

# *Quill*'s Call to Action: Will Congress Update Commerce Clause Nexus Requirements in Light of Cloud Computing?

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## Introduction

The Supreme Court last touched Commerce Clause<sup>1</sup> limits on state taxation in an era when products were sold in brick-and-mortar stores and cell phone use was sixty times less prevalent than it is today.<sup>2</sup> Yet the Court has no plans to modernize the antiquated methodology that currently limits states' ability to tax interstate commerce. In *Quill Corp. v. North Dakota*, the Court emphasized that Congress—with its power to regulate interstate commerce—is the proper branch of government to update and fine tune the rules that govern state taxation of interstate commerce.<sup>3</sup> Despite a constitutional grant of power and an explicit confirmation of authority from the Court, Congress rarely intervenes in the state sales and use tax arena.<sup>4</sup> The only time Congress successfully set a uniform state sales-and-use tax regime was in 2000 with the Mobile

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1. U.S. CONST. art.I, § 8, cl. 3.

2. See *Goldberg v. Sweet*, 488 U.S. 252, 261 (1989); Scott Woolley, *Cell Phone Use is Way Up. So Why Did Brain Cancer Rates Fall?*, CNN MONEY (June 7, 2011), <http://tech.fortune.cnn.com/2011/06/07/cell-phone-use-is-way-up-so-why-are-brain-cancer-rates-down/> (cell phone use last measured in 1990, a year after *Goldberg v. Sweet* was decided).

3. *Quill Corp. v. North Dakota*, 504 U.S. 298, 318 (1992).

4. Charles E. McLure Jr. & Walter Hellerstein, *Congressional Intervention in State Taxation: A Normative Analysis of Three Proposals*, TAX ANALYSTS STATE TAX NOTES MAG, Mar. 1, 2004, at 722–23.

Telecommunication Sourcing Act (“MTSA”), which provided sourcing rules for the taxation of cell phones.<sup>5</sup> Since the enactment of the MTSA, states are continually attempting to expand their tax regimes to encompass new technology, but find themselves severely limited by traditional Commerce Clause boundaries.<sup>6</sup>

One new industry that states hope to tax is cloud computing.<sup>7</sup> With the global market for cloud computing posed to increase from \$40.7 billion in 2011 to \$241 billion in 2020, it is no wonder that states are eager to reach this revenue.<sup>8</sup> But taxing such amorphous products and services—which can be developed, sold, and used in a complicated web of locations—raises serious concerns about whether this new technology can be taxed under traditional Commerce Clause limitations provided by the Constitution.

This note will discuss whether states need Congress to intervene or redefine current Commerce Clause limitations in order to tax the cloud and, if so, whether Congress will act. Part I will introduce the three main service models of cloud computing. Part II will describe the traditional constitutional limitations on state taxation and how these limits constrain states from taxing the cloud. Part III will discuss whether states can successfully tax the cloud on their own by analyzing the Amazon tax, where states have individually developed legislation that requires out-of-state vendors to collect sales tax. Finally, Part IV will debate whether a uniform approach from Congress is likely to occur and if it is economically achievable by comparing the conditions under which the MTSA was passed.

This note argues that congressional intervention is the best solution to taxing the cloud, yet it is unlikely. In its current state, technology has outgrown traditional Commerce Clause limits, making it nearly impossible for states to successfully tax the cloud on their own. Though congressional intervention would permit states to tax the cloud, a uniform solution is improbable because it is doubtful that states and the cloud computing industry will compromise to develop a uniform solution. Further, such legislation might not completely alleviate the problems caused by Commerce Clause limitations. The

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5. Mobile Telecommunication Sourcing Act, 4 U.S.C. § 116 (2000).

6. *Quill*, 504 U.S. at 301 (limiting states ability to require out-of-state vendors to collect sales taxes); *Goldberg*, 488 U.S. at 261 (requires physical presence in state).

7. Richard Rubin & Juliann Francis, *States Pursue Sales Tax Revenue Vanishing Into Computing Cloud*, BLOOMBERG (Aug. 21, 2011), <http://www.bloomberg.com/news/2011-08-22/states-pursue-sales-tax-revenue-vanishing-into-computing-cloud.html>.

8. *Id.*

goal of this note is to emphasize Congress' integral role in state taxation, especially in this age of increasingly rapid technological innovation.

## **I. Revolutionizing Products and Services Through the Cloud**

Cloud computing has created a new industry where products and services are stored, delivered, and used by consumers in entirely new ways. The National Institute for Standards ("NIST") defines cloud computing as "a model for enabling convenient, on-demand network access to a shared pool of confirmable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and related with minimal management effort or service provider interaction."<sup>9</sup> Under this dense umbrella definition there exist three service models that represent the vast array of industries the cloud touches.<sup>10</sup>

### **A. Software as a Service**

The most relatable service model is Software as a Service ("SaaS"). With SaaS, vendors sell customers access to programs or applications that are run on a cloud infrastructure.<sup>11</sup> This means that the software is housed on a computer server rather than on a traditional compact disk that is installed onto an individual computer. This allows the customer to access the software interface from multiple locations without having to actually load software or maintain the application through its own IT department.<sup>12</sup> Under this model, the network, servers, storage, and operating system are managed and controlled by the vendor.<sup>13</sup> Google's Gmail, which provides an email application over the Internet, is an everyday example of SaaS.<sup>14</sup> Software companies like Oracle have begun to

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9. U.S. DEP'T OF COMMERCE, SPECIAL PUBL'N 800-145, THE NIST DEFINITION OF CLOUD COMPUTING (2011), *available at* <http://csrc.nist.gov/publications/nistpubs/800-145/SP800-145.pdf>.

10. *Id.*

11. *Id.*

12. *Id.*

13. *Id.*

14. David Needle, *Gmail Success Spells SaaS Superiority*, INTERNET NEWS, May 21, 2011, <http://www.internetnews.com/software/article.php/3748276/Google+Gmail+Success+Spells+SaaS+Superiority.htm>.

transition their business model to incorporate SaaS.<sup>15</sup> Oracle sells software that organizes purchase history and vendor contact information so that companies can easily keep track of this data.<sup>16</sup> The software giant has evolved from selling disks to selling access to an online version of the software.<sup>17</sup> Even though the same software is being offered, some taxing authorities have treated SaaS software differently.

Most states impose sales tax on “canned software” or packaged software that is sold off the shelf but not on software that is customized for the consumer.<sup>18</sup> These statutes do not, however, explicitly cover state taxation of SaaS.<sup>19</sup> In 2009, only North Carolina and Washington had enacted specific provisions for taxing cloud-based software.<sup>20</sup> Some states have altogether ceded their ability to tax canned software when it is delivered electronically.<sup>21</sup> Other states, such as Pennsylvania, have determined that there is no difference between software delivered electronically or by disk.<sup>22</sup> Where states have not passed a statute to determine whether SaaS is taxable, the taxpayer is left in an uncertain position where facts and circumstances are used to determine whether the software provided online is more like a service or software.<sup>23</sup> This is of great significance because not all services are sourced to the place of use.<sup>24</sup>

### B. Platform as a Service

Platform as a Service (“PaaS”) is similar to SaaS in that the vendor manages and controls the underlying cloud infrastructure, but, under this model, the customer actually employs programming languages and tools provided by the vendor to create or develop

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15. Alex Goldman, *Oracle Sourcing Goes SaaS*, INTERNET NEWS, Mar. 10, 2000, <http://www.internetnews.com/software/article.php/3809526/Oracle+Sourcing+Goes+SaaS.htm>.

16. *Id.*

17. *Id.*

18. Mark N. Stefan & Mauricio G. Keene, *Sales Tax Considerations With Regard to Bundling in the Cloud*, 21 Aug JMTAX 24, 28 (2011).

19. Brian Balingit, *Taxing Software as a Service (SaaS): Lessons Learned*, GRANT THORNTON, Sept. 2010, [http://www.gt.com/staticfiles/GTCom/Technology/Tech/dashboard/SaaS\\_%20article.pdf](http://www.gt.com/staticfiles/GTCom/Technology/Tech/dashboard/SaaS_%20article.pdf).

20. *Id.*

21. WALTER HELLERSTEIN, STATE TAXATION ¶ 13.06 (3rd ed. 2011).

22. *Id.*

23. Balingit, *supra* note 19.

24. WALTER HELLERSTEIN, STATE TAXATION ¶ 18.05 (3rd ed. 2011).

applications.<sup>25</sup> PaaS replaces the costly and complex development of building on-premise applications. Salesforce is a prime example of PaaS. Salesforce provides customers with the infrastructure and user-friendly means to develop applications on Salesforce's network.<sup>26</sup> The platform allows individuals without extensive formal training to develop applications on a platform that is well-tested.<sup>27</sup> This provides an attractive business option to companies that don't have sufficient capital to invest in the development of their own internal systems.<sup>28</sup>

Companies like Salesforce are taxed if states deem the services it provides to be taxable.<sup>29</sup> Even if a state has determined that a certain cloud computing service is taxable, there is still a question of how to tax the transaction when it crosses state borders. This is a common problem for companies like Salesforce, whose platform is designed in California, stored on servers that are potentially in another state, and often used by a customer in a third state. Some states tax services based on where the service will be used or enjoyed, while other states tax services according to where the service was performed.<sup>30</sup> Other states take a less polarized stance and tax services only in proportion to the extent they were used within a state.<sup>31</sup> The place of use model is complicated when multistate corporations have numerous offices across the country using PaaS. The location of performance is also problematic, as it is unclear whether performance is the action done by the servers, which support the enterprise, or the programming that went into making the servers function as they do. Needless to say, any legislation that makes PaaS a taxable service must be precise when defining its sourcing rules.

### C. Infrastructure as a Service

Infrastructure as a Service ("IaaS") functions similarly to SaaS and PaaS in that the vendor controls the underlying cloud

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25. Balingit, *supra* note 19.

26. *What is Platform as a Service (PaaS)*, SALESFORCE. (Mar. 11, 2013), <http://www.salesforce.com/paas/overview/>.

27. Kevin L. Jackson, *Platform-as-a-Service: The Game Changer*, FORBES (Jan. 25, 2012, 9:03 AM). <http://www.forbes.com/sites/kevinjackson/2012/01/25/platform-as-a-service-the-game-changer/>.

28. *Id.*

29. See WALTER HELLERSTEIN, *STATE TAXATION* ¶ 12.05, (3rd ed. 2011) ("most states impose retail sales taxes on all sales of tangible personal property unless explicitly exempted, but only on specified services"); SALESFORCE, *supra* note 26.

30. HELLERSTEIN, *supra* note 29, at ¶ 18.05.

31. *Id.*

infrastructure, but it differs in that the customer has the ability to manage or control the operating system, storage, and deployed application on the cloud.<sup>32</sup> IaaS simply provides customers with the necessary storage, hardware, servers, and networking components needed to function on the cloud.<sup>33</sup> IaaS is attractive for companies that want to develop and run their own home-built applications or website but don't want to maintain the hardware to power them, which can be extremely expensive.<sup>34</sup> Amazon is a leader in IaaS with its Amazon Web Server, which offers companies the ability to buy storage for as little as \$0.125 for the first terabyte.<sup>35</sup>

Similar to PaaS, IaaS customers will not be taxed unless a statute specifically defines the services as taxable.<sup>36</sup> This lack of formal taxation is evident on Amazon's Web Service customer support website, where it only informs customers about European VAT taxes but not any U.S. state taxes.<sup>37</sup> In February 2012, however, Washington passed a statute that permits the taxation of the service Amazon Web Service is providing.<sup>38</sup> This is likely the first of many states that will attempt to tax IaaS.

Much of the confusion involved in taxing the cloud is that states have not updated their statutes to include the innovative products that have been developed throughout the past decade. This lack of legislation is not necessarily a reflection of inefficiency on the part of state legislatures but rather a possible effect of the stringent Commerce Clause limitations on state taxation. The following section lays out these constitutional limitations and considers their impact on states' ability to tax the cloud.

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32. *Id.*

33. Jackson, *supra* note 27.

34. Sean Ludwig, *Cloud 101: What the heck to IaaS, PaaS and SaaS companies do?*, CLOUD BEAT (Nov. 14, 2011), <http://venturebeat.com/2011/11/14/cloud-iaas-paas-saas/>.

35. Mikael Ricknas, *Amazon Web Services Lowers Price of Storage in its Cloud*, INFO WORLD (Feb. 07, 2012), <http://www.infoworld.com/d/cloud-computing/amazon-web-services-lowers-price-of-storage-in-its-cloud-185841>.

36. See HELLERSTEIN, *supra* note 29 ("most states impose retail sales taxes on all sales of tangible personal property unless explicitly exempted, but only on specified services").

37. AMAZON WEB SERVICES, <http://aws.amazon.com/tax-help/> (last visited Mar. 05, 2013).

38. John Cook, *Amazon Web Services to Collect Sales Tax on Customers in Washington State*, GEEK WIRE (Feb. 16, 2012, 9:04 AM), <http://www.geekwire.com/2012/amazon-web-services-collect-sales-tax-customers-washington-state>.

## II. Constitutional Limits on State Taxes

The Constitution poses limitations on a state's power to tax under the Commerce Clause and the Due Process clause.<sup>39</sup> A majority of concerns in taxing the cloud fall under the Commerce Clause's nexus and fair apportionment requirements because they are not easily adapted to reach modern technology. Congress—as a protector of interstate commerce—is not constrained by the Commerce Clause, so any action it takes is not controlled by these concepts.<sup>40</sup>

### A. The Due Process Clause

The Due Process clause provides that no state shall “deprive any person of life, liberty, or property, without due process of law.”<sup>41</sup> In the context of state taxation, the Supreme Court has interpreted this limitation to mean that when a state taxes an entity without having a “minimum connection” with the entity, the entity has been deprived of its property without due process of law.<sup>42</sup> Courts look for a “minimum connection” between states and the entities that they tax to ensure that the “income attributed to the state for tax purposes . . . [is] rationally related to values connected with the taxing state.”<sup>43</sup>

In *Shaffer v. Heitner*, the Court recognized that because of advances in technology and the ability to easily travel across state lines, physical presence in a state is no longer required to establish a minimum connection under the Due Process Clause.<sup>44</sup> A business need only purposefully direct their efforts towards the residents of another state to satisfy Due Process requirements because the business would have “fair warning that [its] activity may subject it to the jurisdiction of a foreign sovereign.”<sup>45</sup>

The Due Process Clause does little to limit the states' ability to tax the cloud because the services or products offered were marketed for use across the United States. A vendor that sells storage space or that offers access to their software online around the country would have minimum contacts with any state where it actively sells its

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39. *Quill Corp. v. North Dakota*, 504 U.S. 298, 301 (1992).

40. *Id.*

41. U.S. Const. amend. XIV, § 1.

42. *Quill*, 504 U.S. at 306.

43. *Id.*

44. *Shaffer v. Heitner*, 433 U.S. 186, 218 (1977).

45. *Quill*, 504 U.S. at 307–08 (quoting *Shaffer*, 433 U.S. at 218).

products or services. Therefore, states would have little trouble taxing such goods and services under the Due Process Clause.

## B. Commerce Clause

The Commerce Clause authorizes Congress to “regulate Commerce with Foreign Nations, and among the several States.”<sup>46</sup> Where the Due Process Clause concerns itself with the fairness of taxation of states through notice or fair warning, the Commerce Clause’s nexus requirements are rooted in a concern for the national economy.<sup>47</sup> In analyzing whether a state has a sufficient nexus, the Supreme Court in *Complete Auto Transit, Inc. v. Brady* set a four part test to determine whether a state’s attempt to tax is permissible: the tax must be “[1] applied to an activity with a substantial nexus with the taxing State, [2] is fairly apportioned, [3] does not discriminate against interstate commerce, and [4] is fairly related to the services provided by the State.”<sup>48</sup> Each prong of this test will be considered independently to determine how it may limit state taxation of the cloud.

### 1. Substantial Nexus

The first prong of the *Complete Auto* test calls for substantial nexus with the taxing state.<sup>49</sup> Unlike the Due Process Clause, nexus under the Commerce Clause requires physical presence.<sup>50</sup> The Court has not required that the principal place of business be located in the taxing state, but simply that an entity is carrying on an active business in the state.<sup>51</sup> Congress has the power to alter the physical presence requirement.<sup>52</sup>

The physical presence test is of particular concern with cloud computing because the cloud is by nature amorphous and flexible rather than physically sedentary. States have approached the physical presence requirement from different angles. For SaaS, some states consider physical presence met in the location where a computer

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46. U.S. Const. art.I, § 8, cl. 3.

47. *Quill*, 504 U.S. at 312.

48. *Complete Auto Transit, Inc. v. Brady*, 430 U.S. 274, 279 (1977).

49. *Id.*

50. *Id.*

51. *Scripto, Inc. v. Carson*, 362 U.S. 207, 211–12 (1960) (held that independent contractors working in a state can satisfy the physical presence requirement).

52. *Quill*, 504 U.S. at 318.



accesses the software.<sup>53</sup> Sourcing a transaction to the location of use is not precise, however, because the software is not technically located in a computer but on a server. For this reason, other states look to the actual location of the servers that store the software.<sup>54</sup> Yet defining physical presence by servers is also difficult because servers switch their load throughout the day so that a server in Arizona might hold the software one hour and a server in Utah might hold it the next.<sup>55</sup> Some states have adopted the server model of taxation and held that nexus requirements were not met where the company selling the software and the servers on which the software was stored were outside of the state attempting to collect taxes.<sup>56</sup> A private letter ruling by the Utah State Tax Commission supported a tax on SaaS simply because a server in Utah housed the software.<sup>57</sup> The physical presence of the cloud presents a deep constitutional issue that appears to severely limit states' ability to tax SaaS, PaaS, and IaaS because the technology is stored on servers in the cloud rather than in a single physical location.

## 2. *Fair Apportionment*

The second prong of *Complete Auto*, fair apportionment, is of particular interest in taxing the cloud because the technology does not lend itself to be easily sourced to specific jurisdictions. In determining whether a tax is fairly apportioned, the Court in *Goldberg v. Sweet* held that it must be internally and externally consistent.<sup>58</sup> To be internally consistent, the tax must be structured so that if every state were to impose an identical tax there would be no duplication of taxes among states.<sup>59</sup> This could be accomplished in cloud computing if states all taxed businesses on a single criterion that is limited to a single state, such as a billing address or corporate headquarters.

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53. Michelle Andre, *Sales and Use Taxation in the Clouds*, KPMG (July 12, 2010), <http://www.kpmginstitutes.com/taxwatch/insights/2010/pdf/wnit-071210-sales-use-taxation-in-clouds.pdf>.

54. *Id.*

55. Valerie Sasaki, *Cloudy With a Chance of Tax*, MILLER NASH (Sept. 02, 2011), [http://www.millernash.com/files/Publication/62e388e8-0bbb-489c-9dfa-ec8fe994253d/Presentation/PublicationAttachment/cd91ca38-f775-417c-88d3-33844a70f31e/Miller\\_Nash%20LLP%20-%20NW%20TaxWire%20-%20Fall%2011.pdf/](http://www.millernash.com/files/Publication/62e388e8-0bbb-489c-9dfa-ec8fe994253d/Presentation/PublicationAttachment/cd91ca38-f775-417c-88d3-33844a70f31e/Miller_Nash%20LLP%20-%20NW%20TaxWire%20-%20Fall%2011.pdf/).

56. Andre, *supra* note 53.

57. Sasaki, *supra* note 55.

58. 488 U.S. 252, 261 (1989).

59. *Id.*

External consistency requires that states tax only that portion of revenues from interstate activity which “reasonably reflects [the] in-state component of activity.”<sup>60</sup> In determining external validity, the Court does not require that states perfectly apportion tax to the extent that it relates to the state.<sup>61</sup> Rather, external validity is not met where the amount of tax is “out of all appropriate proportions to the business transacted in that state.”<sup>62</sup> The Court has found that a test that apportions tax based on the company’s payroll, property, and sales in the taxing state is a proper means to measure external consistency.<sup>63</sup>

There is more difficulty in establishing external consistency in taxing the cloud. For SaaS, it is not immediately clear where a multi-state corporation will use the software. Applying the payroll, employee, and sales volume analysis approved by the Court is problematical as each variable could point to a different office location. Colorado has attempted to meet the external consistency requirement in a tax on SaaS that requires vendors to apportion the tax in accordance with where the software will be used.<sup>64</sup> If the vendor does not know where it will be used, Colorado directs the vendor to source the transaction to the business address provided by the customer.<sup>65</sup> However, it is not clear if this default rule is a permissible solution to the problem.<sup>66</sup>

### 3. *Discrimination Against Interstate Commerce*

The third prong—discrimination against interstate commerce—is manifested in taxes that inhibit interstate commerce.<sup>67</sup> The concern here is preventing states from being protective.<sup>68</sup> To thwart a State’s protective tendencies, “a state may not tax a transaction or incident more heavily when it crosses state lines than when it occurs entirely

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60. *Id.* at 262.

61. *Hans Rees’ Sons v. State of N. Carolina*, 283 U.S. 123, 135 (1931).

62. *Id.*

63. *Container Corp. of Am. v. Franchise Tax Bd.*, 463 U.S. 159, 181–84 (1983).

64. Marianne Evans, *Cloudy With a Chance of Fog: The Outlook for Cloud Computing Income Tax Issues*, KPMG, (Oct. 11, 2010), <http://www.kpmginstitutes.com/taxwatch/insights/2010/pdf/wnit-101110-outlook-cloud-computing-tax-issues.pdf>.

65. *Id.*

66. *Id.*

67. *Camps Newfoundland/Owatonna, Inc. v. Town of Harrison*, 520 U.S. 564, 581 (1997) (quoting *Chemical Waste Mgmt., Inc. v. Hunt*, 504 U.S. 334, 342 (1992)).

68. *Id.*

within the State.”<sup>69</sup> This issue is not fully relevant in taxing the cloud because states’ aim in this context is to gain a piece of the revenue generated in this burgeoning new industry rather than to protect local businesses. Therefore, state taxation of the cloud is not considered discriminatory because states want to tax inter and intra state cloud transactions in the same way.

#### 4. *Fairly Related*

The final prong of *Complete Auto* requires that the tax must be “fairly related to the services provided by the State.”<sup>70</sup> This does not mean that the tax imposed must be equal to the value of services the state provided to the activity being taxed.<sup>71</sup> The Court recognizes that most taxpayers pay more in tax than they receive in benefits from the state.<sup>72</sup> This prong merely requires that the tax charged must be tied to earnings that the state made possible.<sup>73</sup> Upon first glance this appears similar to the fair apportionment requirement, but this final prong focuses on the activities or presence of the taxpayer in the state.<sup>74</sup> A state tax on coal mined by a company was found fairly related to the taxing state because the company’s main activity in the state was on the coal mining.<sup>75</sup>

Cloud computing will likely meet this final prong because the two sourcing options—by server or by location of use—are integral parts of the products and services rendered over the cloud. The location of where the product is put to use in a trade or business and the servers, which allow the product or service to be accessed from anywhere over the cloud, are both integral components of cloud computing. Thus, any tax paradigm that sources a transaction based on either criterion will be sufficiently related to the taxing state.

### III. Taxing the Cloud Without Congressional Intervention

Due to Congress’ bleak history of intervening in state sales and use tax regimes,<sup>76</sup> states might consider passing legislation to tax the cloud on their own rather than putting pressure on Congress to act. It

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69. *Id.*

70. *Complete Auto Transit Inc v. Brady*, 430 U.S. 274, 279 (1977).

71. *Commonwealth Edison Co. v. Montana*, 453 U.S. 609, 622 (1981).

72. *Id.*

73. *Id.* at 626.

74. *Id.*

75. *Id.*

76. *McLure & Hellerstein*, *supra* note 4, at 722–23.

is unclear, however, if a state-by-state approach would work in taxing the cloud. The Amazon tax—where states have acted without Congress—provides insight into the potential benefits and pitfalls that might come from states' independent taxation of the cloud.

### A. Amazon's State-by-State Approach

States cannot require out-of-state retailers to collect sales tax when the retailer does not have “substantial nexus” with the taxing state.<sup>77</sup> “A vendor whose only contacts with the taxing state are by mail or common carrier lacks the ‘substantial nexus’ required by the Commerce Clause.”<sup>78</sup> Instead, it is the state's citizens who are responsible for independently paying the sales tax, but this is rarely done.<sup>79</sup> In an effort to capture this uncollected sales tax revenue, states have started to pass statutes that require out-of-state vendors to collect sales tax.<sup>80</sup> This legislation is often called the Amazon tax because corporate giant Amazon represents many of the online vendors that would be taxed.

In an attempt to require out-of-state vendors to collect sales tax, New York passed a statute that requires out-of-state retailers that produce at least \$10,000 in sales to collect taxes from orders placed by New York customers.<sup>81</sup> To avoid the constitutional issue of nexus, the statute created a rebuttable presumption that the vendor has a taxable physical presence in New York, thus requiring such vendors to collect sales tax.<sup>82</sup> Amazon has challenged the validity of the statute, citing *Quill* in claiming that such a requirement to collect tax is unconstitutional.<sup>83</sup> Amazon's first attempt to squash such taxation was foiled by the New York Supreme Court, which upheld the constitutionality of the tax.<sup>84</sup> California also passed a similar statute.

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77. *Quill*, 504 U.S. at 301.

78. *Id.*

79. Ian Mount, *State's Drive to Collect Taxes on Internet Sales is a Blow to Marketers*, N.Y. TIMES (Jan. 25, 2012), <http://www.nytimes.com/2012/01/26/business/smallbusiness/drive-to-tax-internet-sales-harms-affiliate-marketers.html>.

80. *Id.*

81. Daniel T. Cowan, *New York's Unconstitutional Tax on the Internet: Amazon.com v. New York State Department of Taxation & Finance and the Dormant Commerce Clause*, 99 N.C. L. REV. 1423, 1426 (May 2010).

82. *Id.*

83. *Amazon.com LLC v. N.Y. State Dep't of Taxation and Fin.*, 877 N.Y.S.2d 842, 847 (2009).

84. *Id.* at 851.

In California's version of the statute, a vendor has nexus when the company uses "marketing affiliates in the state to refer customers or if it ha[s] sister companies in California."<sup>85</sup> Amazon took a different approach to fight the California legislation. It organized a referendum against the law so that taxpayers—who see this as a tax increase rather than another means to collect a tax they already owe—may vote to decide whether these vendors should collect sales tax.<sup>86</sup> Amazon later negotiated with the California State Legislature and agreed to drop the referendum and to start collecting tax at a set date in the future unless federal legislation is enacted setting another standard.<sup>87</sup> In addition to collecting sales tax, Amazon has pledged to create 10,000 full time jobs and 25,000 seasonal employment opportunities in California by 2015.<sup>88</sup> Whether California will be the norm amongst states is uncertain, especially considering that California's Silicon Valley is the location where Amazon's lucrative Kindle is produced.<sup>89</sup> It is likely that Amazon needs California just as much as much as California needs Amazon to collect sales tax.<sup>90</sup>

Other states have followed suit, with Arkansas, Colorado, Connecticut, Illinois, North Carolina, Rhode Island, and Texas all passing similar legislation requiring online retailers to collect sales tax by defining nexus in novel ways so that it might be constitutional.<sup>91</sup> Though the initial litigation in New York and negotiations with California are promising for these new adopters, the question becomes how effective this state-by-state approach will be in allowing states to capture additional revenue. As states each pass their own individual affiliate tax statutes, it is inevitable that final implementation will be a slow process wrought with litigation and

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85. Marcus Wohlsen, *California Governor Jerry Brown Approves 'Amazon Tax Compromise'*, HUFFINGTON POST (Sept. 23, 2011, 8:14 AM), [http://www.huffingtonpost.com/2011/09/23/jerry-brown-amazon-tax-compromise\\_n\\_978287.html](http://www.huffingtonpost.com/2011/09/23/jerry-brown-amazon-tax-compromise_n_978287.html).

86. David Streitfeld, *California Lawmakers Give Amazon Tax Reprieve*, N.Y. TIMES (Sept. 10, 2011), <http://www.nytimes.com/2011/09/11/technology/california-votes-to-give-amazon-a-sales-tax-reprieve.html>.

87. *Id.*

88. Wohlsen, *supra* note 85.

89. *Id.*

90. Andrea Chang, *Despite Strong Kindle Sales, Amazon's Fourth-Quarter Disappoints*, L.A. TIMES (Jan. 31, 2012, 1:55PM), <http://latimesblogs.latimes.com/technology/2012/01/amazon-174-billion-fourth-quarter-sales-kindle.html> (Kindle Fire has already increased sales of the regular Kindle by 177%).

91. Colleen Taylor, *Next Up in Amazon's Tax War: California*, GIGAOM (June 29, 2011, 2:41 PM), <http://gigaom.com/2011/06/29/amazon-sales-tax-california/>.

open to further complications of circuit splits, as the different federal courts might be inclined to come out differently on the issue.

In addition to uncertainty in the law, the state by state reaction to Amazon has also had a harsh effect on state revenue. Online vendors have actually moved their online operations from states that are passing Amazon legislation to states that have not yet implemented regulations to tax out-of-state vendors.<sup>92</sup> In fact, Rhode Island and North Carolina have had a reduction in receipts since passing their respective regulations and it is estimated that California could lose 25,000 small businesses as a result of passing its own statute.<sup>93</sup> By separately passing legislation, certain states can become tax havens that attract businesses from states that chose to legislate.

In resolving the Amazon sales tax issue, the state-by-state approach has led to multiple chains of litigation, negotiations, and taxpayers changing their business models to avoid taxation. Further, with the New York statute being the only piece of legislation to be litigated on the merits thus far, it is still too early to tell if future legislation will prove as successful in expanding the current constitutional constraints on nexus.

### **B. State-By-State Approach in the Cloud**

The most obvious concern with a state-by-state approach in taxing the cloud is the litigation that will likely ensue to determine whether states can meet the Commerce Clause's physical presence requirement. States might receive less pushback on legislation that taxes the cloud than they did on the Amazon tax because there is no single cloud computing vendor that represents the industry that can serve as a vigilant plaintiff. Amazon is a major player in IaaS, however, and this might put them in the perfect position to adopt the cloud into their battle against nexus expansion.

On the other hand, states are less likely to develop legislation that taxes the cloud in the first place because they have fewer incentives to do so. With Amazon, it is clear which taxpayer owes the tax but it is unsettled who is required to collect the tax. Brick-and-mortar stores have put great pressure on legislatures to require online

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92. Dan Mitchell, *Will California's 'Amazon tax' cause an affiliate exodus?*, CNN MONEY (June 29, 2011, 9:30 PM), <http://tech.fortune.cnn.com/2011/06/29/california-passes-amazon-tax-amazon-pulls-plugin-on-affiliates/>.

93. *Id.*

stores to collect taxes.<sup>94</sup> Further, citizens are at least familiar with paying sales tax. With the cloud, it is unclear to which state the tax is owed. Additionally, any statute taxing the cloud would not only create a new tax obligation, but the sole proponents of the tax would be the state legislatures as many players in the cloud computing industry do not support such legislation.<sup>95</sup> With only a limited number of states passing legislation, the state-by-state approach would likely lead companies to make economic decisions to set up shop in states that do not tax the cloud, just as businesses have done as a result of the Amazon tax.

Congressional action would eliminate the complications inherent in a state-by-state model. It would eradicate the danger of litigation because nexus requirements would not inhibit Congress' plan to tax the cloud. Further, a uniformed approach from Congress would prevent businesses from reorganizing to get preferential tax treatment as they would be taxed the same regardless of their location.

#### IV. Congressional Intervention

With a state-by-state approach leading to undesirable consequences, a Congressional solution to taxing the cloud appears to provide a better solution. The question becomes whether Congress will break with tradition and help states tax the cloud, and if it does, whether this is economically feasible. The MTSA provides great insight to the conditions that might be required for Congress to act and the impact of such action.

##### A. MTSA: A Uniformed Approach

Just as the development of the cloud is grazing the limits of our tax system, the development of telecommunications technology challenged the existing conceptions of physical presence starting in the mid-eighties.<sup>96</sup> Traditionally, telephone calls were placed through electronic wires, but technology advanced to using electronic paths to transmit calls through fiber optics, microwave towers, satellites, and cables.<sup>97</sup> This shift strained the existing taxation of

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94. Sylvia Dion, *From Main Street to Marketplace Fairness Acts - Sales Tax 2011*, SALES TAX SUPPORT.COM (Nov. 28, 2011), <http://www.salestaxsupport.com/blogs/sales-use-tax/internet-tax-ecommerce/main-street-to-marketplace-fairness-acts-sales-tax-2011/>.

95. Rubin & Francis, *supra* note 7.

96. *Goldberg v. Sweet*, 488 U.S. 252, 252 (1989).

97. *Id.*

telecommunications because there were innumerable paths through which a call could travel making it impossible to trace the call.<sup>98</sup>

The Supreme Court reviewed whether an Illinois tax on calls placed or terminated within Illinois and charged to an Illinois service address violated the Commerce Clause.<sup>99</sup> The specific concern was the second prong of *Complete Auto*, the fair apportionment of taxes.<sup>100</sup> The Court found that the tax was both internally and externally consistent because it would not result in double taxation.<sup>101</sup> This case only involved landline calls and not cell phone calls, so it did not provide clear guidance on this new technology's impact on nexus.<sup>102</sup> The eventual widespread use of cell phones allowed customers to easily move across state lines, thus further blurring the source of the call.<sup>103</sup> It is clear to anyone that has had the misfortune of riding on public transit with a person on a cell phone that it is often possible for a call made in one state to end in another. Many states resorted to a two-out-of-three method, where the state could tax a call if it had two of three factors: origin of call, billing address, the destination of the call.<sup>104</sup>

The telecommunication industry and state and local franchise boards united to iron out the complications and developed uniformed nexus rules for taxing cell phones.<sup>105</sup> In January 2000, Congress introduced the MTSA, which proposed nexus rules for state taxation of telecommunications.<sup>106</sup> The Act was meant to cover any fee paid by "customers for mobile telecommunications services."<sup>107</sup> The Act taxes the call from the source of the caller's primary place of use, "regardless of where the mobile telecommunications services originate, terminate, or pass through."<sup>108</sup> Congress passed the legislation, applauding it for being a "win-win-win."<sup>109</sup> Wireless companies no longer had to keep track of the countless jurisdictions'

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98. *Id.*

99. *Id.*

100. *Id.* at 260.

101. *Id.*

102. Inna Volfson, *A Less Taxing Process*, CONNECTED PLANET (Dec. 1, 2000, 12:00 PM), [http://connectedplanetonline.com/wireless/mag/wireless\\_less\\_taxing\\_process/](http://connectedplanetonline.com/wireless/mag/wireless_less_taxing_process/).

103. *Goldberg*, 488 U.S. at 252.

104. Volfson, *supra* note 102.

105. H.R. 4391, 106th Cong. (2000).

106. *Id.*

107. *Id.*

108. *Id.*

109. 146 CONG. REC. S6812-03 (2000).



individual rules, state and local authorities would no longer have to endure the administrative nightmare of ensuring compliance, and consumers would benefit from fewer inaccuracies in their billing.<sup>110</sup>

The Act authorized states or providers to compile a database that identifies the appropriate taxing jurisdiction for each street address so that the wireless companies could easily bill customers based on their jurisdiction.<sup>111</sup> If a state did not provide a detailed database, providers could also classify addresses by their zip code in order to find the appropriate taxing jurisdiction.<sup>112</sup> The complexity of creating the databases was evidenced in the fact that two years after the bill passed, only thirty-one states had compliance measures passed into law.<sup>113</sup> This reflects the unfortunate truth that even the pursuit of simplicity can result in headache.

Apart from the intricacies of identifying which address is related to which tax jurisdiction, determining the primary place of use was also a delicate process because states had different interpretations. Pennsylvania, for instance, considered the primary place of use to be the billing address or the primary business address on the account.<sup>114</sup> Yet a home or billing address might not represent the actual place of use. For example, a New Jersey resident who works in Manhattan will likely make calls in both states, but only one will count as the primary place of use. In AT&T's service agreement, AT&T asks the customer to provide an address of primary place of use and if they do not, then it will designate a primary place of service.<sup>115</sup> Because this is a Congressional act, the fair apportionment and physical presence required under the Commerce Clause are not in play so this default solution is permissible. It is unlikely that states could implement similar legislation on their own.

Apart from removing Commerce Clause limitations, the uniform approach has been a successful way to produce revenues for states.

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110. *Id.*

111. H.R. 4391, 106th Cong. (2000).

112. *Id.*

113. *States Aren't Ready for New Mobile Sourcing Rules*, BILLING & OSS WORLD (July 1, 2002), <http://www.billingworld.com/articles/2002/07/states-aren-t-ready-for-new-mobile-sourcing-rules.aspx>.

114. *Id.*

115. AT&T WIRELESS CUSTOMER AGREEMENT, *available at* [http://www.wireless.att.com/cell-phone-service/legal/index.jsp?q\\_termsKey=wirelessCustomerAgreement](http://www.wireless.att.com/cell-phone-service/legal/index.jsp?q_termsKey=wirelessCustomerAgreement).

All states tax the use of cell phones.<sup>116</sup> Further, they do so at high rates, an average of 11% when the average sales tax sits around 7%.<sup>117</sup> With a relatively easy system to plug into, states can tax cell phone use without the risk of litigation and guaranteed protections. The most obvious benefit of Congressional intervention in taxing the cloud is that nexus requirements would no longer be a concern. Yet constitutional soundness is not the sole consideration in evaluating whether Congress should act upon *Quill's* call to take action in maintaining nexus requirements. Whether Congressional legislation will provide economically sound solutions and the likelihood that a uniform approach is viable are also important considerations.

### **B. Uniformed Approach in the Cloud: Economic Concerns of Legislation**

It is important to determine whether sound legislation can be developed to resolve the problems posed by cloud computing. Professors McLure and Hellerstein argue that remedies to tax issues should be designed to fix the specific type of problem that exists.<sup>118</sup> The first issue posed by the current constitutional limitations on taxing the cloud is the adverse economic effects it produces for states, who are losing revenue on certain products that, before advances in technology, they had been able to tax. The current state of taxation of the cloud also creates unnecessary complexity that arises when states have different means to determine what constitutes physical presence. This becomes an administrative headache, as companies must keep track of countless state tax policies. Special solutions are required to fix these two concerns.<sup>119</sup>

McLure and Hellerstein argue that when current laws produce adverse economic effects, the rules should be modified.<sup>120</sup> They recognize that adverse economic effects are ameliorated by the expansion of nexus requirements so that more transactions are permissibly taxed.<sup>121</sup> Therefore, an expansion of the traditional concept of physical presence, which can only be performed by

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116. Dennis Cauchon, *City, State Cell Phone Taxes on the Rise*, USA TODAY, May 09, 2005, [http://www.usatoday.com/news/nation/2005-05-08-cellphone-taxes\\_x.htm](http://www.usatoday.com/news/nation/2005-05-08-cellphone-taxes_x.htm).

117. Timothy Noah, *Cellular Sin Taxes*, SLATE, Feb. 16, 2011, [http://www.slate.com/articles/business/the\\_customer/2011/02/cellularsin\\_taxes.html](http://www.slate.com/articles/business/the_customer/2011/02/cellularsin_taxes.html).

118. McLure & Hellerstein, *supra* note 4, at 724.

119. *Id.* at 724.

120. *Id.*

121. *Id.* at 735.

Congress, is the best solution to allow states to tax the cloud and tap into uncollected revenue. Though an expansion of nexus might extinguish state's economic concerns, the problem of complexity might inhibit the extent to which Congress can make such expansions.

Where a current tax regime is riddled with complexities, McLure and Hellerstein proscribe "coordination and simplification."<sup>122</sup> Congress could carry out this solution in the cloud by setting a single definition of physical presence that can be followed by all states. In setting a uniformed tax policy, it is essential that such legislation does "not interfere with market choices" so that the sales tax system will remain economically neutral.<sup>123</sup> An economically neutral solution, however, necessitates that businesses be exempt from sales tax.<sup>124</sup> As most of the services and products offered through the cloud are used solely by businesses, following a policy of only taxing consumers would not be a feasible response to capture cloud computing revenue.

If legislation was passed to tax businesses on their cloud-based transactions, Congress would need to set thresholds to determine which vendors are required to collect sales tax. This will ensure that the businesses are not deterred from participating in interstate commerce due to the complexity involved in adapting to a new taxing jurisdiction's rules.<sup>125</sup> This must be done not by the vendors' total sales, but based upon their sales in each state to ensure that the sales in a state are sufficient to warrant adherence to the complex administrative obligations required by the taxing state.<sup>126</sup> The MTSA was not limited by a threshold concern because cell phone companies are large and they offer a service that is used by a majority of the population of every single state. The cloud computing industry on the other hand consists of many players,<sup>127</sup> big and small, that offer products and services that are not so pervasive that every vendor would have a significant reach into every single state. Developing legislation to tax the cloud will be a much more delicate process than taxing cell phones because threshold requirements will need to be carefully selected.

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122. *Id.* at 724.

123. *Id.* at 727.

124. McLure & Hellerstein, *supra* note 4, at 727.

125. *Id.* at 732.

126. *Id.*

127. Jeremy Geelan, *The Top 150 Players in Cloud Computing*, CLOUD COMPUTING JOURNAL, Oct. 29, 2009, <http://cloudcomputing.sys-con.com/node/770174> (cloud computing industry is too numerous to make a comprehensive list so only various rankings of companies that utilize the technology are available).

On a whole, Congressional intervention would alleviate the adverse economic effects of the Commerce Clause limitations on states but it would do so by developing legislation that is not economically neutral and still wrought with complexity in the form of threshold requirements. Regardless, Congressional intervention is still preferable to a state-by-state solution, which is not strongly grounded in the Constitution.

### C. Uniformed Approach in the Cloud: Whether Congress Will Act

In addition to the economic effects of congressional intervention, it is important to assess whether Congress will actually intervene so that states can swiftly tackle the issue of taxing the cloud. If it is determined that congressional action is unlikely, states can immediately pass their own legislation rather than delay in hopes that Congress might provide a solution. On the other hand, if congressional intervention is quite likely, states can dedicate their efforts to creating a uniform sourcing strategy, similar to the negotiations states carried out to help develop the MTSA.

An empirical study revealed three key characteristics that were present in situations where Congress passed legislation in the realm of state taxation.<sup>128</sup> First, the uniform tax personally aided members of Congress, second, the legislation benefitted a “specific, well-defined interest group that orchestrates an extensive campaign with limited opposition,” and third, the uniform plans tended to “represent compromise between states and taxpayers” as part of a larger set of legislation.<sup>129</sup> Two of the characteristics of successful congressional intervention were present during the MTSA legislation, but are missing in the context of cloud computing: a benefit to a well-defined group with limited opposition and legislation that represents a larger compromise. Because key components that produced the success of the MTSA are missing in cloud computing, it is improbable that Congress will act in this context.

The second criteria of the study—that the legislation represent a benefit to a well-defined group with limited opposition—was present under the MTSA but is lacking in cloud computing. The MTSA directly benefited the telecommunications industry by reducing the administrative headache the industry had to go through in determining how to tax its customers among the various jurisdictions’

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128. Kathryn Moore, *State and Local Taxation: When Will Congress Intervene?*, 23 J. LEGIS. 171, 172 (1997).

129. *Id.*

tax laws.<sup>130</sup> Further, the telecommunication industry is fairly compact, with only thirty-five principal members in the Wireless Association, CTIA.<sup>131</sup> The telecommunication industry was able to define a uniform interest to impress upon Congress due to its compact size and the uniform services each member provided. Further, the legislation that the industry hoped to pass was also supported by taxpayers and the states, thus providing little to no opposition to the legislation.<sup>132</sup>

This same factor is not present in cloud computing, however. The cloud computing industry, which, for the most part, currently is not taxed on its products and services, will not benefit by legislation to tax its products and services. Even if legislation had potential to benefit this industry, it is unlikely that it would uniformly benefit its members. The cloud computing industry is made up of a vast array of companies, where instead of a comprehensive list or organized association, there are various rankings of the best 150 or 90 companies to watch.<sup>133</sup> Further, as discussed above, there are various types of products and services that can be provided through the cloud; potentially making the industry's agenda dislocated. SaaS companies might have more incentive to bill based on customer location because their main focus is selling a more traditional product, whereas IaaS companies that actually manage the servers might be more inclined to tax transactions based on server location because this is the area of the business that they can most easily control. If Congress acts, it will not likely be due to a uniform effort with the cloud computing industry.

Another characteristic common among congressional intervention in state taxation but missing in cloud computing is that the legislation represents a compromise. The MTSA was considered a “win-win-win” showing that the taxpayers, the telecommunications industry, and states all benefited by the implementation of a unified tax.<sup>134</sup> This, however, is not the case with the cloud. Similar to the out-of-state vendors in Amazon, it is unlikely that cloud computing companies—who traditionally are not taxed—will work with state

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130. 146 CONG. REC. S6812-03 (2000).

131. CTIA MEMBERSHIP, [http://www.ctia.org/membership/ctia\\_members/](http://www.ctia.org/membership/ctia_members/) (last visited Mar. 23, 2012).

132. Cong. Rec. S6812-03 (described the legislation as a “win-win-win” among telecommunication industry, states, and taxpayers).

133. Geelan, *supra* note 127.

134. 146 CONG. REC. S6812-03.

governments to develop new taxes that will make their products more expensive to consumers and add an additional administrative headache.<sup>135</sup> In fact, there are instances where tech companies are doing the opposite and lobbying to prevent states from taxing specific cloud computing products and services.<sup>136</sup>

It is therefore likely that states will be required to tackle the taxation of cloud computing on their own as the current state of affairs is not conducive to congressional intervention.

### Conclusion

State taxation is not simply a product of states, but also of Congress. Despite the dramatic evolution cloud computing has brought to the traditional notions of physical presence in our economy, Congress is unlikely to update *Quill*'s definition of substantial nexus. Congress will not be motivated to act by an industry that is eager to simplify tax, but rather inhibited to act by an industry that is currently free of tax. It appears that the best strategy for states in this current regime is to tax the cloud individually to the point that the cloud computing industry is wrought with litigation. It may not be until the complexities and inefficiencies of a state-by-state tax system plague the cloud computing industry that Congress will be inspired to intervene.

Congress is the clear solution to this ineffective system due to its power under *Quill* to retire or relax the physical presence requirement of the Commerce Clause. The Court eliminated the physical presence requirement from Due Process analysis over thirty years ago after it recognized that technology had made our society more interconnected.<sup>137</sup> Congress is long overdue to carry out a similar analysis to determine whether technology has truly expanded beyond what states should rightfully tax or whether nexus requirements should be expanded to incorporate this new technology. To make this assessment, Congress must set aside the various industry concerns that have driven its past action,<sup>138</sup> and carefully modernize the constitutional doctrine it was selected to guard.

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135. Moore, *supra* note 128, at 202–04 (compromise less likely when vendors did not want to expand taxes from status quo).

136. Rubin & Francis, *supra* note 7.

137. *Shaffer v. Heitner*, 433 U.S. 186, 218 (1977).

138. Moore, *supra* note 128, at 172 (discussing the importance of an interest group that can effectively lobby Congress to intervene in state tax issues).