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PUTTING THE COMMERCE BACK IN THE DORMANT COMMERCE CLAUSE: STATE TAXES, STATE SUBSIDIES, AND COMMERCE NEUTRALITY

Ryan Lirette and Alan D. Viard

The unpredictability of the Supreme Court’s dormant Commerce Clause (“DCC”) jurisprudence continues to draw trenchant criticism from commentators and the Justices themselves, as the Court remains unable to explain which state taxes and subsidies impede interstate commerce. We show that these problems can be resolved by a Commerce Neutrality framework requiring that state taxes and subsidies provide a combined treatment of inbound and outbound transactions at least as favorable as their treatment of intrastate transactions. This simple test has an economic foundation because taxes and subsidies that violate it create incentives to engage in intrastate rather than interstate transactions. The Supreme Court recently took an important step toward implementing this framework in Maryland Comptroller v. Wynne, 135 S. Ct. 1787 (2015), when it invalidated Maryland’s income tax scheme based on economic analysis similar to that presented in this article.

The simple Commerce Neutrality condition resembles the Court’s oft-used, but poorly explained, internal consistency test. At the same time, Commerce Neutrality simplifies DCC jurisprudence by sweeping away the Court’s flawed call for equal treatment of out-of-state and in-state parties (as opposed to equal treatment of interstate and intrastate transactions), its half-hearted concern about multiple taxation, and its ill-defined concept of external

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consistency. And, because Commerce Neutrality applies to subsidies on the same terms as taxes, it eliminates the tax-subsidy confusion that has figured so prominently in analyses of the DCC.

By focusing on the prevention of discrimination against interstate commerce, Commerce Neutrality puts the commerce back in the Dormant Commerce Clause.

INTRODUCTION

Almost forty years ago, the Supreme Court overhauled its dormant Commerce Clause (“DCC”) tax jurisprudence in Complete Auto Transit, Inc. v. Brady. In doing so, the Court sought to inject clarity and economic reality into a doctrine that had lacked both since its nineteenth-century conception. Yet despite this doctrinal shift, DCC tax jurisprudence has continued to exhibit the incoherence that has long hampered the Supreme Court’s efforts to protect interstate commerce from abusive state taxation. This incoherence has posed significant difficulties for state courts, which hear most DCC challenges. As Judge Morris B. Hoffman of Colorado’s District Court recently observed, “the [Supreme] Court’s pronouncements about the reach of the dormant restriction have waxed and waned for more than a century, have been profoundly

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2 Id. at 279 (noting that “the present state of the law . . . has no relationship to economic realities” and “stands only as a trap for the unwary draftsman”).
3 The Tax Injunction Act (“TIA”) provides that the U.S. District Courts “shall not enjoin, suspend or restrain the assessment, levy or collection of any tax under State law where a plain, speedy and efficient remedy may be had in the courts of such State.” 28 U.S.C. § 1341 (2012). Even when the TIA does not apply, comity may preclude federal court review of challenges to state taxes. See, e.g., Fair Assessment in Real Estate Ass’n, Inc. v. McNary, 454 U.S. 100 (1981). The TIA generally applies, regardless of whether the suits seek to lower taxes on interstate transactions or increase taxes on intrastate transactions. Levin v. Commerce Energy, Inc., 560 U.S. 413 (2010). In contrast, U.S. District Courts normally have jurisdiction, concurrent with state trial courts, over DCC challenges to state spending programs, which are not subject to the TIA and are generally unaffected by the comity doctrine.
under-theorized, and as a result have produced breathtakingly inconsistent results.\textsuperscript{4}

Judge Hoffman’s comments should come as no surprise. Numerous commentators have criticized the DCC’s incoherence and unpredictability.\textsuperscript{5} Indeed, the Supreme Court itself has often acknowledged the validity of these criticisms.\textsuperscript{6}

These difficulties have served as a staging ground for originalist and textualist attacks on the foundations of the DCC.\textsuperscript{7} The Constitution grants Congress the power to regulate interstate commerce and says nothing about restricting states’ regulation of


\textsuperscript{7} See, e.g., Comptroller of the Treasury of Md. v. Wynne, 135 S. Ct. 1787, 1808 (2015) (Scalia, J., dissenting) (noting that the DCC is inconsistent with the constitution’s text, the historical record of the founding period, and lacks a “governing principle”); Id. at 1812 (Thomas, J., dissenting) (noting the unworkability of the dormant commerce clause and that it is “highly implausible that those who ratified the Commerce Clause understood it” to apply to their states’ income taxes); see also Barry Friedman & Daniel T. Deacon, A Course Unbroken: The Constitutional Legitimacy of the Dormant Commerce Clause, 97 Va. L.R., 1877, 1878 (noting that “the current Supreme Court’s most originalist members have mounted a sustained attack on the dormant . . . Commerce Clause” and discussing their efforts to attack the “textual and historical bona fides of the dormant Commerce Clause”).
interstate commerce. In 1997, Justice Thomas, joined by Chief Justice Rehnquist and Justice Scalia, wrote in dissent that “[t]he negative Commerce Clause has no basis in the text of the Constitution, makes little sense, and has proved virtually unworkable in application.”\(^8\) Likewise, in 2015, Justice Scalia in dissent, joined by Justice Thomas, labeled the DCC a “judicial fraud” that the Court “tend[s] to revamp . . . every couple of decades upon finding existing decisions unworkable or unsatisfactory.”\(^9\) Justice Scalia argued that this uncertain treatment resulted in “a bestiary of ad hoc tests and ad hoc exceptions.”\(^10\) Given the lack of textual foundation for the DCC, the critics’ points deserve consideration.

Although a definitive assessment of the DCC’s constitutional validity is beyond the scope of this article, if the DCC is to remain in place, it must be firmly grounded in a framework that is clearly defined and fully embraces economic reality. As we explain in this article, the appropriate framework is “Commerce Neutrality.” This framework focuses on whether a state tax or subsidy creates economic disincentives for interstate commerce and thereby promotes the division of the nation into separate economic units, an outcome that the Court has referred to as “economic Balkanization.”\(^11\)

Under Commerce Neutrality, state taxes and subsidies are invalid if they discriminate against interstate commerce by creating an economic incentive for in-state parties to engage in transactions with other in-state parties rather than out-of-state parties.\(^12\) As we

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\(^10\) Id. (Scalia, J., dissenting).

\(^11\) Id. at 1794 (majority opinion) (noting that the Commerce Clause “reflected a central concern of the Framers that was an immediate reason for calling the Constitutional convention: the conviction that in order to succeed, the new Union would have to avoid the tendencies toward economic Balkanization that had plagued relations among the Colonies and later among the States under the Articles of Confederation”).

\(^12\) See infra Section II.A. The Commerce Neutrality analysis is also set forth in an amicus brief filed by one of the authors and other economists. See Brief for the Tax Economists as Amici Curiae Supporting Respondents, Comptroller of the Treasury of Maryland v. Wynne, 135 S. Ct. 1787 (2015) (No.13-485) at 1
will show, a tax system has that forbidden effect if the combined tax on interstate transactions, which includes both inbound and outbound transactions, exceeds the tax on intrastate transactions. Conversely, a subsidy system has that effect if the subsidy to intrastate transactions exceeds the combined subsidy to inbound and outbound transactions.

This simple rule—a comparison of the combined treatment of inbound and outbound transactions to the treatment of intrastate transactions—provides a unified framework for evaluating the range of taxes and subsidies that the Court has considered. It rationalizes many of the Court’s holdings and resolves the puzzles that have arisen in DCC jurisprudence.

From one perspective, Commerce Neutrality is already rooted in the Court’s current analysis. It is simply the economic implementation of the Complete Auto requirement that state taxes do not discriminate against interstate commerce. Moreover, in most circumstances, Commerce Neutrality is identical to the Court’s oft-used internal consistency test. Under the internal consistency test, a state’s tax system violates the DCC if, in a hypothetical world in which all of the other states copied the tax system, interstate transactions would bear a heavier nationwide tax burden than intrastate transactions. The Court recently reaffirmed the internal consistency test and, for the first time, applied it to individual income taxation in Comptroller of the Treasury of Maryland v. Wynne. Although the internal consistency test is often derided as an abstraction detached from economic reality, the commerce neutrality analysis demonstrates that those criticisms are incorrect


13 See infra Section II.B. An inbound transaction is one between an out-of-state seller and in-state buyer and an outbound transaction is one between an in-state seller and out-of-state buyer.

14 See infra Section II.B.

15 See discussion infra Section III.A (demonstrating that the internal consistency test is equivalent to the Commerce Neutrality condition except when the state makes its taxes or subsidies dependent on other states’ taxes or subsidies).

16 Wynne, 135 S. Ct. at 1802–03.
and that the test generally provides a real-world economic assessment of whether state policies discriminate against interstate commerce.

In other ways, however, Commerce Neutrality diverges sharply from the morass of the Court’s current DCC jurisprudence. It offers clear and workable guidelines for judges and state legislators and resolves many of the doctrinal problems in DCC jurisprudence while preserving state autonomy to adopt policies that do not discriminate against interstate commerce. For example, the Supreme Court has often stated that multiple taxation (the taxation of a transaction by two or more states) is a potential DCC problem, but has failed to identify the circumstances under which it is impermissible. Commerce Neutrality resolves these complications by demonstrating that multiple taxation is not a constitutional problem, so long as each state’s tax system is nondiscriminatory; no state with a nondiscriminatory tax system is obligated to accommodate, or defer to, another state’s tax system to avoid “multiple taxation.”

The Commerce Neutrality analysis also makes clear that the DCC fair-apportionment requirement is merely an application of the nondiscrimination requirement, eliminating ill-defined auxiliary concepts such as external consistency and the unitary-business principle.

Commerce Neutrality’s insistence on equal treatment of interstate and intrastate commerce squarely exposes the flaws in a rival concept that requires equal treatment of in-state and out-of-state parties (“the out-of-stater-equality principle”). Although the Court and commentators have sometimes conflated that principle with nondiscrimination against interstate commerce, the two concepts are profoundly incompatible. The Court’s flirtation with the out-of-stater-equality principle has complicated DCC

17 See discussion infra Section III.B (discussing the Supreme Court’s inconsistent use of the multiple taxation principle).
18 See infra Section II.D.
19 See infra Section VII.C (discussing the external consistency requirement that business income apportionment formulas accurately reflect the division of income between states and the unitary business principle’s requirement that a state apply its apportionment formula only to those affiliated firms that are within the unitary business operating within the state).
20 See infra Part VI.
jurisprudence because the principle unreasonably insists that states treat their citizens, whom they have the power to tax and the duty to serve, the same as the rest of the nation’s population.\textsuperscript{21} Consistent application of the principle would uphold import and export tariffs, the paradigm example of discrimination against interstate commerce,\textsuperscript{22} because, contrary to initial impressions, tariffs provide equal treatment to in-state and out-of-state parties.\textsuperscript{23} Commerce Neutrality reveals that the import tariff’s real flaw is that it impedes interstate commerce by penalizing transactions between out-of-state sellers and in-state buyers, not that it discriminates against out-of-state parties.

Commerce Neutrality also resolves the quagmire surrounding the DCC’s application to subsidies. Because virtually all subsidies favor in-state parties and in-state production, consistent application of the out-of-stater-equality principle would require the invalidation of an array of widely accepted subsidies, a conclusion that commentators and the Court have struggled to avoid.\textsuperscript{24} Commerce Neutrality resolves these problems by discarding the out-of-stater-equality principle and striking down only those subsidies that favor intrastate transactions over interstate transactions while upholding subsidies to in-state parties and production that are neutral between intrastate and interstate transactions. The validity of subsidies can be evaluated under the same internal consistency test that applies to taxes.

Commerce Neutrality also has a connection to the text and purposes of the Commerce Clause that other standards lack.\textsuperscript{25} The clause does not mention equal treatment of out-of-staters; instead, it gives Congress power to regulate “commerce among the several States.”\textsuperscript{26} An economic inquiry into how to protect the free flow of that commerce, the DCC’s historical purpose, leads directly to

\textsuperscript{21} Id.
\textsuperscript{22} See, e.g., \textit{Wynne}, 135 S. Ct. at 1804 (“[T]ariffs are [t]he paradigmatic example of a law discriminating against interstate commerce.” (second alteration in original) (quoting W. Lynn Creamery, Inc. v. Healy, 512 U.S. 186, 193 (1994))).
\textsuperscript{23} See infra Section VI.A.1.
\textsuperscript{24} See infra Section VI.B.
\textsuperscript{25} See infra Section III.B.
\textsuperscript{26} U.S. CONST. art. I, § 8, cl. 3.
Commerce Neutrality. In that respect, Commerce Neutrality puts the “commerce” back in the dormant Commerce Clause.

Part I of the article provides a brief background of the DCC. Part II explains the basics of Commerce Neutrality and Part III describes its relationship to internal consistency and the purposes of the DCC. Part IV applies Commerce Neutrality to personal income taxation and discusses Wynne. Part V discusses facial neutrality and the implementation challenge of identifying de facto discrimination. Part VI explains how Commerce Neutrality resolves the confusion about the out-of-stater-equality principle and the DCC’s treatment of subsidies. Part VII discusses apportionment.

I. THE DORMANT COMMERCE CLAUSE AND THE NONDISCRIMINATION PRINCIPLE

An analysis of the foundations of DCC jurisprudence and modern case law demonstrate that Commerce Neutrality’s sole focus on invalidating state taxes and subsidies that discriminate against interstate commerce is appropriate.

A. DCC Foundation

The Constitution’s Commerce Clause states, “Congress shall have Power . . . [t]o regulate Commerce . . . among the several States.”27 Although the clause is phrased as a grant of power to Congress, the Supreme Court has long interpreted it to include the DCC, a dormant restriction on state authority to burden interstate commerce.28 That restriction, however, operates only as a presumptive implementation of Congress’s intent, as Congress may authorize states to adopt policies that would otherwise violate the DCC.29 Yet throughout the history of its DCC jurisprudence, the Supreme Court has struggled to fashion coherent rules implementing this latent intent.

27 Id.
28 Wynne, 135 S. Ct. at 1794.
In 1852, years after it began speculating about the DCC’s existence, the Court first formally recognized the doctrine in *Cooley v. Board of Wardens*, holding that the Commerce Clause’s grant of power to Congress is exclusive when the area regulated demands a uniform national policy. But *Cooley’s* framework soon proved unworkable and gave way to a formalistic test that sought to distinguish policies that directly burdened interstate commerce from those that only indirectly burdened interstate commerce. In practice, however, the indirect/direct distinction was applied “indiscriminately” and also proved unworkable. This troubled analysis continued well into the twentieth century with only sporadic attempts to adopt an approach grounded in economic reality. By 1959, it had become clear that “the use of magic words or labels” could “disable an otherwise constitutional levy.”

Yet even during this period of legal formalism, the Court was committed to invalidating laws that discriminated against interstate commerce. That was especially true in the late nineteenth century. In 1875’s *Welton v. Missouri*, the Court invalidated Missouri’s discriminatory licensing tax based on the premise that national uniformity, and thus exclusive Commerce Clause jurisdiction under *Cooley*, was necessary to protect interstate commerce from

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31 See, e.g., *In re State Freight Tax*, 82 U.S. 232, 278 (1873) (invalidating a tax upon the “freight carried” in interstate commerce); Fisher’s Blend Station, Inc. v. State Taxation, 297 U.S. 650 (1936) (invalidating tax because it was an instrumentality of interstate commerce).


33 W. Livestock & J.D. Adams Mfg. Co. v. Storen, 304 U.S. 307, 311 (1938) (attempting to adopt a “multiple taxation” approach that would uphold taxes so long as they were properly apportioned).


discriminatory legislation. In doing so, the Welton Court equated Congress’s silence on the issue to “a declaration that inter-State commerce shall be free and untrammeled.” Relying on Welton, the Court struck down a variety of discriminatory state laws in the late nineteenth century, including facially neutral laws with discriminatory effects. Since then, the Court has repeatedly reaffirmed the nondiscrimination principle, describing a discriminatory policy as “virtually per se” invalid under the DCC. Commerce Neutrality’s focus on nondiscrimination therefore comports with longstanding DCC doctrine.

B. Modern DCC Tax Jurisprudence and Nondiscrimination

The Court cast aside the formalism of previous eras in its much-heralded Complete Auto decision, which unanimously upheld Mississippi’s tax on interstate transportation carriers for the privilege of doing business within the state. Citing the need for an analysis related to “economic reality,” the Court outlined a four-pronged test under which a state tax is consistent with the DCC. The conditions of the test require that the tax: “[1] [be] applied to an activity with a substantial nexus with the taxing State, [2] is fairly

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37 Welton, 91 U.S. at 282.

38 Robbins v. Shelby Cty. Taxing Dist., 120 U.S. 489 (1887) (invalidating a facially neutral law and noting that “[w]hen goods are sent from one state to another for sale, or, in consequence of a sale, they become part of its general property, and amenable to its laws; provided that no discrimination be made against them as goods from another state, and that they be not taxed by reason of being brought from another state, but only taxed in the usual way as other goods are”); Denning, supra note 35, at 442–44.


41 See id. at 279, 288–89 (rejecting the “Spector rule” which the Court found to have “no relationship to economic realities”).
apportioned, [3] does not discriminate against inter-state commerce, and [4] is fairly related to the services provided by the State.”

Although *Complete Auto* requires courts to assess state taxes based on these four elements, Commerce Neutrality rightly focuses only on nondiscrimination. This is for several reasons. First, as we discuss below, the prong assessing whether a tax is fairly related to a state’s services has been largely ignored by the court, rendering it a non-factor in DCC jurisprudence. Second, the nexus requirement is a separate limitation that pertains to the geographical limitations of state sovereignty and that is best handled through the due process clause. Finally, the apportionment prong is not an independent concept but is merely an application of the nondiscrimination requirement. Commerce Neutrality offers the best interpretation of the nondiscrimination requirement embodied in the Court’s precedents and codified in *Complete Auto*.

II. THE BASICS OF COMMERCE NEUTRALITY

A. The Meaning of Commerce Neutrality

A tax or subsidy system satisfies Commerce Neutrality if it can avoid giving sellers and buyers in each state any incentive to switch from interstate to intrastate transactions. Taxes and subsidies generally change the prices at which transactions take place; for example, sellers of a good are likely to raise prices if they are taxed on their sales. A tax or subsidy system is commerce neutral if there is a set of possible price changes that do not give any buyers or sellers a disincentive to trade with parties in other states. Such a system should generally be upheld, regardless of the price changes that actually occur, because it does not systematically discourage interstate transactions relative to intrastate transactions. To

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42 Id. at 279.
43 See infra Section II.B.
44 See infra note 49.
45 See infra Part VII.
47 One caveat that concerns de facto discrimination against interstate commerce. See infra Section V.B.
determine which tax and subsidy systems satisfy that property, courts and legislatures can utilize a simple tax-rate condition that applies to both taxes and subsidies. The condition requires that the combined treatment of interstate transactions in both directions be at least as favorable as the treatment of intrastate transactions.\footnote{This condition is closely related to the Court’s internal consistency test. See infra Section III.A.}

We illustrate the nondiscrimination condition with a simple example involving two states, A and B. There are then four types of transactions, two intrastate and two interstate. One type of intrastate transaction involves a state-A buyer and state-A seller, and the other type involves a state-B buyer and a state-B seller. One type of interstate transaction involves a state-A buyer and state-B seller; this is an inbound transaction from the perspective of state A and an outbound transaction from the perspective of state B. The other type of interstate transaction involves a state-B buyer and state-A seller; this is an inbound transaction for state B and an outbound transaction for state A. We assume that neither state can tax the intrastate transactions within the other state because it would lack nexus to do so.\footnote{This territorial limitation on state authority is best interpreted not as protecting interstate commerce, but as protecting individuals from being subject to conflicting obligations imposed by other sovereigns. Recognizing that this aspect of the nexus requirement is unrelated to the protection of interstate commerce, the Court has grounded it in the Due Process Clause rather than the DCC. Quill v. North Dakota, 504 U.S. 298, 312 (1992). The nexus requirement in the first prong of the Complete Auto test serves the distinct purpose, which lies outside the scope of this article, of limiting tax compliance burdens on out-of-state parties to interstate transactions. Id. at 312–13; cf. Michael S. Greve, The Upside-Down Constitution 69–71 (2012) (territorial limitation is essential non-textual component of original constitutional design); Bradley W. Joondeph, Rethinking the Role of the Dormant Commerce Clause in State Tax Jurisdiction, 24 Va. Tax Rev. 109, 114 (2004) (territorial limitation derives from broader constitutional prohibition on extraterritorial jurisdiction).}

Under these assumptions, a tax or subsidy system is commerce neutral if possible price changes exist such that the taxes and price changes, taken together, do not incentivize any of the four groups to switch from interstate to intrastate transactions. The taxes and price changes must not give state-A sellers an incentive to switch from state-B buyers to state-A buyers or give state-B sellers an incentive
to switch from state-A buyers to state-B buyers. Similarly, they must not give state-A buyers an incentive to switch from state-B sellers to state-A sellers or give state-B buyers an incentive to switch from state-A sellers to state-B sellers.

This framework encompasses a wide array of transactions and taxes. Although the above example refers to taxes on the purchase and sales of goods, the framework, like the Court’s application of the DCC, extends to state taxes on other transactions, such as income payments and asset purchases. The interstate transaction may even involve a single taxpayer conducting some activities in one state and other activities in a different state.

The breadth of the analysis is important because any tax can be designed to selectively discriminate against interstate transactions. Although a property tax explicitly applies to property ownership rather than to transactions, a property tax that applies to in-state property only if it is used to provide services to out-of-staters indirectly taxes exports in a discriminatory manner.

The Court has consistently held that discriminatory treatment of interstate commerce violates the DCC, without regard to the size of the violation and without requiring empirical demonstrations of the magnitude, or even the existence, of actual reductions in the volume

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of interstate commerce. The Court has not, however, been able to identify which treatment is discriminatory. Commerce Neutrality provides a simple tax-rate condition that nondiscriminatory tax and subsidy systems must satisfy.

B. The Tax-Rate Condition

We now derive a condition that can be used to test whether a tax or subsidy system satisfies Commerce Neutrality. The condition is expressed as a relationship between the tax rates on inbound transactions, outbound transactions, and intrastate transactions.

We use $t_{AA}$ to refer to state A’s tax rates and $T_{BB}$ to refer to state B’s tax rates. Let $t_{AA}$ be the tax rate that state A imposes on its intrastate transactions and $T_{BB}$ be the rate that state B imposes on its intrastate transactions. We quote tax rates in tax-inclusive form, which expresses the tax as a fraction of the total price, including the tax itself. For example, suppose the buyer pays a total price of $100, of

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52 See, e.g., Westinghouse, 466 U.S. at 406–07 (“When a tax, on its face, is designed to have discriminatory economic effects, the Court need not know how unequal the Tax is before concluding that it unconstitutionally discriminates.” (quoting Maryland v. Louisiana, 451 U.S. 725, 760 (1981))); New Energy Co. v. Limbach, 486 U.S. 269, 276 (“Where discrimination is patent, . . . [no] . . . widespread [effects] . . . need be shown.”); Associated Indus. v. Lohman, 511 U.S. 641, 650 (stating that the “magnitude and scope of the discrimination have no bearing on the determinative question whether discrimination occurred”); Fulton Corp. v. Faulkner, 516 U.S. 325, 333 n.3 (rejecting a “de minimis defense to a charge of discriminatory taxation”); Camps Newfound, 520 U.S. at 581 n.15 (rejecting the need for particularized showing that any potential camper decided not to attend plaintiff’s camp due to discriminatory tax). The Court has allowed a few exceptions to the DCC, but they lie outside the scope of this article. The market-participant exception allows states to discriminate against interstate commerce when they are buying and selling rather than exercising governmental power. Hughes v. Alexandria Scrap Corp., 426 U.S. 794, 810 (1976). A related exception allows state governments to monopolize a line of business with their residents. See United Haulers Ass’n, Inc. v. Oneida-Herkimer Solid Waste Mgmt. Auth., 550 U.S. 330 (2007). Also, states need not achieve full neutrality when doing so would impose undue administrative costs. See infra Section II.E.

53 This analysis also applies to subsidies, with subsidy rates defined as negative tax rates. See infra Section VI.B. For simplicity, however, we refer only to taxes in the remainder of this section.
which $20 is sent to the government as tax and $80 is retained by the seller. The tax rate is 20% on a tax-inclusive basis because the $20 tax is 20% of the $100 total price.\footnote{For comparison, the tax rate would be 25% on a tax-exclusive basis because the $20 tax is 25% of the $80 net-of-tax price. The substantive results are unaffected by how the tax rates are quoted.}

Both states can tax the two categories of interstate transactions. Let $T_{AB}$ be the tax rate that state B imposes on interstate transactions featuring a state-A buyer and a state-B seller and let $t_{AB}$ be the tax rate that state A imposes on those transactions. Similarly, let $t_{BA}$ be the tax rate that state A imposes on interstate transactions featuring a state-B buyer and a state-A seller and let $T_{BA}$ be the tax rate that state B imposes on those transactions. Any tax imposed by the seller’s state applies to only the payment that the seller receives, net of any tax imposed by the buyer’s state.\footnote{Ruth Mason and Michael Knoll refer to this feature as an “ideal deduction” for the buyer-state tax. See Ruth Mason & Michael S. Knoll, \textit{What is Tax Discrimination?}, 121 \textit{Yale L.J.} 1014, 1064–65 (2012) [hereinafter Mason & Knoll, \textit{Tax Discrimination}].}

If the tax, by its terms, applies only to particular transactions and taxpayers, then, for the present purpose of identifying facially neutral tax systems, we apply the above analysis to those taxpayers and those transactions. We ask whether there are potential price changes for those transactions by those taxpayers, such that each of the four groups (state-A buyers, state-B buyers, state-A sellers, and state-B sellers) among them is not incentivized to switch between intrastate and interstate versions of those transactions. For example, if the tax applies only to potatoes purchased by high-income taxpayers, we ask whether there are possible changes in the potato prices paid by high-income taxpayers such that high-income potato buyers in each state have no incentive to switch from sellers in the other state to sellers in the buyer’s own state and potato sellers in each state have no incentive to switch from high-income buyers in the other state to high-income buyers in the seller’s own state. In that analysis, we allow prices for products other than potatoes and
potato prices paid by non-high-income buyers to remain unchanged.\footnote{We extend the analysis to consider how facially neutral tax systems that are limited to particular products and taxpayers may result in de facto discrimination against interstate commerce. See infra Section V.B.}

Our analysis, which was derived independently of Ruth Mason and Michael Knoll’s analysis of income tax policies that promote “competitive neutrality,”\footnote{See Brief of Michael S. Knoll & Ruth Mason as Amici Curiae Supporting of Respondents, Comptroller of Treasury of Maryland v. Wynne, 135 S. Ct. 1787 (2015) (No. 13-485) [hereinafter Knoll-Mason Brief], http://www.americanbar.org/content/dam/aba/publications/supreme_court_preview/BriefsV4/13-485_resp_amcu_msk-rm.pdf; Mason & Knoll, A Brief Sur-Reply to Professors Graetz and Warren, 123 YALE L.J. 1 (2013); Mason & Knoll, Tax Discrimination, supra note 55; Ruth Mason & Michael S. Knoll, Waiting for Perseus: A Sur-Reply to Graetz and Warren, 67 TAX L. REV. 375 (2014).} is fully consistent with, but is a far-reaching extension of, their analysis. Within the income tax context, our results are the same as theirs. However, we extend the analysis to apply to the full range of economic interactions between states, not merely to workers earning income across state lines. That extension makes the analysis applicable to all of the Court’s DCC cases, not only those that concern the taxation of cross-border income.\footnote{Comptroller of the Treasury of Maryland v. Wynne and Kentucky Department of Revenue v. Davis, 553 U.S. 328 (2008), are among the few modern DCC cases involving individual income taxation.} The broader scope is intertwined with several other changes in derivation and presentation. While Mason and Knoll derive the neutrality conditions by analogy to the modern literature on capital income taxation,\footnote{Mason & Knoll, Tax Discrimination, supra note 55, at 1021, 1036.} we derive them from the longstanding economic model of international trade.\footnote{For a description of the standard economic model of trade, see PAUL R. KRUGMAN ET AL., INTERNATIONAL ECONOMICS: THEORY & POLICY 111–33 (9th ed. 2012).} Although Mason and Knoll describe neutral tax systems as those that allow participants in interstate transactions to competitively outbid participants in intrastate transactions if before-tax prices remained unchanged,\footnote{Mason & Knoll, Tax Discrimination, supra note 55, at 1054.} we adopt an economically equivalent description, in which neutral tax systems are those for which prices can change to preserve relative
incentives for interstate transactions. Although we recognize the concern about the proliferation of neutrality terminology,\(^{62}\) we have coined the term “Commerce Neutrality” to describe the general principle rather than adopting Mason and Knoll’s “competitive neutrality” term.\(^{63}\) By focusing on commerce, the term reinforces the applicability of the analysis to a wide range of commercial interactions (some of which may not involve competition in a narrow sense of that term) and emphasizes the link to the purposes of the dormant commerce clause. Also, while Mason and Knoll state the neutrality condition in terms of the kinds of uniform taxes that can be imposed,\(^{64}\) we state the conditions in terms of tax rates, which facilitates a more general analysis.\(^{65}\)

Mathematical analysis\(^ {66}\) reveals that Commerce Neutrality requires that the state tax systems obey the following conditions:

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(1) \ t_{BA} + t_{AB} - t_{BA}t_{AB} \leq t_{AA}.
\]

\[
(2) \ T_{BA} + T_{AB} - T_{BA}T_{AB} \leq T_{BB}.
\]

Accordingly, for each state’s tax system to satisfy Commerce Neutrality, the sum of the tax rates on inbound and outbound transactions, minus an interaction term, must be less than or equal to the state’s tax on its intrastate transactions.\(^ {67}\) The interaction term

\(^{62}\) See, e.g., DANIEL N. SHAVIRO, FIXING U.S. INTERNATIONAL INCOME TAXATION 14–15 (2014) (noting that commentators are “drowning in alphabet soup” of neutrality principles with different acronyms).

\(^{63}\) Reflecting our debt to the trade literature, one of us used the term “trade neutrality” in a previous article. See Alan D. Viard, U.S. Supreme Court Upholds Balkanization for Some, But Not All, Bonds, 48 ST. TAX NOTES 889, 890 (2008).

\(^{64}\) Mason & Knoll, Tax Discrimination, supra note 55, at 1073–74.

\(^{65}\) Mason and Knoll also consider regimes in which discrimination against interstate commerce by some states is offset by discrimination in favor of such commerce by other states through unlimited tax credits. Id. at 1060–64; see infra note 128.


\(^{67}\) The condition says “less than or equal” rather than “equal” because the DCC permits states to discriminate in favor of interstate commerce. See Associated Indus. v. Lohman, 511 U.S. 641, 652 n.4 (1994).
reflects the fact that the second tax is imposed only on the portion of the price remaining after the first tax is paid.

It may seem surprising that the tax-rate condition depends on a combination of taxes on two different transactions, inbound and outbound, engaged in by different groups. Suppose that state A taxes both inbound and intrastate transactions at 10%, with no tax on outbound transactions, which satisfies Commerce Neutrality. If state A then introduces a 10% outbound tax while keeping its 10% tax on intrastate transactions, condition (1) requires that the 10% inbound tax be removed. The initially permissible 10% tax on inbound transactions has become impermissible due to the state’s imposition of an apparently unrelated 10% tax on outbound transactions, which are engaged in by other parties. The imposition of the outbound tax makes the inbound tax impermissible because of how the two taxes interact to determine the price changes needed to avoid incentives to switch away from interstate commerce.

State A’s tax on outbound transactions reduces state-A sellers’ payoffs from those transactions by 10%. To counteract the resulting incentive for those sellers to switch away from outbound transactions, the price that they receive on intrastate sales must fall by 10%. But, that price decline creates an incentive for state-A buyers to switch away from inbound transactions toward the cheaper intrastate purchases. To counteract that incentive, the 10% tax on inbound transactions must be removed. We further discuss this interdependence, which has also been recognized in the economic literature of international income taxation, in section IV.A, in the context of personal income taxation.

If states A and B impose taxes that exactly satisfy conditions (1) and (2), then there is one mathematically possible set of relative price changes that does not impair anyone’s incentive to engage in interstate commerce. The prices paid by each state’s buyers, for purchases from sellers in either state, rise by the amount of the tax that the buyers’ state imposes on their purchases from the other state. The after-tax payoffs received by each state’s sellers, from sales to buyers in either state, fall by the amount of the tax that the sellers’

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None of the buyers or sellers has any incentive to switch from interstate to intrastate transactions; the relative attractiveness of dealing with parties in the other state and dealing with parties in their own state is unchanged.

Each state’s nondiscrimination condition is independent of the other state’s condition. So long as state A obeys condition (1) and state B obeys condition (2), Commerce Neutrality prevails, even if the two states impose different tax rates or different mixes of taxes on inbound and outbound transactions, and even if those differences cause particular interstate transactions to face multiple taxation. Neither state need provide credits for taxes paid to other states or otherwise adjust its tax policies to accommodate the other state’s policies.

A recurring question concerns when a state may adopt taxes and subsidies that disfavor interstate commerce to compensate for other provisions that favor interstate commerce. As the Supreme Court has noted, a compensatory provision is not invalid merely because the state places it in a different statute than the provision for which it compensates. However, allowing a state to justify discrimination against interstate commerce by alleging that it provides preferential treatment in unrelated areas would facilitate abuse because it would be difficult to prevent one instance of preferential treatment from being invoked to justify multiple instances of discriminatory treatment in successive cases. In Oregon Wastes Systems, Inc. v. Dept. of Environmental Quality of Oregon, the Court sensibly held that a valid compensatory tax must offset an identifiable burden on intrastate transactions in a way that roughly approximates, but does not exceed, that burden and must be imposed on an event similar to the event upon which the tax on intrastate transactions is imposed.

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69 Lirette & Viard, supra note 66, at 8.
70 Cf. Mason & Knoll, Tax Discrimination, supra note 55, at 1104–05 (justifying competitive neutrality model on the grounds that it limits discrimination analysis to the review of just one state’s tax laws).
The Court has also considered the extent to which disparities in tax rates and disparities in government services can compensate for each other.\textsuperscript{73} In principle, taxes should differ across interstate and intrastate transactions to the extent that the \textit{marginal} costs of the associated government services differ. States, however, should not be required to account for such cost differences, which are likely to be small and difficult to measure. They should also not be allowed to account for them to the detriment of interstate transactions unless the levies are user fees that are linked to the costs of specific services.\textsuperscript{74} Neutrality does not require that taxation of participants in interstate and intrastate transactions be linked to the benefits they receive from, or the total costs of providing, government services. The Court was therefore correct to restate the \textit{Complete Auto} prong requiring that taxes be “fairly related to the services provided by the State” as a requirement that the taxes be fairly related to the taxpayer’s activities within the state.\textsuperscript{75}

\textbf{C. Destination and Origin Taxes}

We now identify two types of taxes: destination taxes on residents’ purchases and origin taxes on residents’ sales, which satisfy condition (1) and are therefore commerce neutral. As we


\textsuperscript{74} In \textit{Fulton Corp.}, the Court correctly rejected North Carolina’s argument that it could impose a higher tax on residents who owned shares in corporations doing business out of state because the state maintained a capital market for corporations wishing to sell stock to North Carolina residents, noting that the state’s capital market regulations were financed by user fees rather than general revenue and that the costs were too modest to justify the tax the state sought to impose. \textit{Fulton Corp.}, 516 U.S. at 335–38. In \textit{American Trucking Ass’ns v. Scheiner}, the Court rejected Pennsylvania’s attempt to justify its flat trucking taxes as user fees because they did “not even purport to approximate fairly the cost or value of the use of Pennsylvania’s roads.” \textit{Am. Trucking Ass’ns}, 483 U.S. at 290.

explain, other commerce neutral tax systems are combinations of origin and destination taxes.

Commerce Neutrality allows states to tax their residents’ purchases, provided that inbound interstate transactions are taxed no more heavily than intrastate transactions. It also allows states to tax their residents’ sales, provided that outbound interstate transactions are taxed no more heavily than intrastate transactions. Furthermore, it allows states to combine the two types of taxes. For each tax to be nondiscriminatory, however, intrastate transactions, which include both a purchase by residents and a sale by residents, must be fully subject to both the tax on purchases and the tax on sales in a manner that reflects the interaction term, as discussed below.

Because the tax-rate conditions (1) and (2) are symmetrical, we only discuss State A and condition (1) in this section. And, because the taxes that state A may levy do not depend on what state B does, we make the simplifying assumption that state B imposes no taxes.

First, suppose that state A imposes a uniform tax on all purchases by state-A buyers, both their intrastate purchases from state-A sellers and their inbound purchases from state-B sellers. Such a tax, which is imposed on purchases within the taxing jurisdiction (and are therefore imposed on imports, but not exports), is called a destination tax. Then, \( t_{AB} = t_{AA} \), \( t_{BA} \) is zero, and condition (1) is satisfied. Incentives to engage in interstate transactions are unimpaired if the prices paid by state-A buyers rise to reflect the destination tax.

For a 20% destination tax, for example, incentives are unimpaired if the prices paid by state-A buyers to both states’ sellers rise by 25% and the prices paid by state-B buyers remain unchanged, as shown in Table 1 (under the assumption that all prices would be $100 in the absence of taxes).

---

State-A buyers have no incentive to switch from state-B sellers to state-A sellers because they face the same 25% price increase either way. State-B buyers have no incentive to switch from state-B sellers to state-A sellers because they pay unchanged prices either way. State-A sellers have no incentive to switch from state-B buyers to state-A buyers because they receive an unchanged after-tax amount either way. State-B sellers have no incentive to switch from state-A buyers to state-B buyers because they receive an unchanged after-tax amount either way.

Now, suppose that state A imposes a uniform tax on all sales by state-A sellers, both their intrastate sales to state-A buyers and their interstate sales to state-B buyers. Such a tax, which is imposed on products sold from the taxing jurisdiction (and are therefore imposed on exports, but not imports), is called an origin tax. Then, \( t_{BA} = t_{AA} \) and \( t_{AB} \) is zero and condition (1) is satisfied. Incentives to engage in interstate transactions are unimpaired if all prices remain unchanged. Table 2 depicts this outcome for a 20% origin tax.
### TABLE 2: STATE A IMPOSES TWENTY PERCENT ORIGIN TAX

<table>
<thead>
<tr>
<th></th>
<th>State-A Seller</th>
<th>State-B Seller</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State-A Buyer</strong></td>
<td>Buyer pays 100</td>
<td>Buyer pays 100</td>
</tr>
<tr>
<td></td>
<td>Tax 20</td>
<td>No tax</td>
</tr>
<tr>
<td></td>
<td>Seller receives 80</td>
<td>Seller receives 100</td>
</tr>
<tr>
<td><strong>State-B Buyer</strong></td>
<td>Buyer pays 100</td>
<td>Buyer pays 100</td>
</tr>
<tr>
<td></td>
<td>Tax 20</td>
<td>No tax</td>
</tr>
<tr>
<td></td>
<td>Seller receives 80</td>
<td>Seller receives 100</td>
</tr>
</tbody>
</table>

State-A buyers have no incentive to switch from state-B sellers to state-A sellers because they pay unchanged prices either way. State-B buyers have no incentive to switch from state-B sellers to state-A sellers because they pay unchanged prices either way. State-A sellers have no incentive to switch from state-B buyers to state-A buyers because they suffer a 20% reduction in after-tax receipts either way. State-B sellers have no incentive to switch from state-A buyers to state-B buyers because they receive unchanged after-tax amounts either way.

A combination of destination and origin taxes is also commerce neutral. Suppose that state A imposes both a 20% destination tax on all purchases by state-A buyers and a 10% origin tax on all sales by state-A sellers. For each tax to be neutral (so that their combination is neutral), however, intrastate transactions must be subject to both taxes, as each intrastate transaction involves both an in-state buyer and an in-state seller. That requires a 28% tax rate on intrastate transactions. After the destination tax takes 20% of the buyer’s total payment, the origin tax takes 10% of the remaining 80%, or another 8% of the total payment. Because $t_{BA}$ is .2, $t_{AB}$ is .1, and $t_{AA}$ is 0.28, condition (1) is satisfied. The interaction term, $-t_{BA}t_{AB}$, in condition (1) reflects the fact that the origin tax is imposed only on the amount remaining after the destination tax is paid.\(^{77}\)

\(^{77}\) As Mason and Knoll observe, the first tax must be deductible in computing the second tax, as it would be if it had been imposed by the other state. See Mason & Knoll, *Tax Discrimination*, supra note 55; see also supra text accompanying note 55.
Incentives to engage in interstate transactions are unimpaired if the prices paid by state-A buyers to both states’ sellers rise 25%, as shown in Table 3.

**TABLE 3: STATE A IMPOSES TWENTY PERCENT DESTINATION TAX AND TEN PERCENT ORIGIN TAX (TWENTY-EIGHT PERCENT TAX ON INTRASTATE TRANSACTIONS)**

<table>
<thead>
<tr>
<th>State-A Seller</th>
<th>State-B Seller</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State-A Buyer</strong></td>
<td><strong>State-B Seller</strong></td>
</tr>
<tr>
<td>Buyer pays 125</td>
<td>Buyer pays 125</td>
</tr>
<tr>
<td>Tax 35</td>
<td>Tax 25</td>
</tr>
<tr>
<td>Seller receives 90</td>
<td>Seller receives 100</td>
</tr>
<tr>
<td><strong>State-B Buyer</strong></td>
<td><strong>State-B Buyer</strong></td>
</tr>
<tr>
<td>Buyer pays 100</td>
<td>Buyer pays 100</td>
</tr>
<tr>
<td>Tax 10</td>
<td>No tax</td>
</tr>
<tr>
<td>Seller receives 90</td>
<td>Seller receives 100</td>
</tr>
</tbody>
</table>

State-A buyers have no incentive to switch from state-B sellers to state-A sellers because they face a 25% price increase either way. State-B buyers have no incentive to switch from state-A sellers to state-B sellers because they pay unchanged prices either way. State-A sellers have no incentive to switch from state-B buyers to state-A buyers because they suffer a 10% reduction in after-tax receipts either way. State-B sellers have no incentive to switch from state-A buyers to state-B buyers because they receive unchanged after-tax amounts either way.

Subjecting intrastate transactions to both the origin tax and the destination tax is required for neutrality. The intrastate transactions compete with outbound transactions on the sale side and with inbound transactions on the purchase side; to avoid giving parties an incentive to switch to the intrastate transactions, the intrastate transactions must bear both of the taxes that apply to the competing interstate transactions. Another way to see the point is to recognize that the origin tax is neutral only if it is imposed on the intrastate transactions and that the destination tax is neutral only if it is imposed on the intrastate transactions; neutrality therefore requires that both taxes be imposed on the intrastate transactions.
D. Irrelevance of Multiple Taxation

The prevention of discrimination against interstate commerce, which is the proper concern of the DCC, differs from the prevention of multiple taxation, which occurs when an interstate transaction is taxed by two or more states. The Supreme Court has often indicated that one of the purposes of the DCC is to prevent multiple taxation\(^ {78} \) and has often conflated the concepts of discrimination and multiple taxation. But either multiple taxation or discrimination against interstate commerce can occur with or without the other.

Commerce Neutrality demonstrates that the prevention of multiple taxation is not a valid economic or constitutional concern. Suppose that state A imposes a 20% destination tax and state B imposes a 10% origin tax. Then, sales from state A to state B are double taxed and face a combined tax rate of 28% (a 20% destination tax in state A and a 10% origin tax on the remaining 80% in state B). On the other hand, sales from state B to state A are not taxed by either state. Despite the double taxation, interstate commerce receives neutral treatment, because each state’s tax system is neutral. That conclusion can be confirmed by noting that nobody has an incentive to switch away from interstate transactions if state-A buyers pay 25% more for all of their purchases and state-B buyers pay unchanged prices for all of their purchases, as shown in Table 4.

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\(^ {78} \) Japan Line, Ltd. v. County of Los Angeles, 441 U.S. 434, 446 (1979) (“It is a commonplace of constitutional jurisprudence that multiple taxation may well be offensive to the Commerce Clause.”).
TABLE 4: STATE A IMPOSES TWENTY PERCENT DESTINATION TAX, STATE B IMPOSES TEN PERCENT ORIGIN TAX

<table>
<thead>
<tr>
<th></th>
<th>State-A Seller</th>
<th>State-B Seller</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State-A Buyer</strong></td>
<td>Buyer pays 125</td>
<td>Buyer pays 125</td>
</tr>
<tr>
<td></td>
<td>Tax 25 (A)</td>
<td>Tax 35 (25 A, 10 B)</td>
</tr>
<tr>
<td></td>
<td>Seller receives 100</td>
<td>Seller receives 90</td>
</tr>
<tr>
<td><strong>State-B Buyer</strong></td>
<td>Buyer pays 100</td>
<td>Buyer pays 100</td>
</tr>
<tr>
<td></td>
<td>No Tax</td>
<td>Tax 10 (B)</td>
</tr>
<tr>
<td></td>
<td>Seller receives 100</td>
<td>Seller receives 90</td>
</tr>
</tbody>
</table>

State-A buyers have no incentive to switch from state-B sellers to state-A sellers because they face a 25% price increase either way. State-B buyers have no incentive to switch from state-A sellers to state-B sellers because they pay unchanged prices either way. State-A sellers have no incentive to switch from state-B buyers to state-A buyers because they receive unchanged after-tax receipts either way. State-B sellers have no incentive to switch from state-A buyers to state-B buyers because they face a 10% reduction in after-tax receipts either way.

It may seem surprising that incentives for B-to-A sales can be maintained in the face of double taxation. But, the relevant question is how the tax burden on a transaction compares to the tax burden on alternative transactions. Each of the two tax burdens on B-to-A sales is matched by a corresponding tax on competing transactions. B-to-A sales face a 10% origin tax, but so do intrastate sales in state B; B-to-A sales also face a 20% destination tax, but so do intrastate purchases in state A.

Because each state’s tax system is nondiscriminatory, it has no obligation to accommodate the other state’s taxes. For example, neither state is required to grant a credit for taxes paid to the other state. Moreover, there is no need for the states to harmonize their tax rates or their choice between origin and destination bases. The independence of state tax systems is reassuring because there would be no convincing logical way to determine which state would have the obligation to accommodate, or harmonize with, the other.\footnote{But see Walter Hellerstein, Deciphering the Court’s Opinion in Wynne, 123 J. Tax’N 4, 6–9 (2015) [hereinafter Hellerstein, Court’s Opinion in Wynne]}
short, the neutrality of each state’s system is undisturbed by the existence of the other.\footnote{Cf. Ruth Mason, Made in America for European Tax: The Internal Consistency Test, 49 B.C. L. Rev. 1277, 1307 (2008) (observing, in international context, that each country’s tax system should be judged on its own merits).}

The Supreme Court has sometimes recognized this principle, stating that double taxation resulting from differences in states’ tax rules “is not a structural evil that flows from either tax individually, but it is rather the accidental incident of interstate commerce being subjected to two different taxing jurisdictions.”\footnote{Okla. Tax Comm’n v. Jefferson Lines, 514 U.S. 175, 192 (1995).} Unfortunately, in other cases, the Court has suggested that multiple taxation may violate the DCC.\footnote{We will discuss multiple taxation further in Parts IV and VII, including the Court’s de-emphasis of that concern in \textit{Wynne}. \textit{See}, e.g., MeadWestvaco Corp. v. Ill. Dept of Revenue, 553 U.S. 16, 24 (2008) (stating that DCC forbids taxes “subjecting [interstate] activities to multiple or unfairly apportioned taxation”); Exxon Corp. v. Dep’t of Revenue of Wis., 447 U.S. 207, 228–29 (1980) (rejecting DCC challenge partly because “actual multiple taxation has not been shown”); \textit{Japan Line, Ltd.}, 441 U.S. at 446 (noting “commonplace of constitutional jurisprudence that multiple taxation may well be offensive to the Commerce Clause”).} This uncertainty about when multiple taxation matters, and when it does not, disappears under Commerce Neutrality, which reveals that multiple taxation is never the relevant concern; the only thing that matters is whether each state’s tax system is nondiscriminatory.

\textit{E. Accounting for Economic Effects of Price Changes}

Before further discussing the relationship of the Commerce Neutrality analysis to the Court’s DCC jurisprudence, we address a potential concern about the analysis. Even if the state taxes satisfy conditions (1) and (2), there is no guarantee that the price changes caused by the tax will equal the price changes that preserve each group’s incentives to engage in interstate commerce. This uncertainty about the actual price changes may seem problematic, as courts cannot reliably determine the impact of a tax system on prices. Comparing prices before the tax took effect to those after it
took effect would not resolve the question because other factors may have changed around the time the tax took effect. Any effort to isolate the effects of the taxes would be complicated and inconclusive.

Fortunately, courts generally need not undertake that task, as they can uphold a tax system if its tax rates satisfy condition (1) and invalidate it if its tax rates violate condition (1), without investigating any price changes induced by the tax system. That conclusion is clear if a state imposes a tax system that violates the condition. Then, at every mathematically possible set of price changes, at least one group’s incentive to engage in interstate commerce must be impaired. There is no need for courts to identify the actual price changes; regardless of what they might be, it is logically inescapable that someone’s incentives to engage in interstate commerce have been impaired. In nearly all cases, the system should then be invalidated. However, some policies that slightly deviate from the neutrality condition (1) should be upheld if the administrative costs of adopting a fully neutral alternative would be unduly large.

Things may seem less clear if the tax system satisfies condition (1). Although possible price changes preserving each group’s incentives to engage in interstate commerce exist, the actual price changes may not do so. Nevertheless, the tax system should generally be upheld because it does not systematically discourage interstate transactions. Suppose, for example, that state A imposes the 20% destination tax described in Table 1, but that the tax-inclusive prices paid by state-A buyers do not rise by the full 25% set forth in the table. State-B sellers then have a lower net payoff from selling to state-A buyers, impairing their incentive to engage in interstate commerce. But, state-A sellers also have a lower net

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83 Cf. Mason & Knoll, Tax Discrimination, supra note 55, at 1101–02.
84 See, e.g., McKesson Corp. v. Div. of Alcoholic Beverages & Tobacco, 496 U.S. 18, 40 n.23 (1990) (“[A] tax scheme would not violate the Commerce Clause merely because tax collectors inadvertently missed a few in-state taxpayers.”); Am. Trucking Ass’ns v. Scheiner, 483 U.S. 266 (1987) (upholding fixed fee on trucking on administrative-cost grounds). This principle is discussed in further detail in Section VI.B in connection with nonrefundable tax credits and Section VII.B in connection with flat fees.
payoff from selling to state-A buyers, increasing their incentives to engage in interstate commerce by switching to state-B buyers.

So long as the tax system satisfies condition (1), any price changes that impair one group’s incentive to engage in interstate commerce must improve another group’s incentive to do so. On net, the tax system may incidentally change the volume of interstate transactions in one direction or the other. But, there is no need for a complicated inquiry to identify those effects. It is generally sufficient to note that the tax system does not systematically impede interstate commerce.  

III. COMMERCE NEUTRALITY AND THE DCC

Although Commerce Neutrality may initially appear to be a marked departure from DCC jurisprudence and principles, that is not so. Commerce Neutrality is identical to the Court’s internal consistency test under most circumstances. Moreover, it has a grounding in constitutional text and history, which few other purported DCC principles can claim.

A. Internal Consistency and Commerce Neutrality

The Court first mentioned internal consistency in Container Corporation of America v. Franchise Tax Board. Under the Court’s common description of the internal consistency test, state A’s tax system is valid if interstate transactions would be subject to the same total nationwide tax burden as intrastate transactions under the assumption that every state adopted that tax system. Unfortunately, this description makes the internal consistency test

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85 See infra Section V.B. However, some taxes that facially satisfy (1) should be struck down because they constitute de facto discrimination against interstate commerce. As we explain, some consideration of the taxes’ effects is then necessary, but the relevant judgment calls can generally be made without complicated economic inquiries. Id.


87 See, e.g., Jefferson Lines, 514 U.S. at 185 (“This test . . . looks to the structure of the tax at issue to see whether its identical application by every State in the Union would place interstate commerce at a disadvantage as compared with commerce intrastate.”).
look like an abstraction disconnected from economic reality, as it appears to consider the hypothetical scenario in which other states copy the single state’s tax rather than the actual tax systems employed by the other states. Indeed, critics, such as Justice Scalia, have attacked the test on this ground.\textsuperscript{88} A related criticism has noted that the test cannot determine whether any interstate transactions actually face multiple taxation.\textsuperscript{89} But, as we discussed in section II.D, multiple taxation is not the relevant DCC issue.

The attacks on the internal consistency test’s relation to economic reality are wrong. Internal consistency, in most instances,\textsuperscript{90} is equivalent to Commerce Neutrality and therefore accurately measures a tax system’s discriminatory effect. Each interstate transaction is an outbound transaction in one state and an inbound transaction in another state. If every state adopted state A’s tax system, each interstate transaction would pay in one state the tax that state A imposes on outbound transactions and would also pay in another state the tax that state A imposes on inbound transactions. Each intrastate transaction would face a tax in its state equal to the tax that state A imposes on intrastate transactions. When the test compares those hypothetical nationwide tax burdens, it is also comparing the combined tax that state A actually imposes on inbound and outbound transactions to the tax that state A actually imposes on intrastate transactions, which is precisely the comparison made by the tax-rate condition (1). There is nothing hypothetical about that comparison.

When a state adopts an internally consistent tax system, for which the combined tax on inbound and outbound transactions matches the tax on intrastate transactions, the system is commerce neutral, regardless of what other states may do. The fact that intrastate and interstate transactions would bear equal nationwide

\textsuperscript{88} See, e.g., Comptroller of the Treasury of Md. v. Wynne, 135 S. Ct. 1787, 1809 (Scalia, J., dissenting) (regarding the internal consistency rule to be an “exercise in counterfactuals” that “nicely showcases our ad hocery”).


\textsuperscript{90} We discuss below the exception to this statement, which arises when a state makes its taxes dependent on other states’ taxes.
tax burdens if every state copied the tax system is a side effect of, rather than the reason for, the system’s neutrality; the fact that such a system actually is neutral when adopted by any single state explains why it would remain neutral if, hypothetically, it were to be adopted by every state.

The internal consistency test has worked well when the Court has used it because it largely replicates Commerce Neutrality’s tax-rate condition. However, the Court has failed to articulate the test’s underlying rationale. In *Armco, Inc. v. Hardesty*, West Virginia imposed gross receipts taxes of 0.88% on companies that manufactured property within the state and 0.27% on companies that wholesaled tangible property within the state, but exempted companies that both manufactured and wholesaled within the state from the wholesaling tax.\(^\text{91}\) The West Virginia Supreme Court of Appeals concluded that the tax system did not discriminate against interstate commerce because the 0.88% tax on intrastate transactions (in which both manufacturing and wholesaling occurred within the state) was higher than the 0.27% tax on inbound transactions (in which property manufactured elsewhere was wholesaled within the state).\(^\text{92}\) The U.S. Supreme Court struck down West Virginia’s tax under the internal consistency test, noting that, if every state copied it, interstate transactions would pay approximately 1.15% nationwide tax while intrastate transactions would pay 0.88% nationwide tax.\(^\text{93}\) The Court rightly rejected West Virginia’s objection that other states had not actually copied its tax structure,\(^\text{94}\) but did not state its reasons clearly. It noted that other states had “every right” to impose manufacturing taxes even if they had not done so\(^\text{95}\) and it refused to make the constitutionality of a state’s tax law “depend on the shifting complexities of the tax codes of 49 other States.”\(^\text{96}\) The Court should have said that, because the internal

\(^{92}\) *Id.* at 641 (citing *Armco v. Hardesty*, 303 S.E. 2d 706 (1983)).
\(^{93}\) *Id.* at 642. In 1987, the Court reaffirmed *Armco*. Tyler Pipe Indus. v. Dep’t of Revenue, 483 U.S. 232 (1987) (striking down Washington’s similar tax system).
\(^{94}\) *Armco*, 467 U.S. at 644.
\(^{95}\) *Id.*
\(^{96}\) *Id.* at 644–45.
consistency test revealed that West Virginia’s combined treatment of inbound and outbound transactions was less favorable than the treatment of intrastate transactions, its tax system was discriminatory, regardless of what other states might do. Similarly, in *Oklahoma Tax Commission v. Jefferson Lines*, the Court used the internal consistency test, but lamented that the test “asks nothing about the economic reality reflected by the tax.”

In one widely debated DCC case, the Court could have made its reasoning much clearer if it had relied on the internal consistency test, which it did not mention. In *Camps Newfound/Owatonna, Inc. v. Town of Harrison*, the Court struck down a Maine property tax exemption for in-state summer camps that served state residents. Under that exemption, Maine imposed a property tax only on outbound transactions (in-state camps serving nonresidents), with no tax on inbound transactions (out-of-state camps serving residents) or intrastate transactions (in-state camps serving residents), effectively imposing an export tariff. The exemption violated the internal consistency test; if every state copied it, a camp in one state that served residents of another state would be taxed in its home state while a camp that served residents of its own state would not be taxed. Explaining that point would have enabled the Court to respond to the dissent’s claim that the exemption did not involve facial discrimination against interstate commerce or economic protectionism.

The internal consistency test also exposes the fallacy in the argument that intrastate and inbound transactions should always be taxed at the same rate, to avoid giving out-of-state sellers a tax advantage over in-state sellers. That policy is neutral if there is no tax on outbound transactions but is discriminatory if outbound transactions are taxed. Because the tax-rate condition (1) calls for

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99 *Id.* at 580–81.
100 The tax benefit would have been internally consistent if it had applied to all camps, no matter where located, that served state residents, an option to which the Court alluded, or if it had applied to all in-state camps, no matter who they served. *Id.* at 582 n.16.
101 *Id.* at 602–04 (Scalia, J., dissenting).
intrastate transactions to pay the same tax as the combined tax on inbound and outbound transactions, intrastate transactions must be taxed more heavily than inbound transactions if outbound transactions are taxed. Inbound transactions cannot be taxed to compensate for their exemption from the origin-based taxes that intrastate transactions face; the origin-based taxes are already neutral because they apply to outbound transactions on the same terms as inbound transactions. The Court has rightly rejected efforts to justify import taxes as compensation for origin-based taxes, but has not always been clear about its reasons.\textsuperscript{102}

Internal consistency and Commerce Neutrality diverge if the state makes its tax rate dependent on other states’ tax policies. Then, it matters whether we look at the actual tax systems used by other states or the hypothetical policies assumed by the internal consistency test. Although it is still only the state’s own taxes that matter for the validity of its system, those taxes now depend on what other states are doing and information about other states’ actual taxes is therefore needed to accurately describe the state’s own system. The most important example of interdependent state tax systems is the provision of credits for taxes paid to other states, which we will discuss in section IV.B.

Ruth Mason notes the problems that the internal consistency test faces in the presence of reciprocity provisions, another example of interdependence.\textsuperscript{103} Suppose that state A will impose a nondiscriminatory tax system if state B does the same, but will also impose a discriminatory tax system if state B does so. The internal consistency test yields indeterminate results. One could assume that both states impose the nondiscriminatory tax and uphold state A’s tax system or one could assume that both states impose the

\textsuperscript{102} See, e.g., Fulton Corp. v. Faulkner, 516 U.S. 325, 333–34 (1996) (rejecting North Carolina’s attempt to justify a higher tax on residents’ holdings of stocks in companies that operated out of state by pointing to corporate income taxes paid by companies operating in state and noting that state had no right to impose corporate income tax on companies that operated out of state); Or. Waste Sys., Inc. v. Dep’t of Envtl. Quality, 511 U.S. 93, 100, 104–05 (1994) (concluding that tax on imported waste was not properly calibrated to match income taxes imposed on intrastate waste production and suggesting that imported waste probably faced tax in other states).

\textsuperscript{103} Mason, supra note 80, at 1323–25.
discriminatory tax and strike down state A’s tax system. Such provisions should be invalidated because states should not be allowed to respond to other states’ DCC violations by committing their own violations rather than pursuing judicial remedies. In New Energy v. Limbach, the Court held that a reciprocity provision does not save a measure that otherwise violates the DCC.104

Except for these cases of interdependent state policies, however, the Court’s internal consistency test is functionally identical to Commerce Neutrality. Therefore, Commerce Neutrality has a basis in the Court’s current DCC analysis.

B. The Legal Case for Commerce Neutrality

Aside from its close connection to the internal consistency test, Commerce Neutrality also has a grounding in the history and purposes of the DCC and the constitutional text that other principles lack. Many respected voices have debated the DCC’s constitutional and historical validity.105 Our contention concerning Commerce Neutrality’s validity, however, is much more modest. Assuming that the DCC continues as a constitutional restraint on state power—which appears to be the case—we believe that Commerce Neutrality is the appropriate framework because it aligns with both the text of the Commerce Clause and the DCC’s historical objective.

The DCC is justified as an implication of the Commerce Clause’s affirmative empowerment of Congress to regulate “commerce among the several states.” Yet, many models deviate from an analysis of a challenged policy’s actual effect on interstate commerce. This nontextual focus has produced a number of confused strands of DCC jurisprudence, such as the out-of-stater-equality principle. In contrast, Commerce Neutrality focuses on the Commerce Clause’s textual concern—transactions of trade.106 In

105 See Friedman & Deacon, supra note 7, at 1878–79 & n.6 (presenting voluminous description of DCC criticism).
106 See THE OXFORD ENGLISH DICTIONARY 552 (Clarendon Press 2d ed. 1989) (defining “commerce” as the “exchange between men of the products of
that respect, Commerce Neutrality puts the “commerce” back in the DCC.

Some have criticized the DCC on the grounds that it entrenches a particular economic philosophy, the economic case for free trade, into the Constitution, arguing that this vision is much like the now discredited jurisprudence flowing from *Lochner v. New York*. But that comparison is inapt. The *Lochner* jurisprudence protected economic rights from Congress, as well as from state legislatures. As noted in Part I, however, the DCC is merely a presumptive restriction on state authority, which Congress is free to override. A commerce-neutral DCC requires that any decision to deviate from free trade be made, or authorized, by Congress rather than by states with potentially parochial motivations.

Commerce Neutrality’s implementation of the nondiscrimination principle also aligns with the DCC’s historical purposes. One of the most common justifications for the DCC is the “critical period” thesis popularized by historian John Fiske in 1888. Fiske asserts that the constitutional framers were motivated to create a new governing regime primarily because of escalating disputes among the states over discriminatory trade policies. Although many have criticized the historical validity of Fiske’s

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nature or art; buying and selling together; trading; exchange of merchandise”); Randy E. Barnett, *The Original Meaning of the Commerce Clause*, 68 U. CHI. L. REV. 101 (2001) (demonstrating that the original meaning of commerce referenced the “trade or exchange of goods”).


108 See, e.g., *Adair v. United States*, 208 U.S. 161 (1908) (invalidating a federal law that prohibited “yellow dog” contracts in which employees agreed not to join labor unions).


thesis, modern scholarship supports the proposition that state discrimination against interstate trade was real and likely a concern of the framers.112

Despite these questions concerning the historical validity of Fiske’s thesis, it cannot be disputed that the Court has cited the concerns underlying Fiske’s thesis as a justification for the DCC for generations. In the nineteenth century, the Court invalidated numerous discriminatory state laws that would have promoted political and economic Balkanization based on the Commerce Clause’s historical objective.113 Reliance on this historical thesis extended past the New Deal revolution, with the Court striking down discriminatory measures on the basis that the American system, “fostered by the Commerce Clause,” guaranteed, among other things, freedom from duties and embargoes of other states and “free access to every market in the Nation.”114 Modern decisions, including the recent decision in Wynne, have also cited these concerns as a justification for the DCC and its prohibition against

112 See generally Denning, Confederation-Era, supra note 110, at 40–43 (rehabilitating historical basis of Fiske’s “Critical Period”).

113 Cushman, supra note 32, at 1101 (“As the national economy became increasingly integrated in the years following the Civil War, the Court began a conscious and increasingly aggressive campaign to break down local barriers to interstate trade through a ‘free-trade’ construction of the dormant Commerce Clause.”); see also Bowman v. Chi. & Ry., 125 U.S. 465, 494 (1888) (“In view of the commercial anarchy and confusion that would result from the diverse exertions of power by the several states of the union, it cannot be supposed that the Constitution or Congress have intended to limit the freedom of commercial intercourse among the people of the several States.”); Robbins v. Shelby County Taxing Dist., 120 U.S. 489, 498 (1887) (striking down protectionist statute that would bring the country “back to the condition of things which existed before the adoption of the [C]onstitution, and which was one of the principal causes that led to it”); Cook v. Pennsylvania, 97 U.S. 566, 574 (1878) (striking down a discriminatory tax and explaining that the Constitutional framers designed the Commerce Clause as a protection “against the dangers of any taxation by the States which would interfere with the freest interchange of commodities among the people of the different States” (emphasis added)).

discriminatory state policies.\textsuperscript{115} Thus, by striking down discriminatory policies that would lead to economic and political Balkanization, Commerce Neutrality is firmly aligned with the legal foundations of the Court’s DCC jurisprudence.\textsuperscript{116}

IV. \textit{COMPTROLLER OF THE TREASURY OF MARYLAND V. WINNE AND COMMERCE-NEUTRAL PERSONAL INCOME TAXATION}

In \textit{Comptroller of the Treasury of Maryland v. Wynne} the Supreme Court invalidated Maryland’s income tax scheme because it discriminated against interstate commerce.\textsuperscript{117} Importantly, the Court relied on the internal consistency test, noting that the test’s conclusion was consistent with the undisputed economic analysis, which showed that Maryland’s tax scheme operated as a tariff.\textsuperscript{118} As

\textsuperscript{115} Comptroller of the Treasury of Md. v. Wynne, 135 S. Ct. 1787, 1794 (noting that the Commerce Clause “reflected a central concern of the Framers that was an immediate reason for calling the Constitutional convention: the conviction that in order to succeed, the new Union would have to avoid the tendencies toward economic Balkanization that had plagued relations among the Colonies and later among the States under the Articles of Confederation”); \textit{see also}, e.g., \textit{Okla. Tax Comm’n v. Jefferson Lines}, 514 U.S. 175, 180; \textit{C&A Carbone, Inc. v. Town of Clarkstown}, 511 U.S. 383, 390 (1994) (noting that nondiscrimination requirement is designed “to prohibit state or municipal laws whose object is local economic protectionism, laws that would excite those jealousies and retaliatory measures the Constitution was designed to prevent”).

\textsuperscript{116} Multiple commentators have argued that the proper—and only valid—justification for the DCC is the preservation of political unity, not antidiscrimination for economic efficiency’s sake. \textit{See Mehmet K. Konar-Steenberg, One Nation or One Market? Liberals, Conservatives, and the Misunderstanding of H.P. Hood & Sons v. DuMond}, 11 \textit{Penn. J. CON. L.} 960–64 (2009); \textit{Donald H. Regan, The Supreme Court and State Protectionism: Making Sense of the Dormant Commerce Clause}, 84 \textit{Mich. L. REV.} 1091, 1112–16 (1986); \textit{Denning, Reconstructing the DCC Doctrine, supra} note 35. That distinction, however, is inapplicable to Commerce Neutrality. Commerce Neutrality invalidates taxes and subsidies that favor intrastate commerce over interstate commerce. Although eliminating such policies promotes economic efficiency, there is no reason to believe that it will not also reduce the political friction that naturally accompanies protectionist policies.

\textsuperscript{117} \textit{Wynne}, 135 S. Ct. at 1792.

\textsuperscript{118} \textit{Id.} at 1804.
explained below, that economic analysis bears much similarity to Commerce Neutrality.

A. Commerce-Neutral Personal Income Taxation

The application of Commerce Neutrality to individual income taxation is straightforward, as outlined in the Tax Economists Brief and the Knoll-Mason Brief filed in Wynne and relied upon by the Wynne majority.\textsuperscript{119} In this context, the tax-rate condition (1) requires that the tax rate on nonresidents’ in-state income plus the tax rate on residents’ out-of-state income (minus the interaction term) must be less than or equal to the tax rate on residents’ in-state income.

This condition is satisfied by a uniform residence tax that applies to all income earned by residents, both within and outside the state, while exempting nonresidents’ incomes. It is also satisfied by a uniform source tax that applies to all income earned within the state, both by residents and nonresidents, while exempting residents’ out-of-state incomes. Moreover, it is met by a combination of the two taxes.\textsuperscript{120} This is the same condition that emerges from Mason and Knoll’s competitive neutrality analysis.\textsuperscript{121}

For residence and source taxes and combinations thereof, wage changes exist that preserve everyone’s incentive to earn income across state lines.

First, consider a 5\% residence tax in state A. Incentives are preserved if before-tax wages in both states remain unchanged. State-B residents, who are not subject to the tax, have no incentive


\textsuperscript{120} The Court has upheld states’ power to tax residents on all of their income, including out-of-state income. Okla. Tax Comm’n v. Chickasaw Nation, 515 U.S. 450, 463 (1995); New York ex rel. Cohn v. Groves, 300 U.S. 308, 313–14 (1937). The Court has also upheld states’ power to tax in-state income, including that earned by nonresidents. Shaffer v. Carter, 252 U.S. 37, 50–52 (1920); Travis v. Yale & Towne Mfg. Co., 252 U.S. 60, 75–76 (1920).

\textsuperscript{121} Mason & Knoll, Tax Discrimination, supra note 55, at 1073.
to switch from state-A work to state-B work. State-A residents have no incentive to switch from state-B work to state-A work, as they pay the 5% tax either way.

Next, consider a 5% source tax in state A. Incentives are preserved if before-tax wages for residents of both states rise by 5.26% in state A and remain unchanged in state B. State-B residents have no incentive to switch from state-A work to state-B work. If they work in state A, their wages rise 5.26% and they pay the 5% source-based tax to state A, which offsets the wage increase. If they work at home in state B, they have no wage change and pay no tax. State-A residents have no incentive to switch from state-B work to state-A work, because they face the same wages and taxes as state-B residents.

Now, suppose that state A imposes both a 5% uniform tax on all income earned by its residents, whether within or outside the state, and a 5% uniform tax on all income earned within the state, whether by residents or nonresidents. Recall from our analysis in section II.C that each of the two taxes is uniform only if residents’ in-state income is fully subject to both taxes. The residence tax is neutral only if it applies to residents’ in-state income on the same terms as their out-of-state income and the source tax is neutral only if it applies to residents’ in-state income on the same terms as nonresidents’ in-state income. Residents’ in-state income must face a 9.75% tax rate, as required by (1), with the source tax taking 5% of the income and the residence tax taking 5% of the remaining 95%.

With 5% tax on residents’ out-of-state income, 5% tax on nonresidents’ in-state income, and 9.75% tax on residents’ in-state income, incentives are preserved if wages rise 5.26% in state A and remain unchanged in state B. State-B residents have no incentive to switch from state-A work to state-B work. If they work in state A, their wages rise 5.26% and they pay 5% tax to state A; if they work at home in state B, they face no tax or wage changes. State-A residents have no incentive to switch from state-B work to state-A work. If they work in state B, they receive their original wages and pay 5% tax, leaving them with a 5% shortfall; if they work at home

122 An increase in wages from $10,000 to $10,526 offsets the $526 tax (5% of $10,526).
in state A, their wages rise 5.26% and they pay 9.75% tax, also leaving them with a 5% shortfall.\textsuperscript{123}

To return to a concern that we addressed in section II.C, it may seem odd that the permissible tax rate on residents’ out-of-state income falls when the tax rate on nonresidents’ in-state income rises (holding constant the tax rate on residents’ in-state income). But, that relationship reflects the interdependence of economic incentives. When a state imposes a higher tax rate on nonresidents’ in-state income, wages must rise within the state to avoid creating an incentive for nonresidents to shift to work in their home state. But, the higher in-state wage threatens to create an incentive for residents to switch to working at home, which must be averted by reducing the tax rate on their out-of-state income.

The analysis reveals that it is discriminatory to tax both nonresidents’ in-state income and residents’ out-of-state income at 5% while taxing residents’ in-state income at only 5%. That system is equivalent to a neutral 5% residence-based tax plus a 5% discriminatory tariff on nonresidents’ in-state income. It is also equivalent to a neutral 5% source-based tax plus a 5% discriminatory tariff on residents’ out-of-state income.

Nevertheless, most states with an individual income tax impose tax on both residents’ out-of-state income and nonresidents’ in-state income.\textsuperscript{124} When the combined tax burden on these types of income exceeds the tax burden on residents’ in-state income, the tax system discriminates against interstate income.

\textit{B. A Flawed Solution: Credits for Taxes Paid to Other States}

States generally provide one form of relief from this discrimination. Every state with a broad-based income tax allows its residents a credit for income taxes paid to other states in which the

\textsuperscript{123} If wages rise from $10,000 to $10,526, the tax is $1,026 (9.75% of $10,526) and after-tax income is $9,500.

\textsuperscript{124} See \textsc{Walter Hellerstein et al.}, \textit{State and Local Taxation: Cases and Materials} 397 (West 9th ed. 2009) (“\textsc{S}tates generally tax residents on their income from all sources while taxing nonresidents on income from sources within the state.”).
residents earned income. Most states provide a “full” credit, meaning that the other state’s tax is credited up to the full amount of tax that the residence state imposes on the out-of-state income. There is no credit for the portion, if any, of the other state’s tax that exceeds the tax imposed by the residence state.

So, if the home-state tax rate is 5% and the income is taxed in the source state at a rate higher than 5%, the credit wipes out the residence state tax. For that taxpayer, Commerce Neutrality has been achieved, because the credit effectively exempts the out-of-state income from tax. However, if the other state taxes the income at less than 5%, the full credit does not completely exempt the income from tax at home. If the other state imposes a 3% rate, for example, the resident still pays 2% tax at home after claiming the credit. That residual tax violates neutrality. So long as the state taxes residents’ and nonresidents’ in-state incomes at the same rate, Commerce Neutrality forbids any tax on residents’ out-of-state income.

Although a full credit does not satisfy Commerce Neutrality, it satisfies internal consistency. The equivalence between internal consistency and Commerce Neutrality breaks down when a state makes its taxes dependent on other states’ taxes, as is true when a credit is provided for taxes paid to other states. The internal consistency test examines the nationwide burdens that would arise if every state copied the challenged state’s tax system. Under that assumption, the state in which the income is earned would tax the income at the same rate as the residence state and the full credit would wipe out the residence state’s tax. The assumption

125 Hellerstein, Court’s Opinion in Wynne, supra note 79, at 5 n.5.
126 Id.
127 Id.
128 Mason & Knoll, Tax Discrimination, supra note 55, at 1060–64. Mason and Knoll observe that neutrality is achieved if all states provide credits that are not limited to the amount of tax owed at home. If all states provide unlimited credits, a state income tax system that taxed residents’ in-state and out-of-state incomes at the same rate is neutral, no matter how heavily nonresidents’ in-state income was taxed because the tax paid by nonresidents is fully reimbursed by their home states. Note that the neutrality of each state’s tax system depends upon other states’ provision of an unlimited credit, not the state’s own provision of such a credit. Of course, no state has adopted, or is likely to adopt, an unlimited credit.
129 See supra Section III.A.
automatically rules out the case in which the credit falls short of neutrality, when the source state imposes a lower tax rate.

The full credit’s perceived virtue is that it eliminates multiple taxation. But, that focus is misplaced. When one or both of the states’ tax systems are discriminatory, removing multiple taxation generally does not eliminate discrimination. Conversely, when both states’ tax systems are neutral, there is no need to eliminate multiple taxation.\(^{130}\) For example, Commerce Neutrality is satisfied if state A imposes a 5% source tax and state B imposes a 5% residence tax, even though income earned by B-residents in state A is double taxed (and income earned by A-residents in state B goes untaxed). Everyone’s incentives to earn income across state lines are preserved if wages rise by 5.26% in state A and remain unchanged in state B.\(^{131}\) Because each state’s system is neutral, neither state need provide a credit for taxes paid to the other state. Credits are therefore unnecessary if both states’ taxes are neutral. They are also insufficient if either state’s tax system is discriminatory. Nevertheless, credits are the longstanding remedy for states’ discriminatory personal income tax systems.\(^{132}\)

Before \textit{Wynne}, the disputed issue was not whether credits are constitutionally sufficient to rehabilitate discriminatory income tax systems,\(^{133}\) but whether discriminatory income tax systems are constitutional even in the absence of credits.\(^{134}\) But, in \textit{Wynne}, the

\(^{130}\) \textit{See supra} Section II.D.

\(^{131}\) A-residents have no incentive to switch from state-B work to state-A work. If they work at home in state A, they receive a 5.26% wage increase that offsets their 5% tax; if they work in state B, they receive an unchanged tax-free wage. B-residents have no incentive to switch from state-A work to state-B work. If they work at home in state B, they receive an unchanged wage and pay a 5% tax; if they work in state A, they receive a 5.26% wage increase, pay a combined tax of 9.75% to the two states, and suffer a 5% net loss.

\(^{132}\) \textit{See generally} Hellerstein, \textit{Court’s Opinion in Wynne, supra} note 79, at 5 n.5 (discussing how “virtually all income tax crediting regimes operate”).

\(^{133}\) In \textit{Tyler Pipe Industries}, the Court suggested that Washington could correct the internal inconsistency of its manufacturing and wholesale taxes by providing credit for other states’ taxes. \textit{See} Tyler Pipe Indus. v. Wash. State Dep’t of Revenue, 483 U.S. 232, 249 (1987). The Washington legislature then did so. \textit{See} Hellerstein, \textit{Internal Consistency, supra} note 89, at 144 n.33.

\(^{134}\) \textit{See} JEROME R. HELLERSTEIN & WALTER HELLERSTEIN, \textit{STATE AND LOCAL TAXATION: CASES AND MATERIALS} 942–43 (Thomson/West, 8th ed.)
Supreme Court changed the landscape by shifting the focus away from multiple taxation and toward discrimination.135

C. Wynne: A Step in the Right Direction

In 2015, the Supreme Court invalidated Maryland’s state income tax system under the internal consistency test.136 Maryland’s state income tax, which applied to residents’ in-state and out-of-state income and nonresidents’ in-state income, had a top rate of 4.75% in 2006, the tax year at issue in Wynne.137 The state also collected a county income tax, with rates varying across counties in a range of 1.25 to 3.2%, which applied to residents’ in-state and out-of-state income.138 Nonresidents’ in-state income was subjected to state-collected county tax at a flat 1.25% rate.139 Residents received a credit for taxes paid to other states on out-of-state income, but the credit was limited to the state income tax liability imposed on the out-of-state income; the credit could not be claimed against the state-collected county income tax.140

In invalidating this system, the Court noted that neither Maryland nor the principal dissent questioned the internal consistency test’s “economic bona fides.”141 In explaining its use of the test, the Court suggested, with varying degrees of clarity, that the Maryland tax system’s flaw was discrimination against interstate commerce rather than the multiple taxation that the respondents

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136 Id. at 1803–04.
137 Md. TAX-GEN. CODE ANN. § 10-105 (2005); Wynne, 135 S. Ct. at 1793.
138 § 10-106(a)(1).
139 Id. at § 10-106.1.
141 Wynne, 135 S. Ct. at 1803.
emphasized. However, the Court did not fully elucidate nondiscrimination but simply equated it with internal consistency. Unfortunately, the context of Wynne—the provision of credits for taxes paid to other states—is one of the few contexts in which state taxes are interdependent and internal consistency therefore diverges from Commerce Neutrality.

In a five-four opinion authored by Justice Alito, the Court struck down Maryland’s tax system because it was internally inconsistent and therefore discriminatory. The Court distinguished the multiple taxation that resulted from such discrimination from the constitutionally permissible multiple taxation that may arise from interactions between states’ internally consistent nondiscriminatory tax systems. On a similar note, the Court alluded to “the critical

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141 The respondents’ brief stated the question in the case as “whether a state tax that exposes interstate commerce to double taxation is saved from invalidation under the Commerce Clause merely because the State imposes the tax upon its own residents.” Brief for Respondents, Comptroller of the Treasury of Md. v. Wynne, 135 S. Ct. 1787 (2015) (No. 13-485).

142 See supra Section III.A.

143 Wynne, 135 S. Ct. at 1804 (“[T]he internal consistency test reveals what the undisputed economic analysis shows: Maryland’s tax scheme is inherently discriminatory and operates as a tariff.”); see Tax Economists Brief, supra note 12; see Knoll-Mason Brief, supra note 57.

144 Wynne, 135 S. Ct. at 1803–04 (stating that the internal consistency test distinguishes “tax schemes that inherently discriminate against interstate commerce without regard to the tax policies of other States” from “tax schemes that create disparate incentives to engage in interstate commerce (and sometimes result in double taxation) only as a result of the interaction of two different but nondiscriminatory and internally consistent schemes”). The Court cited to Armco as recognizing that distinction. Id. at 1803. Despite the Court’s emphasis on discrimination, much of the early press coverage mischaracterized Wynne as a decision against multiple taxation. See, e.g., Roger Russell, Supreme Court Strikes Down Maryland’s Double Tax, ACCT. TODAY (May 18, 2015), http://www.accountingtoday.com/news/tax-practice/supreme-court-strikes-down-marylands-double-tax-74637-1.html; Richard Wolf, Supreme Court: Two States Can’t Tax the Same Income, USA TODAY (May 18, 2015), http://www.usatoday.com/story/news/nation/2015/05/18/supreme-court-double-taxation/22066863/; Lawrence Hurly & Will Dunham, U.S. Top Court Rules Against Maryland Over Double Taxation, REUTERS (May 18, 2015), http://www.reuters.com/article/2015/05/18/us-usa-court-tax-idUSKBN0O31G620150518. Some of the legal commentary described the decision in similar terms. See, e.g., Jasper Cummings, Internal Consistency and
distinction, recognized in cases like *Armco*, between discriminatory tax schemes and double taxation that results only from the interaction of two different but nondiscriminatory tax schemes."\(^{146}\) The Court also disposed of a discredited dictum stating that "it is not a purpose of the Commerce Clause to protect state residents from their own state taxes,"\(^{147}\) noting that it had "repudiated that dictum" in an earlier decision and that the dictum "must bow to the holdings of [the] many cases entertaining Commerce Clause challenges brought by residents."\(^{148}\)

Although the principal dissent objected to the Court’s supposed holding “that one of two States, the domiciliary State or the source State, must recede simply because both have lawful tax regimes reaching the same income,”\(^{149}\) the Court’s decision made clear that states with internally consistent (“lawful”) tax systems need not provide credits for other states’ taxes or otherwise recede to their systems.\(^{150}\) Rather, states with internally inconsistent systems, which are discriminatory and therefore not lawful, must remedy the inconsistency, through a credit or otherwise.\(^{151}\) Because the internal consistency test applies symmetrically to residence and source

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146 Id. at 1804.
149 Id. at 1813 (Ginsburg, J., dissenting).
150 Id. at 1805.
151 Id. at 1805–06.
taxation, the Court did not establish a “rule of priority” favoring source taxation.\textsuperscript{152}

Regrettably, the Court did not explain the relationship of the internal consistency test to the tax-rate condition involving the combined tax burden on inbound and outbound transactions. Rather than presenting even a short summary of the economic analysis supporting the internal consistency test, the Court simply referred readers to the Tax Economists Brief and the Knoll-Mason Brief.\textsuperscript{153} Indeed, the principal dissent accurately complained that the majority offered no economic analysis “beyond citation to a pair of amicus briefs.”\textsuperscript{154}

Because it equated neutrality with internal consistency, the Court did not mention, and may not have recognized that, in the context of credits for taxes paid to other states, internal consistency is insufficient to achieve complete neutrality.\textsuperscript{155} As a result, the Court did not identify the lingering discrimination that remains in place even with full credits. That discrimination should have been recognized, even if it would not be desirable to invalidate systems that offer full credits.

The \textit{Wynne} Court rejected Maryland’s partial-credit system that resulted in both discrimination and multiple taxation.\textsuperscript{156} It also rejected the taxpayers’ argument that each state has an unconditional duty to prevent multiple taxation, even if its tax system is neutral.\textsuperscript{157} Instead, the Court held that states could still discriminate to some extent, provided that multiple taxation was avoided, and internal consistency achieved, though full credits.\textsuperscript{158} That position is more

\textsuperscript{152} \textit{Id.} at 1804–05.

\textsuperscript{153} \textit{Wynne}, 135 S. Ct. at 1802, 1804 (citing Tax Economists Brief, \textit{supra} note 12; Knoll-Mason Brief, \textit{supra} note 57); \textit{cf.} Hellerstein, \textit{Court’s Opinion in Wynne}, \textit{supra} note 79, at 9 (“Interestingly, the Court never described the economists’ precise methodology.”).

\textsuperscript{154} \textit{Wynne}, 135 S. Ct. at 1822 n.7 (Ginsburg, J., dissenting).

\textsuperscript{155} \textit{Cf.} James W. Wetzler, \textit{Fixing Discrimination in New York’s Local Income Taxes}, 77 ST. TAX NOTES 263 (2015) (explaining that it is “unclear” whether the Court recognized the difference between internal consistency and neutrality).

\textsuperscript{156} \textit{Wynne}, 135 S. Ct. at 1795.

\textsuperscript{157} \textit{Id.} at 1804.

\textsuperscript{158} \textit{Id.} at 1806.
lenient than a complete commitment to Commerce Neutrality, which would invalidate state income tax systems that rely on credits to achieve internal consistency. Nevertheless, it is appropriate to refrain from invalidating such longstanding and widespread state practices.

The Wynne plaintiffs did not ask the Court to invalidate discriminatory state income tax systems that provide full credits, nor did the Tax Economists’ brief or the Knoll-Mason brief. Their reticence was well founded, as it would be unwise for the Court to strike down such a widespread and longstanding practice. The Court properly reject Maryland’s partial-credit system, which was significantly more discriminatory than full-credit systems and lacked the latter’s historical pedigree. Regrettably, however, the Court did not explain that full credits are insufficient for complete neutrality and that they are acceptable in the personal income tax context only because of their historical provenance. Instead, as noted above, the Court emphasized that full credits are sufficient for internal consistency, neglecting to mention that they are insufficient for neutrality.

D. The Path Forward After Wynne

The Court should accept discriminatory income tax systems that include both residence and source taxes, with residents’ in-state income taxed only once, so long as the state provides a full credit for taxes paid to other states. Although necessitated by history, the acceptance of discriminatory personal income tax systems with full credits raises complications that would not arise under a complete implementation of Commerce Neutrality.

An unresolved question concerns whether states must provide credit for income taxes imposed by municipalities in other states and whether municipalities that impose income taxes must grant credit for taxes imposed by other states. Under current practice, such

159 See supra text accompanying note 126 (noting that most states provide full credits).

160 Cf. Dep’t of Revenue of Ky. v. Davis, 553 U.S. 328, 357 (2008) (“[T]he fact that the system has been in force for a very long time is of itself a strong reason . . . for leaving any improvement that may be desired to the legislature.”).
credits are often denied.\textsuperscript{161} State and local governments will likely seek to maintain these practices on the ground that locally collected taxes are distinguishable from the state-collected county income tax considered in \textit{Wynne}.\textsuperscript{162} Courts should insist that taxes imposed by a state and its subdivisions (all of which are subject to the DCC) be aggregated.\textsuperscript{163} Of course, some local taxes are already neutral because they are purely residence-based or purely source-based and therefore need not provide credits.\textsuperscript{164} But, other localities impose both source and residence taxation, with residents’ in-city income taxed only once, and therefore must provide credits to achieve internal consistency.\textsuperscript{165}

Under current practice, credits are sometimes denied if the other state taxes a different, but related, party than the one taxed by the credit granting state, for example when one state taxes a trust and the other taxes a beneficiary.\textsuperscript{166} Credit may also be denied if the other state taxes the income in a different year than the crediting state.\textsuperscript{167} The courts will need to wrestle with the constitutionality of these limitations.

\begin{footnotesize}
\begin{enumerate}
\item[\textsuperscript{161}] HELLERSTEIN ET AL., supra note 124, at 400; Brief for the International Municipal Lawyers Association et al. as Amici Curiae Supporting Petitioner at 17–18, Comptroller of the Treasury of Md. v. Wynne, 135 S. Ct. 1787 (2015) (No. 13-485) (citing examples of states denying credit for out-of-state local taxes and localities denying credits against their taxes for out-of-state taxes); Jonathan Nehring, \textit{A Walk-Off Wynne for Professional Athletes}, 76 S. TAX NOTES 989, 990 (2015) (stating that such credit denials are “common”).
\item[\textsuperscript{163}] Cf. Hellerstein, \textit{Court’s Opinion in Wynne}, supra note 79, at 14 (“[F]or federal constitutional purposes, the distinction between state and local taxes has no meaning . . . the appropriate way to analyze [local] taxes is to consider them as part of the state’s tax structure.”); Nehring, supra note 161, at 990–91 (explaining that “it does not appear” that \textit{Wynne} ruling depended on tax being state-collected).
\item[\textsuperscript{164}] See, e.g., Wetzler, supra note 155, at 264 (noting that New York City’s general income tax applies only to residents and need not provide credit); Hellerstein, \textit{Court’s Opinion in Wynne}, supra note 79, at 14.
\item[\textsuperscript{165}] See, e.g., Hellerstein, \textit{Court’s Opinion in Wynne}, supra note 79, at 14–15 (discussing that feature of Kansas City, Missouri income tax).
\item[\textsuperscript{166}] HELLERSTEIN ET AL., supra note 124, at 399–400.
\item[\textsuperscript{167}] Id. at 397.
\end{enumerate}
\end{footnotesize}
Moreover, because each state provides credit only for other states’ taxes that it recognizes as “income taxes,” variations across states’ tax systems may preclude crediting.\textsuperscript{168} That limitation illuminates a fundamental conceptual weakness of the concept of multiple taxation, which condemns the imposition of two states’ taxes on a transaction only when the two taxes are similar in some vague sense. Note that the internal consistency test permits this type of limitation on credits because it assumes that other states’ tax systems are similar (indeed identical) to the challenged tax system. Courts must resist a formalistic application of internal consistency that would enable states to impose discriminatory taxes on narrow income categories while providing credits only for other states’ taxes that have an identically narrow scope.\textsuperscript{169}

None of these questions would arise if the Court insisted that each state impose personal income taxes that satisfy Commerce Neutrality, regardless of what other states do. Nevertheless, as discussed above, an insistence on complete neutrality is precluded by historical experience. On the other hand, unrestricted latitude for discriminatory personal income taxation would lead to economic and political Balkanization. Accordingly, courts must confront the above issues in the personal-income-tax context, unless Congress uses its Commerce Clause authority to resolve some or all of them.

To avoid these complications in other contexts, however, the Court must make clear that full credits for taxes paid to other states are generally insufficient to rehabilitate otherwise discriminatory tax systems. Full credits should be allowed to play that role only when sanctioned by longstanding historical practice, as is true in the context of personal income taxation and perhaps sales and use taxation.\textsuperscript{170} States should not be allowed to undermine the DCC by rehabilitating patently discriminatory taxes through the provision of narrow credits for identical taxes paid to other states. For example, a tax system that includes both an import and an export tariff should

\begin{footnotesize}
\textsuperscript{168} Id. at 400.
\textsuperscript{169} Cf. Wetzler, supra note 155, at 264–65 (urging that such a formalistic approach be avoided in designing potential credit against New York City’s unincorporated business tax).
\textsuperscript{170} States that impose use taxes on goods brought into the state generally grant credit for sales or use taxes paid to other states in which the goods were previously sold or used. Hellerstein et al., supra note 124, at 712–14.
\end{footnotesize}
not be upheld merely because it offers credit against the tariffs for any tariffs imposed by other states.  

Another source of discrimination in personal income taxation arises from states’ residence definitions. Many states subject an individual to residence taxation if she is domiciled in the state or if she spends a specified number of days, often 183, in the state. Such a definition is internally inconsistent and discriminatory; if every state adopted such a definition, an individual domiciled in one state and spending the majority of her time in another state would pay higher nationwide tax than someone who was domiciled and spent the majority of her time within a single state. Wynne’s revitalization of the internal consistency test provides a clear path to invalidate these internally inconsistent definitions.

V. FACIAL AND DE FACTO DISCRIMINATION

Policies that satisfy the tax-rate condition (1) are facially neutral between interstate and intrastate commerce. In some cases,

\footnotesize

171 New York has sought to rehabilitate an internally inconsistent tax based on capital or New York-based gross receipts by providing a credit for taxes paid to other states. Wetzler, supra note 155, at 266 n.16 (discussing New York Tax Law section 210-B.42). Commentators have recognized that credits cannot be used to cure DCC violations arising from internally inconsistent business income apportionment formulas. See, e.g., Hellerstein, Internal Consistency, supra note 89, at 186.


173 Cf. Hellerstein, Court’s Opinion in Wynne, supra note 79, at 16 (“Wynne has almost certainly increased the vulnerability of internally inconsistent residence definitions.”); Zelinsky, The Enigma of Wynne, supra note 172, at 819 (finding that Wynne “challenges [the] traditional understanding” that such definitions pose no constitutional problem); Rosen, supra note 172, at 745 (noting that Wynne creates “significant doubt” about validity of such definitions). But cf. Wetzler, supra note 155, at 265 (noting that the impact of Wynne on residence definitions is “matter of speculation”).
however, facially neutral policies should be struck down because they result in *de facto* discrimination against interstate commerce. Commerce Neutrality adopts a pragmatic approach to identifying these discriminatory policies. Before discussing such policies, it is useful to address the confusion about the meaning of facial discrimination.

**A. Understanding Facial Discrimination**

The Court has stated that measures that facially discriminate against interstate commerce are almost always invalid, but has not been clear about what facial discrimination means.\(^{174}\) Commerce Neutrality classifies a tax as facially discriminatory if a violation of the tax-rate condition (1) is apparent on the face of the statute.\(^{175}\) The Court has sometimes used the term in this sense. In *Tyler Pipe v. Washington*, the Court said that the tax invalidated in *Armco* was “discriminatory on its face” and implied that the same was true of the similar tax before it.\(^{176}\) Confusingly, however, the Court also said that the taxes “appeared” to be nondiscriminatory.\(^{177}\)

Under an alternative, formalistic, definition, a tax is facially discriminatory only if it singles out interstate transactions by name.\(^{178}\) That definition makes a tax system’s classification depend on its label, reviving the formalism repudiated in *Complete Auto*.\(^{179}\) Consider three tax systems. The first is a 20% uniform destination tax, accompanied by a 20% export tariff; here, the export tariff is facially discriminatory. The second is a 20% uniform origin tax, accompanied by a 20% import tariff; here, the import tariff is facially discriminatory. The third is a 20% tax that applies to any

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\(^{175}\) See supra Section II.B.


\(^{177}\) *Id.* at 241, 247–48.

\(^{178}\) See, e.g., Comptroller of the Treasury of Md. v. Wynne, 135 S. Ct. 1787, 1811 (Scalia, J., dissenting) (relying on formalistic definition to conclude that the Maryland income tax system did “not discriminate on its face against interstate commerce” and should be upheld).

good that is either purchased or sold by an in-state party. Under the formalistic definition, the third system is not facially discriminatory because it does not explicitly refer to imports or exports. Yet, all three tax systems are identical, apart from their labeling, as each of them imposes a 20% tax on imports, a 20% tax on exports, and a 20% tax on intrastate transactions. The tax-rate condition (1) rightly condemns all three variants on their face.

In Wynne, the Court appeared to entertain the possibility that the Maryland tax system “might have the advantage of appearing nondiscriminatory,” but insisted that it had to be struck down because it “operates as a tariff and discriminates against interstate commerce.”\(^{180}\) The Court said that the DCC regulates “effects, not motives” and that the tax system could not be upheld even if it was “not actually intended to discriminate against interstate commerce.”\(^{181}\) That is the right policy for facially discriminatory taxes, but things are more complicated when facially neutral taxes result in de facto discrimination against interstate commerce.

B. De Facto Discrimination

Facially neutral policies that apply only to particular transactions or taxpayers can sometimes impede interstate commerce. When such an effect is significant and does not arise from a legitimate state purpose, the tax should be viewed as a form of de facto discrimination against interstate commerce. It is simplest to discuss this issue in the context of taxes on the sale or purchase of particular goods.

Suppose that state A imposes a facially neutral destination tax (with the same tax rate on imports and intrastate transactions) on a good that it imports (and does not export) from state A, perhaps potatoes. As we explained in section II.C, there are potential price changes for which a destination tax leaves everyone’s incentives to engage in interstate commerce unchanged. As was shown in Table 1, that outcome requires a price increase for both intrastate purchases and imports of potatoes that fully reflects the tax.\(^{182}\) Then,

\(^{180}\) *Wynne*, 135 S. Ct. at 1804–05.

\(^{181}\) *Id.* at 1801 n.4.

\(^{182}\) See *supra* Section II.C.
no group of buyers or sellers has an incentive to switch between interstate and intrastate transactions in potatoes.

Nevertheless, switching from interstate to intrastate transactions is likely to occur in the overall economy. State-A buyers will switch from potatoes, which the tax has made more expensive, to untaxed goods. Potato imports will fall as part of the reduction in potato purchases, reducing interstate commerce. Purchases of other goods, some of which are exported, will rise. The increase in purchases of exported goods causes a reduction in exports (as more goods are sold at home rather than in other states), further reducing interstate commerce.

A destination tax that applies to a balanced mix of goods that the state imports and goods that it exports does not have these effects. To be sure, the taxed goods still become more expensive, buyers still switch from those goods to untaxed goods, and the reduction in purchases of those taxed goods that the state imports still reduces imports. However, the reduction in purchases of those taxed goods that the state exports increases exports. There is no reason to expect a systematic reduction in interstate transactions.

Like a destination tax on a good that the state imports, an origin tax on a good that the state exports tends to reduce interstate transactions. State-A sellers will switch from production of the exported good, thereby reducing exports, to production of untaxed goods, some of which are goods that the state imports, thereby reducing imports.

In summary, interstate commerce is generally reduced when states impose destination taxes on goods that it imports and origin taxes on goods that it exports. But, not all such taxes should be considered discriminatory. States often have permissible reasons to impose destination and origin taxes on some products but not others. For example, a state that happens to be a tobacco importer may impose a destination tax on tobacco to address the health effects arising from tobacco consumption within its borders. The tax is permissible because the state has a legitimate reason, unrelated to the fact that the state imports tobacco, for treating tobacco consumption differently from other consumption.

It will often be difficult to determine whether the state has a legitimate reason. As the Court commented in a different state tax context, “[d]iscrimination cases sometimes do raise knotty
questions about whether and when dissimilar treatment is adequately justified . . . hard calls can arise.”\textsuperscript{183} Although the Court has refused to inquire into legislators’ motives in some contexts,\textsuperscript{184} it is probably useful to consider both purpose and effect in this context, as the Court has done in cases challenging state regulations under the DCC.\textsuperscript{185} Indeed, in one DCC tax-and-subsidy case, the Court noted the need “for a sensitive, case-by-case analysis of purpose and effects.”\textsuperscript{186} The Court should generally defer to state tax policies, but should strike down laws that are clearly intended to reduce interstate trade by taxing the consumption of goods that the state imports or the production of goods that it exports.

The Court has vacillated between various levels of deference. In \textit{Bacchus Imports Ltd. v. Dias}, the Court appropriately struck down Hawaii’s destination liquor tax that exempted certain liquors produced only in Hawaii, noting that it was “undisputed that the purpose of the exemption was to aid Hawaiian industry.”\textsuperscript{187} The Court may have been excessively deferential in \textit{Commonwealth Edison Co. v. Montana} when it upheld Montana’s origin tax on coal, downplaying the fact that roughly 90% of Montana coal was exported from the state.\textsuperscript{188} The Court appropriately rejected a claim of de facto discrimination in \textit{General Motors v. Tracy}, where Ohio’s destination tax on natural gas exempted some sales by regulated utilities that were primarily in-state, but not sales by private suppliers that were primarily out-of-state.\textsuperscript{189} The Court found that the complexity and pervasive federal regulation of the utility

\textsuperscript{183} CSX Transp., Inc. v. Ala. Dep’t of Revenue, 562 U.S. 277, 297 (2011) (discussing 4-R Act).

\textsuperscript{184} See Arizona v. California, 283 U.S. 423, 455 (1930) (citing eleven cases, seven applicable to Congress and four applicable to state legislatures, in which the Court refused to inquire into legislative motives); Bogan v. Scott-Harris, 523 U.S. 44, 55 (1998); Tenney v. Brandhove, 341 U.S. 367, 377 (1951).

\textsuperscript{185} See, e.g., Kassel v. Consolidated Freightways Corp. of Del., 450 U.S. 662, 671–78 (1981) (Powell, J.) (plurality opinion) (striking down Iowa’s truck length limit based on both purpose and effects).


\textsuperscript{189} Gen. Motors Corp. v. Tracy, 519 U.S. 278, 288, 312 (1997).
PUTTING THE COMMERCE BACK IN THE DCC

markets was a permissible reason to distinguish between the two types of companies.190

Rather than targeting products, a state can target taxpayers. For example, interstate transactions will be reduced if a state imposes a facially neutral destination tax only on a group of taxpayers who primarily engage in inbound transactions or a facially neutral origin tax only on a group of taxpayers who primarily engage in outbound transactions. The principles discussed above also apply in that context.

VI. OUt-OFS TATER QUALITY AND SUBSIDIES

The Commerce Neutrality framework’s greatest contribution may be that it eliminates the confusion between neutral treatment of interstate and intrastate transactions—the relevant objective under the framework—and neutral treatment of in-state and out-of-state parties—an objective that no sensible tax or subsidy system can satisfy due to the inherent differences between in-state and out-of-state parties. Eliminating that confusion also resolves the quagmire that the Court and commentators have encountered in addressing subsidies.

The Court has sometimes described the DCC as requiring states to treat in-staters and out-of-staters equally.191 It has sometimes suggested that this principle is identical to nondiscrimination against interstate commerce.192 In other cases, the Court has viewed

190 Id. at 297–98, 303, 307.
191 The Court has said that the relevant DCC question is whether a tax “discriminates against out-of-state businesses.” Trinova Corp. v. Mich. Dep’t of Treasury, 498 U.S. 358, 361. Furthermore, it said that the DCC prohibits tax measures that “give . . . residents an advantage in the marketplace” by “conferring a commercial advantage over out-of-state competitors.” New Energy Co. of Ind. v. Limbach, 486 U.S. 269, 278 (1988). Finally, the Court said that the DCC prohibits measures that impose “greater burdens on economic activities taking place outside the State.” Westinghouse Elect. Corp. v. Tully, 466 U.S. 388, 404 (1984).
192 The Court has referred interchangeably to measures that “discriminate against interstate commerce” and “measures designed to benefit in-state economic interests by burdening out-of-state competitors.” Associated Indus. of Mo. v. Lohman, 511 U.S. 641, 646–47 (1994) (quoting New Energy, 486 U.S. at 273–74). Furthermore, the Court has defined discrimination “against interstate
Commerce Neutrality and out-of-stater equality as separate limitations, both of which must be satisfied by state taxes. A recent dissenting opinion recognized that neutrality toward interstate commerce is the right standard, saying that “the critical issue is whether the challenged legislation discriminates against interstate commerce” and that it is unimportant “whether those harmed by it reside entirely outside the State.”

In reality, there is no equivalence between a requirement that states be neutral between transactions that cross state lines and that they not discriminate against out-of-state parties. Commerce neutral taxes actually discriminate against in-staters and commerce neutral subsidies discriminate against out-of-staters. In contrast, import and export tariffs, the prototypical policies that discriminate against interstate commerce, are actually neutral between in-staters and out-of-staters, despite what initial appearances may suggest. A requirement that taxes and subsidies not discriminate against out-of-staters would lead to unacceptable results, validating tariffs and invalidating most subsidies.

Ironically, the problematic implications of the out-of-stater-equality principle have been widely recognized, particularly its implication that virtually all state subsidies violate the DCC. Indeed, critics of the DCC have repeatedly argued that the principle cannot be given a coherent interpretation and that the DCC should

commerce” as “differential treatment of in-state and out-of-state economic interests that benefits the former and burdens the latter.” Or. Wastes Sys. Inc. v. Dep’t of Envtl. Quality, 511 U.S. 93, 99 (1994) (alteration in original) (citation omitted). Some commentators and foreign courts have also treated the two criteria as interchangeable. See, e.g., SHAVIRO, FEDERALISM IN TAXATION, supra note 5, at 42, 44–45, 47–48 (referring to “discrimination against outsiders or interstate commerce” repeatedly). The European Court of Justice has held that member nations may not discriminate against nonresidents relative to residents or discriminate against residents’ cross-border activity relative to their domestic activity. Mason, supra note 80, at 1285–86.

193 Bacchus Imports Ltd. v. Dias, 468 U.S. 263, 268 n.8 (“[D]iscrimination between in-state and out-of-state goods is as offensive to the Commerce Clause as discrimination between in-state and out-of-state taxpayers.”).


195 See infra notes 224–26 and accompanying text.
therefore be abandoned.\footnote{See, e.g., Zelinsky, Restoring Politics to the DCC, supra note 5, at 36.} Supporters of the DCC have also displayed awareness of the out-of-stater-equality principle’s problems and have devised formalistic distinctions (particularly the tax-subsidy distinction) in a futile effort to allow the DCC to limp along while shackled to the principle.\footnote{See sources cited infra note 231.}

The problems with the out-of-stater equality principle do not require abandonment of the DCC. Instead, they require the abandonment of the out-of-stater equality principle, which offers incoherent policy prescriptions, has no grounding in the text of the Commerce Clause or in the Complete Auto test, and impedes rather than promotes the DCC’s purpose of preventing Balkanization. Shorn of this ill-conceived principle, the DCC can function perfectly well as a requirement that states not discriminate against interstate commerce. Moreover, that requirement can be applied impartially to taxes and subsidies.

\subsection*{A. Incoherence of the Out-of-Stater-Equality Principle}

A few simple examples readily demonstrate that Commerce Neutrality and out-of-stater equality yield dramatically different results and that the latter principle’s results, particularly its validation of export and import tariffs and its invalidation of commonplace state subsidies, are unacceptable.

\subsubsection*{1. Tariffs Do Not “Discriminate” Against Out-of-Staters}

The paradigm examples of taxes that violate the tax-rate condition and penalize interstate transactions are import tariffs that apply only to inbound transactions and export tariffs that apply only to outbound transactions.\footnote{See, e.g., Comptroller of the Treasury of Md. v. Wynne, 135 S. Ct. 1787, 1804 (“[T]ariffs are the paradigmatic example of a law discriminating against interstate commerce.” (alteration in original) (citation omitted)).} Yet, the consistent application of the out-of-stater equality principle would uphold import and export tariffs because, contrary to common intuitions, tariffs treat in-staters and out-of-staters equally.
To see this point, consider an analytically identical example that is uncontaminated by preconceptions about tariffs. Suppose that a state’s residents were divided into two groups, reds and greens, and that the tax system described in Table 5 was imposed on their transactions.

Table 5: Hypothetical Twenty Percent Tax

<table>
<thead>
<tr>
<th></th>
<th>Red Seller</th>
<th>Green Seller</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Red Buyer</strong></td>
<td>Zero</td>
<td>20 percent</td>
</tr>
<tr>
<td><strong>Green Buyer</strong></td>
<td>Zero</td>
<td>Zero</td>
</tr>
</tbody>
</table>

Because the tax treats the two groups symmetrically, they necessarily receive equal treatment. There is no sense in which reds receive better treatment than greens or vice versa. Transactions between two reds are treated the same as transactions between two greens; both are exempt. The unfavorable treatment of one type of transaction between the two groups does not favor either group over the other. The tax favors red sellers (whose sales are always exempt) over green sellers (for whom one type of sale is taxed), but it also favors green buyers (whose purchases are always exempt) over red buyers (for whom one type of purchase is taxed).

Now, consider a 20% import tariff, as shown in Table 6.

Table 6: Twenty Percent Import Tariff

<table>
<thead>
<tr>
<th></th>
<th>In-State Seller</th>
<th>Out-of-State Seller</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In-State Buyer</strong></td>
<td>Zero</td>
<td>20 percent</td>
</tr>
<tr>
<td><strong>Out-of-State Buyer</strong></td>
<td>Zero</td>
<td>Zero</td>
</tr>
</tbody>
</table>

Table 6 is identical to Table 5, except that greens are now in-staters and reds are now out-of-staters. The import tariff does not discriminate against out-of-staters any more than the tax in Table 5 discriminated against reds. In-staters and out-of-staters receive symmetrical treatment. Transactions between two in-staters are treated the same as transactions between two out-of-staters; both are exempt. The unfavorable treatment of one type of transaction between the two groups does not favor either group over the other.
The tax favors in-state sellers (whose sales are always exempt) over out-of-state sellers (for whom one type of sale is taxed), but it also favors out-of-state buyers (whose purchases are always exempt) over in-state buyers (for whom one type of purchase is taxed). It is straightforward to show that a similar analysis applies to export tariffs.

An import tariff’s flaw is not that it penalizes out-of-state production relative to in-state production; instead, its flaw is that it penalizes out-of-state production only when the buyer is in-state and thereby penalizes interstate transactions.\(^{199}\) In contrast, an export tariff actually penalizes in-state production relative to out-of-state production. Its flaw is that it penalizes in-state production only when the buyer is out-of-state and thereby penalizes interstate transactions. Commerce Neutrality allows states to favor or disfavor in-state production if they do so for all buyers or to favor or disfavor in-state buyers if they do so for all sellers.\(^{200}\)

Tariffs treat in-staters and out-of-staters equally, but destination taxes discriminate against in-staters. Transactions between two in-staters are taxed while those between two out-of-staters are exempt.\(^{201}\) The destination tax favors out-of-state buyers, whose purchases are never taxed, over in-state buyers, whose purchases are always taxed. The tax therefore bears more heavily on in-staters, as one would expect for a tax on their purchases.

Origin taxes also discriminate against in-staters, as transactions between two in-staters are taxed while those between two out-of-staters are exempt. The tax favors out-of-state sellers, whose sales are never taxed, over in-state sellers, whose sales are always taxed. The tax therefore bears more heavily on in-staters, as one would expect for a tax on their sales.

The failures of the out-of-stater-equality principle arise from its conjunction with the nexus requirement, which requires that extraterritorial transactions between two out-of-staters be untaxed.\(^{202}\) Equal treatment would require that transactions between two in-staters also not be taxed, which would leave only interstate

\(^{199}\) See supra Section II.B.


\(^{201}\) See supra Table 1.

\(^{202}\) See supra note 49 and accompanying text.
transactions to be taxed. Complying with the out-of-stater-equality principle would therefore require discrimination against interstate commerce.

The vice of tariffs is not that they discriminate against out-of-staters, which they do not, but that they discriminate against interstate commerce. Transactions between in-staters and out-of-staters are taxed more heavily than transactions within each group. Similarly, the vice of the tax in Table 5 is that transactions between reds and greens are taxed more heavily than transactions within each group. If the Court were to consistently apply the out-of-stater-equality principle, it would uphold import and export tariffs. Presumably, it would also uphold destination and origin taxes, because they discriminate against in-staters, not against out-of-staters. As a result, there would be no DCC scrutiny of state tax systems. Consistent application of the principles to subsidies, however, would be even more problematic.

2. Subsidies “Discriminate” Against Out-of-Staters

All realistic subsidies to goods and services violate out-of-stater equality. First, consider destination subsidies, which apply to purchases by in-staters, either from each other or from out-of-staters. Such subsidies “discriminate” against out-of-staters, as transactions between two in-staters, but not those between two out-of-staters, are subsidized. The subsidy favors in-state buyers, whose purchases are always subsidized, over out-of-state buyers, whose purchases are never subsidized. The subsidy therefore favors in-staters, as one would expect for a subsidy to their purchases.

Consider origin subsidies, which apply to sales by in-staters, either to each other or to out-of-staters. These subsidies also “discriminate” against out-of-staters, as transactions between two out-of-staters, but not those between two in-staters, are subsidized. The subsidy favors in-state sellers, whose sales are always subsidized, over out-of-state sellers, whose sales are never subsidized. The subsidy therefore favors in-staters, as one would expect for a subsidy to their sales.

The crucial feature of both subsidies is the zero subsidy rate for extraterritorial transactions. Just as the lack of a tax on extraterritorial transactions caused commerce neutral taxes to
“discriminate” against in-staters, the lack of a subsidy to extraterritorial transactions causes commerce neutral subsidies to “discriminate” against out-of-staters. Although the zero subsidy rate for extraterritorial transactions is not constitutionally required, no state will bestow its largesse on transactions to which its citizens are not parties. The application of the out-of-stater-equality principle to subsidies would lead to the unacceptable conclusion that the state must subsidize the entire world by aiding extraterritorial transactions on the same terms as intrastate transactions.203

Further problems arise because subsidies are merely negative taxes.204 A 10% destination tax, which is valid, is equivalent to a 20% destination tax and a 10% destination subsidy.205 But, the latter combination would be invalid under the out-of-stater-equality principle because the subsidy discriminates against out-of-staters. Indeed, simply reducing a destination tax from 20% to 10% could be viewed as discriminatory; because destination taxes discriminate against in-staters, reducing those taxes discriminates in favor of them. Similar conclusions would also hold for origin taxes. Police and fire protection and other public services provided only to in-staters would also be discriminatory.

It should not be surprising that state taxes tend to “discriminate” against in-staters, the parties whom the state has authority to tax, and that state subsidies tend to “discriminate” against out-of-staters, whom the state has no obligation to serve.

The Court has sometimes flirted with the principle of locational neutrality, which requires that taxes not distort where production occurs.206 The Court stated in one case that import tariffs are impermissible because they have the effect of “artificially encouraging in-state production even when the same goods can be produced at lower cost in other States” and having “distorting effects on the geography of production.”207 Because locational neutrality is satisfied by destination taxes and subsidies (residence taxes and

204 ROSEN & GAYER, supra note 46, at 340.
205 Ten percent is equal to 20% plus negative 10%.
206 See Mason & Knoll, Tax Discrimination, supra note 55, at 1043.
subsidies in the income-tax context), it avoids many of the problems posed by the out-of-stater equality principle. But, it would still preclude origin-based subsidies, such as the business incentive discussed below, and origin-based services such as police and fire protection. In any event, there is no constitutional basis for invalidating origin-based subsidies; they do not discriminate against inbound transactions, even though the latter are not subsidized. Because origin subsidies apply to outbound as well as intrastate transactions, they need not also apply to inbound transactions. The point resembles our conclusion that origin taxes do not favor inbound over intrastate transactions; because the taxes apply to outbound transactions, they need not also apply to inbound transactions.

Many commentators have noted that the out-of-stater-equality principle casts doubt on the validity of nearly all state subsidies. Because the Court has failed to distinguish out-of-stater equality from Commerce Neutrality, its treatment of subsidies has led it into a quagmire.

B. The Subsidy Quagmire

The Court has generally recognized that some subsidies violate the DCC, but has not been clear about which ones do so. Commentators have trenchantly criticized the Court’s lack of clarity and have suggested that the DCC should not apply to subsidies. But, these difficulties arise only under the out-of-stater-equality principle.

208 Mason & Knoll, Tax Discrimination, supra note 55, at 1046.
209 Moreover, economists tend to favor locational neutrality as a way to promote production efficiency. See id. at 1098 & n.232 (“[M]any economists are likely to view violations of locational neutrality as having the largest negative welfare consequences.”).
210 Cf. W. Lynn Creamery, Inc., 512 U.S. at 208 (Scalia, J., concurring) (“[A] State subsidy would clearly be invalid under any formulation of the Court’s guiding principle.”).
211 See supra Section III.A.
212 See, e.g., Dan T. Coenen, Business Subsidies and the Dormant Commerce Clause, 107 YALE L.J. 965, 971–73 (1998) (“On their face, state subsidies seem to violate this principle [that local businesses cannot be favored].”).
213 See Zelinsky, Restoring Politics to the DCC, supra note 5.
principle, and vanish under Commerce Neutrality, which draws the same clear distinction between permissible and impermissible subsidies that applies to taxes and permits the application of the internal consistency test.

1. Trying to Square the Circle

The DCC treatment of subsidies and tax incentives for in-state production is important because such provisions remain widespread, despite questions about their effectiveness and desirability. If the DCC requires equal treatment of out-of-state parties and production, nearly all of these incentives are vulnerable to challenge. To be sure, potential plaintiffs sometimes lack standing to challenge these programs. In Daimler Chrysler v. Cuno, the Supreme Court ruled that state taxpayers challenging an Ohio investment tax credit lacked Article III standing to sue in federal court based on its prior holdings that federal and state taxpayers do not have a sufficiently concrete and personalized interest to supply

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215 See, e.g., Walter Hellerstein & Dan T. Coenen, Commerce Clause Restraints on State Business Development Incentives, 81 CORNELL L. REV. 789, 790 (1996) (noting “large body of evidence that incentives have little effect on industrial location decisions” and arguing that incentives can distort resource allocation); Enrich, supra note 214, at 389–92 (surveying evidence and concluding that “state tax incentives are a thoroughly unproven tool for promoting economic development”); Klimmek, supra note 214, at 1116 (“[E]conomic research indicates that their effectiveness is limited.”); cf. Holcomb & Smith, supra note 214, at 1157–58 (“[T]here is sustained and vigorous debate about whether they work.”).

216 Enrich, supra note 214, at 433–40; Klimmek, supra note 214, at 1117–19.
standing to challenge spending programs.\textsuperscript{217} Cuno significantly restricts challenges to business tax incentives, although it does not necessarily preclude challenges in state courts with standing rules more lenient than Article III, as well as challenges by municipal taxpayers (who are not subject to the limits on state-taxpayer standing) and out-of-state companies.\textsuperscript{218}

Regardless of who may have standing, however, a coherent DCC jurisprudence must provide clear guidance on which subsidies and incentives are valid and which are not. The Court has failed to supply clear guidance in this area. It has recognized that the DCC allows states to subsidize in-state sellers to make the state a more attractive place to do business, stating that it is a “laudatory goal in the design of a tax system to promote investment that will provide jobs and prosperity to the citizens of the taxing State”\textsuperscript{219} and that it is “undisputed that States may try to attract business by creating an environment conducive to economic activity.”\textsuperscript{220} But, it has not made clear how these permissible measures can be distinguished from impermissible measures. Commerce Neutrality provides that distinction.

The Court has sometimes flirted with the unsustainable position that cash subsidies should be treated differently from tax reductions. In \textit{Camps Newfound v. Town of Harrison}, the Court suggested, without resolving the issue, that the DCC might permit Maine to subsidize only in-state camps serving residents if it provided direct cash payments rather than tax exemptions.\textsuperscript{221} In \textit{New Energy Co. v.
Limbach, the Court said that “direct subsidization of domestic industry does not ordinarily run afoul of” the DCC, but that “discriminatory taxation of out-of-state manufacturers does.”

Commentators under the thrall of the out-of-stater-equality principle have also been unable to provide clear guidance on subsidies. Because commentators have been unwilling to accept that all subsidies are permissible (which would permit any discriminatory tax reduction to escape DCC scrutiny by being relabeled as a subsidy) or that all of them are impermissible, they have been drawn to a variety of ill-defined principles for distinguishing permissible from impermissible subsidies. This doctrinal confusion has led to severe uncertainty about the validity of numerous business incentives. One commentator notes that “the constitutionality of state investment tax credits presents a hard case whose outcome is difficult to predict—an undesirable situation when billions of dollars of foregone tax revenue depend on the outcome.”

This confusion exists because subsidies cannot be coherently judged under the out-of-stater-equality principle. The solution is to

224 See, e.g., Coenen, supra note 212, at 1029 (noting the “need to sustain many state subsidy programs, while nonetheless imposing some limiting principle on them”); Hellerstein & Coenen, supra note 215, at 805 (“Our view rests in part on an instinctive sense that virtually all state tax incentives cannot really be unconstitutional.”).
225 One commentator advocates a four-pronged test that considers whether the subsidy allows residents to “reap what they have sown,” whether invalidation of the subsidy frustrate policy experimentation, whether undesirable political dynamics mark the subsidy, and whether the subsidy formally resembles a tariff. Coenen, supra note 214, at 969, 1031. Another commentator suggests invalidating subsidies that “achieve a substantial redirection of business to local producers at very little cost” to the state. Regan, supra note 116, at 1196. Another view would evaluate subsidies based on their general economic efficiency. Mark P. Gergen, The Selfish State and the Market, 66 Tex. L. Rev. 1097, 1107 (1988). Another approach condemns policies that condition reductions in preexisting tax liabilities on producing within the state. Hellerstein & Coenen, supra note 215, at 806–07.
226 Klimmek, supra note 214, at 1119; cf. Hellerstein & Coenen, supra note 215, at 791 (distinguishing between valid and invalid incentives under DCC is “perplexing” and “thorny” question).
jettison that principle and instead judge both taxes and subsidies on the basis of Commerce Neutrality. Like taxes, subsidies are commerce neutral if, and only if, the combined treatment of inbound and outbound transactions is at least as favorable as the treatment of intrastate transactions.

2. Commerce Neutrality to the Rescue

The tax-rate condition (1) applies without modification to subsidies, with subsidy rates treated as negative tax rates. The subsidy to intrastate transactions can be no greater than the combined subsidy to inbound and outbound transactions, similar to the neutrality condition for taxes. Destination and origin subsidies are commerce neutral for the same reason that destination and origin taxes are neutral. Because destination and origin subsidies are both commerce neutral, a combination of them is also commerce neutral. The irrelevance of multiple taxation, which we discussed in section II.D, also carries over to this context; if state A provides an origin-based subsidy and state B provides a destination-based subsidy, Commerce Neutrality holds even though a sale from B to A receives no subsidy.228

Commerce Neutrality is identical to internal consistency so long as a state’s subsidies do not depend on other states’ policies. A subsidy is valid if its universal adoption by all states would result in no greater subsidy for transactions within a state than for transactions between states.

States may provide extravagant subsidies to their citizens without having to subsidize extraterritorial transactions. But, if intrastate transactions are subsidized, then an equal subsidy must be provided, in combination, to inbound and outbound transactions. For example, a state may provide as large a subsidy as it wishes to residents’ apples purchases while refusing to give a penny to aid nonresidents’ apples purchases. The subsidy must nevertheless apply to the apples residents import from nonresidents as well as the

227 Other constitutional clauses, such as privileges and immunities and equal protection, may require a concept of out-of-stater equality, but it would need to be formulated in a manner that avoids the absurd results discussed in the text. The interpretation of these clauses lies outside the scope of this article.

apples they buy from fellow residents. A state may generously subsidize the production and sale of apples by residents without helping nonresidents who produce and sell apples, but the subsidy must apply to apples exported to nonresidents as well as to apples sold to fellow residents.

Under Commerce Neutrality, many state subsidies would be valid. Walter Hellerstein describes numerous subsidies for economic activity conducted within a state, including credits for new investment, research spending, hiring state residents, and construction or improvement of business facilities. These subsidies are permissible if they are available to everyone who engages in these activities within the state, both those engaged in intrastate and interstate transactions. A subsidy is invalid, however, if it applies only when both of two activities occur within the state. The subsidy to an intrastate transaction in which both activities are in-state then exceeds the combined subsidies of zero that apply to inbound and outbound transactions in which only one of the activities occurs in-state. For example, discrimination occurs if a company can receive a property tax reduction (beneficial only for in-state property) for increasing in-state employment. Such an incentive impedes interstate commerce by encouraging companies to locate property and employment in a single state rather than spreading them across different states.

Even a business incentive that applies to a single activity may be problematic if it is nonrefundable (the incentive can only be claimed against the taxpayer’s preexisting tax liability). Consider a nonrefundable credit for investment within the state. A subsidy for such investment by all parties, regardless of their other connections with the state, is commerce neutral. But, the nonrefundable credit is available only to those businesses that have sufficient income taxed by the state to generate tax liability against which the credit may be claimed. If the investment itself can be expected to generate sufficient taxable income to absorb the credit, then the credit is effectively available to anyone making the investment. Otherwise,


230 See Enrich, supra note 214, at 439 (noting internal inconsistency for tax preference that applies only when company operates in-state and shareholders live in state).
however, the credit subsidizes investment only by those with other activities in the state (on which tax is already owed) and discriminates against interstate commerce. The internal consistency test again reveals the problem; if every state copies this tax system, a business with investment in one state and other activities in a different state pays more nationwide tax than a business that does everything in a single state. Although nonrefundable tax incentives facially depart from neutrality, they should be upheld if the impact on interstate commerce is minor relative to the administrative and compliance costs of making the incentive refundable. As previously discussed, departures from neutrality are justified if the administrative costs of achieving neutrality are too large relative to the amounts involved.

Facially neutral subsidies can result in *de facto* discrimination against interstate commerce just as facially neutral taxes can. Interstate commerce is reduced when a state provides origin subsidies to goods that it imports, just as when it imposes destination taxes on those goods; the subsidies encourage in-state production of the goods, reducing the demand for imports of the goods. Conversely, interstate commerce is reduced when a state provides destination subsidies to goods that it exports, just as when it imposes origin taxes on those goods; the subsidies encourage in-state purchases of the goods, reducing the supply available for export. Our discussion of *de facto* discrimination in section V.B remains applicable here.

3. Resolving the *West Lynn Creamery* Enigma

This analysis resolves the perennial debate over *West Lynn Creamery v. Healy*, one of the Court’s most controversial and widely discussed DCC decisions. The state taxed all dealers of liquid milk, in-state and out-of-state, on sales to Massachusetts

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231 See id. at 436. Hellerstein and Coenen propose invalidating only those subsidies that are framed as a reduction in preexisting tax liability and conditioned on engaging in-state production. See Hellerstein & Coenen, supra note 215 and accompanying text. However, they indicate that they would invalidate a provision framed in this manner even if the subsidy was available to out-of-state businesses in some other form. Id. at 814–15.

232 See supra Section II.E.
retailers, with the tax proceeds deposited in a Dairy Equalization Fund used to pay cash subsidies to Massachusetts dairy producers. The Court assumed for purposes of analysis that the tax and subsidy would each be valid in isolation, but concluded, “[b]y conjoining a tax and a subsidy, Massachusetts has created a program more dangerous to interstate commerce than either part alone” and struck down the tax and subsidy on the ground that they combined to form an import tariff.

If Massachusetts had imposed a uniform destination tax on its residents’ purchases of all products and provided a uniform origin subsidy to its residents’ sale of all products, that combination would be commerce neutral because the tax and subsidy would each be neutral. Although tax would be imposed on all of the state’s imports, a subsidy would be provided to all of its exports. The tax-rate condition (1) would be satisfied because the tax burden on imports minus the subsidy to exports would equal the net tax burden on intrastate transactions (which would both pay the tax and receive the subsidy). Accordingly, Massachusetts’ destination tax and origin subsidy on milk were each facially neutral, as was their combination. The combination imposed a tax on milk imports and provided a subsidy to milk exports while applying both the tax and the subsidy to intrastate milk transactions.

The relevant issue was de facto discrimination. Milk was a good that Massachusetts imported. As discussed above, interstate commerce is reduced by either a destination tax or an origin subsidy on a good that a state imports. It is therefore reduced by the combination of those two measures.

The policy’s validity depended on whether Massachusetts was discriminating against interstate commerce or whether it incidentally reduced interstate commerce while pursuing permissible objectives (as in the example from section V.B of a tobacco-importing state imposing a destination tobacco tax for

233 W. Lynn Creamery, Inc. v. Healy, 512 U.S. 186, 190 (citing 1992 order issued by Massachusetts Department of Food and Agriculture).

234 Id. at 199–200.


236 Id. at 199 n.16 (“[I]t is undisputed that an overwhelming majority of the milk sold in Massachusetts is produced elsewhere.”).

237 See supra Sections V.B, VI.B.2.
health reasons). It seems unlikely that Massachusetts had legitimate reasons to discourage milk consumption or encourage milk production, let alone both, and it seems far more likely that it had the protectionist goal of reducing milk imports. Indeed, the state conceded that its purpose was “preserving the Massachusetts dairy industry,” which the Court interpreted to mean “protecting it from the rigors of interstate competition.” The tax and subsidy, though facially neutral, each had a negative effect on interstate commerce. The state’s decision to combine the measures made it easier to conclude that the negative effects were intended and that the state was engaging in de facto discrimination against interstate commerce.

VII. FAIR APPORTIONMENT AND EXTERNAL CONSISTENCY

Commerce Neutrality also permits the unification of the Court’s jurisprudence on fair apportionment with the remainder of its DCC jurisprudence. Apportionments are fair if they are commerce neutral, providing a combined treatment of inbound and outbound transactions that is at least as favorable as their treatment of intrastate transactions. The Commerce Neutrality framework reveals that some of the Court’s apportionment doctrines, particularly the external consistency test and the unitary-business principle, are misplaced, because they have no bearing on whether apportionment systems are commerce neutral. The complications and uncertainties posed by those doctrines therefore disappear under Commerce Neutrality.

The Complete Auto test treats fair apportionment as separate from nondiscrimination. The second prong in the Complete Auto test is fair apportionment, which requires state taxes to be “properly apportioned to local activities within the taxing [s]tate.” In Complete Auto, the Supreme Court justified the fair apportionment requirement as a means of ensuring that a state tax “does not

238 Id. at 204–05.
239 Complete Auto Transit, Inc. v. Brady, 430 U.S. 274, 279, 285 (1977) (noting that precedent has “sustained a tax against Commerce Clause challenge when the tax is applied to an activity with a substantial nexus with the taxing State, is fairly apportioned, does not discriminate against interstate commerce, and is fairly related to the services provided by the State”).
undertake to tax any interstate activities carried on outside the state’s borders.”

As discussed below, apportionment should not be viewed as a separate prong because unfair apportionment, properly understood, is a form of discrimination against interstate commerce that can be handled under the nondiscrimination prong.

A. Formulary Apportionment

The biggest debate over apportionment concerns how the income of interstate businesses is attributed among the different states in which they do business. States often employ formulary apportionment to allocate the income of interstate businesses.

Under formulary apportionment, a hypothetical liability is computed for a taxpayer based on its nationwide level of the taxed activity, usually income. A fraction of that hypothetical liability is then assigned to the taxing state based on the state’s share of one or more other activities (the apportionment factors). For example, under the traditional three-factor formula that states once commonly used, the share of a corporation’s hypothetical nationwide income tax liability assigned to a state equals one-third the state’s share of sales plus one-third its share of payroll plus one-third its share of property. Many states have moved away from the traditional three-factor formula by increasing the weighting on sales, with some adopting a single-sales-factor formula.

An analysis of formulary apportionment yields results similar to those obtained in section III.A: a formula satisfies Commerce Neutrality if it is internally consistent. Suppose, for example, that a state apportions business income based on sales and that a

240 Id. at 282 (quoting Memphis Nat. Gas Co. v. Stone, 335 U.S. 80, 96–97 (1948)).
242 See id.
243 Id. at 156; see, e.g., Container Corp. of Am. v. Franchise Tax Bd., 463 U.S. 159, 170 (1983).
244 HELLERSTEIN ET AL., supra note 124, at 469; SHAVIRO, FEDERALISM IN TAXATION, supra note 5, at 34.
corporation has 70% of its sales in the state and 30% elsewhere. The formula is internally consistent; if every state copied this formula and used the same tax rate, a corporation with all of its sales in one state would pay the same nationwide tax as one with the 70–30 split. Moreover, the tax increase from an inbound transaction in which the in-state sales fraction rises from 70% to 100% equals the tax savings from an outbound transaction in which the fraction falls from 100% to 70%, allowing incentives for both transactions to be preserved if the tax system causes in-state returns to rise by that same amount. Commerce Neutrality is therefore satisfied.

Although some apportionment formulas may not accurately reflect how income is generated, that is not a DCC problem. Inaccurate formulas generate economic inefficiencies, including incentives and disincentives for firms to merge, but without more, do not discriminate against interstate commerce. For example, a sales-apportioned income tax, a common target of criticism, economically resembles a sales tax in which the effective tax rate on sales varies across companies based on their sales-to-income ratios. But, the economic shortcomings of this rate variation are not a judicial concern. Just as a direct tax on sales to residents is commerce neutral, so too is an income tax apportioned on the basis of those sales.

The only caveat concerns de facto discrimination. If, for example, a state uses sales-factor apportionment for an income tax that applies only to producers of a good that the state imports, the tax reduces interstate commerce. That policy may be permissible or may be de facto discrimination, depending on the factors discussed in section V.B. Of course, the same possibility would exist for a simple destination sales tax that applied to that industry.

Although multiple taxation may arise from divergences in states’ formulas, that is not a DCC concern, as we explained in section II.D.

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That is just as well, because it would be difficult to prevent multiple taxation. It could be eliminated only by requiring all states to use a single formula, perhaps the “correct” or the most widespread formula, which would be incompatible with federalism. A more modest restriction would allow a range of formulas, but prohibit those outside the range. Such an approach would, at most, reduce rather than eliminate multiple taxation while still needlessly restricting states’ policy choices and forcing courts to make policy judgments about permissible formulas. As discussed below, the Court’s “external consistency” doctrine purports to follow the latter approach, but the Court has generally paid little more than lip service to that doctrine.\footnote{See infra Section VII.C.}

In summary, the DCC forbids apportionment formulas that are internally inconsistent or that result in \textit{de facto} discrimination against interstate commerce, but does not require that the formula be “correct” or uniform across states.

\section*{B. Internal Consistency and Apportionment}

The Court has long required that apportionment formulas be internally consistent. It first mentioned the internal consistency test in \textit{Container Corporation of America v. Franchise Tax Board}, an apportionment case. In that case, California’s use of the traditional three-factor formula satisfied internal consistency because its adoption by all states would result in a corporation being taxed once on its full income, regardless of whether its payroll, property, and sales were in the same state or different states.\footnote{See infra \textit{Container Corp. of Am. v. Franchise Tax Bd.}, 463 U.S. 159, 169–70 (1983).} Even those Justices who criticize the internal consistency test in other contexts accept its validity in apportionment cases.\footnote{See, e.g., \textit{Tyler Pipe Indus., Inc. v. Wash. State Dep’t of Revenue}, 483 U.S. 232, 256 (1987) (Scalia, J., dissenting); \textit{Armco, Inc. v. Hardesty}, 467 U.S. 638, 648 (1984) (Rehnquist, J., dissenting).}

In 1987, the Court used the internal consistency test to invalidate flat fees on truckers.\footnote{See \textit{Am. Trucking Ass’ns, Inc. v. Scheiner}, 483 U.S. 266, 284 (1987).} The Court said that where it was feasible to apportion, states could no longer rely on its past decisions upholding
flat, unapportioned fees.\textsuperscript{251} In 2005, however, the Court unanimously upheld Michigan’s flat $100 tax on trucks making commercial hauls from one location to another within the state (with no tax on trucks that merely crossed the state on interstate hauls).\textsuperscript{252} The Court found that the use of a flat rather than per-mile fee was appropriate because there was no evidence that the small fee had “any significant practical burden upon interstate trade”\textsuperscript{253} and because mileage-based apportionment would have required the state to create a data accumulation system, indicating that “the game is unlikely to be worth the candle.”\textsuperscript{254} The Court indicated that it was unwilling to strike down states’ “numerous flat fees.”\textsuperscript{255}

The Court has valid grounds for not insisting on burdensome apportionment mechanisms for small fees, in accord with the general principle that departures from neutrality are justified if the administrative concerns of achieving full neutrality are large relative to the taxes involved.\textsuperscript{256} However, the same latitude does not apply to larger taxes for which administrative costs are small relative to the taxes involved.\textsuperscript{257}

\textbf{C. External Consistency}

The Court’s misplaced concerns with correct apportionment and the prevention of multiple taxation has led it to a chimerical, but half-hearted, pursuit of “external consistency.” In \textit{Container Corp.}, the Court defined external consistency as the requirement that the

\begin{itemize}
\item \textsuperscript{251} Id. at 291–92.
\item \textsuperscript{253} Id. at 434.
\item \textsuperscript{254} Id. at 436.
\item \textsuperscript{255} Id. at 434.
\item \textsuperscript{256} See supra Section II.E. Although states could adopt less costly internally consistent apportionment methods, such as equal division among all states in which the trucker operated, they should not be required to adopt arbitrary formulas of that kind.
\item \textsuperscript{257} In \textit{Wynne}, the Court asserted that the tax in \textit{American Trucking II} did not violate the internal consistency test, Comptroller of the Treasury of Md. v. Wynne, 135 S. Ct. 1787, 1802–03 & n.7 (2015), a claim rightly rejected by the principal dissent. Id. at 1821 n.6 (Ginsburg, J., dissenting). The Court should have said that concerns about administrative costs could not justify the significant discrimination in the Maryland tax system challenged in \textit{Wynne}.
\end{itemize}
apportionment formula “actually reflect a reasonable sense of how income is generated.” Recognizing the “substantial margin of error inherent in any method” of apportionment, the Court said that a state’s formula would be invalid only if it “led to a grossly distorted result.” The Court accepted the traditional three-factor formula as a benchmark for constitutional apportionment, but made clear that variations were acceptable.

The Court has not been clear about when apportionment is required, permitted, or forbidden. Although it has paid lip service to the principle that states should use apportionment formulas that yield a reasonable approximation to correct results, it has generally yielded to the state’s choices. When it upheld Iowa’s single-sales-factor formula in Moorman Mfg. Co. v. Bair, the Court stated that “the income attributed to the State for tax purposes must be rationally related to values connected with the taxing State,” but devoted little attention to the merits of how Iowa allocated income. In Trinova Corp. v. Michigan Dep’t of the Treasury, the Court allowed Michigan to apportion its value added tax using the traditional three-factor formula, rejecting the taxpayer’s contention that specific components of value added should be allocated to the locations in which they arose. Similarly, in Amerada Hess Corp. v. Director, Div. of Taxation, N.J. Dept. of Treasury, the Court rejected the taxpayer’s claim that it was entitled to remove discrete components of income thought to have a clear cut location from the

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259 Id. at 184.
260 Id. at 170 (quoting Norfolk & W. R. Co. v. Mo. State Tax Comm’n, 390 U.S. 317, 326 (1968)).
apportionment base and insist that they be allocated to that location.\textsuperscript{264}

Upholding Oklahoma’s unapportioned tax on bus tickets sold within the state in \textit{Jefferson Lines}, the Court acknowledged that it had required apportionment for income taxes and gross receipts taxes.\textsuperscript{265} But, the Court also noted that it had “set a different course” for sales taxes on goods, permitting full taxation by the state in which the sale occurs,\textsuperscript{266} and reasonably concluded that those principles should also apply to sales taxes on services.\textsuperscript{267}

While eschewing a distinction between sales taxes on goods and sales taxes on services, the \textit{Jefferson Lines} Court left intact a distinction between sales taxes and income taxes, offering the halfhearted rationalization that, “[a] sale of goods is most readily viewed as a discrete event facilitated by the laws and amenities of the place of sale, and the transaction itself does not readily reveal the extent to which completed or anticipated interstate activity affects the value on which the buyer is taxed.”\textsuperscript{268} The Court’s decisions have left considerable doubt about which types of sales and gross receipts taxes need to be apportioned, a topic on which debate continues.\textsuperscript{269} Commerce Neutrality sweeps away these difficulties, allowing states to impose any of these taxes in any internally consistent manner, whether apportioned or not.

The Court’s most significant restriction on the mechanics of apportionment is its doctrine that related companies’ activities cannot be combined in the apportionment formula unless the companies are carrying on a unitary business.\textsuperscript{270} The Court has stated that limiting the apportionment formula to unitary businesses


\textit{See supra} section III.A.

\textsuperscript{266} \textit{Jefferson Lines}, 514 U.S. at 186–87.

\textsuperscript{267} \textit{Id.} at 188–89.

\textsuperscript{268} \textit{Id.} at 186.

\textsuperscript{269} \textit{See, e.g.}, Hellerstein, \textit{Internal Consistency}, \textit{supra} note 89, at 171–78 (discussing various factors that may be relevant); \textit{HELLERSTEIN ET AL., supra} note 124, at 758–61 (discussing various factors that may be relevant).

\textsuperscript{270} Walter Hellerstein, \textit{A Unitary Business is the “Linchpin of Apportionability,”} \textit{Not Nexus}, 67 ST. TAX NOTES 865 (2013).
is necessary to avoid inaccurate apportionments that result in states taxing “value or income that cannot in fairness be attributed to the taxpayer’s activities within the State.” In 1992, the Court emphatically reaffirmed a stringent version of the unitary-business requirement, holding that a state can combine companies’ activities in the apportionment calculation only if the companies feature functional integration, centralization of management, and economies of scale. The Court unanimously reaffirmed its strict view in *MeadWestvaco Corp. v. Illinois Department of Revenue*, holding that operational interdependence is not enough. The Commerce Neutrality framework permits the unitary-business doctrine, with all of its complications and ambiguities, to be discarded, enabling states to apply internally consistent apportionment formulas, whether or not a unitary business exists.

The Court needlessly invoked external consistency when it struck down California’s interest allocation rule in *Hunt-Wesson, Inc. v. Franchise Tax Board of California* based on its understanding that it allocated all interest expense deductions against non-unitary business income that California lacked the power to tax before allocating any against unitary business income that California had the power to tax. Using the language of external consistency, the Court condemned the rule as “unrealistic” and going beyond “reasonable bounds.” But, this appeal to external consistency was unnecessary. The rule, as understood by the Court, was internally inconsistent and could have been struck down on that ground.

272 Id. at 783 (citing Container Corp. of Am. v. Franchise Tax Bd., 463 U.S. 159, 179 (1983)).
275 *Hunt-Wesson*, 528 U.S. at 466.
276 Cf. McIntyre, *supra* note 274, at 1922 (noting that rule, as understood by the Court, was internally inconsistent, but arguing that rule, as correctly interpreted, was internally consistent).
Just as the Court has generally rejected complaints that apportionment formulas are incorrect, it has also generally rejected complaints that divergences between states’ formulas result in impermissible multiple taxation. The Court commendably recognized the irrelevance of multiple taxation in *Moorman v. Bair* when it upheld Iowa’s single-factor sales formula, stating that Iowa was no more at fault than Illinois for the fact that differences between the two states’ formulas caused the taxpayer to be taxed by both states.\(^{277}\) The Court rejected the idea that it should prevent multiple taxation by prescribing nationally uniform apportionment rules, concluding that the “Constitution has committed such policy decisions” to Congress.\(^{278}\) In *Jefferson Lines*, the Court acknowledged the possibility of multiple taxation because sales tax could be imposed upon delivery and income tax could be imposed on the seller’s income,\(^{279}\) but said that it “found a sufficient safeguard against the risk of impermissible multiple taxation of a sale in the fact that it was consummated in only one State,”\(^{280}\) which simply restates the internal consistency of taxing at the point of sale.

Commerce Neutrality permits a more straightforward analysis by categorically recognizing that multiple taxation is constitutionally innocuous, so long as each state’s apportionment system is nondiscriminatory.

As we discussed in section IV.C, the *Wynne* Court made several statements suggesting, with varying degrees of clarity, that multiple taxation arising from divergences between nondiscriminatory tax systems is not a DCC problem.\(^{281}\) If the Court fully embraces and adheres to that key insight, external consistency and multiple taxation are likely to play even smaller roles in future apportionment cases.\(^{282}\) The Court can focus its attention on preventing


\(^{278}\) *Id.* at 278–80.


\(^{280}\) *Id.* at 186–87.

\(^{281}\) Comptroller of the Treasury of Md. v. Wynne, 135 S. Ct. 1787, 1802 (2015) (dismissing concern about “double taxation only as a result of the interaction of two different but nondiscriminatory and internally consistent schemes”).

\(^{282}\) Cf. Zelinsky, *The Engima of Wynne*, supra note 172, at 810 (noting the possibility that *Wynne* jettisons external consistency); Hellerstein, *Court’s
discrimination against interstate commerce, the proper role of the DCC.

CONCLUSION

In this article, we have outlined a clear analytical DCC framework grounded in economic reality. The framework is grounded in a single clear rule derived from economic principles: a tax or subsidy system violates the DCC if its combined treatment of inbound and outbound transactions is less favorable than its treatment of intrastate transactions. Economic analysis reveals that such a tax or subsidy system unavoidably creates economic disincentives to engage in interstate transactions.

The Commerce Neutrality framework provides a coherent rationale for the Court’s oft-used internal consistency test, but discards other concerns, such as the prevention of multiple taxation and the ill-defined concept of external consistency. It exposes the deep flaws in the notion that the DCC requires equal treatment of in-state and out-of-state parties. That in turn permits a coherent resolution of the longstanding confusion about the treatment of subsidies under the DCC, enabling them to be evaluated on the same basis as taxes and thereby eliminating the formalistic tax-subsidy distinction. Commerce Neutrality is also rooted in the text of the Commerce Clause and serves the purposes of the DCC in ways that out-of-stater equality and other standards do not. In that respect, Commerce Neutrality puts the commerce back in the dormant commerce clause.

In Wynne, the Court took a major step towards a coherent DCC framework. As future cases, particularly those addressing the validity of state subsidies and business tax incentives, arise, courts can draw guidance from Commerce Neutrality. As we have shown in this article, Commerce Neutrality is nimble enough to evaluate the wide range of state policies challenged under the DCC. Adopting

Opinion in Wynne, supra note 79, at 10–11 (describing as a plausible, but not the only, interpretation of Wynne the principle that only internally inconsistent taxes can be invalidated as posing an unacceptable risk of multiple taxation, but that external consistency remains as a constraint on the correctness of the apportionment formula).
the Commerce Neutrality framework would make the DCC a coherent and useful part of constitutional jurisprudence.
Appendix: Deriving the Tax-Rate Conditions

Let $P_{AA}$ be the price (including all taxes) that buyers pay on state A’s intrastate transactions with the taxes in place, expressed as a ratio of the price that they would pay with no taxes. Let $P_{BB}$ be the price (including all taxes) that buyers pay on state B’s intrastate transactions with the taxes in place, expressed as a ratio of the price that they would pay with no taxes. Let $P_{AB}$ be the similar ratio for the price that state-A residents pay on purchases from state-B residents and $P_{BA}$ be the ratio for the price that state-B residents pay on purchases from state-A residents.

We denote the tax rates in the manner set forth in section III.A. As discussed in the text, they are quoted in tax-inclusive form. Each state’s tax rates on interstate transactions apply to the border prices (the payments made across state lines). State A’s tax on its residents’ purchases from state-B sellers applies to the total payment made to state B, including both the payment retained by the state-B seller and any tax collected by the state-B government. State A’s tax on its residents’ sales to state-B buyers applies to the payment received from state B and does not apply to any tax payment that the state-B buyer makes to the state-B government.

For the tax system to avoid giving anyone an incentive to switch from interstate to intrastate transactions, four conditions must hold, two pertaining to buyers and two pertaining to sellers.

First, the tax system must not give state-A buyers an incentive to switch from interstate purchases from state-B residents to intrastate purchases from other state-A residents. So, the price ratio for interstate purchases must be no higher than the price ratio for intrastate purchases,

\[(A1) \quad P_{AB} \leq P_{AA}.\]

Similarly, the tax system must not give state-B buyers an incentive to switch from interstate purchases from state-A residents to intrastate purchases from other state-B residents. So, the price ratio for interstate purchases must be no higher than the price ratio for intrastate purchases,

\[(A2) \quad P_{BA} \leq P_{BB}.\]
Third, the tax system must not give state-A sellers an incentive to switch from interstate sales to state-B residents to intrastate sales to other state-A residents. So, the after-tax payoff that state-A sellers receive from interstate sales must fall by no more than their after-tax payoff from intrastate sales,

\[(A3) \quad P_{BA}(1 - T_{BA})(1 - t_{BA}) \geq P_{AA}(1 - t_{AA}).\]

The left-hand side of (A3) states the net price received by state-A sellers on their interstate sales, after state B collects tax equal to $T_{BA}P_{BA}$ and state A collects tax of $t_{BA}P_{BA}(1 - T_{BA})$.

Fourth, the tax system must not give state-B sellers an incentive to switch from interstate sales to state-A residents to intrastate sales to other state-B residents. So, the after-tax payoff that state-B sellers receive from interstate sales must fall by no more than their after-tax payoff from intrastate sales,

\[(A4) \quad P_{AB}(1 - t_{AB})(1 - T_{AB}) \geq P_{BB}(1 - T_{BB}).\]

The left-hand side of (A4) states the net price received by state-B sellers on their interstate sales, after state A collects tax equal to $t_{AB}P_{AB}$ and state B collects tax of $T_{AB}P_{AB}(1 - t_{AB})$.

We now solve for the sets of tax rates for which possible prices exist that meet all four conditions.

First, use equation (A2) to rewrite equation (A3) as $P_{BB}(1 - T_{BA})(1 - t_{BA}) \geq P_{AA}(1 - t_{AA})$, which implies,

$$P_{BB} \geq P_{AA} \frac{1 - t_{AA}}{(1 - T_{BA})(1 - t_{BA})}$$

Then, use equation (A1) to rewrite equation (A4) as $P_{AA}(1 - t_{AB})(1 - T_{AB}) \geq P_{BB}(1 - T_{BB})$. Substituting in for $P_{bb}$ from the preceding equation yields,

$$P_{AA}(1 - t_{AB})(1 - T_{AB}) \geq P_{AA} \frac{1 - t_{AA}}{(1 - T_{BA})(1 - t_{BA})}(1 - T_{BB}).$$
Multiplying both sides of this inequality by \( \frac{(1-t_{BA})(1-t_{BA})}{P_{AA}} \) yields the following inequality (A5):

\[
(1 - t_{AB})(1 - T_{AB})(1 - T_{BA})(1 - t_{BA}) \geq (1 - t_{AA})(1 - T_{BB}).
\]

So, possible prices that allow conditions (A1) through (A4) to hold exist if, and only if, the two state’s tax rates satisfy condition (A5). If state B imposes no taxes, then neutrality is achieved if state A obeys the following condition:

(A6) \[ (1 - t_{BA})(1 - t_{AB}) \geq (1 - t_{AA}). \]

If state A imposes no taxes, then neutrality is achieved if state B obeys the following condition:

(A7) \[ (1 - T_{BA})(1 - T_{AB}) \geq (1 - T_{BB}). \]

Moreover, with both states imposing taxes, neutrality is achieved if each state obeys its condition.

For some purposes, it is useful to rewrite the nondiscrimination conditions (A6) and (A7). Subtracting one from both sides of each condition and multiplying by negative one (which reverses the direction of each inequality) yields conditions (1) and (2) presented in section I.B. If state A exactly meets its tax-rate criterion \[(1 - t_{BA})(1 - t_{AB}) = (1 - t_{AA}), \]
and state B exactly meets its tax-rate criterion, \[(1 - T_{BA})(1 - T_{AB}) = (1 - T_{BB}), \]
then inequality (A5) holds as an exact equality,

\[
(1 - t_{AB})(1 - T_{AB})(1 - T_{BA})(1 - t_{BA}) = (1 - t_{AA})(1 - T_{BB}).
\]

There is then a unique set of relative prices at which each group’s incentives for interstate commerce are maintained. Those prices are given by

(A8) \[ P_{AA} = P_{AB} = \frac{1}{1-t_{AB}}, \quad P_{BA} = P_{BB} = \frac{1}{1-T_{BA}}. \]

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283 The absolute level of prices, which would be determined by the Federal Reserve’s monetary policy response to the state taxes, does not matter. For example, commerce neutrality would still prevail if all prices were twice as large, or twice as small, as those set forth in (A8).
If tax rates exactly meeting the nondiscrimination conditions (A6) and (A7) are imposed and if the prices stated in (A8) result, then inequalities (A1) through (A4) all hold as exact equalities. It is easy to see from (A8) that (A1) and (A2) hold. Condition (A3) also holds, with state-A sellers receiving after-tax payoffs of $1 - t_{BA}$ on sales to either state-A buyers or state-B buyers. Condition (A4) also holds, with state-B sellers receiving after-tax payoffs of $1 - T_{AB}$ on sales to either state-A buyers or state-B buyers. So, each of the four groups has the same incentive to engage in interstate commerce with the taxes as it did without them, as required for commerce neutrality.

The taxes are likely to cause price changes approximately equal to the price changes set forth in (3). Otherwise, conflicting incentives would result. Suppose, for example, that $P_{AA}$ was higher than the value stated in (3) while the other prices were equal to the values stated there. Then, state-A sellers would have an incentive to switch into intrastate transactions and state-A buyers would have an incentive to switch away from them. But, it is impossible for the sellers to increase their intrastate transactions while the buyers reduce their intrastate transactions because they are the same transactions. So, even if the price changes differ from those given by (3), there would be no overall disincentive to engage in interstate transactions. For example, as noted above, if $P_{AA}$ was higher than the value stated in (3) and the other prices equaled the values stated in (3), then state-A sellers would have an incentive to switch from interstate to intrastate transactions, but state-A buyers would have an offsetting incentive to switch from intrastate to interstate transactions.