 (quoting Walter Hellerstein, "Deconstructing the Debate Over State Taxation of Electronic Commerce," 13 *Harv. J.L. & Tech.* 549, 553 (2000)).

Post-*Wayfair* Nexus Rules for Remote Sellers (as of February 2019)

State	Annual Sales Threshold	Annual Transaction Threshold	Effective Date	Report/ Collect Option	SSUTA Member
Alabama	$250,000 (goods only)	Not applicable	Oct. 1, 2018	No	No
California	$100,000	200	April 1, 2019	No	No
Colorado	$100,000	200	Dec. 1, 2018	No	No
Connecticut	$250,000	200	Dec. 1, 2018	No	No
District of Columbia	$100,000	200	Jan. 1, 2019	No	No
Georgia	$250,000 (goods only)	200 (goods only)	Jan. 1, 2019	Yes	Yes
Hawaii	$100,000	200	July 1, 2018	No	No
Illinois	$100,000	200	Oct. 1, 2018	No	No
Indiana	$100,000	200	Oct. 1, 2018	No	Yes
Iowa	$100,000	200	Jan. 1, 2019	No	Yes
Kentucky	$100,000	200	Oct. 1, 2018	No	Yes
Louisiana	$100,000	200	Jan. 1, 2019	No	No
Maine	$100,000	200	July 1, 2018	No	No
Maryland	$100,000	200	Oct. 1, 2018	No	No
Massachusetts	$500,000 *and*	100	Oct. 1, 2017	No	No
Michigan	$100,000	200	Oct. 1, 2018	No	Yes
Minnesota	$100,000	100	Oct. 1, 2018	No	Yes
Mississippi	$250,000	Not applicable	Sept. 1, 2018	No	No
Nebraska	$100,000	200	Jan. 1, 2019	No	Yes
Nevada	$100,000	200	Nov. 1, 2018	No	Yes
New Jersey	$100,000	200	Nov. 1, 2018	No	Yes
New York	$300,000 *and*	100	Jan. 15, 2019	No	No
North Carolina	$100,000	200	Nov. 1, 2018	No	Yes
North Dakota	$100,000	200	Oct. 1, 2018	No	Yes
Oklahoma	$10,000	Not applicable	July 1, 2018	Yes	Yes
Pennsylvania	$10,000	Not applicable	Mar. 1, 2018	Yes	No
Rhode Island	$100,000	200	Aug. 17, 2017	Yes	Yes
South Carolina	$100,000	Not applicable	Nov. 1, 2018	No	No
South Dakota	$100,000	200	Nov. 1, 2018	No	Yes
Texas	$500,000	Not applicable	Oct. 1, 2019	No	Yes
Utah	$100,000	200	Jan. 1, 2019	No	Yes

Post-*Wayfair* Nexus Rules for Remote Sellers (as of February 2019) *(Continued)*

State	Annual Sales Threshold	Annual Transaction Threshold	Effective Date	Report/ Collect Option	SSUTA Member
Vermont	$100,000	200	July 1, 2018	No	Yes
Washington	$100,000	200	Oct. 1, 2018	No*	Yes
West Virginia	$100,000	200	Jan. 1, 2019	No	Yes
Wisconsin	$100,000	200	Oct. 1, 2018	No	Yes
Wyoming	$100,000	200	Feb. 1, 2019	No	Yes

*Washington retains a preexisting report-or-collect option for remote sellers with receipts between $10,000 and $99,999.

Once the Court had overruled the physical presence rule, its only remaining task was to apply the commerce clause nexus test — which "simply asks whether the tax applies to an activity with a substantial nexus with the state" — to the South Dakota statute. Quoting an earlier decision, the Court found that nexus is established when the taxpayer or collector "avails itself of the substantial privilege of carrying on business" in that jurisdiction. Its decision followed easily:

> Here, the nexus is clearly sufficient based on both the economic and virtual contacts respondents have with the State. The Act applies only to sellers that deliver more than $100,000 of goods or services into South Dakota or engage in 200 or more separate transactions for the delivery of goods and services into the State on an annual basis. This quantity of business could not have occurred unless the seller availed itself of the substantial privilege of carrying on business in South Dakota. And respondents are large, national companies that undoubtedly maintain an extensive virtual presence. Thus, the substantial nexus requirement . . . is satisfied in this case.

III. The Post-*Wayfair* Landscape

A. Constitutional Nexus

The constitutional nexus standard for requiring remote vendors to comply with states' sales and use tax collection obligations after *Wayfair* is whether the vendor has purposefully availed itself of the privilege or benefit of carrying on business in the state's economic market. As the Court indicated in *Wayfair*, that question may be answered by reference to the taxpayer's or tax collector's economic and virtual contacts with the state. One does not have to be a tax practitioner to recognize that the foregoing standards provide little concrete guidance to state tax administrators and advisers on the nature and level of economic and virtual contacts that will satisfy constitutional nexus norms for remote sellers. The only thing we know for sure is that sellers that deliver more than $100,000 of goods or services into a state or engage in at least 200 separate transactions in a state annually have economic and virtual contacts that are clearly sufficient to satisfy constitutional standards.

Having said that, one must also underscore several other things we know at this juncture that will be critical in shaping the framework governing remote vendors' tax collection obligations in the wake of *Wayfair*. First, those obligations will depend critically on the criteria in state sales and use tax statutes (such as those embodied in the South Dakota statute at issue in *Wayfair*) and not merely on the vague constitutional criterion of purposeful availment of a state's economic market that circumscribes state tax enforcement authority. Indeed, there is already strong evidence that states will embrace thresholds similar to those in the South Dakota statute as a safe harbor from post-*Wayfair* constitutional challenges.[15] Second, *Wayfair* may well spur congressional action to impose

[15] *See* Section III.B, *infra*.

nationwide standards governing states' power to require remote vendors to collect sales and use taxes on interstate trade. Third, the inevitable litigation over the application of the *Wayfair* nexus standards is likely to add some flesh to the bare bones of the Court's criteria.

In connection with the third point, after holding that the substantial nexus requirement was satisfied in *Wayfair*, the Court went on to observe that the question remained whether some other principle in its commerce clause doctrine might invalidate the South Dakota rules. Because other aspects of that doctrine had not been litigated or briefed, the Court remanded the case for consideration of any claims like that.[16] It strongly implied, however, that those claims would not be persuasive on the facts presented and effectively provided guidance to other states regarding how to design tax regimes that will survive commerce clause scrutiny in a post-*Wayfair* world. Specifically, it identified several features of South Dakota's tax system that it said appeared designed to prevent discrimination against or undue burdens on interstate commerce: the nexus statute provided a safe harbor for those who transact only limited business in the state; the statute did not apply retroactively; and South Dakota was one of more than 20 states that have adopted the Streamlined Sales and Use Tax Agreement, which "standardizes taxes to reduce administrative and compliance costs."[17] As the Court elaborated:

> It requires a single, state level tax administration, uniform definitions of products and services, simplified tax rate structures, and other uniform rules. It also provides sellers access to sales tax administration software paid for by the State. Sellers who choose to use such software are immune from audit liability.

Finally, the Court's embrace of a nexus rule based on economic and virtual contacts with a state did not render physical presence irrelevant to the nexus inquiry. Physical presence is surely an economic contact, and it remains relevant to — albeit not controlling of — the nexus inquiry, although the precise significance of physical presence in the post-*Wayfair* world, and its relationship to virtual presence in establishing nexus, will undoubtedly be a focus of further analysis and controversy.

B. The States' Legislative Responses

It may seem premature to be examining the states' response to *Wayfair* only a few months after the Court's decision, given that state lawmakers and tax administrators do not ordinarily respond immediately to external developments. But *Wayfair* may be the exception that proves the rule. The ink was barely dry on the opinion before state legislatures and tax administrators began to respond to its implications for their authority to collect taxes from online and other remote sellers.

As suggested above, the Court in *Wayfair* effectively provided the states with three guiding principles for designing legislation or administrative guidance that would carry with it a strong presumption of constitutionality in a post-*Wayfair* world:

- adopt a threshold of selling more than $100,000 of goods or services into the state or engaging in at least 200 transactions for delivery of goods or services into the state annually, because that quantity of business could not occur unless the seller avails itself of the substantial privilege of carrying on business in the state;
- do not apply the standard retroactively; and
- adopt the Streamlined Sales and Use Tax Agreement (if the state has not already done so) or equivalent measures that standardize taxes to reduce administrative and compliance costs and provide sellers with access to sales tax administration software paid for by the state that immunizes sellers from audit liability.

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[16] For further discussion of some of those issues, see Hellerstein et al., *supra* note 8, at para. 19.02[2][c][ii]; and Hellerstein and Appleby, *supra* note 5.

[17] *Wayfair*, 138 S. Ct. at 2100.

Based on their responses to *Wayfair* thus far, states have taken those guiding principles to heart. The table reflects state legislative and administrative guidance as of February.[18]

IV. *Wayfair* and the Digital Tax Debate

At first glance one might question whether *Wayfair*, which is concerned exclusively with U.S. constitutional nexus requirements in connection with subnational sales tax collection obligations, has any relevance to controversial international nexus questions and to broader base erosion and profit-shifting concerns over the allocation of taxing rights. On closer examination, however, the decision may well have something to contribute to the debate over appropriate nexus criteria for the digital economy — whether focusing on direct or indirect taxation — and may have broader implications for the role of the market in allocating direct taxing rights.

The Court's opinion in *Wayfair* focused on nexus in connection with indirect tax obligations and did not address the market state's authority over the taxing rights in question. The explanation for *Wayfair*'s failure to consider nexus issues in the direct (as well as the indirect) context or to address allocation of taxing rights to the market state is simple: The Court was simply playing the hand it was dealt. The only issue in the case was whether the market state could force remote sellers with no physical presence in South Dakota to collect and remit taxes that were admittedly owed by in-state consumers.[19] There was no reason for the Court to address additional questions. Indeed, if it had, it might well have been criticized for exceeding the proper scope of the judicial function. But that is not the same as saying that the Court's opinion might not contain insights relevant to the international debate over appropriate nexus criteria and the allocation of taxing rights in the digital economy. It does suggest, however, that it might first be helpful to broadly identify how *Wayfair* might inform that discussion, even if the legal questions it addressed are distinct from those underlying the debate.

Wayfair's possible contribution falls into two broad categories. The first is the potential analogy between international tax nexus rules and U.S. subnational sales tax nexus rules. That potential linkage may be examined from the perspective of the fairness and efficacy of nexus in both contexts in light of the shared reality of the digital economy in which the levies function. In that regard, it might be argued that *Wayfair*'s reasoning is broadly aligned with international tax justifications for digital tax reform, which are generally based on fairness.[20] The second potential link is the focus on virtual presence and the significance of virtual presence thresholds in both contexts. The rest of this article explores those potential links.

A. New Nexus, the New Economy, and 'Fairness'

1.Tax Allocation vs. Tax Collection

International tax rules, whether involving the allocation of taxing rights (substantive jurisdiction) or the collection of tax under those rights (enforcement jurisdiction) are closely linked with the concept of fairness in international taxation.[21] Fairness is achieved when everyone pays their fair share, but that might not be achieved under existing rules. For example, digital businesses might not be required to pay their fair share in jurisdictions where they engage in business activities but lack a physical permanent establishment, thus preventing the host state (under current treaty rules) from imposing or collecting tax. However, recent economic and technological developments have challenged the traditional PE concept because foreign sellers can now establish a market or significant economic presence in the host state without being physically present there.

[18] The guidance is based on Sarah Horn and Rebecca Newton-Clarke, "One by One, States Respond to *South Dakota v. Wayfair*" (regularly updated state-by-state chart); Joseph Bishop-Henchman, Hannah Walker, and Denise Garbe, "Post-*Wayfair* Options for States," Tax Foundation (Aug. 29, 2018); Bloomberg BNA, "Daily Tax Report: State"; CCH, "State Tax Day"; Tax Analysts' *State Tax Notes* and *State Tax Today*; and Thomson Reuters, Checkpoint, "Daily Updates, State and Local Tax." Readers should view the ensuing description as no more than a snapshot of the state of play as of February and should assume that the picture may — and, in some cases, clearly will — have changed by the time they read this.

[19] *See* Hellerstein et al., *supra* note 8; Hellerstein and Appleby, *supra* note 5, at 286; and Ruth Mason, "Implications of *Wayfair*," 46(10) *Intertax* 810 (2018), at 817.

[20] *See* OECD, "Addressing Base Erosion and Profit Shifting" (2013), at 48; and European Commission, COM(2017) 547 final (Sept. 21, 2017).

[21] *See id.*

Although that problem occupies center stage in the debate over taxing the digital economy,[22] it is hardly novel. Some commentators have been addressing it for years, with one saying:

> If there is one proposition upon which virtually all observers agree, it is that the way in which income is generated in the "new economy" is materially different from the way it was generated during the formative era of international income tax rules. . . . Suffice it to say that services and intangibles have become increasingly important (relative to goods) in today's economy and electronic commerce pervades (when it does not dominate) many forms of income-producing activity. . . . Specifically, the significance of the relationship that traditionally existed between the physical location of activities and the income they produce has diminished. The implications for jurisdictional analysis are apparent. The concept of a permanent establishment, rooted as it is in indicia of physical presence, has become a less accurate gauge of the source of income than it was when the concept was first adopted.[23]

Another commentator has observed that "the principle of physical presence comes under pressure where a business is able to exploit a market in a country without establishing a physical presence there"; that "the concept of geographical fixedness may be inapplicable or even irrelevant in the Internet environment"; and that "the operation of the permanent establishment concept could be easily manipulated for tax purposes."[24] He illustrated the possibilities for manipulation using some examples: A multinational business could locate its website on a server in a tax haven so as to constitute a PE there and use that server to conduct business anywhere in the world, or it could arrange for a PE to exist nowhere by regularly moving its website from a server in one jurisdiction to a server in another.

Wayfair addresses the enforcement of sales (consumption) taxes and does not raise any questions whether the allocative principle — that is, the destination principle — is justified, as it plainly is under widely accepted international norms.[25] Although physical presence has not generally been a contentious issue for the allocation of consumption tax rights, it has historically been at the center of controversies over collection of the tax, at least in the business-to-consumer context, in which the taxing jurisdiction cannot rely on the local purchaser to remit the tax.[26] If digital businesses engage in economic activity directed at jurisdictions where they lack physical presence and to which taxing rights could be assigned, *Wayfair* could provide a template for jurisdictions that want to align their rules on allocating taxing rights with their ability to collect tax arising from those rights and to embrace rules of enforcement jurisdiction that reflect the reality of today's digital economy. Viewed in that light, *Wayfair* may be regarded as answering the fundamental question of how to restore fairness in a cross-border tax setting

[22] *See* OECD BEPS final action 1 report (2015); OECD, "Tax Challenges Arising From Digitalization — Interim Report 2018" (2018); and Stephen E. Shay, J. Clifton Fleming Jr., and Robert J. Peroni, "The David R. Tillinghast Lecture — What's Source Got to Do With It — Source Rules and U.S. International Taxation," 56 *Tax L. Rev.* 81 (2002). But compare Wolfgang Schön, "Ten Questions About Why and How to Tax the Digitalized Economy," 72(4/5) *Bull. Int'l Tax'n* 278 (2018), at 279, criticizing the OECD rationale of conferring taxing rights to market jurisdictions based on the value creation concept. *See also* European Commission, COM(2018) 147 final (Mar. 21, 2018); and Ryan Finley, "EU Digital Services Tax Attempts To Bypass Treaty Rules," *Tax Notes Int'l*, Oct. 29, 2018, p. 534. For a critical assessment of proposed PE definitions as a response to the digital economy, see Daniel W. Blum, "Permanent Establishments and Action 1 on the Digital Economy of the OECD Base Erosion and Profit Shifting Initiative — The Nexus Criterion Redefined?" 69(6/7) *Bull. Int'l Tax'n* 314-325 (June/July 2015). Compare the proposal by Peter Hongler and Pasquale Pistone, "Blueprints for a New PE Nexus to Tax Business Income in the Era of the Digital Economy," IBFD Working Paper (Jan. 20, 2015).

[23] Hellerstein, "Jurisdiction to Tax Income and Consumption in the New Economy," *supra* note 4, at 41-42 (citations omitted).

[24] Jeffrey Owens, "The Tax Man Cometh to Cyberspace," *Tax Notes Int'l*, June 2, 1997, p. 1833.

[25] OECD, "International VAT/GST Guidelines" (2017).

[26] *See* summary of *Wayfair*, Section II, *supra*. In the business-to-business context, under reverse-charge or self-assessment mechanisms, taxing jurisdictions can generally rely on the business purchaser to comply with tax collecting and reporting obligations on purchases from sellers with no physical presence in the jurisdiction. *See* OECD, "Mechanisms for the Effective Collection of VAT/GST Where the Supplier Is Not Located in the Jurisdiction of Taxation" (2017), Chapter 2(C)(2).

without physical presence, and the Court's language is broad enough to encompass situations that may depart from the precise issues the case addressed.

2. Income Allocation in the Digital Economy

As just noted, *Wayfair* did not address, let alone challenge, the international framework for allocating the income of MNEs lacking a physical presence in jurisdictions where they have substantial economic (albeit virtual) contacts through their digital activities, but as suggested the case might still contribute to the debate regarding the adequacy of international rules on allocating taxing rights, which arguably do not reflect standards of fairness or economic reality. Assuming, as *Wayfair* shows, that tax nexus principles do not satisfactorily address the reality of the digital economy, one could contend that for analogous reasons, profit allocation methods substantially based on those principles likewise fail to address that reality. Accordingly, this section focuses on the possible implications of *Wayfair* for allocating the income of digital businesses that lack physical presence in the jurisdictions where they direct their activities and seeks to identify lessons from the U.S. subnational experience.

In many respects, *Wayfair* may be read as a paean to the economic significance of the market state to a business wholly apart from the physical presence of that business in the state. In language quoted above that is well worth repeating, the Court said:

> Between targeted advertising and instant access to most consumers via any internet-enabled device, *"a business may be present in a State in a meaningful way without"* that presence *"being physical in the traditional sense of the term."* A virtual showroom can show far more inventory, in far more detail, and with greater opportunities for consumer and seller interaction than might be possible for local stores. *Yet the continuous and pervasive virtual presence of retailers today is, under* Quill, *simply irrelevant. This Court should not maintain a rule that ignores these substantial virtual connections to the State*. [Emphasis added.]

In that context, U.S. states, which historically have applied formulary apportionment to allocate corporate income,[27] have long used a sales factor to reflect the contribution of the market state to a corporation's income.[28] Indeed, although the states traditionally apportioned income according to a three-factor formula that averaged the ratios of property, payroll, and sales in the state to the totals throughout the business, today only six of the 45 states (and the District of Columbia) with corporate income taxes rely primarily on the equally weighted three-factor formula to apportion corporate income, with nearly 90 percent of those jurisdictions using formulas that rely exclusively or heavily on sales.[29] One commentator has observed, however, that development has "little to do with sound state tax policy and everything to do with state 'economic development' policy."[30]

Although this article is not the appropriate vehicle for addressing the complex and controversial issues in allocating taxing rights to market jurisdictions based on their contribution to value creation,[31] *Wayfair*, with its wholehearted endorsement of the economic significance of the market state in the digital economy without regard to physical presence, will inevitably be

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[27] *See* Avi-Yonah, "Between Formulary Apportionment and the OECD Guidelines: A Proposal for Reconciliation," 2(1) *World Tax J.* 3 (2010) (arguing that the arm's-length principle is the reason OECD countries do not move toward formulary apportionment).

[28] *See* Walter Hellerstein, "A US Subnational Perspective on the 'Logic' of Taxing Income on a 'Market' Basis," 72(4/5) *Bull. Int'l Tax'n* 293-296 (Apr./May 2018).

[29] *See* Walter Hellerstein, "The Transformation of the State Corporate Income Tax Into a Market-Based Levy," *J. Tax'n* (forthcoming May 2019).

[30] Hellerstein et al., *supra* note 8, at para. 8.06[1]. According greater (or exclusive) weight to the sales factor is designed to encourage taxpayers to locate in the state because their in-state capital and labor will count relatively less (or not at all) in determining their in-state income, and their sales will count only if they have a market in the state.

[31] Much literature discusses taxation based on the value creation concept and the role the market plays, especially for business models that rely heavily on users' contributions to generate revenue. *See, e.g.*, Walter Hellerstein, "Jurisdiction to Tax in the Digital Economy: Permanent and Other Establishments," 68(6/7) *Bull. Int'l Tax'n* 346-351 (June/July 2015); Johanna Hey, "'Taxation Where Value Is Created' and the OECD/G20 Base Erosion and Profit Shifting Initiative," 72(4/5) *Bull. Int'l Tax'n* 203 (2018); Aleksandra Bal, "(Mis)guided by the Value Creation Principle — Can New Concepts Solve Old Problems?" 72(11) *Bull. Int'l Tax'n* (2018); Miranda Stewart, "Abuse and Economic Substance in a Digital BEPS World," 69(6/7) *Bull. Int'l Tax'n* 399-409 (June/July 2015); Wolfgang Schön, "Ten Questions About Why and How to Tax the Digitalized Economy," 72(4/5) *Bull. Int'l Tax'n* 278 (2018); and Yariv Brauner and Pasquale Pistone, "Adapting Current International Taxation to the New Business Models: Two Proposals for the European Union," 71(12) *Bull. Int'l Tax'n* 681 (2017).

invoked by those who support attributing taxing rights to the market state.[32]

B. Virtual Presence Thresholds

In *Wayfair*, the Court's evaluation of the constitutionality of South Dakota's legislation introducing virtual nexus criteria for sales tax collection was strongly motivated by its view that the state's approach would advance the objective of nondiscrimination by creating a level playing field between in- and out-of-state traders selling to local purchasers. At the same time, the Court acknowledged that overturning the physical presence rule could result in undue compliance burdens for some sellers engaged in cross-border trade. The thresholds in South Dakota's law, which conferred a reasonable degree of protection to small vendors, balanced the risk of undue burdens, however.

Although any threshold could in principle be viewed as arbitrary, *Wayfair* suggests that a reasonable trade-off can be made for ensuring the effectiveness of a market state's tax jurisdiction without imposing too onerous a burden on remote sellers. The Court identified the key factors for achieving the appropriate trade-off: safe harbor thresholds that require a merchant to collect tax only if does a considerable amount of the business in the state, and the availability of a simplified registration and compliance regime (adopted by South Dakota and many other states). The simplified regime included a single state-level administration; uniform definitions of goods and services; simplified rate structures; and access to sales tax administration software paid for by the state, use of which protects the seller from audit liability.[33]

1. Thresholds

In considering the international implications of *Wayfair*, it may be instructive to compare the Court's approach to those proposed or taken in analogous contexts by the OECD and the EU. Both the OECD and the EU have considered or proposed thresholds both for income tax nexus (based on a significant economic presence) and VAT purposes (under distance-selling rules requiring remote sellers to comply with tax collection requirements).

As noted, South Dakota conditioned compliance with its sales tax collection obligation on the seller's having annual gross revenue over $100,000 from the sale of tangible personal property or services delivered into the state or engaging in at least 200 separate transactions for the delivery of those goods or services into the state. The EU included thresholds in its proposal for a directive on significant economic presence (COM(2018) 147 final) laying down rules for establishing a taxable nexus reflecting a nonphysical commercial presence for cross-border digital businesses. The significant economic presence concept is added to the traditional PE concept and is based on criteria deemed to determine a business's digital footprint in a jurisdiction using indicators of economic activity.[34] Those criteria reflect the reliance of digital businesses on a large user base, user engagement, user contributions, and the user-created value. That value is not considered to be created by users that receive services from digital businesses that merely facilitate digital transactions by providing digital interfaces. Accordingly, the significant economic presence concept is neither uniform nor based on objective revenue or transactional thresholds; rather, it is determined by the value-creation concept.

India introduced a significant economic presence concept in its 2018 budget, although it has yet to specify the thresholds for establishing a presence.[35] In principle, it expanded the definition of a business connection to India to include transactions involving goods, services, or property carried out by a nonresident if the aggregate of payments arising from the transactions during the previous year exceed a

[32] OECD 2018 interim report, *supra* note 22, at 169; European Commission, COM(2018) 147 final, *supra* note 22; and European Commission, COM(2018) 148 final (Mar. 21, 2018).

[33] *See* Section III, *supra*.

[34] European Commission, COM(2018) 147 final, *supra* note 22.

[35] Alexander Lewis, "Budget Introduces Digital PE Rules," *Tax Notes Int'l*, Feb. 5, 2018, p. 507.

prescribed amount.[36] Also, a nonresident carrying out a systematic and continuous solicitation of business activities, or interacting with a prescribed number of users through digital means, is considered to have a significant economic presence. The calculation is based on two criteria: a business's user base and revenue. It has been said that those criteria are subjective because they do not consider such issues as the value of a supply chain transaction, profit margins, the scale of a business, or the business model being used.[37] It has also been suggested that other clarifications must be made for the significant economic presence concept to be effective for establishing nexus and to interact effectively with the India's tax treaty network.[38]

Under the EU's proposal, there is a significant digital presence in a member state if at least one of the following criteria is met: revenues from providing digital services to users in a jurisdiction exceed €7 million in a tax period; the number of users of a digital service in a member state exceeds 100,000 in a tax period; or the number of business contracts for digital services exceeds €3,000.[39] As explained in the impact assessment, the specified threshold is set high enough to exclude small cases in which profits attributable to a digital presence would not even cover a PE's tax compliance cost.[40] Assuming that those thresholds provide a safe harbor for small vendors, the EU's proposal would appear to satisfy the *Wayfair* standard.

From a VAT perspective, the European Commission proposed similar nexus criteria in the relevant e-commerce package as part of the broader EU digital single market strategy. The proposed amendments in the VAT rules initially focused on electronically supplied business-to-consumer (B2C) services as of 2015, while new rules for B2C distant sales of goods with transport would take effect as of 2021.[41] Even though the 2015 VAT amendments have taken effect, a large VAT compliance gap has been observed, challenging the appropriateness of the VAT rules.[42] The rules on nexus requirements were amended as of 2018 to reintroduce an origin-based VAT for electronically intra-EU B2C supplies of services falling under the threshold of €10,000, which was meant to relieve compliance costs for small and midsize enterprises. An additional threshold based on the value of the taxable transactions was also proposed: If the total annual value of intra-EU B2C supplies, exclusive of VAT, does not exceed €100,000, a single piece of evidence will be sufficient to prove the location of a taxable person's customers in an intra-EU B2C context.[43]

Regarding distant B2C sales of goods sold over the internet, a new turnover threshold was introduced, above which taxable persons must charge and collect the VAT at destination and below which VAT is charged and collected at origin. An extension of the Mini One-Stop Shop to distance sales, which would enter into force as of 2021, has been also proposed. Two additional thresholds have been introduced to simplify VAT obligations for microbusinesses and small and medium-size enterprises: an annual turnover threshold of €10,000 for intra-EU cross-border supplies of telecommunications, broadcasting, and electronic services, and an annual turnover threshold of €100,000, up to which the vendor must keep only one piece of evidence (instead of two) to identify the customer's member state.

[36] *See also* Stephanie Soong Johnston, "India's Tax Chief: Digital Taxation Needs Fair Allocation Rules," *Tax Notes Int'l*, Oct. 22, 2018, p. 435 (citing Akhilesh Ranjan, India's chief commissioner of income tax, who pointed out the importance of significant economic presence in reestablishing fairness in the international tax system).

[37] *See* J.P. Finet, "New PE Scheme Limited by Unanswered Questions," *Tax Notes Int'l*, Oct. 15, 2018, p. 313.

[38] *Id.*

[39] COM(2018) 147 final, *supra* note 22, at article 4.

[40] European Commission, SWD(2018) 81 final (Mar. 21, 2018).

[41] See Proposal for a Council Directive amending Directive 2006/112/EC and Directive 2009/132/EC as regards certain value added tax obligations for supplies of services and distance sales of goods, COM(2016) 757 final; Proposal for a Council Implementing Regulation Amending Implementing Regulation (EU) 282/2011 laying down implementing measures for Directive 2006/112/EC on the common system of value added tax, COM(2016) 756 final; and Proposal for a Council Regulation Amending Regulation (EU) 904/2010 on administrative cooperation and combating fraud in the field of value added tax, COM(2016) 755 final.

[42] For a critical assessment of 2015 VAT rules, see Marie Lamensch, "European Commission's New Package of Proposals on E-Commerce: A Critical Assessment," 28(2) *Int'l VAT Monitor* 137-146 (Mar./Apr. 2017).

[43] *Supra* note 37.

It thus seems that for a virtual presence test to be implemented, thresholds are key to ensuring its feasibility and administrability. The criteria for establishing those thresholds vary — what is essential is that any thresholds reflect a substantial economic presence constituting a purposeful penetration of the jurisdiction's market by the taxable digital business.

2. Simplifying Tax Compliance Mechanisms

Comparing the proposed thresholds in connection with the modernization of VAT compliance mechanisms and those approved in *Wayfair* reveals several similarities (see table).[44] Even so, digital commerce continues to challenge the tax system's appropriateness if one addresses the particularities of some business models. Although discussion of that kind of approach is beyond the scope of this article, it is still important to emphasize that the adoption of thresholds, together with simplification of compliance mechanisms, improves the system's efficacy.[45]

Further, increasing the use of technological tools in tax compliance mechanisms is another way to achieve the appropriate trade-off. Technology-facilitated methods could remove administrative burdens for both businesses and tax authorities and improve compliance.[46] Interesting proposals have been made for the technological modernization of tax compliance mechanisms, especially in the VAT area,[47] although their implementation will take time and will require the necessary consensus.

V. Concluding Remarks

Even if the foregoing discussion has accomplished nothing else, it has revealed the enormous challenges the digital economy presents to cross-border tax regimes, direct and indirect, international and subnational. We hope, however, that it has demonstrated the opportunities for proactively responding to those challenges in a manner that reflects economic reality and facilitates the appropriate allocation of taxing rights to, and the collection of tax in, the jurisdiction where those rights have been assigned.

In that context, one may appreciate the true global importance of a case like *Wayfair*. Faced with quintessentially digital cross-border business activity, along with archaic tax nexus principles rooted in physical presence, the U.S. Supreme Court jettisoned antiquated principles and endorsed nexus rules embodying a virtual presence that reflected the economic reality it was adjudicating. At the same time, however, it recognized that the rules it was endorsing did not impose undue burdens on cross-border trade.

The fundamental message of *Wayfair*, then — which applies to all the issues touched on in this article, regardless of context — is that tax rules for the digital economy, whether involving allocating taxing rights or enforcing tax obligations arising from those rights, should reflect contemporary economic reality while avoiding the imposition of undue burdens on those tasked with collection obligations. ■

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[44] Elvire Tardivon-Lorizon and Amanda Z. Quenette, "Indirect Taxation of E-Commerce — Significant Recent Changes in the United States and the European Union," 29(6) *Int'l VAT Monitor* 215-219 (Nov./Dec. 2018).

[45] Walter Hellerstein, Stéphane Buydens, and Dimitra Koulouri, "Simplified Registration and Collection Mechanisms for Taxpayers That Are Not Located in the Jurisdiction of Taxation: A Review and Assessment," OECD Taxation Working Papers No. 39 (2018).

[46] Lamensch, *supra* note 42, at 146 (arguing that what is truly needed is a fundamental rethink of the VAT system based on available or to-be-created technology).

[47] *See* Rifat Azam and Orly Mazur, "Cloudy With a Chance of Taxation," *Fla. Tax Rev.* (forthcoming) (proposing a real-time automatic exchange of information across jurisdictions and cooperation in VAT collection, a real-time blockchain VAT system, and VAT collection through payment intermediaries). *See also* Richard T. Ainsworth and Musaad Alwohaibi, "The First Real-Time Blockchain VAT: GCC Solves MTIC Fraud," *Tax Notes Int'l*, May 22, 2017, p. 695.