

THE PECULIAR CASE OF STATE NETWORK NEUTRALITY REGULATION[♦]

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ABSTRACT

In the wake of the FCC's recent decision to rescind federal network neutrality rules, several states have implemented their own network neutrality regulations, some in the form of procurement conditions on state contracts and others affirmative mandates requiring broadband Internet service providers to observe neutrality in providing service. The federal government and industry trade associations have challenged the state network neutrality laws as both preempted and unconstitutional under the "dormant Commerce Clause" doctrine.

*This paper analyzes those state restrictions as a matter of constitutional law. The Court has recently changed dormant Commerce Clause law, liberalizing those limits with regard to the Internet last year in *South Dakota v. Wayfair* and showing more deference to state regulation of the Internet. But state network neutrality rules present an altogether different problem than typically arises in dormant Commerce Clause cases, which calls for a different approach. Much state network neutrality regulation (especially regulation of Internet traffic exchange) is problematic under traditional dormant Commerce Clause and due process analysis because it explicitly reaches outside of local states. But more fundamentally, the entire economic theory underlying network neutrality regulation makes network neutrality especially problematic under dormant Commerce Clause law. Although states are likely free to regulate many aspects of the Internet—especially after *Wayfair*—the peculiar nature of network neutrality regulation makes it singularly poorly suited for state regulation.*

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INTRODUCTION

When the Federal Communications Commission adopted its Restoring Internet Freedom Order¹ rescinding previous network neutrality rules in 2018, states responded. Many of them joined a lawsuit—*Mozilla v. FCC*—challenging the rescission as illegal.² But many others took an additional step. Unhappy that the Federal Communications Commission (FCC or the “Commission”) had abandoned network neutrality as a national policy, several states decided to provide what the federal government would not.

The most ambitious of these state network neutrality provisions is the California Consumer Protection and Network Neutrality Act,³ more popularly referred to as SB 822. The Act, described in more detail below, recreates most aspects of the rescinded federal network neutrality regulations and adds others. Governor Jerry Brown signed the bill into law on September 30, 2018.⁴

The U.S. Department of Justice filed suit the same day seeking to

¹ Restoring Internet Freedom, Declaratory Ruling, Report and Order, and Order, 33 FCC Rcd. 311 (2017) [hereinafter FCC 2017].

² Petition for Review, *Mozilla Corp. v. Fed. Comm’ns Comm’n*, No. 18-1051 (D.C. Cir. filed Feb. 22, 2018). The case was argued before the D.C. Circuit on February 1, 2019, and a decision is anticipated by summer 2019.

³ California Consumer Protection and Network Neutrality Act, CAL. CIV. CODE §§ 3100-04 (Deering 2019).

⁴ *Id.*

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have SB 822 declared preempted by federal law, namely the same Restoring Internet Freedom Order whose legality was challenged by the states.⁵ In the Restoring Internet Freedom Order, the FCC had expressly preempted state network neutrality regulation (as it had done in the previous orders adopting network neutrality rules).⁶ Of course, the preemption argument is dependent at least in part on the outcome of *Mozilla v. FCC*, and so the scope of the federal government's preemption claim remains uncertain.⁷

Not content to let the federal government fight alone, a number of broadband Internet service provider trade associations filed suit against California the next day.⁸ The carriers re-asserted the Department of Justice's argument that SB 822 is preempted by the Restoring Internet Freedom Order⁹ and added a new argument of their own: that SB 822 is also unconstitutional in its own right as violating the "'dormant' or 'negative' Commerce Clause of the United States Constitution."¹⁰ The carriers allege that SB 822 regulates "conduct occurring wholly outside California's borders" because the Internet services it regulates are "overwhelmingly interstate communications, which the FCC has found cannot practically be separated from instances of purely intrastate electronic communications."¹¹ The gravamen of the carriers' complaint is that a host of different state laws will form a "patchwork" of varying and potentially conflicting regulation, which, given the inherently interstate nature of Internet communications, imposes too great a burden for the carriers as compared to the small local benefit from SB 822.¹²

⁵ *United States v. California*, No. 2:18-at-01539, ¶ 10 (E.D. Cal. filed Sept. 30, 2018).

⁶ Opponents argue that given the FCC's choice of regulatory framework, it no longer had the authority to regulate broadband Internet service providers and therefore the Restoring Internet Freedom Order could not preempt state law. See April Glaser, *The Federal Government and California Are Officially at War Over Net Neutrality*, SLATE (Oct. 1, 2018, 4:25 P.M.), <https://slate.com/technology/2018/10/net-neutrality-california-justice-department-lawsuit.html> (quoting Prof. Barbara van Schewick).

⁷ Recognizing the interdependent nature of the cases, the parties agreed to stay the federal lawsuit against California pending the outcome of the *Mozilla* case.

⁸ Complaint, *Am. Cable Ass'n v. Becarra*, No. 2:18-at-01552 (E.D. Cal. filed Oct. 3, 2018).

⁹ Complaint at 5–6, *Becarra*, No. 2:18-at-01552. The complaint also alleged that SB 822 was preempted by the Communications Act itself because California was applying common carrier regulation to an "information service," as defined by the Communications Act. See *Verizon v. Fed. Comm'ns Comm'n*, 740 F.3d 623 (D.C. Cir. 2014). That argument is predicated on broadband Internet service being defined as an "information service," which itself was a product of the Restoring Internet Freedom Order's reversal of the FCC's 2015 Protecting and Promoting the Open Internet, Report and Order on Remand, Declaratory Ruling, and Order, 80 Fed. Reg. 19737 (Apr. 13, 2015) [hereinafter FCC 2015], and so is predicated on the legality of the 2017 Restoring Internet Freedom Order.

¹⁰ Complaint at 11, *Becarra*, No. 2:18-at-01552.

¹¹ *Id.* at 7. This argument is also apparently premised on an FCC interpretation, albeit one with a considerably older pedigree than the 2017 Restoring Internet Freedom Order. See *infra* note 141.

¹² Complaint at 24, *Becarra*, No. 2:18-at-01552 ("In the context of the Internet in particular, compliance with a patchwork of inconsistent state laws is inherently burdensome and likely impossible.").

Although the Department of Justice did not name the Commerce Clause in its complaint, Attorney General Jeff Sessions' press release announcing the Department of Justice lawsuit voiced a similar concern over "patchwork" regulation and named the commerce power as well.¹³

The power of such "patchwork" arguments was substantially diminished by the Supreme Court's decision this past year in *South Dakota v. Wayfair*,¹⁴ in which the Court reversed a prior case holding that states could not impose sales taxes on transactions conducted over the Internet. Notably, the Court refused to accept the argument that "subjecting retailers to tax-collection obligations in thousands of different taxing jurisdictions"¹⁵ warranted a prohibition on taxation—the same kind of "patchwork" argument advanced by the carriers (and Attorney General Sessions) against state network neutrality laws. On its face, the dormant Commerce Clause case does not look promising for the carriers.

But network neutrality regulation is different from most forms of regulation because of the regulatory theory underlying how network neutrality works. Although network neutrality itself is a highly contentious policy, the regulatory theory underlying it is not; it is a point on which neutrality advocates and opponents agree. That theory explains that, while network neutrality regulations on their face control the relationship between broadband Internet service providers and subscribers, the object of the regulation is to control the relationship between the broadband Internet service provider and so-called "edge providers"¹⁶—those who supply content, applications, and services over the Internet. Thus, the relevant regulatory locus for SB 822 and other

¹³ Press Release, U.S. Dept. of Justice, Justice Department Files Net Neutrality Lawsuit Against the State of California (Sept. 30, 2018) ("Under the Constitution, states do not regulate interstate commerce—the federal government does.") (*available at* <https://www.justice.gov/opa/pr/justice-department-files-net-neutrality-lawsuit-against-state-california-0>).

¹⁴ *South Dakota v. Wayfair, Inc.*, 138 S. Ct. 2080 (2018).

¹⁵ *Id.* at 2093.

¹⁶ A note on terminology. Following the FCC, I will

use "broadband" and "broadband Internet access service" interchangeably, and "broadband provider" and "broadband Internet access provider" interchangeably. "End user" refers to any individual or entity that uses a broadband Internet access service; [I] sometimes use "subscriber" or "consumer" to refer to those end users that subscribe to a particular broadband Internet access service. [I] use "edge provider" to refer to content, application, service, and device providers, because they generally operate at the edge rather than the core of the network.

These activities are not mutually exclusive. For example, individuals who generate and share content such as personal blogs or Facebook pages are both end users and edge providers, and a single firm could both provide broadband Internet access service and be an edge provider, as with a broadband provider that offers online video content. Nevertheless, this basic taxonomy provides a useful model for evaluating the risk and magnitude of harms from loss of openness.

Preserving the Open Internet, Report and Order, 76 Fed. Reg. 59192, 59194-96 (Sept. 23, 2011) [hereinafter FCC 2010].

state network neutrality regulations is not at the point of in-state Internet subscriber connections but rather of national (if not international) markets for edge provider content, applications, and services. When the mechanics of network neutrality regulation are properly understood, the dormant Commerce Clause question answers itself: state network neutrality laws are inherently violative of dormant Commerce Clause restrictions because the markets they actually seek to regulate—content markets—are primarily located outside the relevant states.

The paper proceeds by describing network neutrality and specifically why it is primarily focused not on consumers of Internet broadband access but rather on edge providers. I then examine state network neutrality rules, including the use of state contract procurement restrictions that seek to do through the states' purchasing power under the so-called "market participant exception"¹⁷ to dormant Commerce Clause limits that which they might not be able to do through mandate. Under the Supreme Court's existing dormant Commerce Clause jurisprudence (as informed by a series of preemption cases on similar procurement conditions), these state attempts to avoid direct challenge will fail and the procurement policies will be evaluated under the dormant Commerce Clause as though they were prohibitions. After describing the Court's dormant Commerce Clause law, the paper applies that law to the case of state network neutrality provisions to demonstrate why virtually any attempt by states to regulate network neutrality is invalid under the Commerce Clause.

I. NETWORK NEUTRALITY

Although the Internet itself is a paragon of dynamism, dominated by forms of content, applications, and services that most could not even have imagined two decades ago, many of the arguments regarding its regulation have hardly changed at all. Despite the recent rise of network neutrality (or, more popularly, "net neutrality") in the popular conscience, the fundamental understandings of what is at stake in the regulation of discrimination by carriers have not changed since 2003, when the concerns underlying "network neutrality" were being debated as part of so-called "open access" requirements. That theoretical continuity is fortunate, because it provides a basis for analyzing how state network neutrality rules work. The relevant constitutional law is pragmatic, focusing on both the effects and mechanics of state regulation. Only with a suitably deep understanding of how those laws work—an understanding informed by the theories underlying network neutrality—can one evaluate their constitutionality.

¹⁷ See *Hughes v. Alexandria Scrap Corp.*, 426 U.S. 794 (1976).

A. *A User's Guide to Network Neutrality*

Network neutrality is the concept, embodied by the Internet by virtue of its implementation of the Internet Protocol (IP),¹⁸ that data will be transmitted by a data communications network without regard to its source or nature. That technical design feature of the Internet has been transformed over time into a political commitment held by a number of technologists, policy advocates, and academics that providers of Internet service should similarly carry all information traveling over the Internet without regard to its source or nature.¹⁹

Broadly speaking, network neutrality prohibits Internet broadband providers from either blocking or prioritizing content that flows over the networks they operate. There are some major limitations. Most importantly, the rule as has been implemented in the United States only applies to those who sell broadband Internet access to end users. It does not apply to operators of the Internet backbone, which is the series of connections that connect major end users (like Google) and providers (also like Google) to each other.²⁰

Network neutrality at its most general level is a rule that keeps broadband providers from either favoring or disfavoring certain content. In the late 1990s and early 2000s, the same set of concerns were captured in another proposed rule—generally called “open access”²¹—requiring “last mile” telecommunications carriers to allow their subscribers to choose their Internet service providers (virtually no one had broadband Internet access at that time). When the FCC opted against open access rules by deregulating first cable-company-provided cable modems²² and then telephone-company-provided “digital subscriber lines” (DSL),²³ declaring them to be “information services,”

¹⁸ *Request for Comments No. 791* 12, INTERNET ENGINEERING TASK FORCE (Sept. 1981), <https://tools.ietf.org/pdf/rfc791.pdf>.

¹⁹ As Tim Wu, who coined the term, explained, network neutrality and the non-discrimination rule that it has come to represent are not the same thing. To him, “[n]etwork neutrality, as shorthand for a system of belief about innovation policy, is the end, while open access and broadband discrimination are the means.” See Tim Wu, *Network Neutrality, Broadband Discrimination*, 2 J. TELECOMM. & HIGH TECH. L. 141, 144 (2003). Be that as it may, the nondiscrimination policy for which Wu and others advocated has come to subsume the theoretical point about innovation policy, and “network neutrality” is now commonly referred to as a rule prohibiting certain discriminatory practices by broadband providers. See Last Week Tonight, *Net Neutrality: Last Week Tonight with John Oliver (HBO)*, YOUTUBE (June 2, 2014), <https://www.youtube.com/watch?v=fpbOEOrrHyU>.

²⁰ FCC 2015, *supra* note 9, ¶ 190. On Google’s ownership of Internet backbone capacity, see generally Jameson Zimmer, *Google Owns 63,605 Miles and 8.5% of Submarine Cables Worldwide*, BROADBANDNOW (Sept. 12, 2018), <https://broadbandnow.com/report/google-content-providers-submarine-cable-ownership/>.

²¹ See, e.g., Wu, *supra* note 19, at 144.

²² Inquiry Concerning High-Speed Access to the Internet Over Cable & Other Facilities, Declaratory Ruling and Notice of Proposed Rulemaking, 67 Fed. Reg. 18848 (Apr. 17, 2002), *aff’d* Nat’l Cable Telecomm. Ass’n v. Brand X Internet Servs., 545 U.S. 967 (2005).

²³ Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities, Report

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the debate shifted to considering whether the FCC should adopt a broader anti-discrimination mandate. In 2004, FCC Chairman Michael Powell announced his “four freedoms”—freedom to access content, freedom to use applications, freedom to attach personal devices, and freedom to obtain service plan information—at an academic conference held at the University of Colorado.²⁴ In 2005, the FCC promulgated four “principles”: consumers are entitled to access the lawful Internet content of their choice; consumers are entitled to run applications and use services of their choice, subject to the needs of law enforcement; consumers are entitled to connect their choice of legal devices that do not harm the network; and consumers are entitled to competition among network providers, application and service providers, and content providers.²⁵ In 2010, the FCC adopted network neutrality rules requiring broadband Internet service providers to “publicly disclose accurate information regarding the network management practices, performance, and commercial terms of its broadband Internet access services”²⁶ and denying them the ability to either block²⁷ or “unreasonably discriminate in transmitting lawful network traffic over a consumer’s broadband Internet access service.”²⁸ Those rules were vacated by the D.C. Circuit in 2014,²⁹ but the FCC restored them under distinct statutory authority in 2015, expanding the requirements to wireless carriers’ mobile broadband offerings,³⁰ adding additional prohibitions on “throttling” on “the basis of Internet content, application or service, or use of a non-harmful device”³¹ and paid prioritization,³² and clarifying the

and Order and Notice of Proposed Rulemaking, 70 Fed. Reg. 60222 (Oct. 17, 2005), *aff’d* Time Warner Telecom, Inc. v. Fed. Comm’n Comm’n, 507 F.3d 205 (3d Cir. 2007).

²⁴ Michael K. Powell, *Preserving Internet Freedom: Guiding Principles for the Industry*, 3 J. TELECOMM. & HIGH TECH. L. 5 (2004) (remarks given Feb. 8, 2004).

²⁵ Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Policy Statement, 20 FCC Rcd. 14986 (2005).

²⁶ FCC 2010, *supra* note 16, at ¶ 8.3.

²⁷ *Id.* ¶ 8.5.

²⁸ *Id.* ¶ 8.7. This is a vast oversimplification, but tracing the specific nondiscrimination rules through the series of orders and reversals is unnecessary to my analysis. Where the details of the FCC’s nondiscrimination rules are relevant to my analysis, I will describe them in greater detail.

²⁹ Verizon v. Fed. Comm’n Comm’n, 740 F.3d 623 (D.C. Cir. 2014).

³⁰ FCC 2015, *supra* note 9, ¶ 146.

³¹ *Id.* ¶ 119. Thus, this form of “throttling” is distinct from reducing the bandwidth available to subscribers when they exceed an overall data allowance. *See Id.* ¶ 122 (“Because our no-throttling rule addresses instances in which a broadband provider targets particular content, applications, services, or non-harmful devices, it does not address a practice of slowing down an end user’s connection to the Internet based on a choice made by the end user. For instance, a broadband provider may offer a data plan in which a subscriber receives a set amount of data at one speed tier and any remaining data at a lower tier.”). The FCC has, for its part, at least entertained the possibility that overall usage caps, such as those implemented through throttling, might be a problem by discriminating against high-usage applications, like video, *id.* ¶ 115, but the application-specific nature of its no-throttling rule is intended to cover such cases. *Id.* ¶ 123.

³² *Id.* ¶ 125.

transparency rules.³³

This set of restrictions mirrors in many ways traditional common carriage regulations³⁴ by prohibiting discrimination,³⁵ but it is unlike modern utility regulation in that it largely ignores the fundamental problem underlying most modern utility regulation: market power. None of the FCC's neutrality rules limit the ability of broadband providers to charge monopoly prices or indeed any price at all.³⁶ Nor do the rules do anything to diminish existing market power in the future, such as by enabling entry by competing broadband providers, which was the regulatory design behind the 1996 Telecommunications Act with regard to local exchange carrier monopolies.³⁷ The 2005 “four principles” mention that consumers are “entitled to competition,”³⁸ but that has never been part of the regulation. None of the FCC's various network neutrality rules either require or seem to be predicated on creating competition among broadband providers. In fairness, the four principles continue “among network providers, application and service providers, and content providers,”³⁹ and one could certainly say that the rules might enhance competition among application, service, and content providers (collectively, the “edge providers”), but as for network providers of any kind, and certainly broadband providers, the rules do nothing to foster competition. If anything, they diminish competition among broadband providers by preventing product differentiation—in this case, differentiation by blocking or preferring particular content.⁴⁰ Network neutrality rules have taken the market power that broadband providers have as a given and done nothing to alter it.

The FCC—either convinced that network neutrality was doing more harm than good⁴¹ or just as shills for the carriers,⁴² depending on whom you believe—eventually dismantled network neutrality.⁴³ States like California have come to network neutrality's rescue, providing at

³³ *Id.* ¶¶ 154–87.

³⁴ Wu, *supra* note 19, at 150.

³⁵ Thomas B. Nachbar, *The Public Network*, 17 *COMM'LAW CONSPECTUS* 67 (2008).

³⁶ FCC 2015, *supra* note 9, ¶ 37.

³⁷ See Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified at 47 U.S.C. §§ 251–62); GLEN O. ROBINSON & THOMAS B. NACHBAR, *COMMUNICATIONS REGULATION* 500–01 (2008).

³⁸ Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Policy Statement, 20 FCC Rcd. 14986, ¶ 4 (2005) [hereinafter FCC 2005].

³⁹ *Id.*

⁴⁰ Christopher S. Yoo, *Beyond Network Neutrality*, 19 *HARV. J.L. & TECH.* 1, 29–33 (2006).

⁴¹ FCC 2017, *supra* note 1, ¶¶ 86–108.

⁴² Dell Cameron, *Scott Wiener Paints Ajit Pai as Telecom Shill as California Net Neutrality Fight Escalates*, GIZMODO (Sept. 14, 2018, 6:50 P.M.), <https://gizmodo.com/scott-wiener-paints-ajit-pai-as-telecom-shill-as-califo-1829071978>.

⁴³ FCC 2017, *supra* note 1. That order is currently the subject of litigation. See *Mozilla Corp. v. Fed. Comm'n's Comm'n*, No. 18-1051 (D.C. Cir. filed Feb. 22, 2018).

the state level what the FCC has refused to provide at the federal level.

B. *State Network Neutrality Regulations*

To date, five states have adopted some form of network neutrality statute and the governors of five (including one, Vermont, that later adopted a statute) have issued executive orders implementing some kind of enforceable network neutrality requirements on broadband Internet service providers. California's SB 822, the broadest of the state network neutrality laws to date, recreates the disclosure, blocking, throttling, paid prioritization, and interference/disadvantage provisions of the FCC's 2015 version of the neutrality rules. SB 822 adds prohibitions on zero rating, which the FCC had chosen to consider on a case-by-case basis,⁴⁴ and the charging of fees to edge providers for delivery of content (or avoiding blocking) by broadband providers,⁴⁵ which the FCC had considered and similarly held-over for case-by-case analysis.⁴⁶ Washington's "open Internet" statute similarly adopted disclosure requirements and blocking, throttling, unreasonable interference, and paid prioritization prohibitions.⁴⁷ Oregon, Vermont, and Colorado have laws that, in the case of Oregon and Vermont, prohibit the award of state contracts to broadband providers that engage in or, in the case of Colorado, provide a contracting preference for providers that don't engage in, such practices. All of them similarly define neutrality along the lines of blocking, throttling, paid prioritization, and unreasonable interference, and all require similar disclosures of terms and network management practices.⁴⁸

C. *State Network Neutrality Regulation via Procurement Condition*

Some states have approached the question of network neutrality through the lens of state procurement. Oregon and Vermont statutes prohibit the purchase of Internet service from providers who do not

⁴⁴ FCC 2015, *supra* note 9, ¶¶ 151–52.

⁴⁵ See California Consumer Protection and Network Neutrality Act, CAL. CIV. CODE § 3101 (Deering 2019).

⁴⁶ FCC 2015, *supra* note 9, ¶ 202. In the report, the FCC simultaneously pointed out that such matters are typically resolved through commercial transactions. *Id.*

⁴⁷ H.R. 2282 § 1, 2018 Wash. Sess. Laws 156 (codified in WASH. REV. CODE ANN. § 19.385.010 (West 2019)). The statute defines such conduct as an "unfair or deceptive act in trade or commerce and an unfair method of competition" under the Washington Consumer Protection Act. *Id.* § 2.

⁴⁸ S. 19-078, to be codified at COLO. REV. STAT. § 40-15-209(1); H.R. 4155, 79th Legis. Assemb. (Or. 2018); Act 169, S. 289 (Vt. 2018). Vermont also required its Attorney General to investigate broadband provider practices. *Id.* The carriers sued to strike the Vermont procurement restriction on both preemption and dormant Commerce Clause grounds. Complaint, *Am. Cable Ass'n v. Scott*, No. 2:18-cv-00167 (D. Vt. filed Oct. 18, 2018). In addition to its procurement preference, Colorado conditioned the award of "high cost support mechanism" grants to provide communications services in unserved areas to firms that comply with neutrality. See S. 19-078, to be codified at COLO. REV. STAT. § 45-15-209.

meet neutrality standards, and Hawaii, Montana, New Jersey, New York, Rhode Island, and Vermont itself (which reinforced its governor's procurement order with a statute) have done so through executive order. Colorado both uses the procurement process, by providing a "preference" to neutrality-compliant providers rather than outright debarring non-compliant ones,⁴⁹ and also conditions the grants it gives carriers to provide service in unserved parts of Colorado – essentially subsidies – on compliance with neutrality.⁵⁰ This state use of procurement rules to push network neutrality deserves some mention.

Although procurement conditions have been lauded as a "crafty"⁵¹ way for states to accomplish indirectly what they cannot regulate directly, courts are unlikely to be distracted by this particular sleight of hand. It is important to distinguish between the case of preemption and a simple dormant Commerce Clause claim, although the logic of the (broader) preemption cases probably applies to these procurement limitations under dormant Commerce Clause law as well.

If the Restoring Internet Freedom Order is upheld, these state procurement rules will almost surely be found preempted. In both *Chamber of Commerce of the United States v. Brown*⁵² and *Wisconsin Department of Industry v. Gould, Inc.*,⁵³ the Court preempted state procurement limitations that tread on federal labor law. In *Gould*, a Wisconsin provision barred three-time violators of the National Labor Relations Act (NLRA) from receiving state contracts. The Court looked past the form of the regulation (a procurement limitation) to its substance and saw it for the regulation it truly was.⁵⁴ In *Brown*, the state prohibition was even narrower than that in *Gould*—it was a prohibition on the use of state *funds* for the purpose of deterring union organizing.⁵⁵ Nevertheless, the Court struck it as preempted by the NLRA as an attempt to set labor policy rather than procurement policy.⁵⁶ The same would be true for these states' attempts to use procurement policy to effect broader network neutrality throughout their states if the Restoring Internet Freedom Order is found to be a valid agency interpretation of

⁴⁹ S. 19-078 § 4, to be codified at COLO. REV. STAT. § 24-103-911.

⁵⁰ S. 19-078 § 1, to be codified at COLO. REV. STAT. § 40-15-209(1).

⁵¹ See, e.g., Brian Fung, *This Crafty Tactic May Let States Get Around the FCC on Net Neutrality*, WASH. POST (Feb. 9, 2018), www.washingtonpost.com/news/the-switch/wp/2018/02/09/states-and-the-fcc-are-on-a-collision-course-over-net-neutrality-and-nobodys-sure-how-itll-go/?utm_term=.9604e43ace71.

⁵² *Chamber of Commerce of U.S. v. Brown*, 554 U.S. 60 (2008).

⁵³ *Wis. Dep't of Indus. v. Gould, Inc.*, 475 U.S. 282, 286 (1986).

⁵⁴ *Id.* at 286 ("It is the conduct being regulated, not the formal description of governing legal standards, that is the proper focus of concern" . . . "[b]y flatly prohibiting state purchases from repeat labor law violators . . . for all practical purposes, Wisconsin's debarment scheme is tantamount to regulation.") (internal quotations and citations omitted).

⁵⁵ *Brown*, 554 U.S. at 63.

⁵⁶ *Id.* at 70 ("As the statute's preamble candidly acknowledges, the legislative purpose is not the efficient procurement of goods and services, but the furtherance of a labor policy.")

the Communications Act.

The dormant Commerce Clause case is a little harder. Dormant Commerce Clause law, which is more fully described below,⁵⁷ includes the “market participant exception,” which generally allows states to engage in business transactions without hewing to restrictions imposed by dormant Commerce Clause doctrine. In somewhat sweeping language, the Court has explained, “[W]hen a state or local government enters the market as a participant it is not subject to the restraints of the Commerce Clause.”⁵⁸ But even with sweeping language, the market participant exception does not extend to any of the state procurement conditions that have been adopted to foster network neutrality because they set the terms by which broadband providers provide service *to others*.⁵⁹

In all of the Court’s cases applying the market participant exception, the state’s contracting preference was limited to transactions in which the state itself participated.⁶⁰ While the network neutrality procurement policies on their face apply only to state contracts, the conditions on the award of those state contracts depend on the terms of broadband provider contracts with non-state customers. In Montana, for instance, to be eligible for a state contract, a broadband provider must apply network neutrality to services it provides “with respect to any consumer in the State of Montana (including but not limited to the State itself).”⁶¹ All of the state orders to date either explicitly point to non-state contracts or use language⁶² that indicates general adherence to

⁵⁷ See *infra* the text accompanying notes 120–125.

⁵⁸ *White v. Mass. Council of Constr. Emp’rs, Inc.*, 460 U.S. 204, 208 (1983).

⁵⁹ For purposes of this analysis, Colorado’s preference should be treated the same as a binary procurement condition. The Court’s approach in *South Central Timber* is to compare the incentives of a commercial actor with that of a regulator, not to vary the approach based on whether it is a condition or merely a preference. For instance, in *Hughes v. Alexandria Scrap Corp.*, 426 U.S. 794 (1976), the Court considered a program in which the state paid a bounty for automobile hulks to in-state junkyards but not to out-of-state ones. The Court upheld the bounty even though it discriminated against out-of-state junkyards. There is no reason to think the Court would have analyzed the problem differently if the state had been willing to pay a smaller bounty for out-of-state cars than for in-state ones. *Cf. Sturgis v. Washington*, 368 F. Supp. 38 (W.D. Wash. 1973), *aff’d* 414 U.S. 1057 (1973) (upholding differential tuition for in-state and out-of-state students). A preference might affect the calculus of benefits and burdens (a preference being less of a burden than a bar), but it would not alter the analysis used to conduct that balancing.

⁶⁰ See, e.g., *Dept. of Revenue of Ky. v. Davis*, 553 U.S. 328, 333 (2008) (state income tax exemption for municipal bonds issued by the state and its political subdivisions); *White*, 460 U.S. at 208 (residential employment requirement in city construction contracts); *Reeves, Inc. v. Stake*, 447 U.S. 429 (1980) (residential sales preference by state-owned cement plant); *Alexandria Scrap*, 426 U.S. at 803 (subsidy paid for cars scrapped at in-state facilities).

⁶¹ Mont. Exec. Order 3-2018 (Jan. 22, 2018), at 2.

⁶² See, e.g., *id.*; N.J. Exec. Order 9 (Feb. 5, 2018), at 3 (“with respect to any consumers in New Jersey (including but not limited to State entities)”); R.I. Exec. Order 18-02 (Apr. 24, 2018), at 3 (“with respect to any consumer in the State of Rhode Island (including the State itself)”). Vermont’s procurement policy was originally promulgated by executive order, which was unclear about its coverage, generally refers to “its customers,” “to any Internet customer” and “a

network neutrality by providers, not just network neutrality in state contracts themselves.⁶³ Almost ironically, in Oregon and Rhode Island, the definition of covered services (“a mass-market retail” service) likely *excludes* the state government’s own major broadband contracts, most of which would be considered “enterprise” contracts, not “mass market” ones.⁶⁴ Such contractual overreaching—attempts to control the terms by which a business does business with others—is almost certainly on the regulatory side of the market participant/regulator divide.⁶⁵

The Court has been explicit that state attempts to extend state market participant influence beyond its own actual purchases and sales are regulatory and not within the market participant exception. In *South-Central Timber Development, Inc. v. Wunnicke*,⁶⁶ a plurality of the Court struck an Alaska contractual condition in its own timber sales contracts that prohibited the export of the timber before it was processed. While the Court acknowledge the market participant exception, it emphasized its limits, limits that any governor considering “crafty” attempts to avoid dormant Commerce Clause restrictions should ponder: “[C]ontrary to the State’s contention, the doctrine is not *carte blanche* to impose any conditions that the State has the economic power to dictate, and does not validate any requirement merely because the State imposes it upon someone with whom it is in contractual

customer”. Vt. Exec. Order 2-18 (Feb. 15, 2018). It was later replaced by a statutory procurement requirement, which applies to practices “in Vermont.” Act 169, S. 289 (Vt. 2018).

⁶³ See, e.g., COLO. REV. STAT. § 40-15-209(1) (providing a contracting preference for firms that certifies that they “will not engage” in any of the prohibited practices); Haw. Exec. Order 18-02 (Feb. 5, 2018), at 2 (“who demonstrate and contractually agree to support and practice net neutrality principles where all Internet traffic is treated equally”); N.Y. Exec. Order 175 (Jan. 24, 2018), at 2 (“unless the ISPs agree to adhere to net neutrality principles”); H.R. 4155, 79th Legis. Assemb., § 1 (Or. 2018) (describing the prohibited practices generally). Colorado’s limits also apply to grants that it gives for its high-cost support to provide communications services to unserved parts of Colorado. Grants are similar, if not identical to procurement—they are effectively either the procurement or subsidy of services for others. Cf. *Alexandria Scrap*, 426 U.S. at 816 (Stevens, J., concurring) (describing the program as a “subsidy” program). More importantly for the purposes of the dormant Commerce Clause analysis, the nature of the *conditions*, which look to what the grantees do generally and not just what they do with the grant money, see COLO. REV. STAT. § 40-15-209, take them beyond the normal case of the state conditioning its expenditures in a way so that they are only used to support specific services. See generally *Rust v. Sullivan*, 500 U.S. 173, 198–200 (1991) (upholding spending limits on abortion-related activities that require separation of supported from non-supported activities and highlighting the connection between the spending condition and the specific activity affected by the condition).

⁶⁴ H.R. 4155, 79th Legis. Assemb. § 1(1)(a)(A); R.I. Exec. Order 18-02, at 3. See also the Vermont statute, which is similarly limited to “mass market” broadband. 2018 Vt. Act 169 § 2(d). Compare FCC 2015, *supra* note 9, ¶ 25 (defining “broadband Internet access service” as a “mass-market retail service”), with FCC 2015, *supra* note 9, ¶ 26 (“As in 2010, BIAS does not include enterprise services . . .”).

⁶⁵ See Thomas B. Nachbar, *The Antitrust Constitution*, 99 IOWA L. REV. 57, 70–71 (2013) (identifying regulatory control as controlling property owned by others).

⁶⁶ *South-Central Timber Dev., Inc. v. Wunnicke*, 467 U.S. 82 (1984) (plurality opinion).

privity.”⁶⁷ Economic leverage plus contract does not equal an exemption from the dormant Commerce Clause. The plurality distinguished the immediate sale of the timber, which was subject to the exception, from future transactions. It immediately identified the downstream condition as a state “attempt[] to govern the private, separate economic relationships of its trading partners,”⁶⁸ and hence not within the exception.

The state network neutrality procurement policies have an even more attenuated connection to the state’s actual purchasing interest than the one invalidated in *South-Central Timber*. In *South-Central Timber*, the state was at least imposing a condition on something it had sold, and the Court had previously allowed conditions to reach vertically up the supply chain beyond the immediate state transaction. In *White v. Massachusetts Council of Construction Employers, Inc.*,⁶⁹ the Court had allowed a condition covering employees of contractors working on construction projects for the state.⁷⁰ In *South-Central Timber*, the plurality refused to extend that exception to a downstream condition on a sale (a condition on future uses of the timber), distinguishing *White* because in substance the subcontractors had been “working for the city” even as employees of contractors.⁷¹ Given how narrowly the doctrine is applied even up and down the supply chain, it is inconceivable that the Court would extend it to “market participation” in transactions whose only connection to an actual state transaction was that they happened to be for a similar service (or in states that impose procurement policies only on mass market broadband service,⁷² a *dissimilar* one).

As the plurality in *South-Central Timber* explained, when asking whether a particular state act is regulatory or commercial, it is helpful to compare the state’s interest with that of a purely commercial enterprise⁷³—to ask whether it is likely that a purely commercial participant in this market would impose such a restraint on a trading partner. The clear answer to that question is no. In most cases, commercial parties do not stipulate how their trading partners must deal with others in unrelated transactions (that is, transactions for goods and services that will not eventually wind up delivered to a buyer). As the Court explained, “in the commercial context, the seller usually has no

⁶⁷ *Id.* at 97.

⁶⁸ *Id.* at 99.

⁶⁹ *White v. Mass. Council of Const. Emp’rs, Inc.*, 460 U.S. 204 (1983).

⁷⁰ *White*, 460 U.S. at 211 n.7.

⁷¹ *South-Central Timber Dev.*, 467 U.S. at 94–95; *see also id.* at 99 (“In contrast to the situation in *White*, this restriction on private economic activity takes place after the completion of the parties’ direct commercial obligations, rather than during the course of an ongoing commercial relationship in which the city retained a continuing proprietary interest in the subject of the contract.”).

⁷² *See supra* text accompanying note 64.

⁷³ *South-Central Timber Dev.*, 467 U.S. at 96.

say over, and no interest in, how the product is to be used after sale,⁷⁴ and that heuristic is enough to identify the reach of most market participant cases.

Looking at these procurement restrictions from the standpoint of commercial actors demonstrates just how far away they are from anything that looks like commercial action. For example, as a market participant, I have no interest in the quality of the Internet service that my neighbor buys, except for the extremely unlikely possibility that my own communications might not be delivered to them, an interest that does not seem to be at the root of the state procurement restrictions. New Jersey did pay lip service to its own interests in communicating with others on the network,⁷⁵ but only after discussing how New Jerseyans “rely on a free and Open Internet to” engage in a wide variety of activities, from communicating with family and friends to enjoying “a vast array of entertainment options.”⁷⁶ Most commercial actors do not consider the types of entertainment options a broadband Internet service provider makes available to *others* when deciding whether to buy Internet service from that provider.

Indeed, when one seriously engages with the states’ procurement argument, it’s not clear why they bothered limiting their procurement policies to broadband providers’ in-state services.⁷⁷ If New Jersey’s interest is as a market participant,⁷⁸ why would that interest be limited to New Jerseyans? The content markets that consumers access over Internet connections are national, if not international, as are the communications they engage in over those connections, so New Jersey’s interest as a market participant should extend to Internet subscribers throughout the country, if not the world.⁷⁹ To take the market participant argument seriously is to demonstrate just how extravagant it is as applied to these state network neutrality procurement

⁷⁴ *Id.*

⁷⁵ N.J. Exec. Order 9 (Feb. 5, 2018), at 2 (reciting that “many New Jersey government services are offered exclusively online, and throttling or paid prioritization could limit New Jerseyans’ ready access to these important and often critical government services and inhibit citizens in need from accessing important government services”).

⁷⁶ *Id.*

⁷⁷ For some states using general language—like Hawaii and New York—it is not clear that the companies’ adherence to neutrality is limited to their own states’ residents.

⁷⁸ Notably, if New Jersey’s interest in the online experience of non-New Jerseyans is *regulatory*, that would not be a legitimate interest under dormant Commerce Clause doctrine. *See* *Edgar v. MITE Corp.*, 457 U.S. 624, 644 (1982) (“[T]he State has no legitimate interest in protecting nonresident shareholders.”).

⁷⁹ *See* *Nat’l Foreign Trade Council v. Natsios*, 181 F.3d 38, 63 (1st Cir. 1999) (invalidating state regulation that prohibited state purchases from companies doing business with Burma as outside the market participant exception), *aff’d* *Crosby v. Nat’l Foreign Trade Council*, 530 U.S. 363 (2000). The Supreme Court affirmed *Natsios* on preemption grounds and therefore did not reach the dormant (Foreign) Commerce Clause argument. *Id.* at 374 n.8.

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policies.⁸⁰

A second, independent reason why the market participant exception does not apply to state network neutrality procurement policies is that it likely does not apply at all to this branch of dormant Commerce Clause law. As described below, dormant Commerce Clause law prohibits two different kinds of state restrictions: those that discriminate in favor of in-state interests and those that merely interfere with interstate commerce. The network neutrality procurement provisions likely fall into the latter category—they do not seem to discriminate in favor of in-state broadband suppliers. But the market participant exception itself is designed as a response to favoritism, not interference with interstate markets. All of the cases in which the Court applied the market participant exception are cases alleging favoritism.⁸¹ Moreover, the consequence of applying the market participant exception is specific to the problem of favoritism. The market participation exception answers claims that state laws violate the dormant Commerce Clause by favoring in-state interests not by suggesting there isn't discrimination, but that discrimination is permissible in that context. In *Reeves, Inc. v. Stake*, the Court upheld South Dakota's policy of selling cement produced by a state-owned cement plant only to South Dakotans.⁸² The Court applied the market participant exception, embracing rather than explaining away the state's favoritism: "The State's refusal to sell to buyers other than South Dakotans is 'protectionist' only in the sense that it limits benefits generated by a state program to those who fund the state treasury and whom the State was created to serve."⁸³

⁸⁰ Although it would likely be unnecessary to reach this point given the breadth of the Resorting Internet Freedom Order's express preemption (should it be upheld), the Court applied a similar distinction in the preemption cases, distinguishing for preemption purposes between labor-related contracting conditions for state-owned projects (permitted) and those that touched upon conduct in transactions to which the state was not a party (not permitted). *Compare* Building & Constr. Trades Council of Metro. Dist. v. Associated Builders & Contractors of Mass./R.I., Inc., 507 U.S. 218, 227 (1993) (allowing city contracting conditions requiring exclusive bargaining with craft unions on city-administered projects), *with* Wis. Dep't of Indus. v. Gould Inc., 475 U.S. 282, 286 (1986) (preempting state law debarring any firm that was found to have three substantiated NLRA violations).

⁸¹ *See, e.g.*, Dep't of Revenue of Ky. v. Davis, 553 U.S. 328 (2008) (upholding state tax exemption for only in-state government bonds); *White v. Mass. Council of Constr. Employers, Inc.*, 460 U.S. 204 (1983) (upholding procurement rules requiring one half of employees on government contracts be Boston residents); *Reeves, Inc. v. Stake*, 447 U.S. 429 (1980) (upholding restriction of sales from state-owned cement plant to state residents); *Hughes v. Alexandria Scrap Corp.*, 426 U.S. 794 (1976) (upholding program paying a bounty for scrap delivered to in-state facilities); *see also* *United Bldg. & Const. Trades Council of Camden Cty. & Vicinity v. Mayor & Council of City of Camden*, 465 U.S. 208, 221 (1984) (assuming that resident employment restrictions for city contracts are subject to the exception, although plaintiffs had abandoned that theory after *White*).

⁸² *Reeves*, 447 U.S. 429.

⁸³ *Id.* at 442.

Because the market participant exception is specific to the problem of favoritism by the state, its logic does not readily lend itself to the interference branch of dormant Commerce Clause analysis. It is possible to conceive of examples of how a state might interfere with interstate commerce as a market participant—perhaps by buying up all of a commodity or a service so as to prevent it from crossing a state line—but it is hard to imagine a practical one. Even in *Hughes v. Alexandria Scrap, Corp.*, in which Maryland paid a bounty on scrap cars processed at facilities in Maryland (which is pretty close to my conceivable case), the Court viewed the problem as one of discrimination (in favor of in-state processors) rather than mere interference.⁸⁴

That they are styled as procurement policies does not save these state attempts to regulate network neutrality from invalidation under the dormant Commerce Clause. Under the market participant doctrine, the states could decide to buy Internet access only from residents, sell Internet access only to residents, or even buy Internet access only with neutrality protections itself as a way to foster a market for such services. But beyond those limited acts, the market participant doctrine offers the states no protection. These procurement policies are regulatory, not commercial acts, and as such are fully subject to dormant Commerce Clause restrictions.

D. Consumers and Edge Providers in Neutrality Theory

The title of SB 822⁸⁵—The “California Consumer Protection and Network Neutrality Act”⁸⁶—is somewhat remarkable for its invocation of consumer protection because, as generally understood, consumer interests are largely irrelevant to network neutrality. That is why the FCC’s neutrality rules never addressed broadband provider market power—neutrality theory is not about preventing monopolist broadband providers from gouging consumers. Rather, network neutrality is about protecting the interests of edge providers, potentially (and certainly in California’s case) at the *cost* of consumers. In order to understand why network neutrality is indifferent to monopoly gouging of consumers, one has to consider the role of monopoly theory in network neutrality regulation.

⁸⁴ *Alexandria Scrap*, 426 U.S. at 810 (“Nothing in the purposes animating the Commerce Clause prohibits a State, in the absence of congressional action, from participating in the market and exercising the right to favor its own citizens over others.”).

⁸⁵ Because SB 822 is the broadest (and affects the largest number of consumers) of the state network neutrality provisions, I will focus my analysis on it. None of the state laws are materially different for the purposes of my analysis.

⁸⁶ I have generally eschewed using the act’s title in favor of the bill number, both because the title is irredeemably prolix (in both its full and initialistic form—CCPNNA) and because it is generally referred to as “SB 822” in popular usage (which is to say on both Google and Twitter).

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The first step is to consider the monopoly as encountered by consumers: the monopoly in broadband Internet access.⁸⁷ From the consumer perspective, though, broadband Internet access itself is meaningless; what consumers want is to use that Internet access to reach content and services. Network neutrality is a policy designed to prevent a monopolistic broadband provider—a firm with a monopoly in providing Internet connections to a particular locale—from extending that monopoly vertically into the markets for the content and services that their subscribers want to access through those Internet connections.

The problem for network neutrality advocates is that, in the simple case, broadband Internet service providers have no incentive to extend their monopolies vertically because it is mathematically impossible to increase their profits that way. Because consumers view their broadband Internet service and the content they access as a combined good, any attempt to extract more monopoly profits by controlling access to content will decrease the value of the broadband service. If the broadband service is worth less to consumers, they will pay less for it, reducing the monopolist's profits. This mathematical proposition is captured by the "one monopoly rent theorem." As the theorem holds, "[t]here is only one monopoly profit to be made in a chain of production."⁸⁸

This is superficially a counter-intuitive proposition because the entire idea of monopoly is that there is no substitute for the particular good or service. But there is always a substitute. If water cost \$2,000 a gallon, we'd all buy a lot less of it, perhaps substituting into milk. The same is true of monopolies in complementary goods, like broadband Internet access and the content and services one accesses with it. To paraphrase the canonical example, if nuts are only valuable because they can be combined with bolts to secure items together, the monopolistic price of the nut-bolt combination is constrained by the availability of (potentially less suitable) alternatives, like nails, adhesive, and clamps. A bolt monopolist cannot earn greater monopoly profits by extending her monopoly into nuts.⁸⁹

Thus, even when it comes to something as ubiquitous (at least at American institutions of higher education or Starbucks) as Internet

⁸⁷ This of course assumes the worst case of a single Internet broadband provider. According to the FCC, over 92% of Americans have access to both fixed and mobile broadband. 2018 Broadband Deployment Report, FCC 18-10 (Feb. 2, 2018), ¶ 56. It is not clear that mobile broadband is a complete replacement for fixed broadband, *id.* ¶ 18, but the FCC notes that 13% of Americans rely exclusively on mobile broadband and do not subscribe to fixed broadband access, *id.* ¶ 17, so there appears to be at least some degree of substitutability between the two services.

⁸⁸ RICHARD A. POSNER & FRANK H. EASTERBROOK, *ANTITRUST: CASES, ECONOMIC NOTES AND OTHER MATERIALS* 870 (2d ed. 1981). See generally *Town of Concord, Mass. v. Bost. Edison Co.*, 915 F.2d 17 (1st Cir. 1990); Ward S. Bowman, Jr., *Tying Arrangements and the Leverage Problem*, 67 *YALE L.J.* 19 (1957); Aaron Director & Edward H. Levi, *Law and the Future: Trade Regulation*, 51 *NW. U. L. REV.* 281 (1956).

⁸⁹ Bowman, *supra* note 88, at 21–22.

access, demand for it is remarkably elastic. If your Internet broadband provider tried to charge you \$15,000 per month for Internet access, you wouldn't buy it. You would read more books or spend more time with your friends or hang out more at Starbucks. Indeed, that the one monopoly rent theorem is so hard for so many of us to imagine as applied to Internet access is a sign that our broadband access is currently being priced well below our reservation price. For most people likely to read this paper, the price at which broadband Internet access would be so expensive that they would forego it is higher than they can imagine because it is currently so cheap.

What is true for price is true for content. If your broadband provider prevented you from accessing half of the Internet, your reservation price for broadband access would go down and, on the margin, the providers would lose users.⁹⁰

That means that a typical monopolist, including a monopolistic broadband Internet service provider, has no incentive to either charge high prices for content (any content) or to limit one's ability to reach content. If anything, the incentive for a broadband monopolist is to push the price of content down (or, given a stable price, push the quality, including the variety, of content up), because doing so maximizes the price it can charge for its monopolized portion (broadband access) of the complementary product (accessing information on the Internet).⁹¹ The one monopoly rent theorem suggests not only that monopolists have no incentive to discriminate but rather that they have an incentive not to if nondiscriminatory access is indeed what consumers want.

That is likely why, in the wake of the first set of FCC rulings deregulating Internet service in the early 2000s, before "open access" concerns morphed into "network neutrality," Internet service providers did not rush to build walled gardens on the Internet. Those that relied on that model failed. AOL, one of the original walled-garden Internet services, is a perfect example, essentially disappearing after the explosion of the web rendered such curated services obsolete. When the FCC imposed network neutrality rules in 2010, the number of attempts to overreach it cited could be counted on one hand.⁹² I hold no illusions that it was because broadband providers love an open Internet; rather, I

⁹⁰ James B. Speta, *Handicapping the Race for the Last Mile?: A Critique of Open Access Rules for Broadband Platforms*, 17 YALE J. ON REG. 39, 84 (2000); Adam Candeub, *Networks, Neutrality, and Discrimination*, 69 ADMIN. L. REV. 125, 164 (2017).

⁹¹ Joseph Farrell & Michael L. Katz, *Innovation, Rent Extraction, and Integration in Systems Markets*, 48 J. INDUS. ECON. 413 (2000). On the application to network neutrality, see Joseph Farrell & Philip J. Weiser, *Modularity, Vertical Integration, and Open Access Policies: Towards a Convergence of Antitrust and Regulation in the Internet Age*, 17 HARV. J.L. & TECH. 85, 104 (2003); Barbara van Schewick, *Toward an Economic Framework for Network Neutrality Regulation*, 5 J. TELECOMM. & HIGH TECH. L. 329, 341 (2007).

⁹² See FCC 2010, *supra* note 16, ¶ 35.

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suspect that it was because they rightly divined that unhindered access to an open Internet was the service their customers were willing to pay the most for.

The operation of the one monopoly rent theorem to network neutrality is not a contested matter; it is a commonplace among both advocates and opponents of network neutrality regulation.⁹³ Rather than reject the one monopoly rent theorem, academic advocates of strong network neutrality have attempted to identify specific circumstances in which it might not apply.⁹⁴

Regardless of how one thinks the one monopoly rent theorem applies, though, the fact that it clearly does apply has significant implications for network neutrality regulation. The most important is that the theorem demonstrates that there is exactly one monopoly rent for a monopolist in one part of the combined product—no more (and therefore there is little incentive to discriminate) but also no *less*. That is, regardless of the effects of nondiscrimination rules like network neutrality, monopolists are still free, absent other regulation, to charge their customers monopoly prices for broadband access. The one monopoly rent theorem demonstrates not only that monopoly rents are limited but also that they are flexible; absent price regulation, any reduction in the ability to charge rents at one level can be shifted to another. The one monopoly rent theorem demonstrates how, to the extent broadband customers are at the mercy of monopolistic broadband providers, network neutrality does not solve that problem because it does not divest the monopolist of the ability to charge (exactly the same) monopoly rents as without the regulation.⁹⁵

That point bears repeating: Broadband customers are not directly benefitted by network neutrality regulation. The relative unimportance of customer interests to network neutrality is apparent from the FCC's neutrality rulings, which largely ignore the role of broadband customers. Rather than affecting customer relationships, network neutrality changes the relationship between broadband providers and the *edge providers*. In 2010, when promulgating enforceable neutrality rules, the FCC adopted wholesale the one monopoly rent-driven understanding of the benefits of network neutrality, operating not on a theory about

⁹³ van Schewick, *supra* note 91, at 340; Brett M. Frischmann & Barbara van Schewick, *Network Neutrality and the Economics of an Information Superhighway: A Reply to Professor Yoo*, 47 JURIMETRICS 383, 410 (2007) (referring to the one monopoly rent theorem as “the baseline for discussion”); Daniel F. Spulber & Christopher S. Yoo, *Mandating Access to Telecom and the Internet: The Hidden Side of Trinko*, 107 COLUM. L. REV. 1822, 1836–37 (2007). *See generally* Christopher S. Yoo, *Vertical Integration and Media Regulation in the New Economy*, 19 YALE J. ON REG. 171, 252 (2002) (collecting sources).

⁹⁴ *See, e.g.*, Farrell and Weiser, *supra* note 91, at 105–19; van Schewick, *supra* note 91, at 337–38; Frischmann and van Schewick, *supra* note 93, at 410–16.

⁹⁵ Yoo, *supra* note 40, at 13.

customer relationships but rather on the theory that neutrality rules benefit society by virtue of their effect on edge providers. According to the FCC, its network neutrality regulation

enables innovators to create and offer new applications and services without needing approval from any controlling entity, be it a network provider, equipment manufacturer, industry body, or government agency. End users benefit because the Internet's openness allows new technologies to be developed and distributed by a broad range of sources, not just by the companies that operate the network. . . . Startups and small businesses benefit because the Internet's openness enables anyone connected to the network to reach and do business with anyone else, allowing even the smallest and most remotely located businesses to access national and global markets, and contribute to the economy through e-commerce and online advertising. Because Internet openness enables widespread innovation and allows all end users and edge providers (rather than just the significantly smaller number of broadband providers) to create and determine the success or failure of content, applications, services, and devices, it maximizes commercial and non-commercial innovations that address key national challenges—including improvements in health care, education, and energy efficiency that benefit our economy and civic life.⁹⁶

The beneficial effects on edge markets are then revisited upon broadband markets because improved content would then increase demand for broadband. The result is a “virtuous circle of innovation.”⁹⁷ The FCC explains, “new uses of the network—including new content, applications, services, and devices—lead to increased end-user demand for broadband, which drives network improvements, which in turn lead to further innovative network uses,” and the cycle continues.⁹⁸ The idea behind network neutrality is that neutrality makes the Internet more valuable, which then drives increased demand for Internet access, which then drives increased broadband deployment.⁹⁹

⁹⁶ FCC 2010, *supra* note 16, ¶ 13 (internal footnotes omitted).

⁹⁷ *Id.* The “virtuous circle” evolved, *see id.* ¶ 38, into a “virtuous cycle.” By the time of the 2015 Protecting and Promoting the Open Internet Report and Order, the virtue was clearly to be had and propagated by means of a “cycle” and not a “circle.” FCC 2015, *supra* note 9, ¶ 142.

⁹⁸ FCC 2010, *supra* note 16, ¶ 14.

⁹⁹ This understanding of how network neutrality works as been a part of network neutrality from the beginning. In 2004, when first announcing his “four freedoms,” then-FCC Chairman Michael Powell described the mechanics of network neutrality:

Many are racing to develop the content, applications, and devices they hope will entice more and more consumers to abandon dial-up and slower broadband access in favor of faster broadband. But first, these companies have to be able to reach the broadband consumer. Thus, usage and deployment of high-speed Internet depends on access to content. Giving broadband consumers the access they want is not a matter of charity; it is a matter of simple good business. Network owners, ISPs, equipment makers, and content and application developers all benefit when

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Indeed, throughout the last decade of neutrality's trials and tribulations—a regulatory back-and-forth engaged in by both the courts and the FCC¹⁰⁰—one aspect of neutrality regulation has remained a constant: the understanding that neutrality operates primarily between carriers and edge providers. Neutrality frees edge providers to innovate, which then increases the value of the network to consumers and thereby increases broadband deployment.¹⁰¹ Even as the FCC was dismantling network neutrality rules, it did so with the same basic understanding of the mechanics of neutrality that the Commission has relied upon throughout its tumultuous history with network neutrality.¹⁰²

Thus, network neutrality is not so much about regulating markets for broadband Internet access (because it does so little to affect those markets) as it is about regulating markets for *content*. This is fully in keeping with the economic theory of how monopoly in a single stage of a distribution chain works. If one takes the existence of a monopoly at one level as a given, as network neutrality does, then the primary concerns are not about pricing or output (since the relevant monopolist already has control over those things under the one monopoly rent theorem), but rather about foreclosure, and here the relevant foreclosure is foreclosure in content markets. Thus, when the Commission

consumers are empowered to get and do what they wish.

Powell, *supra* note 24, at 8. The FCC itself continued that approach in the Four Principles:

Moreover, to ensure that broadband networks are widely deployed, open, affordable, and accessible to all consumers, the Commission adopts the following principles The Commission has a duty to preserve and promote the vibrant and open character of the Internet as the telecommunications marketplace enters the broadband age. To foster creation, adoption and use of Internet broadband content, applications, services and attachments, and to ensure consumers benefit from the innovation that comes from competition, the Commission will incorporate the above principles into its ongoing policymaking activities.

FCC 2005, *supra* note 38, ¶ 5.

¹⁰⁰ *Comcast Corp. v. Fed. Comm'n's Comm'n*, 600 F.3d 642 (D.C. Cir. 2010) (holding that the Four Principles Internet Policy Statement, FCC 2005, *supra* note 38, was not enforceable against broadband providers). The 2010 Preserving the Open Internet Report and Order, FCC 2010, *supra* note 16, was a response to *Comcast*. In 2014, the D.C. Circuit struck the 2010 rules as beyond the scope of the Commission's authority under Title I. *Verizon v. Fed. Comm'n's Comm'n*, 740 F.3d 623 (D.C. Cir. 2014). The Commission responded in 2015, relying on its Title II authority to reinstate neutrality rules. FCC 2015, *supra* note 9, ¶ 29.

¹⁰¹ In the 2015 order, the FCC again relied on the “virtuous cycle” of network neutrality, pointing out that even as the D.C. Circuit had struck the network neutrality rules themselves, it had upheld the Commission's “virtuous cycle” model for how network neutrality operates. FCC 2015, *supra* note 9, ¶ 7 (“But the *Verizon* court upheld the Commission's finding that Internet openness drives a ‘virtuous cycle’ in which innovations at the edges of the network enhance consumer demand, leading to expanded investments in broadband infrastructure that, in turn, spark new innovations at the edge”).

¹⁰² FCC 2017, *supra* note 1, at ¶ 119 (“ISPs, as well as edge providers, are important drivers of the virtuous cycle, and regulation must be evaluated accounting for its impact on ISPs' capacity to drive that cycle, as well as that of edge providers.”); *id.* ¶ 575 (“The open Internet rules we adopt today each operate independently to protect the open Internet, promote the virtuous cycle, and encourage the deployment of broadband on a timely basis.”).

announced that “this openness promotes competition,” the competition of which it was speaking was competition in content markets, not broadband service.¹⁰³ The hope is that innovation and growth in content markets (enabled by prohibitions on discrimination) will eventually lead to greater broadband deployment and better Internet access, but the benefits of the “virtuous cycle” expressly operate through content markets. Without the effect on content markets—and the edge providers that supply them—there is no real effect on the overall availability of broadband, or for that matter, no real effect on the welfare of consumers.

That is not to say that the FCC or other neutrality advocates do not care about consumers. Some consumers are also edge providers, and so these consumers benefit from neutrality rules the way any edge provider does. Mostly, though, consumers benefit under network neutrality by riding the “rising tide”¹⁰⁴ that neutrality brings through the “virtuous cycle” and the journey from nondiscriminatory consumer Internet connections to content markets and back to expanded broadband access: “Each round of innovation increases the value of the Internet for broadband providers, edge providers, online businesses, and consumers.”¹⁰⁵ But while the FCC invoked the rhetoric of consumer protection¹⁰⁶ and consumer choice,¹⁰⁷ neither seem to have driven neutrality regulation. The FCC expressly rejected a consumer-harm-driven approach to network neutrality when it adopted general neutrality rules.¹⁰⁸ Nor is it clear that consumer choice mattered much. It is entirely possible, for instance, that consumers will choose a non-neutral connection if it makes financial sense for them. When AT&T added its Sponsored Data program as an option to its wireless plans at no cost to

¹⁰³ See FCC 2010, *supra* note 16, ¶ 3, 10 (citing “competition through low barriers to entry” while not altering the barriers for broadband providers to enter the market, only edge providers). The transparency rules, but not the nondiscrimination rules, might be seen as enabling competition by providing more information in broadband markets. *See id.* ¶ 53.

¹⁰⁴ See Tom Nugent, *A Rising Tide . . . In More Ways Than One: The Wisdom of the JFK-Reagan-Bush Tax-Cut Model*, NAT’L REV. ONLINE (July 28, 2006, 1:02 P.M.), www.nationalreview.com/2006/07/rising-tide-more-ways-one-thomas-e-nugent/ (extolling the virtues of the Laffer Curve).

¹⁰⁵ FCC 2010, *supra* note 16, ¶ 14.

¹⁰⁶ *Id.* ¶ 10 (describing a framework that “enables consumer choice”).

¹⁰⁷ *Id.* ¶ 1 (“will empower and protect consumers”).

¹⁰⁸ The FCC considered and rejected proposals to limit network neutrality rules to cases resulting in harm to consumers. *See id.* ¶ 78 (“The broad purposes of this rule—to encourage competition and remove impediments to infrastructure investment while protecting consumer choice, free expression, end-user control, and the ability to innovate without permission—cannot be achieved by preventing only those practices that are demonstrably anticompetitive or harmful to consumers. Rather, the rule rests on the general proposition that broadband providers should not pick winners and losers on the Internet—even for reasons that may be independent of providers’ competitive interests or that may not immediately or demonstrably cause substantial consumer harm.”).

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consumers,¹⁰⁹ it is hard to imagine that customers who opted in were harmed, and all of them did so as a matter of choice—it was a purely optional service on a plan they were already paying for.¹¹⁰ The FCC considered and refused to issue an outright prohibition against zero rating programs like Sponsored Data in the 2015 version of its neutrality regulation, opting instead to withhold judgment on zero rating.¹¹¹ The FCC’s Wireless Bureau later issued a policy report¹¹² arguing that Sponsored Data (among other programs) “may violate” the 2015 version of the FCC’s neutrality rules. By rejecting options like zero rating that consumers might *prefer*, network neutrality necessarily puts the interests of edge providers before those of consumers, limiting consumer choice if that choice is exercised in a way that alters the relationship between broadband providers and edge providers. Doing so makes sense in a neutrality regime, because it is clear that it is the broadband provider/edge provider relationship that is the object of neutrality regulation, not the relationship between broadband providers and their customers.

Edge providers might need regulatory intervention more than consumers because, even if consumers have limited leverage over broadband providers, edge providers have none. Consumers can protect themselves against what they consider to be harmful discrimination by choosing a broadband provider that does not discriminate. Customer choice may be limited in the case of a monopolistic broadband provider, but that limit stems from the broadband provider’s market power, not its ability to discriminate. To the extent the subscribers suffer a harm from carrier discrimination, they will seek better deals within the constraints of the market they face, just as they would with any aspect of a service they don’t like. Correcting what customers consider to be deficits in their Internet service requires competition among carriers, but that is something that network neutrality does not affect one way or the other.

¹⁰⁹ Sponsored Data is a form of zero-rating in which content providers subsidize wireless broadband customers’ data usage in order to encourage them to use the sponsor’s content. See *Sponsored Data from AT&T*, AT&T, <https://www.att.com/att/sponsoreddata/en/index.html> (last visited Apr. 4, 2019).

¹¹⁰ On the economic implications of zero rating, see C. Scott Hemphill, *Network Neutrality and the False Promise of Zero-Price Regulation*, 25 YALE J. ON REG. 135 (2008).

¹¹¹ FCC 2015, *supra* note 9, ¶ 152 (“Accordingly, we will look at and assess such practices under the no-unreasonable interference/disadvantage standard, based on the facts of each individual case, and take action as necessary.”).

¹¹² *Release of Report on Policy Review of Mobile Zero-Rating Practices*, FED. COMMS. COMMISSION (Jan. 11, 2017), <https://www.fcc.gov/document/release-report-policy-review-mobile-zero-rating-practices>. The Wireless Bureau report was issued days before the appointment of Ajit Pai to be Chairman of the FCC, prompting him to label the action among numerous “partisan, political agendas that only harm investment and innovation.” Days after Pai’s appointment, the inquiry was unceremoniously closed. See John Eggerton, *FCC’s Wireless Bureau Dumps Zero-Rating Report*, BROADCASTING & CABLE (Feb. 3, 2017), <https://www.broadcastingcable.com/news/fccs-wireless-bureau-dumps-zero-rating-report-163063>.

The same is not true for edge providers. At least part of the connection that edge providers need to reach their customers—the “last mile”¹¹³ regulated by network neutrality—is purchased not by the edge provider but by its customer. Because of that, edge providers are dependent on their customers to represent, at least in part, the interest of the edge provider in being able to use that segment of the connection. In a sense, part of the distribution channel the edge provider uses to reach its customers is provided by the customer. Both the broadband subscriber and the edge provider may want the connection to be made, but they do not necessarily have an equal interest in seeing it is provided, and they may have divergent interests in whether the customer’s broadband provider engages in discrimination. That is so because discrimination may not affect customers very much at all.

Suppose I decide to subscribe to *only one* streaming video service and, for simplicity’s sake, that all subscription services are equally priced at \$10 per month and the marginal cost of providing content to me is zero. If I value Netflix at \$12 and Hulu at \$11, then, in a world without broadband discrimination, I will pay \$10 to Netflix and receive streamed content I value at \$12. Netflix gets my \$10 subscription fee, and I get \$2 in consumer surplus.

But I will be willing to accept broadband access that discriminates against Netflix in favor of Hulu so long as that discriminatory broadband service costs at least \$1 less than a neutral broadband service. In that world, I am still \$2 ahead (\$1 in consumer surplus from buying Hulu and \$1 in reduced cost for Internet service). But Netflix is out my *entire* \$10 subscription fee. Neutral broadband access is only worth \$1 more to me, but it is worth \$10 more to Netflix. If the broadband provider happens to own Hulu,¹¹⁴ the math can work in its favor. It could potentially give up \$1 in broadband subscription fees and capture \$10 in streaming service revenue (diverted from Netflix) in the deal.¹¹⁵ It needn’t be the broadband provider’s own edge service that is favored. One edge provider could pay the broadband provider and subsidize a customer’s broadband service in an attempt to get the customer to switch from a different edge provider, which is how AT&T’s Sponsored Data program is supposed to work.

This is just one way in which the interest of edge providers and broadband subscribers might not be aligned, making customers imperfect proxies for the economic interests of edge providers. The

¹¹³ The “last mile” is the connection between a residence or business and the local Internet service provider, who then provides a connection to the rest of the Internet. *See Verizon v. Fed. Comm’n’s Comm’n*, 740 F.3d 623, 628–29 (D.C. Cir. 2014).

¹¹⁴ Hulu is jointly owned by Walt Disney, 21st Century Fox (which is currently being acquired by Disney), Comcast, and AT&T, the last two of which are large broadband providers.

¹¹⁵ For a similar argument regarding low or zero marginal cost goods as applied to edge providers, see Frischmann & van Schewick, *supra* note 93, at 413–14.

biggest difference is that broadband subscribers have at least limited ability to fight back against broadband provider overreaching—overreaching that is limited by the one monopoly rent rule, whose effect is not altered by network neutrality.

The upshot of all this is that it is edge providers, not consumers, that need network neutrality to correct the anticompetitive impulses of monopolistic broadband providers, and it is for edge providers, not broadband customers, that network neutrality is primarily designed.

E. *Network Neutrality, SB 822, and Californians*

What should be obvious by now is that, if you are a consumer, the appealingly named California *Consumer* Protection and Network Neutrality Act is not going to help you. If consumers were at the mercy of monopolistic broadband Internet service providers before SB 822, they remain at their mercy after it. At the very least, SB 822 does nothing to make consumers better off with regard to their broadband providers. Moreover, because SB 822 bans zero rating—which is frequently beneficial to consumers¹¹⁶—consumers are almost certainly marginally worse off after SB 822 than they were before it. In 2017, The Wireless Bureau thought AT&T’s Sponsored Data program “may violate” the 2015 FCC neutrality rules,¹¹⁷ but there has been no equally equivocal statement from California regulators: zero rating (and the potential consumer benefits it provides) will be prohibited under SB 822.

The lack of consumer benefit is not really a failure of SB 822; it is a natural consequence of network neutrality more generally because, although network neutrality regulation ostensibly regulates the “last mile” relationship between consumer and broadband provider, what it actually seeks to control are content markets, as demonstrated above by the “virtuous cycle.” Network neutrality regulation might control content markets on the theory that improvements in content markets will eventually lead to improvements in Internet access, although it needn’t. It was the FCC’s theory that improved content markets will lead to increased broadband access (the FCC’s *raison d’être*), but network neutrality would be a viable policy even if all one wanted were more open content markets.¹¹⁸ Either way, network neutrality operates primarily on content markets, not broadband markets, even if the regulation facially applies to “last mile” connections in California. This is so by virtue of the theory and economics behind network neutrality, and nothing in SB 822 changes that regulatory theory or the underlying

¹¹⁶ See *supra* text accompanying note 110.

¹¹⁷ See *supra* text accompanying note 112.

¹¹⁸ See, e.g., Susan P. Crawford, *The Internet and the Project of Communications Law*, 55 UCLA L. REV. 359, 406–07 (2007).

economics.

That presents something of a problem for California, since the vast majority of the content transactions governed by the law, even in a state as large as California, take place in content markets that exist beyond the borders of California. The necessarily extraterritorial impact of state network neutrality regulation like SB 822 is not an empirical claim about the ratio of in-state vs. interstate content transactions that Californians engage in;¹¹⁹ it is a consequence of the way network neutrality works. While Californians' "last mile" broadband service may be provided entirely in California and the subscribers themselves may be in California when they engage in transactions with edge providers, the markets through which network neutrality must operate in order to affect broadband service in California are inherently national, if not international. Because of the "virtuous cycle" of network neutrality, unless California succeeds in affecting national content markets, its neutrality regulation will fail because it will not generate the innovation required to support increased broadband, even if California's goal is to increase broadband access only in California. It is a necessary feature of California's neutrality regulation that California effectively export its regulatory authority outside of the state to affect national (and

¹¹⁹ There are any number of ways that one could measure such transactions, such as comparing the quantity of bits flowing intrastate vs. interstate, the location of data servers accessed by Californians, the headquarters of edge providers, or the revenue that Californians spend on content (which would be incomplete but could serve as an estimate of free content as well). It probably does not matter how one counts. Although California is a major locus of edge provider activity, the population of California is only 12% of that of the United States and 0.5% of the world. Even if Californians are ninety-five times as likely to access an intrastate edge provider as one outside California, the majority of their interactions will be with edge providers outside California. The numbers for any other state even more strongly point to the dominance of extraterritorial edge providers. Practically any such measure would be meaningless given the architecture of the Internet and the portability of content. Even limiting the inquiry to a single firm shows the difficulty of deciding how to measure content flows. Take the example of Amazon. Amazon hosts its content on servers all over the country (indeed, its network is so extensive that it hosts content for others all over the country), including in California. But Amazon itself is headquartered in Washington (with a second headquarters in Virginia on the horizon). The content that Amazon serves, though, is produced all over the world, including by California-based motion picture studios. The same is true for the retail sales of tangible goods made through Amazon's site, which may take place or be fulfilled by warehouses or be on behalf of sellers either in or out of California. Any attempt to categorize whether Amazon is an in-state edge provider or an out-of-state one would be essentially meaningless. Suffice it to say, a lot of California's content likely comes from outside California.

But such measures are not only practically impossible but also largely irrelevant to evaluating the regulatory impact of state network neutrality regulation. What matters is that content *markets* are interstate, because content flows freely across state lines in such a way that intrastate content and interstate content are close enough substitutes for each other to make the two indistinguishable. That substitutability is what makes all content markets national (if not international), not the physical location of any particular piece of content or group of subscribers. Any content that does come from outside California presents immediate problems for California as a regulator because of the extraterritorial effect of its regulation, but no specific content need come from outside California for one to conclude that California is regulating interstate content markets.

potentially international) content markets.

In this way, SB 822 presents an altogether different problem than the normal “patchwork” problem of state regulation of activity on the Internet by virtue of not only its practical effects but also its theoretical basis. SB 822 is not only likely to affect non-California markets; it *must* affect non-California markets in order to have its desired effect.¹²⁰ Some forms of regulation, such as California’s nascent consumer data privacy law,¹²¹ may increase the cost and complexity of transactions that are frequently interstate in nature. SB 822 goes beyond such incidental effects, directly targeting content markets beyond California’s borders.

Because of the economics of the one monopoly rent theorem and the entire regulatory theory underlying network neutrality, the primary focus of state network neutrality laws like SB 822 is not on the local broadband customers whose connections are facially regulated but rather on interstate and international content markets. The one monopoly rent theorem, combined with the lack of price controls, means that neutrality regulation does not directly affect consumers’ access to broadband service, other than to eliminate potentially wealth-enhancing schemes like zero rating. At the same time, the theory behind network neutrality requires that for any neutrality regulation to actually increase broadband availability, it must do so by affecting content markets, which are necessarily interstate in nature. The question, then, is what constitutional law has to say about a state regulation whose intrastate effects are predicated on producing interstate effects.

II. THE “DORMANT” COMMERCE CLAUSE AND STATE NETWORK NEUTRALITY RULES

Such an unusual regulation does not readily fit the existing constitutional tests, which were designed to address specific problems that might result from state economic regulation that crosses state lines. Every state law has some effect on interstate commerce, and so constitutional law accommodates such necessarily incident interstate effects, recently with increasing regard for states’ need to regulate transactions taking place over the Internet. Some aspects of state network neutrality laws attempt to directly regulate transactions taking place out of state, but even for those state network neutrality rules that

¹²⁰ Of course, SB 822 does not need to completely control content markets to have its desired effect. Federal network neutrality also necessarily incompletely regulated content markets, since many other countries might not have neutrality rules, and the rules themselves did not apply to enterprise broadband service, *see* FCC 2015, *supra* note 9, ¶ 189, which would have left a large number of uncovered broadband connections. The point is that the regulations’ mechanism of effect necessarily operates through content markets outside California in order to have any effect on broadband markets inside California, not that there will be no effect on California broadband markets if California does not have complete control over all content markets.

¹²¹ California Consumer Privacy Act of 2018, CAL. CIV. CODE §§ 1798.100 *et. seq.* (West 2018).

do not on their face reach beyond state boundaries, they necessarily do so as a direct means of producing their intended in-state effects. After a brief discussion of the relevant constitutional law—specifically dormant Commerce Clause law—I will consider the implications of that law for state regulation of broadband connections and state network neutrality laws in particular.

A. *Basics of Dormant Commerce Clause Law*

The concept of a “dormant Commerce Clause” is a somewhat awkward one, given that the Constitution lacks any such provision. The limits on state power that we have come to call “dormant Commerce Clause” restrictions are an implication of the grant of power to Congress in Article I of the Constitution to “regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes”¹²² or, as the Court described the first time it paired “dormant” with “commerce,” “the power to regulate commerce in its dormant state.”¹²³ Although without firm textual basis, it is a limit as old as the Court’s Commerce Clause jurisprudence itself.¹²⁴

As suggested above, dormant Commerce Clause law encompasses two different sets of concerns: discrimination against interstate commerce in favor of intrastate interest (favoritism), and interference with the free flow of interstate commerce, even in the case of ostensibly well-meaning and public-regarding state regulation. The doctrine reflects that bifurcation:

First, state regulations may not discriminate against interstate commerce; and second, States may not impose undue burdens on interstate commerce. State laws that discriminate against interstate commerce face “a virtually per se rule of invalidity.” State laws that “regulat[e] even-handedly to effectuate a legitimate local public interest . . . will be upheld unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits.”¹²⁵

The two different cases are subject to different rules, with discriminatory state regulation receiving far more restrictive treatment than non-discriminatory regulation that merely interferes with the flow of interstate commerce.

¹²² U.S. CONST. art. I, § 8, cl. 3.

¹²³ *Willson v. Black-Bird Creek Marsh Co.*, 27 U.S. 245, 252 (1829).

¹²⁴ *See S. Pac. Co. v. Ariz. ex rel. Sullivan*, 325 U.S. 761, 767 (1945) (“But ever since *Gibbons v. Ogden*, the states have not been deemed to have authority to impede substantially the free flow of commerce from state to state, or to regulate those phases of the national commerce which, because of the need of national uniformity, demand that their regulation, if any, be prescribed by a single authority.”).

¹²⁵ *South Dakota v. Wayfair, Inc.*, 138 S. Ct. 2080, 2091 (2018) (citations omitted).

B. *Analysis of State Network Neutrality Laws as Nominal Internet Regulation*

None of the relevant state network neutrality laws appear to be protectionist in purpose, intent, or form,¹²⁶ and so they are likely to be evaluated for their potential to interfere with interstate commerce.

As canonically stated in *Pike v. Bruce Church*, under the interference branch of the doctrine, state regulation

will be upheld unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits. . . . If a legitimate local purpose is found, then the question becomes one of degree. And the extent of the burden that will be tolerated will of course depend on the nature of the local interest involved, and on whether it could be promoted as well with a lesser impact on interstate activities.¹²⁷

Given the nature of the Internet, it is tempting to identify every local regulation as a burden on interstate commerce because the Internet itself is a tremendous engine for interstate commerce. But the Internet is hardly so exceptional,¹²⁸ as the Court made clear just last year in *South Dakota v. Wayfair*,¹²⁹ in which it upheld South Dakota's power to require out-of-state sellers (those with no physical presence in the state) to collect sales tax on purchases made over the Internet, reversing a twenty-six-year-old precedent in the process.¹³⁰ It cannot be the case that state network neutrality regulations will be struck as violating the dormant Commerce Clause simply because they regulate transactions related to the Internet or transactions that cross state borders.

Even without considering special problems inherent in neutrality regulation discussed below—that is, even taking the regulation as merely being about the sale of broadband Internet service in the various states—the dormant Commerce Clause case for these state regulations is not particularly strong.

California, for example, generally relies on its police power as the basis for SB 822,¹³¹ but the *Pike* test is not so insensitive to “the nature of the local interest involved”¹³² to accept such a blanket claim of

¹²⁶ See *Philadelphia v. New Jersey*, 437 U.S. 617 (1978).

¹²⁷ *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970).

¹²⁸ Jack L. Goldsmith & Alan O. Sykes, *The Internet and the Dormant Commerce Clause*, 110 YALE L.J. 785, 787 (2001).

¹²⁹ *Wayfair*, 138 S. Ct. 2080.

¹³⁰ *Id.*; see *Quill Corp. v. North Dakota*, 504 U.S. 298 (1992). The twenty-six year figure is for Internet-related sales taxes; the Court had prohibited states from requiring out-of-state sellers to collect sales taxes since 1967. See Ruth Mason, *Implications of Wayfair*, 46 INTERTAX 810 (2018).

¹³¹ CAL. CIV. CODE § 3101(a)(1) (Deering 2019).

¹³² *Pike*, 397 U.S. at 142.

authority, and “police power” justifications have been rejected before.¹³³ The Court’s dormant Commerce Clause cases distinguish among various state interests, with some receiving particular deference (such as food safety in *Hunt*,¹³⁴ although to no avail, for the Court struck the statute anyway¹³⁵) and others not. One would think safety would be an area in which the Court would defer to states, but in both *Kassell v. Consolidated Freightways* and *Southern Pacific Co. v. Arizona*, the Court provided its own estimation of the balancing of benefits and burdens of transportation regulation premised on safety, rejecting both provisions in the process.¹³⁶ In *South Carolina State Highway Department v. Barnwell Brothers*, the Court accepted both a safety and “economical use” justification for roads,¹³⁷ but it did so in combination with state ownership of and general responsibility for those roads, a distinction it later found compelling¹³⁸ and one that would not extend to state attempts to regulate Internet service. In *Wayfair*, the Court was careful to call out how strong an interest the state had in the success of its taxation regime, which touches upon the state’s ability to do anything else.¹³⁹

Other cases have focused on a combination of reliance and tradition,¹⁴⁰ but unlike in many dormant Commerce Clause cases, there is no tradition of state regulation of broadband Internet service or communications to be upset. On the contrary, the regulation of Internet service has been an almost exclusively federal enterprise for its admittedly brief history.¹⁴¹

¹³³ See *S. Pac. Co. v. Arizona*, 325 U.S. 761, 780 (1945) (holding that the restrictions of the dormant Commerce Clause are “not to be avoided by simply invoking the convenient apologetics of the police power.”) (internal quotation omitted).

¹³⁴ *Hunt v. Wash. State Apple Advert. Comm’n*, 432 U.S. 333, 350 (1977) (“[A]s appellants correctly note, that ‘residuum’ [of state power] is particularly strong when the State acts to protect its citizenry in matters pertaining to the sale of foodstuffs.”).

¹³⁵ *Id.* at 353–54.

¹³⁶ *Kassel v. Consol. Freightways Corp.*, 450 U.S. 662, 670 (1981) (“[T]he incantation of a purpose to promote the public health or safety does not insulate a state law from Commerce Clause attack.”); *S. Pac.*, 325 U.S. at 780; see also Dan L. Burk, *Federalism in Cyberspace*, 28 CONN. L. REV. 1095, 1125 (1996) (“The degree of deference accorded states in this area naturally makes consumer protection rationales particularly attractive to state legislatures. Where possible, they will likely articulate such a rationale in order to avoid dormant Commerce Clause nullification of a given statute. The courts are not blind to such subterfuge, and so-called health and safety measures cannot be simply ‘convenient apologetics’ for constructive trade barriers between the states.”).

¹³⁷ *S.C. State Highway Dept. v. Barnwell Bros.*, 303 U.S. 177, 190 (1938).

¹³⁸ *S. Pac.*, 325 U.S. at 783 (distinguishing *Barnwell Bros.*).

¹³⁹ *South Dakota v. Wayfair, Inc.*, 138 S. Ct. 2080, 2095 (2018).

¹⁴⁰ *Cooley v. Bd. of Wardens of Port of Phila.*, 53 U.S. 299, 321 (1851) (“For more than sixty years this subject has been acted on by the states, and the systems of some of them created and of others essentially modified during that period.”).

¹⁴¹ FCC 2015, *supra* note 9, ¶ 199–200 (collecting cases); see also *Minn. Pub. Utils. Comm’n v. Fed. Commc’ns Comm’n*, 483 F.3d 570, 577–78 (2007); *Bell Atlantic Tel. Cos. v. Fed. Commc’ns Comm’n*, 206 F.3d 1 (D.C. Cir. 2000).

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The fact that there has been active federal regulation matters, because dormant Commerce Clause analysis depends not only on what the state has done but also on Congress's views on the topic, even in the absence of enforceable federal law. Here, the FCC's view that Internet service is inherently interstate is an interpretation of the Communications Act itself,¹⁴² an expression of congressional will. Even if the Restoring Internet Freedom Order itself is struck and unenforceable, that interpretation pre-dates the Restoring Internet Freedom Order and is likely to stand.¹⁴³ Because the dormant Commerce Clause relates to state power in the absence of congressional action, Congress's views matter. In *Cooley v. Board of Wardens*,¹⁴⁴ the Court took the absence of federal legislation as a strong indication that Congress had left the matter to the states; in *Southern Pacific*, the Court noted the existence of a later-enacted federal regime as an argument for abrogating state regulation in favor of national uniformity.¹⁴⁵

If one accepts the inherently interstate nature of Internet service, state network neutrality laws seem more likely to fall to the traditional "patchwork" argument than the sales tax measures at issue in *Wayfair*. On the other hand, the *Wayfair* Court seemed unsympathetic to the plight of nationwide businesses doing business on the Internet to keep track of the many different state sales tax regimes they must encounter,¹⁴⁶ and it's not like broadband providers will accidentally sell Internet service to customers in a particular state—these companies can more easily keep track of where they are and are not selling their services than can an Internet retailer.

In the end, though, proportions matter. In *Southern Pacific*, the Court pointed out that "93% of the freight traffic and 95% of the passenger traffic is interstate."¹⁴⁷ *Wayfair* could easily have come out differently if all the commerce subject to the tax took place on the Internet and the vast majority of it was interstate—the equalization of the brick-and-mortar and online shopping worlds was a key feature of the decision.¹⁴⁸ No similar argument can be made for network neutrality laws; they apply by their nature exclusively to Internet service, for which there is no comparison to physical transactions, and by design they operate on markets that are interstate.

This difference—that network neutrality regulations by their

¹⁴² See *Bell Atlantic*, 206 F.3d at 9 (citing *Chevron U.S.A. Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837 (1984)).

¹⁴³ See *supra* note 141 and accompanying text.

¹⁴⁴ *Cooley*, 53 U.S. at 320 ("It manifests the understanding of Congress, at the outset of the government, that the nature of this subject is not such as to require its exclusive legislation.").

¹⁴⁵ *S. Pac. Co. v. Ariz. ex rel. Sullivan*, 325 U.S. 761, 764–65 (1945).

¹⁴⁶ *Wayfair*, 138 S. Ct. at 2098.

¹⁴⁷ *S. Pac.*, 325 U.S. at 771.

¹⁴⁸ *Wayfair*, 138 S. Ct. at 2093.

design target markets outside their local states—distinguishes state network neutrality laws from typical “interference” dormant Commerce Clause cases, which involve ostensibly local regulation that has an incidental interstate effect. State network neutrality laws *necessarily* have interstate effects, necessary not only in the sense of certainty but in the sense of causation. As such, state network neutrality laws present a series of problems not encountered in typical dormant Commerce Clause “interference” cases and that are not limited to concerns over “patchwork” state laws.

C. *The Peculiar Case of State Network Neutrality Regulation*

Because state network neutrality rules seek to produce in-state effects by altering interstate markets, they do not fit the traditional paradigm for dormant Commerce Clause analysis, which focuses on either favoritism (which is simply prohibited) or the possibility that an in-state regulation will have an interstate effect. Although these rules fit the interference branch of dormant Commerce Clause analysis, in which state laws will be upheld unless their interstate effect is clearly excessive relative to their in-state benefit,¹⁴⁹ the way in which they interfere—both the transactions they must reach in order to function and the theory supporting the benefits they seek to provide—makes them particularly problematic as state regulations of interstate markets. State network neutrality rules directly regulate interstate markets in at least three different ways.

a. The Territorial Reach of State Neutrality Rules

Network neutrality is not the first area in which states have attempted to regulate an industry with an interstate reach, but it still deserves to be treated differently because of the nature of the state’s interest, or rather its geographical limitations. States do not have a legitimate interest in regulating conduct that takes place outside their borders.¹⁵⁰ This is true both as a matter of dormant Commerce Clause doctrine¹⁵¹ and on more general “principles of state sovereignty and comity.”¹⁵² In addition to how confusing and burdensome state extraterritorial regulation would be for individuals, it also infringes on the authority of other states to regulate conduct within their borders.¹⁵³

The lack of a legitimate interest in regulating conduct outside the

¹⁴⁹ *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970).

¹⁵⁰ *Edgar v. MITE Corp.*, 457 U.S. 624, 644 (1982).

¹⁵¹ *Healy v. Beer Inst.*, 491 U.S. 324, 336 (1989).

¹⁵² *BMW of N. Am., Inc. v. Gore*, 517 U.S. 559, 72 (1996).

¹⁵³ *Id.* (“But by attempting to alter BMW’s nationwide policy, Alabama would be infringing on the policy choices of other States.”). See generally Goldsmith & Sykes, *supra* note 128, at 805–06.

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state combined with the injury it imposes on the regulatory autonomy of other states suggests a more stringent standard than *Pike*'s "clearly excessive"¹⁵⁴ balance between local benefits and interstate burdens. Nowhere in dormant Commerce Clause doctrine does there seem to be any tolerance for state regulation that directly targets out-of-state conduct, even if it is supported by a non-discriminatory purpose. It might be helpful, then, to distinguish further among dormant Commerce Clause "interference" cases between "normal" cases of interference and those resulting from extraterritorial regulation by a state. But even if one were to adopt the same test for all non-favoritism cases, because states cannot rely on extraterritorial benefits to balance the burdens they impose on interstate commerce, combined with the harm to other states' regulatory interests, such regulations would likely fail.¹⁵⁵

There are several ways that state network neutrality laws could tread on this inviolate prohibition of constitutional law. Neutrality is a policy that can extend not only to the "last mile" falling within the states but also to the other end of the connection, where the broadband Internet service provider connects to a particular content provider—the point of Internet traffic exchange. Discrimination at the point of Internet traffic exchange is similarly problematic as a matter of neutrality;¹⁵⁶ the effects will be the same to the subscriber as discrimination along the last mile. Such was the case in the well-publicized dispute between Comcast and Netflix over Comcast's willingness to carry content from Netflix to its customers.¹⁵⁷ California's SB 822 explicitly governs Internet traffic exchange agreements,¹⁵⁸ and if other state network neutrality rules are

¹⁵⁴ *Pike*, 397 U.S. at 142.

¹⁵⁵ The territorial limitation almost certainly extends to debarment under procurement policies designed to affect broadband providers' conduct in other states. As the Court explained in *BMW v. Gore*, "We think it follows from these principles of state sovereignty and comity that a State may not impose economic sanctions on violators of its laws with the intent of changing the tortfeasors' lawful conduct in other States. . . . Nor may Alabama impose sanctions on BMW in order to deter conduct that is lawful in other jurisdictions." *BMW*, 517 U.S. at 572. The sanction of debarment, even if just as a deterrent rather than a punishment for lawful extraterritorial conduct, is likely to be treated identically to outright regulation.

¹⁵⁶ FCC 2015, *supra* note 9, ¶ 193 (including Internet traffic exchange within federal network neutrality rules).

¹⁵⁷ See Shalini Ramachandran, *Netflix to Pay Comcast for Smoother Streaming*, WALL STREET J. (Feb. 23, 2014, 7:47 P.M.), www.wsj.com/articles/netflix-agrees-to-pay-comcast-to-improve-its-streaming-1393175346. As an indication of how quickly these market evolves, Comcast is now bundling Netflix with Comcast's Xfinity service. Todd Spangler, *Comcast Will Start Bundling Netflix Into Xfinity TV Packages*, VARIETY (Apr. 13, 2018, 6:00 A.M.), <https://variety.com/2018/digital/news/comcast-netflix-bundle-xfinity-tv-packages-1202752477/>.

¹⁵⁸ CAL. CIV. CODE § 3131(9) (Deering 2019). Notably, SB 822 limits its reach to broadband Internet service provided in California, *id.* § 3100(a), but does not contain a similar limitation for Internet traffic exchange agreements. There is every reason to believe California's regulation extends to Internet traffic exchange agreements for traffic exchange outside of California if entered into by California broadband Internet service providers. As the carriers' lawsuit points out, California's regulation of Internet traffic exchange connections in California may pose a substantial burden for the interstate communications that cross them. Complaint, Am. Cable

read to include such discrimination, they will also control conduct outside the state. Indeed, the discrimination targeted by neutrality could occur anywhere along the line between edge provider and consumer, a connection that could span several states—there are any number of interconnection points along the line between edge provider and in-state consumer that could be subject to state control.

The same is true for the outlawed practice of paid prioritization. Paid prioritization can occur anywhere along the connection from customer to edge provider, not just along the “last mile” that is certain to be within state jurisdiction; for instance, Netflix resolved its much-publicized carriage dispute with Comcast by paying for interconnection.¹⁵⁹ Many companies pay third-party providers—“content delivery networks” such as Akamai and Amazon Web Services—for a form of paid prioritization, albeit one excluded from federal neutrality rules.¹⁶⁰ Many of these services are likely to be performed outside the state in which a particular customer resides. If Comcast builds a dedicated connection from its interstate network to a Netflix server in Utah, would that violate California’s network neutrality statute? Although an out-of-state effect is not itself enough to doom a state law under the dormant Commerce Clause,¹⁶¹ this is not just the natural interstate extension of a regulation in California. It is possible that Utahns (and Nevadans and others, for that matter) would also benefit from the hypothetical high-speed connection between Comcast and Netflix, an effect not felt in California at all. Would Comcast have to maintain two connections to Netflix? A high-speed one for Utahns and a “neutral-speed” one for Californians?

The effect of these rules are not limited to Internet service providers or even edge providers but read directly on other states’ ability to regulate. Suppose Utah would like to provide an incentive for edge providers to locate their servers in Utah by allowing (or even subsidizing) discriminatory carriage regimes in Utah. If California requires the entire connection (including Internet traffic exchange) to be subject to neutrality, it would directly thwart Utah’s ability to allow discriminatory carriage in Utah if any of that traffic happened to reach California.

Even assuming these neutrality restrictions are limited to the “last mile” connections between broadband providers and their subscribers, some of the provisions are written so broadly as to govern the service

Ass’n v. Beerra, No. 2:18-at-01552 (E.D. Cal. filed Oct. 3, 2018). But those connections actually take place in California. That makes such cases subject to the standard “interference” branch of dormant Commerce Clause analysis. How the benefits and burdens test weighs in such a case is hard to estimate.

¹⁵⁹ See Ramachandran, *supra* note 157.

¹⁶⁰ FCC 2015, *supra* note 9, ¶ 190.

¹⁶¹ Goldsmith & Sykes, *supra* note 128, at 803.

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providers' business beyond state borders. Oregon's procurement limitation prohibits Oregon from buying Internet access from any company "at any time on or after the operative date" of any of the prohibited conduct.¹⁶² New York's requires broadband providers "agree to adhere to net neutrality principles" with no mention of whether they need to do so only within New York.¹⁶³ Vermont's executive order requires state broadband contracts to restrict the broadband provider from engaging in discrimination to "its customers," "to any Internet customer," or "a customer," without mention of the customer's location.¹⁶⁴ Hawaii's procurement policy requires broadband providers to "demonstrate and contractually agree to support and practice net neutrality principles,"¹⁶⁵ which suggests broadband providers must not only practice neutrality themselves but "support" it in other ways, perhaps by urging their competitors to provide or edge providers to insist on (or perhaps other regulators to mandate?) neutrality restrictions.¹⁶⁶ There is no reason why a service provider would not think that these restrictions reach far beyond state borders, especially, as in the case of the procurement policies, if they are being asked to take on these obligations as a matter of contract rather than positive law. These cases go far beyond extraterritorial effects often permitted by dormant Commerce Clause law¹⁶⁷—they explicitly seek to control the extraterritorial activities of the broadband providers, a plain violation of dormant Commerce Clause limitations on state power.¹⁶⁸

b. The Comparative Nature of Network Neutrality

Even provisions that do not facially seek to control broadband provider conduct in other states likely do so by virtue of the nature of the concept of neutrality. Neutrality, like equality, is an inherently comparative mandate,¹⁶⁹ and as such it calls for a comparison with broadband Internet service providers' other service offerings. If Comcast were to provide better access to Netflix than other streaming services for its Utah customers, it's not clear what the remedy is in

¹⁶² H.R. 4155, 79th Legis. Assemb., § 1(3) (Or. 2018).

¹⁶³ N.Y. Exec. Order 175 (Jan. 24, 2018), at 2.

¹⁶⁴ Vt. Exec. Order 2-18 (Feb. 15, 2018), at 1–2.

¹⁶⁵ Haw. Exec. Order 18-02 (Feb. 5, 2018), at 2.

¹⁶⁶ Regulation that seeks to control the policy stances of carriers would create substantial First Amendment concerns. See Kareem Ramadan, *Silencing Boycotts: Anti-BDS Legislation and the Constitutionality of State Boycott Regulation* (manuscript on file with the author).

¹⁶⁷ Goldsmith & Sykes, *supra* note 128, at 803 ("The fact that a state regulation of cross-border harms has an impact on out-of-state actors cannot by itself be the touchstone for illegality under the extraterritorial-regulation strand of analysis. State regulations are routinely upheld despite what is obviously a significant impact on outside actors.").

¹⁶⁸ *BMW of N. Am., Inc. v. Gore*, 517 U.S. 559, 572 (1996) ("[B]y attempting to alter BMW's nationwide policy, Alabama would be infringing on the policy choices of other States.").

¹⁶⁹ See Thomas B. Nachbar, *The Rationality of Rational Basis Review*, 102 VA. L. REV. 1627 (2016).

California. California could require Comcast to provide Californians access that matches the best access it provides to Netflix anywhere. That might sound extreme, but it is not given the nature of neutrality, which is concerned with providing equal carriage for all edge providers. If Netflix has an advantage in Utah, that might reduce the subscriber base of other edge providers, even if only in Utah. With smaller subscription bases, those other edge providers would be limited in their ability to provide services, and because many edge provider service markets are national, Californians would be losing out on the availability of those edge services just like Utahns would.

c. National Content Markets and the “Virtuous Cycle”

That necessary interrelationship between California (to stay with this example) consumers and consumers in other states is what makes network neutrality singularly unsuitable for state regulation. Not only are out-of-state markets necessarily affected by California network neutrality regulation, they *must be as a matter of design* in order for California network neutrality regulation to be effective.

The entire regulatory theory behind network neutrality is that its benefits for broadband service customers come not directly from the regulation (which does not alter the market power of broadband providers—as explained above), but rather by allowing edge providers to compete on a more open field, which then stimulates further broadband deployment through the “virtuous cycle.”¹⁷⁰ The content markets that make up an essential part of the virtuous cycle are national (if not international), not intrastate in nature, which means in order for California’s neutrality regulation to have its desired effect in California, it must first operate on the national markets for content and other edge services.

If California’s theory of neutrality does *not* follow the “virtuous cycle” approach, then the only clear benefit of the regulation is for edge providers,¹⁷¹ most of whom are outside California. That is not a problem for the favoritism branch of dormant Commerce Clause doctrine,¹⁷² but it is completely inconsistent with the pro-consumer rhetoric accompanying,¹⁷³ and even the title of, SB 822.¹⁷⁴ Of course, even if the

¹⁷⁰ See *supra* text accompanying notes 97–102.

¹⁷¹ See *supra* text accompanying notes 116–117.

¹⁷² Although we do not know; I have not been able to find any examples of cases in which the Court examined favoritism toward interstate markets over intrastate ones.

¹⁷³ See *Legislators and Advocates Call on Governor to Sign Senator Wiener’s SB 822, Which Will Enact the Strongest Net Neutrality Protections in the Nation*, CAL. ST. SENATE DEMOCRATIC CAUCUS (Sept. 6, 2018), <https://sd11.senate.ca.gov/news/20180906-legislators-and-advocates-call-governor-sign-senator-wiener-s-sb-822-which-will-enact> (“When Donald Trump’s FCC took a wrecking ball to net neutrality protections, we knew California had to step in to protect California consumers and businesses. We worked hard to pass a strong bill that does the job. We urge the Governor to sign it.”); see also Barbara van Schewick, *Gov. Jerry Brown Signs SB 822*,

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California legislature does not care about whether the benefits for edge providers will eventually result in a benefit for California broadband customers, SB 822 is still an attempt to directly regulate the relationship between broadband providers and edge providers, most of which will be outside of California and therefore beyond California's power.¹⁷⁵

This is not a case in which California is seeking to minimize harms felt in California that originate in other states.¹⁷⁶ Compare products liability for goods made outside California. It is legitimate for California to regulate the safety of products sold in California, even if those products come from outside California and California regulation affects the ability of firms outside of California to produce those products. But the regulatory theory of network neutrality means that the harm does not emanate from a discrete discriminatory act visited upon California consumers the way a dangerous product might. The harm here stems from the (national) market conditions for content. To take a far-fetched example, California clearly could ban the possession of marijuana in California, including the importation of marijuana, but it cannot penalize California companies for producing and selling marijuana in states where it is legal in the hope that reducing the supply of marijuana elsewhere will reduce the amount available to be brought into California. To do so would be to regulate interstate markets in the hope of having an intrastate effect. That is exactly what state network neutrality laws do.

Rather than a local regulation with an interstate effect, state network neutrality laws directly target interstate markets because those are the markets that are freed from carrier discrimination. That direct targeting, whether as an intentional attempt to control interstate markets or simply as an integral part of the regulatory scheme, exceeds California's authority. As the Court explained as long ago as 1925, "a state statute which by its necessary operation directly interferes with or burdens [interstate] commerce is a prohibited regulation and invalid, regardless of the purpose with which it was enacted."¹⁷⁷ Regulatory

Restoring Net Neutrality to California, CTR. FOR INTERNET AND SOC. (Sept. 30, 2018, 12:10 P.M.), <http://cyberlaw.stanford.edu/blog/2018/09/gov-jerry-brown-signs-sb-822-restoring-net-neutrality-california>.

¹⁷⁴ See CAL. CIV. CODE § 3101(a)(1) (Deering 2019) ("This act shall be known, and may be cited, as the California Internet Consumer Protection and Net Neutrality Act of 2018").

¹⁷⁵ See *supra* note 119; *supra* text accompanying notes 150–153.

¹⁷⁶ Compare Goldsmith & Sykes, *supra* note 128, at 801.

¹⁷⁷ *Edgar v. MITE Corp.*, 457 U.S. 624, 643 (1982) (plurality opinion) (quoting *Shafer v. Farmers Grain Co.*, 268 U.S. 189, 199 (1925)). Given their regulatory theory, state network neutrality laws are likely constitutionally invalid on their face. Such statutes are problematic under both the dormant Commerce Clause and due process analysis. See Goldsmith & Sykes, *supra* note 128, at 806. Even if they were to survive a facial challenge, they would almost certainly be invalid as applied to transactions taking place outside the relevant states, such as the Internet traffic exchange at the other end of every Internet broadband connection. See *MITE*, 457 U.S. at 642–43 (plurality opinion) ("The Commerce Clause . . . precludes the application of a

locus matters, and a necessary regulatory locus of state network neutrality rules are the national (if not international) markets in which edge providers operate.

Although it is tempting to focus on the problems that diverse state regulations have for Internet-related services, it is not clear those problems present a significant limit for state network neutrality regulation, at least not after *Wayfair*. But network neutrality regulation has special consequences for the relationship between in-state regulation and out-of-state markets. The specific characteristics of network neutrality regulation makes it a singularly inappropriate candidate for state regulation under the American constitutional order.

CONCLUSION

Discrimination by broadband Internet service providers is not a state-wide problem, even for a state as large as California. It is a national problem (or maybe an international problem) because that is the natural geographic scope of the content markets affected by broadband discrimination. And no state, not even one as large as California, is permitted to regulate national problems under U.S. constitutional structure. To do so is to interfere with the regulatory autonomy of other states—to further one state’s regulatory vision for interstate content markets that are not one state’s to regulate.

State network neutrality laws present a host of problems under dormant Commerce Clause doctrine, but creating a “patchwork” of regulation is likely not one of them. Although it is true that state network neutrality laws have the potential to set up a “patchwork” of varying regulatory objectives, the cost of varying regulation is a necessary consequence of our interconnected economy, and the Supreme Court seems comfortable that interstate providers of services over the Internet will be able to manage their varying regulatory obligations.

But state network neutrality laws go far beyond the problem of varying regulatory obligations. Because of how network neutrality regulation of all kinds works, state network neutrality regulations directly target interstate content markets in service of producing their putative local effects. Such direct targeting of interstate markets is beyond the power of any state. Moreover, because states have no legitimate interest in controlling the operation of markets outside their borders, re-styling network neutrality regulations as procurement debarments does not save them from constitutional challenge.

Although rhetorically attractive, network neutrality actually relies

state statute to commerce that takes place wholly outside of the State’s borders, whether or not the commerce has effect within the state.”).

on a complex set of economic circumstances and effects in furtherance of affecting broadband markets. Some are skeptical about whether those effects are possible (or, if possible, desirable). But even if one accepts both the policy goals and efficacy of neutrality rules, they operate only indirectly on consumer broadband markets by operating directly on content markets. Those content markets are interstate (if not international), making states constitutionally incapable of regulating them, even if they do so in service or affecting in-state markets for broadband Internet access. States do not have the freedom to control the economics of Internet access markets because a necessary part of those markets operate on an interstate basis. Nor should states generally be attempting to buy through their procurement power that which they cannot regulate.

Although states are governments of general power, the domain in which they may exercise those powers is necessarily limited by our federal structure. Consumer protection is a politically popular justification, but invoking it does not provide “carte blanche”¹⁷⁸ for states to regulate interstate content markets, partly because network neutrality is not itself designed to protect consumers—it is designed to protect edge providers with the hope that consumer benefits will follow. That those edge provider and consumer benefits occur in geographically distinct markets means that state network neutrality rules need to be evaluated differently than other kinds of regulations, including state regulations of activity on the Internet.

That is not to say that all state regulation of Internet connections is prohibited—there clearly are things states can do to affect how their residents purchase Internet access that do not operate in the same way as neutrality rules, such as transparency rules, state provision of Internet access, or subsidization of Internet access, to name a few. But network neutrality, whether by insisting on it as a condition for the state to enter into contracts or by mandate, is not one of them. States do not have the freedom to control the economics of Internet access markets, because a necessary part of those markets operates on an interstate basis.

As suggested by the distinction between neutrality rules and other forms of Internet access regulation, the advent of state network neutrality rules presents an opportunity to reconsider network neutrality in its more abstract dimensions. Constitutional law highlights the regulatory mismatch between in-state broadband subscribers and interstate content providers, a mismatch that is present in all network neutrality regulation but is typically (for U.S. purposes) legally irrelevant. The necessity that network neutrality regulations operate primarily through content markets and only secondarily on consumer

¹⁷⁸ *South-Central Timber Dev't, Inc. v. Wunnicke*, 467 U.S. 82, 97 (1984) (plurality opinion).

Internet markets is a product of the economic theory underlying network neutrality, and it is equally present in federal network neutrality regulation even if it is largely ignored by neutrality advocates. The mechanics of network neutrality revealed by serious consideration of state network neutrality rules should cause one to treat with some skepticism the pro-consumer rhetoric of network neutrality advocates more generally, including those who favor federal, as opposed to state, network neutrality regulation. Thinking about state network neutrality also raises another possibility: a non-economic justification for network neutrality.

Although network neutrality has been predicated in scholarship and in the FCC's analysis almost entirely as a counter to the market power held by broadband Internet service providers, other theories of neutrality are predicated on other values, such as free speech (which has its own issues with regard to state action), or historical commitments to common carriage, which are not themselves predicated on market power. If states do want to engage in their own forms of neutrality, it is possible they could do so under some of those theories—theories not subject to the same concerns over regulation of extraterritorial markets because they are not predicated on producing the same effects as network neutrality.¹⁷⁹ Developing those theories would take some work, though, especially given the current singular emphasis on a market-power-dominated approach to neutrality. In the end, the biggest effect of state network neutrality rules might be to demonstrate just how limited the FCC's (and most scholars') approach to network neutrality has been by focusing on the market power of broadband Internet service providers when there are many other theories on which to base nondiscrimination rules like neutrality.¹⁸⁰ If the state neutrality rules do no more than open the aperture on bases for neutrality, that itself would be an accomplishment, if an inadvertent one.

State network neutrality rules provide an excellent opportunity for us all to reconsider exactly how network neutrality works and the types of benefits it does and does not provide. There is little argument that states are the optimal level of government to regulate Internet traffic, but more importantly, state efforts highlight how network neutrality does and does not work. We should use the opportunity to take a step

¹⁷⁹ That is not to say that such theories would not be subject to some objections as a matter of dormant Commerce Clause law, *see* *Wabash, St. L. & P. Ry. Co. v. Illinois*, 118 U.S. 557, 576–77 (1886) (striking state regulation of intrastate portion of interstate freight rates), but they would not be subject to the stronger objection I raise here.

¹⁸⁰ *See, e.g.*, Nachbar *supra* note 35, at 102 (“Monopolies will always make popular political targets—as they did during the public interest era—but the correlation between market power and the traditional imposition of nondiscriminatory access is tenuous at best.”); Crawford, *supra* note 118, at 406–07 (“Scholars who argue about the wealth effects of particular regimes on telecommunications providers are focused on a small subset of the story.”).

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back from the hype and to confront both network neutrality's promise and its limits.