A BEAUTIFUL MEND: A GAME THEORETICAL ANALYSIS OF THE DORMANT COMMERCE CLAUSE DOCTRINE

MAXWELL L. STEARNS*

ABSTRACT

While the Commerce Clause neither mentions federal courts nor expressly prohibits the exercise of state regulatory powers that might operate concurrently with Congressional commerce powers, the Supreme Court has long used the dormant Commerce Clause doctrine to limit the power of states to regulate across a diverse array of subject areas in the absence of federal legislation. Commentators have criticized the Court less for creating the doctrine than for applying it in a seemingly inconsistent, or even haphazard

* Professor of Law, George Mason University School of Law. B.A., University of Pennsylvania, 1983; J.D., University of Virginia School of Law, 1987. I would like to thank Michael Abramowicz, Omri Ben Shahar, Evan Caminker, Lloyd Cohen, Hanoch Dagan, Andrew Daughety, Brannon Denning, Dharmika Dharmapala, John Duffy, Lee Epstein, D. Bruce Johnsen, Bruce Kobayashi, Peter Letsou, Saul Levmore, Erin O'Hara, Francesco Parisi, Eric Posner, Jennifer Reingenum, Ron Rotunda, Warren Schwartz, Mike Vandenbergh, Adrian Vermeule, Omri Yadlin, and Todd Zywicki for their helpful comments and suggestions. I benefitted from comments at the University of Chicago Constitutional Law Workshop, the University of Cincinnati College of Law Faculty Workshop, the George Mason Law School Faculty Workshop, the Georgetown Law School Law and Economics Seminar, the University of Michigan Legal Theory Workshop, the Midwest Political Science Association Annual Meeting, the Northwestern Law School Faculty Workshop, the Public Choice Society Annual Meeting, and the Vanderbilt Law School Legal Theory Workshop. I have also benefitted from the many comments of students over the years who have endured my insistence that the dormant Commerce Clause doctrine warrants top billing. Any remaining errors will be exacerbated in the motion picture.
way. Past commentators have recognized that a game theoretical model, the prisoners' dilemma, can explain the role of the dormant Commerce Clause doctrine in promoting cooperation among states by inhibiting a regime of mutual defection. This model, however, provides at best a partial account of existing dormant Commerce Clause doctrine, and sometimes seems to run directly counter to actual case results. The difficulty is not the power of game theory to provide a positive account of the cases or to provide the dormant Commerce Clause doctrine with a meaningful normative foundation. Rather, the problem has been the limited choice of models drawn from game theory to explain the conditions in which states rationally elect to avoid mutually beneficial cooperative strategies with other states. Professor Stearns shows how a state might avoid cooperation in a situation not captured in the prisoners' dilemma account to disrupt a multiple Nash equilibrium game, thus producing an undesirable mixed-strategy equilibrium in place of two or more available pro-commerce, pure Nash equilibrium outcomes. At the same time, the defecting state secures a rent that only becomes available as a consequence of the pro-commerce, pure Nash equilibrium strategies of surrounding states and that is closely analogous to quasi-rents described in the literature on relational contracting. The combined game theoretical analysis, drawing upon the prisoners' dilemma and multiple Nash equilibrium games, not only explains several of the most criticized features of the dormant Commerce Clause doctrine and several related doctrines, but also underscores the proper normative relationship between the dormant Commerce Clause doctrine and various forms of state law rent seeking.
A BEAUTIFUL MEND

TABLE OF CONTENTS

INTRODUCTION .......................................................... 5
I. THE DORMANT COMMERCE CLAUSE DOCTRINE:
   ANOMALIES AND INCONSISTENCIES .......................... 15
   A. The Dormant Commerce Clause Doctrine in the Marshall,
      Taney, and Fuller Courts .................................. 17
      Table 1: Marshall and Johnson Frameworks in
      Gibbons v. Ogden ............................................. 19
      Table 2: Commerce Categories ................................ 24
   B. A Brief Excursion on Congressional
      Commerce Clause Powers .................................. 25
   C. Return to the Dormant Commerce Clause Doctrine:
      The Modern Era ................................................. 29
      1. Statutes that Facialy Discriminate in Commerce ...... 31
         a. Waste Import Restrictions and
            Environmental Protection ............................... 31
         b. The Reciprocity Doctrine .............................. 39
         c. Tax and Rebates as the Functional Equivalent
            of Facialy Discriminatory Statutes ................. 40
      2. Facialy Neutral Statutes that Burden Commerce .... 43
         a. The Movement of Goods Cases ......................... 43
         b. Instrumentalities of Commerce Cases ............... 49
         Table 3: Dormant Commerce Clause Flow Chart ...... 56
      3. The Market Participant Exception to the
         Dormant Commerce Clause ................................ 57
      4. Article IV Privileges and Immunities .................. 62
      5. The Export Taxation Doctrine ............................ 64
         Table 4: The Dormant Commerce Clause and
         Related Doctrines: Inconsistencies Exposed .......... 66
II. A GAME THEORETICAL MODEL OF THE DORMANT COMMERCE
   CLAUSE DOCTRINE ............................................... 69
   A. A Brief Overview of the Model ......................... 71
   B. Developing the Game Theoretical Model ................ 82
      1. The Prisoners' Dilemma ................................ 82
         Table 5: The Prisoners' Dilemma ...................... 82
      2. The Multiple Nash Equilibrium Game .................. 89
         Table 6: The Driving Game ............................. 90
         a. Defining Other Forms of Rent ....................... 97
            Figure 1 .................................................. 98
         b. Defining Transactions Costs ....................... 102
         c. Empty Core Bargaining as a Transactions Cost ... 103
III. APPLYING THE GAME THEORETICAL MODEL:
THE DORMANT COMMERCE CLAUSE CASES REVISITED .......... 118
A. The Exceptions that Help Define the Rule:
Market Participation, Export Taxation, and
Article IV Privileges and Immunities ....................... 118
B. The Dormant Commerce Clause Cases Revisited .......... 123
1. The First Core Value: Inhibiting a Regime of
Mutual Defection in a Standard Prisoners' Dilemma .... 124
   a. City of Philadelphia Revisited ........................ 124
   b. West Lynn Creamery Revisited and Camps
      Newfound/Owatonna, Inc. v. Town of Harrison .... 126
   c. Summary ............................................... 129
      Table 7: The Prisoners' Dilemma Cases ............... 129
2. The Second Core Value: Restoring a Benign
Multiple Nash Equilibrium Game ............................ 130
   a. The Paradigm Cases ................................. 130
   b. A Comment on the Default Nature of the
      Dormant Commerce Clause Rules ..................... 133
   c. The Proxy Cases: The Extraterritorial
      Effects and Antitakeover Cases ..................... 136
3. The Hard Cases: Those Containing Elements of
Prisoners' Dilemma and Multiple Nash
Equilibrium Games ........................................ 142
   a. Hunt Revisited .................................... 142
   b. Exxon Revisited ................................... 143
   c. The Reciprocity Cases Revisited ................... 146
   d. Summary .............................................. 147
      Table 8: Multiple Nash Equilibrium Cases .......... 147
4. A Preliminary Assessment of Maine RX ................... 148
CONCLUSION ............................................. 154
I do not think the United States would come to an end if we lost our power to declare an Act of Congress void. I do think the Union would be imperiled if we could not make that declaration as to the laws of the several States. For one in my place sees how often a local policy prevails with those who are not trained to national views and how often action is taken that embodies what the Commerce Clause was meant to end.¹

In the 114 years since the doctrine of the negative Commerce Clause was formally adopted as [a] holding of this Court ... and in the 50 years prior to that in which it was alluded to in various dicta of the Court ... our applications of the doctrine have, not to put too fine a point on the matter, made no sense.²

INTRODUCTION

Describing the pivotal scene in A Beautiful Mind,³ the 2002 Academy Award winner for Best Picture, is perhaps more problematic for its mathematical than for its political incorrectness. The disturbed but brilliant John Nash, a mathematics graduate student at Princeton, is in a bar with four male classmates. The men spot a group of women that includes an extremely attractive blonde woman. One of Nash's classmates offers the following assessment: According to the teachings of Adam Smith, if all members of the group pursue the blonde woman, competition, or the invisible hand, will increase the likelihood that each man will achieve his desired goal of "scoring" with one of the women.⁴ In a burst of mathematical, if not hormonal, inspiration (Nash leaves the bar without pursuing any of the women), Nash suddenly realizes that this two century-old conventional economic wisdom—suggesting that competition produces the socially optimal result—is misplaced in this context. Nash then articulates what the movie presents as his core insight, justifying his receipt, some fifty years later, of the 1994 Nobel Prize in Economics.

¹. OLIVER WENDELL HOLMES, COLLECTED LEGAL PAPERS 295-96 (1920).
³. A BEAUTIFUL MIND (Universal Studios 2001).
⁴. For the original (and admittedly less intriguing) illustrations of the invisible hand proposition, see ADAM SMITH, AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS 291-92 (Kathryn Sutherland ed., 1993).
Nash counters his classmate by explaining that unlimited competition would prevent the five men from achieving their desired objectives. If all five men pursue the blonde woman, in their simultaneous pursuit they will block each other from succeeding with her. By pursuing that strategy, Nash continues, the men will offend the remaining women, none of whom would respond favorably to being considered a consolation prize. In this context, Nash suggests, competition threatens to produce an inferior result to that which the men could achieve if they instead coordinated their pursuits. According to Nash, if the men eschewed the blonde woman in favor of a coordinated effort in which each pursued one of the remaining women, each man’s prospect for success would significantly increase.

The purpose here, of course, is not to analyze boorish male behavior. Nor is it to defend the accuracy of this particular historical account, one that, at least for this viewer, seems implausible even for an earlier generation of Princeton mathematics graduate students. Rather, my objective is to compare the game theoretical insight presented in this now famous bar scene with the actual insight that gave rise to John Nash’s eventual receipt of the Nobel prize.

The bar scene reveals a coordination difficulty that the men appeared to confront in their efforts to secure their individual objectives. Absent coordination, given their first choice strategies, the prospect for success by each individual actor was substantially lower than with coordination. The problem of coordinated strategies is not uncommon to game theory; indeed it lies at the base of what is likely the most well known game—the prisoners’ dilemma.

In the standard prisoners’ dilemma game, the inability of two prisoners to coordinate their behavior or to enforce any prior agreements, yields an outcome for each that is inferior to that which would have been available had the prisoners followed a strategy of mutual cooperation. In this familiar game, each prisoner is informed that she will receive a modest sentence if neither prisoner rats out the other; that she will be let free if she alone rats out the other prisoner, while the other prisoner will get a maximum

5. It is noteworthy that this scene is not recounted in Sylvia Nasar’s 1998 book, A BEAUTIFUL MIND, which provided the basis for the movie.

6. As explained below, not only does this fail to capture Nash’s true insight, but also, it might not accurately characterize the incentives in the bar scene game. See discussion infra Parts II.B.1, III.B.1.c.
sentence; and that both will receive a significant sentence short of the maximum if both rat out the other. Behaving rationally, each prisoner has an incentive to defect because, regardless of what the other prisoner does, she can reduce her sentence by being an informant. The problem that the prisoners' dilemma reveals is that with the given payments, the players cannot achieve the potential superior outcome in which both remain silent and thus both receive modest sentences because they are unable to coordinate their behavior.

The bar scene itself does not necessarily depict a prisoners' dilemma. Without any coordinated effort, any one (or more) of the mathematics graduate students could increase his prospect of succeeding with a woman other than the blonde woman by pursuing that strategy individually. His payoff from following that strategy is therefore independent of whether the other men pursue the same strategy. For our immediate purpose, however, it is sufficient to note that participants in cooperation/defection games of this sort confront incentives that threaten to produce payoffs inferior to those otherwise available if the participants are unmotivated (as might have been the case in the Princeton bar), or unable (as in the prisoners' dilemma), to coordinate their behavior.

At least one prominent game theorist has observed that the bar scene in A Beautiful Mind fails to accurately capture the true mathematical insight that resulted in Nash's receipt of the Nobel Prize. Nash's foundational insight was not in recognizing that individuals can improve their positions by adopting cooperative strategies. Rather, it was in finding a solution that works in every possible game precisely because it does not require any coordination

---

7. For a more formal presentation of the prisoners' dilemma game, see discussion infra Part II.B.1.
8. It is, of course, the relationship between the payments, rather than the nominal payments, that produces the prisoners' dilemma.
9. This assumes that if two or more men pursue a woman other than the blonde woman, they will not pursue the same woman. If they did pursue the same woman, they would confront anew the same coordination difficulty with regard to her that confronted them in their efforts to pursue the blonde woman.
10. See How Bad Things Can Happen, NEWSWEEK INT'L, Mar. 25, 2002, at 74 (presenting critical interview with Stanford game theorist Paul Milgrom). Because the bar scene was intended to convey the circumstances under which John Nash developed his first mathematical breakthrough as a student at Princeton, I do not consider the implications of this scene for his later axiomatic bargaining theory. For a general discussion describing the relationship between the two theories, see GAME-THEORETIC MODELS OF BARGAINING 1-2 (Alvin E. Roth ed., 1985).
between or among the players. To illustrate, it will be helpful to introduce another familiar, but contrasting, game involving driving.

In the driving game, two drivers are trying to devise a rule or custom that optimizes their payoffs, and in doing so recognize the need to anticipate or otherwise account for the other driver's behavior. If we assume that the drivers are generally indifferent to left or right driving, but are concerned about personal safety, then the second driver will optimize her payoffs by mimicking the first driver's behavior, whether the initial regime is left or right. Unlike the prisoners' dilemma game, in which the payoffs produce a single dominant outcome—mutual defection—in the driving game, the payoffs produce two possible stable outcomes: right-right or left-left. The alternative mixed strategies—right-left or left-right—produce payoffs that either of the two drivers can improve by changing to the other's chosen regime.\(^\text{11}\) Most importantly, the higher payoffs are achieved without the players formally coordinating their behavior. Nash's core insight was that there is a unique solution (as in the prisoners' dilemma), or a set of available solutions (as in the driving game), that is a stable equilibrium because it produces maximum payoffs for each player given the likely strategies of the other players in the absence of any coordination with the other players.

This brief introduction to cooperative and non-cooperative games provides an apt prelude to the dormant Commerce Clause doctrine and to the game theoretical analysis of that doctrine offered in this Article. The dormant Commerce Clause doctrine has long been the subject of two lines of judicial and academic criticism. First, while Article I, section 8 grants Congress the power "[t]o regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes,"\(^\text{12}\) it says nothing of the power of federal courts to strike down state laws found to undermine some conception of political or economic union when Congress is silent.\(^\text{13}\)

---

\(^{11}\) This is not to suggest that whenever players confront a multiple Nash equilibrium game, the result of their uncoordinated efforts is invariably a pure Nash equilibrium. A mixed-strategy equilibrium can arise if the parties incorrectly guess at each other's behavior, and lack an opportunity to correct their chosen regime after the fact. For a more detailed discussion and an explanation of why this problem is unlikely in the dormant Commerce Clause doctrine context, see infra note 2266.

\(^{12}\) U.S. CONST. art. I, § 8, cl. 3.

\(^{13}\) Scholars are divided as to whether the Commerce Clause is intended to facilitate political union, and thus to prevent intentional discrimination that might foment retaliatory measures by disadvantaged states, or whether the clause is intended to facilitate economic union and the notion of specialization and exchange (also referred to as comparative
Indeed, the Commerce Clause neither mentions federal courts nor expressly prohibits the exercise of state regulatory powers that might operate concurrently with federal Commerce Clause powers. Second, critics have questioned the doctrine’s effectiveness. One need not be a law and economics enthusiast to appreciate the inherent normative appeal of an open national market,¹⁴ one that is unhindered by costly and obstructive state-imposed barriers to trade.¹⁵ But assuming that to be the goal, then a doctrine that is

¹⁴. Economists characterize this in terms of promoting “comparative advantage.” The critical insight is that one can have an absolute advantage in two endeavors and still benefit from specializing in one, and trading with another who, although less skilled in the other in absolute terms, possesses a comparative advantage in it. Comparative advantage is, of course, the flip side of the economic concept of “opportunity cost.” If I am an outstanding rock musician and typist, the opportunity cost of typing is simply too high for me to forgo being a rock musician. Even if I have to hire someone who is slower at typing and who makes more mistakes, the typist and I will both be better off if we each pursue our respective comparative advantages.

¹⁵. Indeed, Justice Thomas, who ranks among the conservative detractors on the present Court with respect to the dormant Commerce Clause doctrine, has conceded its normative merit, observing that despite its absence of a textual basis, the rulings are both “intuitively ... desirable” and “constitutionally correct.” Camps Newfound/Owatonna, Inc. v. Town of Harrison, 520 U.S. 564, 618 (1997) (Thomas, J., dissenting) (emphasis omitted). Of course the normative merit of an analysis like that associated with the dormant Commerce Clause doctrine is by no means limited to interstate trade. For two articles on GATT that complement the game theoretical analysis of the dormant Commerce Clause doctrine set out in this Article, see John O. McGinnis & Mark L. Movsesian, The World Trade Constitution, 114 HARV. L. REV. 511, 526-27 (2000) (offering Madisonian vision of GATT); Warren F. Schwartz & Alan O. Sykes, Toward a Positive Theory of the Most Favored Nation Obligation and Its Exceptions in the WTO/GATT System, 16 INTL REV. L. & ECON. 27, 39-42 (1996) (using free rider analysis to explore incentives under most favored nation treaties).
pervasively viewed as "incoherent"\(^{16}\) and "hopelessly confused"\(^{17}\) seems unlikely to achieve it.

Despite these general criticisms of the doctrine, in the name of the dormant Commerce Clause, the Court has significantly limited the power of states to regulate across a wide range of subject areas, including train\(^{18}\) and truck\(^{19}\) safety, imports\(^{20}\) and exports\(^{21}\) of myriad goods and services, the conditions for the intake\(^{22}\) and outflow\(^{23}\) of solid and liquid waste, and insurance\(^{24}\) and corporatel\(^{25}\)

---

16. See, e.g., Brian C. Newberry, Taking the Dormant Commerce Clause Too Far? - West Lynn Creamery, Inc. v. Healy, 114 S. Ct. 2205 (1994), 69 TEMP. L. REV. 547, 556 (1996) ("Whether the issue is state taxation, state environmental regulation, truck safety, or something else, the cases have continually been decided on an ad hoc basis with the result being that there is no coherent theory for the Court to follow."); Winkfield F. Twyman, Jr., Beyond Purpose: Addressing State Discrimination in Interstate Commerce, 46 S.C. L. REV. 381, 383 (1995) (describing dormant Commerce Clause doctrine as incoherent).


19. See, e.g., Kassel, 450 U.S. at 665, 669 (striking down Iowa statute that prohibited, with exceptions, the use of sixty-five foot twin trailers); Bibb v. Navajo Freight Lines, Inc., 359 U.S. 520, 523, 530 (1959) (striking down Illinois statute requiring the use of curved mudflaps when surrounding states required or permitted straight mudflaps).


25. See CTS Corp. v. Dynamics Corp., 481 U.S. 69, 94 (1987) (sustaining Indiana antitakeover statute that permitted control shares in Indiana corporation to be voted only if other shareholders passed approving resolution); Edgar v. MITE Corp., 457 U.S. 624, 646 (1982) (striking down Illinois statute which allowed secretary of state to block tender offer upon finding failure to provide full and fair disclosure of material information or inequity,
law. In virtually every case, the defending state claimed that the challenged law was a valid exercise of traditional police powers, and is thus protected by the Tenth Amendment. The Court's seeming inconsistency in evaluating this defense has confounded both jurists and legal scholars.

This Article's thesis is that viewed through the lens of game theory, the dormant Commerce Clause doctrine proves neither "incoherent" nor "hopelessly confused." Quite the contrary, the dormant Commerce Clause doctrine, properly understood, furthers a vital set of objectives associated with political—as distinguished from economic—union between and among the states. This Article will reveal that the dormant Commerce Clause cases can be cast along two analytical dimensions, both sharing a common end point. While the dormant Commerce Clause doctrine does not target ordinary in-state wealth transfers from diffuse to organized groups, it does target two specific types of rent-seeking laws that have the significant potential, if sustained, to compromise the political relationships between and among states.

The first dimension of dormant Commerce Clause cases involves state laws—most prominently tariffs and subsidies—that because they are obviously economically motivated would, if sustained, encourage adversely affected out-of-state interests to attempt to secure reciprocal protections in their own states. In the absence of benign dormant Commerce Clause intervention, the result of this state-based prisoners' dilemma game would be one of mutual defection. And this is so even though it can be demonstrated that all states would be better off in the absence of such obvious protectionist measures. Indeed, as the Oliver Wendell Holmes quote makes plain,26 this familiar account is often presented as the paradigmatic justification of the dormant Commerce Clause doctrine. This Article will show that while significant to the overall objectives of the dormant Commerce Clause doctrine, this category represents but a slice of the most significant modern cases.

The second dimension involves laws through which individual states undermine other states in their efforts to adopt common pro-commerce strategies that represent one of two or more stable, pure Nash equilibrium outcomes. While the rents pursued in these cases are not always apparent, for our immediate purposes it is sufficient to observe that a phenomenon much like efforts to secure

---

26. See supra note 1 and accompanying text.
appropriable quasi-rents in relational contracting can arise when the relationship between two or more states creates an opportunity for another state to undermine the resulting gains from the common regime simply by adopting a contrary law. When this occurs, the motivation is not to secure the benefits flowing from the particular contrary regime (had the other states started with the contrary regime, the state whose law is challenged would still have an incentive to defect), but rather it is to appropriate the gains that other states have made available through the adoption of a common pro-commerce strategy. Thus, when several states permit combined trucks of a particular length, a certain type of mudflap, or trains that meet particular specifications, a state that seeks to minimize its own contribution to facilitating a regime of interstate commerce can upset the resulting gains simply by adopting a contrary regime, even if the contrary regime has nothing more to commend it than that adopted more generally by other states. In these cases, when the Supreme Court strikes down the challenged law on grounds that it “burdens” commerce, in effect the Court facilitates a benign multiple Nash equilibrium game, one that presumptively takes strategies inducing a mixed-strategy equilibrium outcome off the table, but that also effectively ratifies the choice of the early movants followed by other states. It does so not because the chosen regime is superior to the alternative, but rather because the commonality of the regime is more important than the particular choice of regime. In effect the Court tells the state whose law is under review that while the states are free to choose any of two or more available pure Nash equilibrium outcomes, individual states are not free, after a common regime is in place, to supplant other states’ pure Nash equilibrium outcome with a mixed-strategy equilibrium, at least absent a sufficient demonstration that the nonconforming state’s motivation is other than to disrupt a pure Nash equilibrium strategy.

27. See infra notes 234, 236-38, 271-73 and accompanying text.

28. The rule is presumptive because it applies when the state inducing a mixed-strategy equilibrium cannot justify the nonconforming rule on grounds of that rule’s superiority, but rather has selected it based solely or primarily for its nonconformity with the laws or dominant practices of other affected states. The Supreme Court is less likely to apply the presumptive prohibition provided that the state whose law is challenged can demonstrate that its nonconforming rule is superior for reasons other than the benefits flowing from the simple act of defecting from a pure Nash equilibrium outcome with respect to other states. Cf. Bibb v. Navajo Freight Lines, Inc., 359 U.S. 520, 530 (1958) (asserting that “a new safety device—out of line with the requirements of the other States—may be so compelling that the innovating State need not be the one to give way”); see also infra note 359.
Perhaps the most significant insight of this Article is that while the Supreme Court has employed the dormant Commerce Clause doctrine to target those narrow forms of rent seeking through which individual states encourage other states to adopt comparable anti-commerce, protectionist measures, or through which individual states undermine other states' common pro-commerce strategies, the dormant Commerce Clause doctrine is not targeted against rent seeking as such. The common end point for each of these two prohibited dimensions of rent seeking under the dormant Commerce Clause doctrine involves the successful efforts of organized in-state interests to secure rents at the expense of diffuse constituents, when the resulting laws, although costly and inefficient, are not likely to motivate other states to confer reciprocal protections, and when the result does not undermine the common pro-commerce strategies of other states. Simply put, the dormant Commerce Clause doctrine is not a subterfuge for economic substantive due process. Rather, it aims to further interstate commerce. As a result, the Supreme Court has employed the doctrine to target those state rent-seeking laws that, if sustained, would compromise commerce respecting other states either by encouraging them to enact comparably undesirable laws or by undermining a desirable common pro-commerce regime that is already in place.

Jurists and legal scholars have long condemned the dormant Commerce Clause doctrine because of its dubious textual basis and because of the apparent haphazard manner in which it is applied. In this Article, I show that the latter claim does not withstand careful scrutiny. A game theoretical analysis of the dormant Commerce Clause doctrine shows that while the Court could improve its application of the doctrine in discrete areas, it has applied the doctrine in a manner that is generally coherent and that furthers credible and important objectives associated with interstate commerce. As for the claim of textual illegitimacy, the answer rests on one's willingness to afford the Court power when the Constitution itself is either ambiguous or broadly worded. The primary mission of this Article is to offer a positive account of the dormant Commerce Clause doctrine, one that explains even the most controversial cases. In so doing, the Article offers a sound, normative basis for this extremely important doctrine. In short, while it might have been preferable for the Framers to have

29. See supra notes 15-16 and accompanying text.
expressly afforded the federal judiciary dormant Commerce Clause power, this Article explains why, in the absence of such an expression, the dormant Commerce Clause doctrine as currently applied represents "A Beautiful Mend" that helps to further the Constitution's overriding commitment to a strong political union between and among the states.

While the game theoretical model of the dormant Commerce Clause will not eliminate all of the doctrinal anomalies, the anomalies that it does explain are of central importance to existing debates over the doctrine's proper scope, its normative underpinnings, and its coherence. Most notably, the model provides a foundation for the exceptions to the dormant Commerce Clause doctrine as well as the dormant Commerce Clause doctrine itself. In addition to explaining the two dominant dimensions of dormant Commerce Clause jurisprudence described above, I will provide a positive explanation of such related doctrines as: (1) state as market participant, a much contested exception to dormant Commerce Clause scrutiny; 30 (2) Article IV Privileges and Immunities, a clause that has been used as a limited de facto exception to the market participant doctrine with the effect of restoring the functional equivalent of dormant Commerce Clause scrutiny; 31 and (3) export taxation, a doctrine that appears to allow states to impose significant burdens on commerce with minimal judicial scrutiny. 32

While it is commonplace in the dormant Commerce Clause literature to cordon off these separate doctrines, and to limit the analysis that has been offered only to the dormant Commerce Clause cases, 33 or to a subset of those cases, 34 this Article deliberately takes the opposite approach. Rather than dismissing these doctrines summarily at the end, the game theoretical model

30. See infra Parts I.C.3, III.A.
31. See infra Parts I.C.4, III.A. The doctrine is limited because it does not apply to corporations and because it only applies to fundamental rights. See Paul v. Virginia, 75 U.S. (8 Wall.) 168 (1868).
32. See infra Parts I.C.5, III.A.
33. See, e.g., Michael A. Lawrence, Toward a More Coherent Dormant Commerce Clause: A Proposed Unitary Framework, 21 HARV. J.L. & PUB. POL'Y 395, 462 (1998) (noting that the author's proposed "Unitary Framework [offered to explain the dormant Commerce Clause doctrine] does not apply ... to two sorts of state regulations impacting interstate commerce: (1) state regulations involving taxation; and (2) state regulations where the State is a 'market participant'").
takes them head-on. After all, the analysis that I offer cannot be described as robust if it loses its explanatory force simply because the Court has invoked an alternative doctrinal label in characterizing the operative case facts. In fact, the game theoretical model is strengthened when the scope of inquiry is broadened to include these doctrinal exceptions.

The Article proceeds in three Parts. In Part I, I sketch the existing dormant Commerce Clause doctrine, and the related doctrines involving market participation, export taxation, and Article IV Privileges and Immunities. This Part exposes several of the most significant anomalies that have proven problematic for traditional doctrinal analysis, even when that analysis is primarily motivated by a desire to reconcile existing doctrine.\(^{35}\) Part II, which also draws upon tools from price theory, public choice theory, and the study of transactions costs, will set out the game theoretical model of the dormant Commerce Clause doctrine. Part III applies the game theoretical model developed in Part II to the cases and doctrines described in Part I, and offers some modest suggestions for improving existing doctrine.

I. THE DORMANT COMMERCE CLAUSE DOCTRINE: ANOMALIES AND INCONSISTENCIES

As suggested in Justice Scalia's opening quote,\(^{36}\) the dormant Commerce Clause doctrine has among the longest histories of any active constitutional law doctrine, and especially of any body of law widely viewed as an illegitimate judicial innovation. Although some context will be helpful, it is not necessary to provide a comprehensive historical account of the dormant Commerce Clause doctrine for the game theoretical analysis to follow.\(^{37}\) Instead, this Part sketches the contours of the dormant Commerce Clause doctrine and related doctrines as they presently exist. In setting out the relevant cases and doctrines, I remain true to the Court's own articulation of the governing tests and standards. I deliberately seek to avoid presenting characterizations that could be viewed as tendentious or as an effort to cleverly fit the cases into a neat

\(^{35}\) For an informative article along these lines, see Lawrence, supra note 33. For an article that seeks to reconcile the movement of goods cases, see Regan, supra note 34.

\(^{36}\) See supra note 2 and accompanying text.

\(^{37}\) For an excellent and detailed history of the dormant commerce clause cases, see RONALD D. ROTUNDA & JOHN E. NOWAK, TREATISE ON CONSTITUTIONAL LAW: SUBSTANCE AND PROCEDURE §§ 11.1 to .11 (3d ed. 1999).
doctrinal or theoretical framework. Instead, my objective is to describe the doctrine in the Court's own terms, and in doing so, to expose the various inconsistencies that have long been the focus of judicial and academic commentary.

In this Part, I follow a conventional presentation, one that places the doctrine's exceptions at the end, as apparent inconsistencies to be explained. In Part III, I use the model developed in Part II to show that reversing much of the conventional presentation allows us to synthesize the game theoretical analysis with existing case law and to show that the dormant Commerce Clause and associated doctrines can be defended on credible normative grounds.

The dormant Commerce Clause cases are divided in numerous ways in the literature, and I do not intend to suggest that my method of presentation is the only one that is correct. The purpose of this presentation is to identify the principal case categories, and then to reveal within each of those categories the most prominent doctrinal anomalies that have been identified in the literature to criticize the dormant Commerce Clause and its related doctrines. The purpose of the division and classification, in any event, is not to reconcile the existing cases or doctrines. That comes later. Instead, the purpose is to highlight the conflicts that have motivated much academic and judicial commentary in a manner that remains true to the doctrines as the Court itself has expressed them. Because some of the anomalies relate to foundational aspects of the dormant Commerce Clause doctrine, including its default status and the doctrine's relationship to the Court's affirmative Commerce Clause jurisprudence, the next two subparts provide a background of the early history of the dormant Commerce Clause doctrine and an overview of the modern Commerce Clause cases. The Part that follows provides the framework for evaluating the modern dormant Commerce Clause cases, which are the principal focus of this Article.

38. For other informative approaches, see supra notes 33-34.
39. The four principal categories are summarized in Table 3, infra Part I.C.2.b, and the anomalies that are associated with each category are set out in Table 4, infra Part I.C.5.
40. Readers familiar with these aspects of the Court's Commerce Clause jurisprudence are invited to skip ahead to Part I.C.
A. The Dormant Commerce Clause Doctrine in the Marshall, Taney, and Fuller Courts

An analysis of the dormant Commerce Clause doctrine necessarily begins with *Gibbons v. Ogden.* The dispute between Chief Justice Marshall and Justice Johnson in the landmark Commerce Clause case centered on the basis for striking down the challenged New York license granted to Fulton and Livingston, who in turn granted it to Ogden. Gibbons claimed a competing right to operate a “vessel[in] the coasting trade” in the same waters pursuant to a federal statute enacted in 1793. Chief Justice Marshall spent most of his famous opinion answering the question whether commerce comprehends navigation, and if so, whether Congress has the power to regulate navigation that occurs within the boundaries of a single state against that state’s contrary regulation. Marshall’s affirmative answer to both questions rested upon his understanding that “[c]ommerce, undoubtedly, is traffic, but it is something more: it is intercourse.” Marshall observed that the “power over commerce, including navigation, was one of the primary objects for which the people of America adopted their government, and must have been contemplated in forming it.” Marshall cautioned, however, that the delegated powers under the Commerce Clause presuppose some powers not delegated, and then set about defining the scope of Congress’ delegated—and conversely the scope of the states’ reserved—powers. Thus, Marshall stated:

The enumeration presupposes something not enumerated; and that something, if we regard the language or the subject of the sentence, must be the exclusively internal commerce of a State. The genius and character of the whole government seem to be, that its action is to be applied to all the external concerns of the nation, and to those internal concerns which affect the States generally; but not to those which are completely within a particular State, which do not affect other States, and with which it is not necessary to interfere, for the purpose of executing some of the general powers of the government. The completely internal commerce of a State, then, may be considered as reserved for the State itself.

41. 22 U.S. (9 Wheat.) 1 (1824).
42. Id. at 189.
43. Id. at 190.
44. Id. at 195.
Marshall’s analysis was in large part motivated by the then-dominant conception of federal and state powers residing in discrete—and thus mutually exclusive—spheres. The central theoretical problem that such a supposition posed was that there were numerous state laws—typified, for example, by inspection laws—that limited the flow of goods in commerce, but that were widely understood to operate as valid exercises of state police powers. Chief Justice Marshall and Justice Johnson, who wrote separately, agreed on two points: first, that the New York license should be struck down, and second, that striking down the New York license should not threaten traditional exercises of state police powers in general, and inspection laws in particular.

Marshall’s analysis and language focusing on intercourse suggested that commerce did not take place at the boundaries of the states, but necessarily pierced the border of the states, and sometimes passed entirely through states. This notion, when combined with the late eighteenth century understanding of powers residing in discrete and isolated spheres, might have further suggested that Congress’ Commerce Clause power—which in this case had already been exercised—threatened to diminish or even to eliminate traditional state police powers that touched upon goods destined for commerce. Marshall avoided this problem through an analytical ploy that can rightly be characterized as formalistic. His analytical technique continues to influence debates over the scope of Congress’ Commerce Clause powers. For Marshall, inspection laws were carved out of the scope of commerce powers because

45. This thinking was motivated in large part by the issue of slavery. In Mayor of New York v. Miln, 36 U.S. (11 Pet.) 102 (1837) and in the Passenger Cases, 48 U.S. (7 How.) 283 (1849), the Court addressed the permissible extent of state powers in regulating the slave trade. In Miln, the Court treated the subject matter as one of state police powers, thus allowing a state to require shipmasters to report the names and residences of passengers. In the Passenger Cases, a divided Court struck down, among other things, a state statutory provision that imposed a per-passenger tax used to defray the cost of health inspections and treatment of incoming passengers on a slave ship. Provided the regulatory power resided in the states, southern states had an incentive to support the mutually exclusive powers model. But once the Court determined the subject area to be national, the same states were motivated to argue for the abandonment of the exclusive powers model in favor of one that allowed concurrent regulation.

46. Gibbons, 22 U.S. at 211; id. at 234 (Johnson, J., concurring).

47. Id. at 211; id. at 235 (Johnson, J., concurring).

48. Id. at 211-14; id. at 235-36 (Johnson, J., concurring).
"[t]hey act upon the subject before it becomes an article of foreign commerce."49

Justice Johnson, in contrast, rested his analysis on the nature of the underlying state law, rather than on a timing-based conception of when goods are or are not in commerce. Thus, Johnson asserted that while inspection laws touch on goods in a noncommercial capacity, by ensuring that goods destined for commerce are safe and that noxious goods are stopped in their tracks and quarantined, the same could not be said about the New York license.50 The license ultimately prohibited all others who sought to navigate waters between New York and New Jersey. The nature of the New York license was therefore commercial, and thus off limits without regard to whether Congress had acted in the first instance. The positions of the two justices are summarized in Table 1 below:

<table>
<thead>
<tr>
<th></th>
<th>Pre-Commerce</th>
<th>In Commerce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Regulation</td>
<td></td>
<td>New York License</td>
</tr>
<tr>
<td>Non-Commercial Regulation</td>
<td>Inspection Laws</td>
<td></td>
</tr>
</tbody>
</table>

In the Marshall framework, inspection laws operated pre-commerce, and thus fell within the valid bounds of state powers represented in the left-hand side of the four box matrix. In contrast, in the Johnson framework, such laws were valid because they operated in the lower half of the same four box matrix. Because the lower left box overlaps in these two conceptions, we can place the hypothetical inspection laws in that box, consistent with the competing analyses of both jurists. In addition, both Marshall and Johnson voted to strike down the New York license, again for competing reasons that allow us to identify an overlapping box in

49. Id. at 203 (emphasis added).
50. Id. at 232-33 (Johnson, J., concurring).
Table 1. For Marshall, the New York license operated in an area in commerce, and since Congress chose to regulate it, the contrary state law had to yield. This analysis places the actual case in the right two boxes. For Johnson, however, because the state law was commercial in nature, it was invalid without regard to whether Congress had acted, thus placing it in the top two boxes. Because these categorizations again overlap—this time in the upper right box—we can place the actual case facts there in a manner consistent with both opinions. In short, because the debate between Johnson and Marshall allowed both to maintain their preferred positions with respect to the immediate case and the most significant hypothetical that they envisioned, it was unnecessary to the outcome of Gibbons for the Court to resolve these two competing visions of the Commerce Clause. The next time that Marshall was presented with an opportunity to strike down a state law on dormant Commerce Clause grounds, he declined, holding that the state law in question was a valid exercise of state police powers.\footnote{In Wilson v. Black Bird Creek Marsh Co., 27 U.S. (2 Pet.) 244, 250-52 (1829), a federally licensed sloop broke and injured a dam, erected under the authority of Delaware law, on a creek that flowed into the Delaware River. In defending against a suit for the resulting damages, Wilson claimed that the state law authorizing the dam violated the Commerce Clause. \textit{Id.} at 250. In this case, Chief Justice Marshall found no clear preemption, and thus was forced to consider the question raised in Johnson's \textit{Gibbons} analysis, namely whether in the absence of a federal statute, a state statute that interfered in some sense with interstate commerce was void under the Commerce Clause. \textit{Id.} at 251. In his short opinion for the Court, Marshall appeared to follow Johnson's lead in asking whether the regulation in question was commercial in nature. \textit{Id.} at 252. Marshall conceded that had Congress chosen to regulate access through small navigable creeks, "we should feel not much difficulty in saying, that a state law coming to conflict with such act would be void." \textit{Id.} at 250. He also recognized, however, the Delaware statute as an exercise of state police powers that had the effect of enhancing property values and of promoting the health of local inhabitants. \textit{Id.} at 251. In essence, Marshall appeared to recognize, perhaps in some tension with his earlier \textit{Gibbons} analysis, that a challenged state law might be "commercial" for purposes of evaluating a preemption case (meaning in this instance that Congress has actually exercised its Commerce Clause powers), but "police" when Congress has failed to do so, and instead, when the Court must evaluate a state law under the Commerce Clause operating in its dormant capacity.

52. In a later case, Pennsylvania v. The Wheeling and Belmont Bridge Co., 54 U.S. (13 How.) 518 (1852), the Supreme Court, over Chief Justice Taney's dissent, appears to have...}
In *Cooley v. Board of Wardens*, the Court addressed the constitutionality of an 1803 Pennsylvania statute that required local pilots on ships entering or leaving the port of Philadelphia. Operating in the background of the case was a 1789 federal statute that provided for local regulation of pilotage unless Congress sought to impose a uniform rule in the future. The Court did not consider the federal statute controlling, however, because under the then-dominant thinking about the separate spheres of federal and state powers, if the regulation of pilotage was local, Congress lacked the power to regulate in any event, and if it was national, it remained unclear whether Congress had the power to delegate that power back to the states. But the Court observed that the federal statute did "manifest[] the understanding of Congress" that regulation of pilotage was not such as to require exclusive federal regulation.

Unlike in the earlier Marshall Court opinions, Justice Curtis, writing for the majority, determined that the state pilotage law did regulate an aspect of commerce. The Court went on, however, to qualify its holding, stating:

>The power to regulate commerce, embraces a vast field, containing not only many, but exceedingly various subjects, quite unlike in their nature; some imperatively demanding a single uniform rule ... and some, like the subject now in

exercised dormant Commerce Clause power. In *Belmont Bridge*, the Court granted an injunction compelling a company constructing a bridge on the Ohio River pursuant to Virginia law to remove or to modify the bridge so as to operate consistently with the interests of Pennsylvania in facilitating traffic along the river to and from its ports. The Court's reliance upon the dormant Commerce Clause doctrine is obscured because the case rested upon the Court's original jurisdiction (Pennsylvania was a party), and because the Court relied for its injunction upon an exercise of its equitable powers, without mentioning the Commerce Clause. In contrast, Chief Justice Taney discussed and rejected dormant Commerce Clause power in his dissent. In a later case, after the bridge was blown down by a violent storm and the company planned to rebuild, on defendant's motion the Supreme Court dissolved its earlier injunction, relying upon a subsequently enacted federal statute that approved construction at the original location on terms more favorable than those set out in the Court's earlier decree. See Pennsylvania v. The Wheeling and Belmont Bridge Co., 59 U.S. (18 How.) 521 (1856).

53. 53 U.S. (12 How.) 299 (1851).
54. See id. at 315.
55. *Id.* at 319-20. For a discussion of the linkage of this issue to slavery, see *supra* note 45.
57. *Id.* at 315-16.
question, as imperatively demanding that diversity, which alone can meet the local necessities of navigation.\textsuperscript{58}

The Court went on to articulate the following famous—if not terribly helpful—formulation:

\textit{\textit{Whatever subjects of this power are in their nature national, or admit only of one uniform system, or plan of regulation, may justly be said to be of such a nature as to require exclusive legislation by Congress. That this cannot be affirmed of laws for the regulation of pilots and pilotage is plain.}}\textsuperscript{59}

Finally, in the first of two related Fuller Court opinions, both written by the Chief Justice, the Supreme Court struck down a state law based upon the dormant Commerce Clause doctrine, only to then in the second case issued one year later, hold that Congress could confer upon states regulatory power over the same subject matter. In \textit{Leisy v. Hardin},\textsuperscript{60} the Court applied the “original package doctrine”\textsuperscript{61}—preventing states from taxing items shipped in original packages in interstate commerce—to strike down an Iowa law under which a local marshal seized kegs of beer that Leisy brewed in Illinois and shipped in original packaging to Iowa.\textsuperscript{62} Chief Justice Fuller held that although Iowa could regulate local liquor consumption, under the \textit{Cooley} formulation, the Court could not allow the seizure to stand.\textsuperscript{63} The Court stated:

\begin{quote}
Whenever ... a particular power of the general government is one which must necessarily be exercised by it, and Congress remains silent, this is not only not a concession that the powers reserved by the States may be exerted as if the specific power
\end{quote}

\textsuperscript{58} \textit{Id.} at 319.

\textsuperscript{59} \textit{Id.} While the Court appeared to reject the national/local distinction in favor of the inquiry into whether the challenged statute affected commerce “only indirectly, incidentally, and remotely,” see Smith v. Alabama, 124 U.S. 465, 482 (1888)), the Court has continued to draw upon both formulations.

\textsuperscript{60} 135 U.S. 100 (1890).

\textsuperscript{61} \textit{Id.} at 110-12. The Court articulated this doctrine in Brown v. Maryland, 25 U.S. (12 Wheat.) 419 (1827), and then restricted its use in \textit{Michelin Tire Corp. v. Wages}, 423 U.S. 276, 288 (1976).

\textsuperscript{62} \textit{Leisy}, 135 U.S. at 101-02.

\textsuperscript{63} \textit{Id.} at 125.
had not been elsewhere reposed, but, on the contrary, the only legitimate conclusion is that the general government intended that power should not be affirmatively exercised, and the action of the States cannot be permitted to effect that which would be incompatible with such intention.\textsuperscript{64}

Within months of the \textit{Leisy} decision, Congress passed the Wilson Act, which effectively exempted liquor traveling interstate from the original package doctrine.\textsuperscript{65} Even though in \textit{Leisy} Fuller had stated that taxing originally packaged liquor violated the dormant Commerce Clause on the ground that the subject matter demands the application of a uniform national rule,\textsuperscript{66} in \textit{In re Rahrer} he proceeded to sustain the Wilson Act.\textsuperscript{67} In the latter case, Fuller stated that:

\begin{quote}
No reason is perceived why, if Congress chooses to provide that certain designated subjects of interstate commerce shall be governed by a rule which divests them of that character at an earlier period of time than would otherwise be the case, it is not within its competency to do so.\textsuperscript{68}
\end{quote}

This awkward circumlocution later became unnecessary, once the Court abandoned the notion that commerce could be delineated as inherently national or local, and thus that the respective powers of Congress and the states could not overlap. But even with this later jurisprudential refinement, the combined \textit{Cooley/Leisy/Rahrer} regime helps to frame the modern dormant Commerce Clause analysis.
Table 2 summarizes the discussion:

**Table 2: Commerce Categories**

<table>
<thead>
<tr>
<th></th>
<th>Congress Regulates</th>
<th>Congress Silent</th>
<th>Congress Delegates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inherently National</td>
<td>States cannot act (per <em>Gibbons v. Ogden</em>)</td>
<td>States cannot act</td>
<td>States can act (per <em>In re Rahrer</em>)</td>
</tr>
<tr>
<td>(direct)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inherently Local</td>
<td>States cannot act (but see <em>New York v. United States</em>; <em>United States v. Lopez</em>)</td>
<td></td>
<td>[irrelevant cell]</td>
</tr>
<tr>
<td>(indirect, incidental, or remote)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

While the first column, which treats the subject matter of the Congressional Commerce Clause powers, and the third cell, which treats the subject matter of congressional delegation, are not the central concern of this Article, filling in these cells will help to provide the necessary context for the analysis to follow. The upper left box is easily handled by *Gibbons* itself. In that case, the Court held that if Congress regulates in an area that is inherently national, the federal statute will preempt a contrary state law, and thus states cannot act. The lower box in the first column is more problematic. To flesh out that box, which is now complicated by such cases as *New York v. United States* and *United States v. Lopez*, we must briefly consider the Court’s Commerce Clause jurisprudence.

---

70. 505 U.S. 144 (1992).
B. A Brief Excursion on Congressional Commerce Clause Powers

Beginning in the mid 1930s during the New Deal and continuing until the mid to late 1990s, the Supreme Court had all but abandoned a narrow construction of the Commerce Clause coupled with a broad reading of the Tenth Amendment to limit Congressional regulation of commerce. During this roughly sixty-year period, the Court sustained nearly all exercises of congressional Commerce Clause powers regardless of the local nature of the underlying subject matter,\(^{72}\) or the seemingly attenuated connection to commerce.\(^{73}\) While the Court’s permissive use of the Commerce Clause generated strong dissents among conservative jurists and academic commentators, it was not until the 1992 decision in *New York v. United States*\(^{74}\) that the Court, for the first time in nearly six decades, struck down a federal statute as extending beyond federal Commerce Clause powers, or conversely, as violating the Tenth Amendment.\(^{75}\)

The *New York* holding was narrow and did not rest upon a finding that Congress had improperly regulated a subject area off limits to it under the Commerce Clause due to its inherently local nature.\(^{76}\) In fact, there is little question that the subject matter — disposal of low level radioactive waste — fell squarely within the

---


73. See, e.g., *Heart of Atlanta Motel, Inc. v. United States*, 379 U.S. 241 (1964) (sustaining the public accommodations provisions of the 1964 Civil Rights Act to prohibit discrimination against African Americans by a hotel under the Commerce Clause, thus avoiding the difficult state action problems that threatened to arise if the Court instead relied upon Congressional enforcement powers under the Fourteenth Amendment); *Katzenbach v. McClung*, 379 U.S. 294 (1964) (applying the same analysis to a restaurant).


75. *Id.* at 156 (“In a case like these, involving the division of authority between federal and state governments, the [Tenth Amendment and Commerce Clause] ... inquiries are mirror images of each other.”).

76. *See id.* at 159-60.
proper scope of congressional commerce powers. The Court objected to a coercive tactic employed in a federal statute, which imposed draconian sanctions upon states that did not become self-sufficient in storing low-level radioactive waste in a manner consistent with a series of progressive deadlines, either by siting a waste facility in-state or by joining a regional pact. While she had previously suggested that federalism is designed to limit excessive governmental powers, in New York v. United States, Justice O'Connor, writing for the majority, held for the first time that Congress lacks the power to "commandeer" state legislatures. The anticommandeering doctrine holds that while Congress can create incentives, for example, by linking the receipt of federal funds to the passage of certain state law programs, and while Congress can threaten to preempt contrary state regulations if the states do not undertake a favored program, Congress otherwise lacks the constitutional power to force states to regulate on its behalf.

Three years later, the Court issued a far more important decision suggesting a meaningful limit for the first time since the New Deal on Congress' Commerce Clause powers based on subject matter. In the 1995 decision, United States v. Lopez, the Court, in an opinion by Chief Justice Rehnquist, struck down the Gun Free School Zones

77. Id.
78. See id. at 174-77.
79. For example, in Gregory v. Ashcroft, Justice O'Connor wrote, "Perhaps the principal benefit of the federalist system is a check on abuses of government power. The constitutionally mandated balance of power between the States and the Federal Government was adopted by the Framers to ensure the protection of our fundamental liberties." 501 U.S. 452, 458 (1991) (quoting Atascadero State Hosp. v. Scanlon, 473 U.S. 234, 242 (1985) (internal quotations omitted)).
80. New York, 505 U.S. at 161. "Congress may not simply 'commandeer the legislative processes of the States by directly compelling them to enact and enforce a federal regulatory program.'" Id. (quoting Hodel v. Va. Surface Mining & Reclamation Ass'n, Inc., 452 U.S. 264, 286 (1981) (alteration in original)).
81. The Court subsequently extended this principle in Printz v. United States, 521 U.S. 898 (1997), holding that the Brady Act, which required state chief law enforcement officers to perform background checks on prospective gun purchasers, violated the anticommandeering principal even though the Act directed executive officers rather than state legislatures. But see Reno v. Condon, 528 U.S. 141 (2000) (employing quasi-market participant analysis to reject anticommandeering challenge to Driver's Privacy Protection Act, which regulates disclosure of personal information from records of state motor vehicle departments).
Act of 1990. The Act made it a federal crime to knowingly possess a gun in a place that the person knows or has reason to believe is a school zone.\textsuperscript{83} In doing so, the Court suggested a far more significant set of restrictions on Congress’ use of Commerce Clause powers, asserting that the prior expansive use of these powers could be placed into three categories: (1) “the channels of interstate commerce,” (2) “the instrumentalities of interstate commerce, or persons or things in interstate commerce,” and (3) “economic activity[ies]” that “substantially affect interstate commerce.”\textsuperscript{84} The Lopez Court determined that however expansive prior Commerce Clause jurisprudence had been, and without overruling any earlier cases, the challenged statute extended beyond the permissible limits of Congress’ Commerce Clause powers.\textsuperscript{85}

Lopez is relevant to Table 2 in two respects. First, it requires a qualification in what once had been a clear presentation in the lower box under column one. Until Lopez, one could predict with some certainty that if Congress regulated under the Commerce Clause, the states could be prevented from enacting a contrary regulation, even if the subject area appeared to be inherently local. Without suggesting that the pre-Lopez regime was one without limits on Congressional powers, one could confidently represent that the Court had not yet found them. In Lopez, Chief Justice Rehnquist did not claim to change pre-existing Commerce Clause doctrine, but there is little doubt that some revisionism attended his effort to squeeze the expansive jurisprudence in that area into three doctrinal categories, into which the challenged statute did not fall. For present purposes it is sufficient to observe that while Congress retains considerable Commerce Clause powers, those powers are now subject to some limitations affecting inherently

\textsuperscript{83} Id. 567-68.
\textsuperscript{84} Id. at 558-59. “Where economic activity substantially affects interstate commerce, legislation regulating that activity will be sustained.” Id. at 560.
\textsuperscript{85} Id. at 567-68. More recently, in United States v. Morrison, 529 U.S. 598 (2000), the Court extended Lopez to strike down a provision in the Violence Against Women Act, which provided a civil remedy against any person “who commits a crime of violence motivated by gender.” Id. at 605 (quoting Violence Against Women Act of 1994, 42 U.S.C. § 13981(c)(1997 & Supp. 2002)). As in Lopez, the Court ruled out the first two categories easily, and determined that to fit the statute into the third category—“activities that substantially affect interstate commerce”—would require abandoning the distinction between that which is “truly national and ... [that which] is truly local.” Id. at 618.
local activity. Second, and perhaps more importantly, the *Lopez* categories are notable for the dormant Commerce Clause cases that follow. As one commentator recently observed: "[M]ost ... [dormant Commerce Clause] cases involve conduct that, were it regulated by Congress, would be considered regulation of either the *channels* of interstate commerce (and things or persons moving therein) or of *instrumentalities* of interstate commerce—the least controversial of *Lopez's* taxonomy of congressional commerce power." The discussion of the principal dormant Commerce Clause cases in the next subpart of this Article is consistent with this assertion.

Before discussing the second column in Table 2, let us briefly turn to the third. The lower right cell is uninteresting. If a subject area is inherently local, then there is simply no need for Congress to delegate as a precondition to a state's exercise of regulatory power in that area. The upper right cell is important, and has become analytically problematic, in large part due to Chief Justice Marshall’s formalistic conception of commerce expressed in *Gibbons*, namely the idea that federal and state powers with respect to commerce reside in discrete and non-overlapping spheres. If a power was truly national, then as suggested by Chief Justice Fuller in *Leisy*, it requires a uniform rule. And while the Court need no longer rely upon Fuller’s awkward formalism, Fuller’s ultimate holding in *Rahrer* that Congress can delegate to states the power to regulate an area that would otherwise have been deemed inherently national remains good law. As a result, Congress has full power to delegate to the states regulatory authority over commerce, with the caveat that any resulting state law will remain subject to independent constitutional checks.

---

87. See infra Part I.C.
89. *Leisy v. Hardin*, 135 U.S. 100, 108-09 (1890) ("Where the subject matter requires a uniform system as between the States, the power controlling it is vested exclusively in Congress ....").
90. *Id.* at 109 (suggesting that when "different rules may be suitable for different localities" Congress may divest powers "of the nature of the power granted to the general government" to the states "until or unless circumscribed by the action of Congress").
91. *In re Rahrer*, 140 U.S. 545, 564-65 (1891).
92. For a case that illustrates this proposition, see *Metropolitan Life Insurance Co. v. Ward*, 470 U.S. 869 (1985), which struck down Alabama's differential tax scheme on
C. Return to the Dormant Commerce Clause: The Modern Era

We have now established not only the doctrinal context for the middle column in Table 2 (state regulatory powers in the face of Congressional silence), which represents the principal focus of this Article, but also the nature of permissible federal regulations of commerce against which illicit state interference with commerce is most obviously compared. When Congress is silent, under the Cooley formulation it devolves to the federal courts to determine whether a challenged state law falls into a subject area that is inherently local, thus remaining within state powers, or inherently national, thus removed from state powers unless Congress delegates that power to the states. But as we have already seen, the Court has abandoned its once dominant jurisprudential conception—prevalent throughout the late eighteenth and nineteenth centuries—that unless otherwise clear from context, for example in area of taxation,\(^93\) the respective spheres of federal and state power are presumed to be hermetically sealed.\(^94\) As a result, even before we review the modern dormant Commerce Clause cases, we can appreciate the difficulty that the Court inevitably confronts in trying to classify challenged laws according to whether they touch on a matter that is inherently national, or commercial, in nature, or, as subsequently expressed, whether they touch upon commerce

---

\(^93\) The area of concurrent taxation is noteworthy in that in the chestnut decision, McCulloch v. Maryland, 17 U.S. (4 Wheat.) 316 (1819), Chief Justice Marshall, while acknowledging that taxation powers were concurrent, employed a process-based argument drawn from political theory suggesting that if individual state legislatures, which answer to a constituency that represents a subset of the nation as a whole, were permitted to tax a national entity individually or collectively, the state taxation power could then be exercised so as to destroy. \textit{Id.} at 429-31. In his recent article, Professor Denning argues that the same analysis provides at least a partial rejoinder to those who read Hamilton’s \textit{FEDERALIST} NO. 32 narrowly to argue against an original understanding consistent with construing the Commerce Clause to operate in a dormant capacity. See Denning, supra note 86. As Denning argues, the same difficulty with vesting a subpart of the whole with power to tax an entity of the whole applies in allowing subparts of the whole to regulate commerce as it affects the whole. \textit{Id.} While Denning does not construct, or rely upon, game theory in setting forth his argument, his structural analysis is largely consistent with the model developed in Part II.

\(^94\) See supra notes 82-86 and accompanying text.
"only indirectly, incidentally, and remotely ...."

Because the categories of police powers and commercial regulatory powers necessarily overlap, any implicit limitation derived from the Commerce Clause on state powers threatens to undermine its functioning in traditional regulatory areas.

It is for that reason, I would suggest, that the Court’s doctrinal formulations often appear inadequate in explaining the contours and import of the dormant Commerce Clause doctrine. Only after we have reviewed the relevant cases arising under the dormant Commerce Clause and related doctrines—market participation, export taxation, and Article IV Privileges and Immunities—will we be prepared for the game theoretical framework that I suggest will help to explain these cases and to provide a sounder normative foundation for some of their most criticized features.

In contrast to the prior subpart, the section that follows is not presented in historical sequence. Instead, I discuss cases that are most helpful in setting forth the Court’s doctrinal formulations for the major case categories, and then introduce other cases and


96. To fully appreciate this point, it is worth remembering a critical distinction between federal and state constitutional structures. The United States Constitution operates on a stripping and vesting model. Powers are stripped from the states, and vested in the various branches of the federal government or in the federal government generally. In this model, Congress is presumed to lack power absent a proper constitutional hook, and it is further subject to independent constitutional constraints. In contrast, state constitutions are premised upon a plenary powers model. State legislatures are presumed to have power unless limited by the constraints imposed by the state or federal constitutions, by virtue of the Supremacy Clause, or by laws enacted pursuant to the federal Constitution. See Maxwell L. Sterns, The Misguided Renaissance of Social Choice, 103 YALE L.J. 1219, 1258 (1994); see also James E. Castello, Comment, The Limits of Popular Sovereignty: Using the Initiative Power to Control Legislative Procedure, 74 CAL. L. REV. 491, 553 n.329, 554 (1986). As suggested in the text, especially in a regime of overlapping powers, the dormant Commerce Clause doctrine holds great significance for this combined constitutional scheme. The Tenth Amendment admonition that "[t]he powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people," U.S. CONST. amend. X, is less meaningful if the limitations on plenary state legislative powers, especially those understood to operate in the area of traditional police powers, derive from implicit limits imposed by the Commerce Clause operating in its dormant capacity, in addition to the explicit limits imposed through Congress's already broad exercise of power under that expansive clause.

97. This is especially true in the core cases falling into the multiple Nash equilibrium category, namely Kassel and Bibb. See infra Parts I.C.2.b (explaining anomalies that cases represent under the Court's own doctrinal framework), III.B.2.a (recasting cases based upon multiple Nash equilibrium analysis developed in Part II).
doctrines that reveal the apparent inconsistencies and limits of the Court's articulated doctrinal formulations. The presentation is not comprehensive. I add cases and details to the discussion in Part III. My purpose is to establish both the basic doctrinal framework and to expose the apparent inconsistencies in applying that framework that have given rise to the widespread criticism of the dormant Commerce Clause doctrine both from members of the Court and among constitutional scholars.

We will begin with City of Philadelphia v. New Jersey, a well known case involving facial discrimination in the increasingly important and litigious area of waste disposal. Because this case helps establish multiple doctrinal categories, I quote somewhat more extensively from it than from the cases that follow.

1. Statutes that Facial Discriminate in Commerce

a. Waste Import Restrictions and Environmental Protection

In City of Philadelphia v. New Jersey, a New Jersey statute prohibited importing most "solid or liquid waste" originating out-of-state. The state supreme court sustained the law against a Commerce Clause challenge by, among others, private landfill operators, concluding that it "advanced vital health and environmental objectives." On appeal, the Supreme Court determined that there was no controlling federal statute, and thus no pre-emption. Thus, the case arose under the Commerce Clause operating in its dormant capacity.

Justice Stewart, writing for the majority, began by rejecting the state's argument that the negative value of waste prevents it from being a commodity in commerce. Stewart then articulated his

99. The proliferation of waste-related cases is well captured in the statement by Judge Cabranes that the federal judicial docket has become "clogged with ... garbage." SSC Corp. v. Town of Smithtown, 66 F.3d 502, 505 (2d Cir. 1995).
100. 437 U.S. 617 (1978).
101. Id. at 620.
102. See id.
103. Id. at 622 ("All objects of interstate trade merit Commerce Clause protection; none is excluded by definition at the outset.... Hence, we reject the state court's suggestion that the banning of 'valueless' out-of-state wastes ... implicates no constitutional protection.")
vision of the role of the federal courts in dormant Commerce Clause cases:

Although the Constitution gives Congress the power to regulate commerce among the States, many subjects of potential federal regulation under that power inevitably escape congressional attention because of their local character and their number and diversity.... In the absence of federal legislation, these subjects are open to control by States so long as they act within the restraints imposed by the Commerce Clause itself.104

Justice Stewart then relied upon Justice Jackson’s famous articulation, expressed in *H.P. Hood & Sons, Inc. v. Du Mond*,105 of the object of the Court’s dormant Commerce Clause jurisprudence:

Th[e] principle that our economic unit is the Nation, which alone has the gamut of powers necessary to control of the economy, including the vital power of erecting customs barriers against foreign competition, has as its corollary that the states are not separable economic units....

The material success that has come to inhabitants of the states which make up this federal free trade unit has been the most impressive in the history of commerce, but the established interdependence of the states only emphasizes the necessity of protecting interstate movement of goods against local burdens and repressions....

Our system, fostered by the Commerce Clause, is that every farmer and every craftsman shall be encouraged to produce by the certainty that he will have free access to every market in the Nation, that no home embargoes will withhold his exports, and

---

the more recent decision, *C & A Carbone, Inc. v. Town of Clarkstown, N.Y.*, 511 U.S. 383 (1994), the Court struck down a flow control ordinance that required all waste generated within Clarkstown to be deposited at a specified waste transfer station, which would then collect a fee exceeding the cost of disposal, as a means of financing the station’s construction. *Id.* at 394-95. In that case, Justice Kennedy, writing for the majority and striking down the challenged statute, provided a more obvious justification for treating waste as commerce:

As the town itself points out, what makes garbage a profitable business is not its own worth but the fact that its possessor must pay to get rid of it. In other words, the article of commerce is not so much the solid waste itself, but rather the service of processing and disposing of it.

*Id.* at 390-91.

104. *City of Philadelphia*, 437 U.S. at 623 (internal quotation and citation omitted).
no foreign state will by customs duties or regulations exclude them. Likewise, every consumer may look to the free competition from every producing area in the Nation to protect him from exploitation by any. Such was the vision of the Founders; such has been the doctrine of this Court which has given it reality.\(^{106}\)

Relying upon *H.P. Hood & Sons*, Justice Stewart then asserted that "where simple economic protectionism is effected by state legislation, a virtually per se rule of invalidity has been erected."\(^{107}\) Stewart noted that the clearest examples of such laws "overtly block[] the flow of interstate commerce at a State’s borders."\(^{108}\) He added, however, that "where other legislative objectives are credibly advanced and there is no patent discrimination against interstate trade, the Court has adopted a much more flexible approach."\(^{109}\)

Stewart then quoted the balancing test initially articulated by Justice Stone in *Pike v. Bruce Church*:\(^{110}\)

Where the statute regulates evenhandedly to effectuate a legitimate local public interest, and its effects on interstate commerce are only incidental, it will be upheld unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits.... If a legitimate local purpose is found, then the question becomes one of degree. And the extent of the burden that will be tolerated will of course depend on the nature of the local interest involved, and on

\(^{106}\) *Id.* at 537-39. Justice Stewart quoted only the first paragraph of the block quote as it appears in *H.P. Hood & Sons*. See *City of Philadelphia*, 437 U.S. at 623. For Professor Bittker’s description of the Jackson quote as stretching history, see BORIS I. BITTKER, BITTKER ON THE REGULATION OF INTERSTATE AND FOREIGN COMMERCE § 6.06, at 6-35 to 6-36 (1999).

\(^{107}\) *City of Philadelphia*, 437 U.S. at 624 (emphasis added).

\(^{108}\) *Id.*

\(^{109}\) *Id.*

\(^{110}\) *See Pike v. Bruce Church*, Inc., 397 U.S. 137, 142 (1970). Professor Regan has argued that, at the time of his article, all but one major Supreme Court dormant Commerce Clause case in the movement of goods category that purported to apply this, or some other, balancing test, could be best explained, without the use of balancing, by inquiring whether the Court found appropriate proxies for purposeful discrimination and that Justice Stone was the only true balancer on the Court. *See Regan*, *supra* note 34, at 1107, 1260. Regan concedes that the Court does employ a form of balancing in transportation cases, which are not the primary subject of his article. *See id.* at 1082-93
whether it could be promoted as well with a lesser impact on interstate activities.\textsuperscript{111}

In \textit{City of Philadelphia}, Justice Stewart did not obviously apply either the per se rule of invalidity or the balancing test as articulated in \textit{Pike}. He began his analysis by evaluating the state's contention that the statute was motivated primarily by environmental rather than financial concerns.\textsuperscript{112} The New Jersey Supreme Court had found that the statute was environmentally motivated, citing as support findings in the legislative history concerning the environmental toll resulting from the shortage of landfill space.\textsuperscript{113} The State refuted the allegation that the statute was financially motivated, observing that New Jersey landfill operators were among the plaintiffs and that no commercial in-state interests obviously stood to gain from the regulation.\textsuperscript{114} In contrast, appellants challenged the statute by relying upon statements in the legislative history that pointed to the need to extend the life of local landfills to delay "the day when New Jersey cities must transport their waste to more distant and expensive sites."\textsuperscript{115} For Stewart, it was not necessary to resolve the dispute: "\textit{W}e assume New Jersey has every right to protect its residents' pocketbooks as well as their environment."\textsuperscript{116} Stewart added:

This dispute about ultimate legislative purpose need not be resolved, because its resolution would not be relevant to the constitutional issue to be decided in this case. Contrary to the evident assumption of the state court and the parties, the evil of protectionism can reside in legislative means as well as legislative ends.\textsuperscript{117}

Instead, the problem was New Jersey's chosen method of advancing those interests. Justice Stewart distinguished cases

\begin{itemize}
\item \textsuperscript{111} \textit{City of Philadelphia}, 437 U.S. at 624 (alteration in original) (quoting \textit{Pike}, 397 U.S. at 142); see also \textit{Raymond Motor Transp., Inc. v. Rice}, 434 U.S. 429, 441-42 (1977) (citing the \textit{Pike} balancing test).
\item \textsuperscript{112} See \textit{City of Philadelphia}, 437 U.S. at 625-26.
\item \textsuperscript{113} \textit{Id.} at 625.
\item \textsuperscript{114} \textit{Id.} at 626.
\item \textsuperscript{115} \textit{Id.}
\item \textsuperscript{116} \textit{Id.}
\item \textsuperscript{117} \textit{Id.}
\end{itemize}
involving the quarantine of noxious goods, observing that "quarantine laws ban[] the importation of articles such as diseased livestock that require[] destruction as soon as possible because their very movement risk[s] contagion and other evils."\textsuperscript{118} Rather than discriminating in commerce, such laws "simply prevent[] traffic in noxious articles, whatever their origin."\textsuperscript{119} The difficulty in this case, however, is that New Jersey affected a patent discrimination based upon point of origin without having a "reason, apart from their origin, to treat them differently."\textsuperscript{120} Stewart then observed that "New Jersey may pursue ... [its] ends by slowing the flow of all waste into the State's remaining landfills, even though interstate commerce may incidentally be affected."\textsuperscript{121} Quoting \textit{Foster-Fountain Packaging Co. v. Haydel},\textsuperscript{122} Stewart added: "[A] 'State is without power to prevent privately owned articles of trade from being shipped and sold in interstate commerce on the ground that they are required to satisfy local demands or because they are needed by the people of the State.'"\textsuperscript{123} As a result, Stewart concluded that "[t]he New Jersey law at issue ... falls squarely within the area that the Commerce Clause puts off limits to state regulation."\textsuperscript{124}

\begin{flushleft}
118. \textit{Id.} at 628-29.
119. \textit{Id.} at 629.
120. \textit{Id.} at 627.
121. \textit{Id.} at 626.
122. 278 U.S. 1 (1928).
124. \textit{Id.} at 628. Stewart added that there is a sense of fair play that underlies the Court's ruling: "Tomorrow, cities in New Jersey may find it expedient or necessary to send their waste into Pennsylvania or New York for disposal, and those States might then claim the right to close their borders." \textit{Id.} at 629. Writing in dissent, then-Associate Justice Rehnquist observed that the ruling appeared to present what he regarded to be an unwarranted Hobson's choice:

\begin{quote}
New Jersey must either prohibit all landfill operations, leaving itself to cast about for a presently nonexistent solution to the serious problem of disposing of the waste generated within its own borders, or it must accept waste from every portion of the United States, thereby multiplying the health and safety problems which would result if it dealt only with such wastes generated within the State.
\end{quote}

\textit{Id.} at 631 (Rehnquist, J., dissenting). For an article sympathetic to the Rehnquist dissent, see generally Paul E. McGreal, \textit{The Flawed Economics of the Dormant Commerce Clause}, 39 WM. & MARY L. REV. 1191 (1998) (arguing that the Court's dormant Commerce Clause doctrine, especially as applied in the waste disposal cases, is based upon an erroneous set of premises drawn from neoclassical economics, rather than a better suited prisoners' dilemma.

HeinOnline -- 45 Wm. & Mary L. Rev. 35 2003-2004
The *City of Philadelphia* decision thus presented something of an ambiguity as to the test it applied in striking down the waste import restriction. While the Court articulated two rules, the per se rule of invalidity and the balancing test, it is not clear which, if either, of these tests the Court actually applied. The problem is that while the statute at issue was facially discriminatory against commerce, it was coupled with an interest that the Court acknowledged to be legitimate for the state to pursue, albeit not by the chosen means. This leaves open the possibility that when the fatal defect is the means chosen, the applicable standard might not be the per se rule, but rather a kind of strict scrutiny, which the Court hinted at but did not fully articulate in its opinion. Rather than merely balancing the possibility of a nonrestrictive alternative, the Court might have demanded the absence of such a possible alternative as a precondition to sustaining the challenged law. The following cases help to determine when such a rule, which more closely resembles strict scrutiny than a balancing test, applies and whether this test provides a better reading of *City of Philadelphia*.

We begin with another case evaluating a statute that overtly blocked the flow of commerce, in which the Court expressly applied the “strictest scrutiny,” but then proceeded to uphold the challenged law. In *Maine v. Taylor*, the Court considered a Maine statute that prohibited the import of live baitfish from out-of-state where the out-of-state fish commonly had parasites that presented a danger to native Maine fish, and where the parasite was not common in Maine. The Court stated that:

---

model). For a more benign assessment of *City of Philadelphia*, see NOWAK & ROTUNDA, supra note 37, at 170 (positing that case illustrates how the “dormant commerce clause ... steps in to prevent ... economic Balkanization of the country”).


127. *Taylor* had a peculiar procedural history. Taylor was convicted under a federal statute that prohibited interstate shipments in violation of federal or state-law. Taylor defended by claiming that the Maine statute prohibiting the importation of live baitfish violated the Commerce Clause, thus providing an unconstitutional state law predicate for his federal prosecution. While the court of appeals reversed his conviction on that basis, the State of Maine intervened to defend the constitutionality of its own statute on appeal to the Supreme Court. *Id.* at 133. Even though the case was moot as to Taylor, the Supreme Court found that Maine could invoke the Supreme Court’s jurisdiction under 28 U.S.C. § 1254(2) to defend the constitutionality of its statute. *Id.*
[O]nce a state law is shown to discriminate against interstate commerce "either on its face or in practical effect," the burden falls on the State to demonstrate both that the statute "serves a legitimate local purpose," and that this purpose could not be served as well by available nondiscriminatory means.  

Because this statute expressly discriminated in commerce, the Court determined that it was appropriate to apply "strictest scrutiny." In this case, the Court determined that the test was met:

First, Maine's population of wild fish—including its own indigenous golden shiners—would be placed at risk by three types of parasites prevalent in out-of-state baitfish, but not common to wild fish in Maine. Second, nonnative species inadvertently included in shipments of live baitfish could disturb Maine's aquatic ecology to an unpredictable extent by competing with native fish for food or habitat, by preying on native species, or by disrupting the environment in more subtle ways.

While the Court purported to apply strict scrutiny, under which the state bears the burden of proof, it determined that the unique problem posed by imported live baitfish demonstrated the absence of a neutral, nondiscriminatory alternative, and thus upheld the facial restriction on commerce.

Taylor is significant for two reasons. First, it establishes that even in a case involving facial discrimination against out-of-state commerce, the Court does not necessarily apply the per se rule of invalidity. Instead, if the state provides a justification that is not protectionist or financially motivated, the Supreme Court will inquire whether the justification is legitimate and whether it can be advanced in a nondiscriminatory manner. In Taylor, the Court

128. Id. at 138 (quoting Hughes, 441 U.S. at 336).
129. Id. at 141 (citation omitted).
130. It is worth noting that although the state arguably met the requirement that the objectives cannot be achieved in a nondiscriminatory manner, as Justice Stevens observed in his dissent, it was possible to devise an alternative method that would achieve the articulated objective in a less discriminatory manner. Id. at 152-53 (Stevens, J., dissenting). If the state had set up a regime in which it inspected out-of-state live baitfish, it would have discriminated, but would have allowed some such fish to be imported.
deferred to the district court's determination that both prongs were met.\textsuperscript{131} Second, the case provides an important additional datum in reading \textit{City of Philadelphia}. If we assume, as New Jersey claimed, that concerns for environmental protection and the desire to preserve landfill space motivated its waste import restriction, then the question arises whether the chosen means would have satisfied the Court's strict scrutiny test. Framing the issue in this manner reveals that even without applying the per se rule, the Court would likely have achieved the same result under the test articulated in \textit{Taylor}.\textsuperscript{132} New Jersey could have achieved its legitimate environmental goal—but not its financially motivated goal of benefitting only the citizens of New Jersey at the expense of commerce—by reducing waste intake in its landfill sites by specified percentages each year, and by providing access on a first come, first served basis without regard to the waste's point of origin. While the \textit{City of Philadelphia} Court articulated the per se rule and the balancing test, its ruling rests upon an application of this strict scrutiny test.

We will now consider one more context of facial discrimination in commerce, which the Court has prohibited unless pursuant to a Congressional delegation. The case that follows involves a state law that appears to facilitate free trade with neighboring states by conditioning access to their goods or services upon a reciprocal grant of free trade from the partnering state. Despite the apparent pro-trade nature of the statute, the Court struck it down.

\textsuperscript{131} \textit{Id.} at 140.

\textsuperscript{132} For another case that, like \textit{City of Philadelphia}, articulated the per se rule of invalidity, but instead turned upon the availability of a less discriminatory alternative, see \textit{C & A Carbone, Inc. v. Town of Clarkstown}, N.Y., 511 U.S. 383 (1994). In that case, Justice Kennedy articulated the per se rule in striking down the city's waste transfer program, which required all waste that flowed through the municipality to be processed at a waste transfer station, but went on to articulate nondiscriminatory "uniform safety regulations." \textit{Id.} at 392-93. The availability of such an alternative would have been unnecessary had the per se rule actually applied. This suggests that as applied to facially discriminatory statutes for which the Court is able to identify a legitimate state purpose, the Court will apply strict scrutiny rather than the per se rule. This appears to apply as a general matter in dormant Commerce Clause cases involving environmental regulations.
b. The Reciprocity Doctrine

In Sporhase v. Nebraska ex rel. Douglas, a Nebraska statute prohibited the withdrawal of groundwater from Nebraska wells intended for export to any state that failed to grant reciprocal water export rights to Nebraska. While the Court upheld other Nebraska water export restrictions requiring that the exports be reasonable and not contrary to conservation on the ground that the state holds a proprietary interest in its scarce water supply, the Court applied strict scrutiny to the reciprocity provision, which it then struck down, holding that it was not “narrowly tailored” to further the state’s conservation goals. The Sporhase Court relied upon an earlier reciprocity case, Great Atlantic & Pacific Tea Co. v. Cotrell, in which the Court asserted that reciprocity statutes were invalid even if intended to produce an incentive to eliminate trade barriers.

The reciprocity doctrine appears peculiar because it is not obvious that reciprocity statutes fail strict scrutiny. While the state

---

134. The challenged provision stated:
   Any person, firm, city, village, municipal corporation or any other entity intending to withdraw ground water from any well or pit located in the State of Nebraska and transport it for use in an adjoining state shall apply to the Department of Water Resources for a permit to do so. If the Director of Water Resources finds that the withdrawal of the ground water requested is reasonable, is not contrary to the conservation and use of ground water, and is not otherwise detrimental to the public welfare, he shall grant the permit if the state in which the water is to be used grants reciprocal rights to withdraw and transport ground water from that state for use in the State of Nebraska.
   Id. at 944 (quoting NEB. REV. STAT. § 46-613.01 (1978)).
135. Id. at 942.
137. In addition to the prisoners’ dilemma analysis presented below, the tit-for-tat game provides a strong theoretical foundation for assuming that such statutes will have a benign effect in promoting trade. Assuming that the states are repeat trade players, then Robert Axelrod’s study of the tit-for-tat game suggests that reciprocity agreements—despite the facial discrimination—are more likely to promote than to inhibit open trade. See ROBERT AXELROD, THE EVOLUTION OF COOPERATION 27-54 (1984). So viewed, these statutes are likely to limit the power of interest groups to pursue restrictive trade measures because legislators will appreciate that catering to such pressures will impose direct costs on beneficiaries of imports from those states that carry the reciprocity provisions. And yet, the Court has disallowed such reciprocity agreements absent Congressional authorization. For a further discussion of reciprocity statutes, see infra Part III.B.3.c.
has the alternative of mimicking the law of the potential trade partner, such a strategy would threaten to undermine, rather than to promote, free trade. And yet, the Supreme Court has upheld such reciprocal trade provisions only in the limited context of a federal statute that conferred regulatory power over the underlying subject matter. In *Western & Southern Life Insurance Co. v. State Board of Equalization*, 138 the Court sustained a reciprocity statute in the context of insurance, where Congress had delegated to the states regulatory power over the subject area. 139

The Court has not only presumed against the constitutionality of laws that facially discriminate in commerce, but also against legislative efforts to conjoin provisions that would be independently constitutional, but that when put together have a clear discriminatory effect only on out-of-state interests. The next case provides an illustration.

c. *Tax and Rebates as the Functional Equivalent of Facially Discriminatory Statutes*

In *West Lynn Creamery, Inc. v. Healy*, 140 Justice Stevens, writing for the majority, struck down a Massachusetts tax and rebate scheme for milk where the tax operated neutrally on all milk sales, without regard to the milk’s point of origin, but where the revenues went into a subsidy fund, the proceeds of which were distributed solely to Massachusetts milk producers. In doing so, Justice Stevens provided one of the Court’s clearest articulations of a political process, or representation reinforcement, justification for the dormant Commerce Clause doctrine, one that is parallel to, and more commonly associated with, the famous *Carolene Products* footnote four. 141 In essence, this model holds that the Constitution’s broadly

139. These cases thus raise the possibility of an interesting empirical verification of the Axelrod thesis in the context of reciprocal barriers to trade where Congress has allowed states to follow the strategy. See AXELROD, supra note 137. If reciprocal trade statutes in insurance have had the effect of loosening barriers to interstate insurance marketing, then this would provide an important empirical datum against the Court’s presumed contrary rule in such cases as *Sporhase* and *Great Atlantic & Pacific Tea Co.*
140. 512 U.S. 185 (1994).
141. See United States v. Carolene Prods. Co., 304 U.S. 144, 152 n.4 (1938); see also JOHN HART ELy, *DEmOCRACY AND DISTRUST* (1980) (providing a sympathetic account of this
worded provisions, especially equal protection, but also the Commerce Clause, should be construed to further the representation of those who are disadvantaged in the relevant political process.\textsuperscript{142} Because out-of-state competitors are not represented in the Massachusetts legislature, a law that imposed an obligation solely upon them would appear to violate this norm. The relevant question for dormant Commerce Clause purposes is whether an in-state interest that is meaningfully represented in the political process ensures functional representation for the relevant out-of-state interests. In this case, the law appears neutral, but as Justice Stevens notes, the combined regime has the practical effect of excluding those in-state who would otherwise share a common set of interests with those who are not represented.

In applying the analysis to \textit{Healy}, it is important to note what was not in dispute in the case. All justices in the case appeared to agree that had the component parts of the statute—the neutral tax measure and the subsidy program—arisen and been challenged separately, they would have withstood dormant Commerce Clause scrutiny. Even so, the Court struck down the combined regime:

Nondiscriminatory measures, like the evenhanded tax at issue here, are generally upheld, in spite of any adverse effects on interstate commerce, in part because “[t]he existence of major in-state interests adversely affected ... is a powerful safeguard against legislative abuse.” ... However, when a nondiscriminatory tax is coupled with a subsidy to one of the groups hurt by

\textsuperscript{142} It is important to note a major criticism leveled against this process-based political theory. The problem is that the appropriate level of participation that any particular group receives is a normative question that cannot be answered independently of the underlying substantive question of whether the law subject to challenge is constitutionally permissible. Thus, if out-of-state interests are required to be included in a state’s political processes, that effectively answers the question of whether a state law that operates to the detriment of those interests will withstand constitutional scrutiny. But rather than directly confronting the question of whether the law is or is not permissible, the representation reinforcement analysis sidetracks this question by asking instead whether those who were harmed were adequately represented. For a general analysis of this analytical difficulty, see Einer R. Elhauge, \textit{Does Interest Group Theory Justify More Intrusive Review?}, 101 YALE L.J. 31 (1991) (observing that although this inquiry sounds content neutral, it has the nonneutral effect of simply masking an underlying substantive question).
the tax, a State's political processes can no longer be relied upon to prevent legislative abuse, because one of the in-state interests which would otherwise lobby against the tax has been mollified by the subsidy.\textsuperscript{143}

Stevens concluded by observing that "the purpose and effect of the pricing order are to divert market share to Massachusetts dairy farmers."\textsuperscript{144}

Perhaps the easiest way to conceptualize this case is to appreciate that although the tax portion of the challenged law was neutral, the scheme as a whole was equivalent to a differential tax on milk imported from out of state, which was motivated by the desire to confer an advantage on the local milk industry at the expense of its out-of-state competitors. Had the statute taken that simpler form, there is little question that it would have been struck down under the per se rule of invalidity. So viewed, the case stands for the proposition that combined schemes that function as facially discriminatory schemes in practical effect will be subject to the per se rule, or at least to strict scrutiny.

We have now reviewed a sufficient body of case law to cover the essential framework for facially discriminatory statutes—or their operational equivalents—to which ordinary dormant Commerce Clause analysis applies. We now turn to the body of dormant Commerce Clause case law that establishes the rules governing neutral state laws that allegedly burden commerce. After doing so, we consider a group of cases, under the header of the market participant doctrine, that involve facially discriminatory statutes, but that generally have been exempted from dormant Commerce Clause analysis; an exception to the market participant doctrine that reinstates a kind of strict scrutiny; and a case that involves an alleged undue burden on commerce that is further exempt from dormant Commerce Clause analysis.

\textsuperscript{144} Id. at 203.
2. Facialy Neutral Statutes that Burden Commerce

a. The Movement of Goods Cases

In Hunt v. Washington State Apple Advertising Commission, the Supreme Court considered a dormant Commerce Clause challenge to a North Carolina statute, unique among all states, that prohibited the apples sold or shipped in closed containers in North Carolina to be identified with any designation other than United States Department of Agriculture (USDA) grading. North Carolina defended its statute as a necessary means of preventing fraud and consumer confusion in apple marketing. The Washington State Apple Commission challenged the statute on the ground that it burdened Washington apple growers by preventing them from using an alternative grading system pursuant to Washington law. Writing for the majority, Chief Justice Burger explained the burden that the North Carolina statute imposed on Washington apple growers as follows:

By prohibiting Washington growers and dealers from marketing apples under their State's grades, the statute has a leveling effect which insidiously operates to the advantage of local apple producers.... The Washington State grades are equal or superior to the USDA grades in all corresponding categories. Hence, with free market forces at work, Washington sellers would normally enjoy a distinct market advantage vis-à-vis local producers in those categories where the Washington grade is superior. However, because of the statute's operation, Washington apples which would otherwise qualify for and be sold under the superior Washington grades will now have to be marketed under their inferior USDA counterparts. Such "downgrading" offers the North Carolina apple industry the very sort of protection against competing out-of-state products that the Commerce Clause was designed to prohibit.

The critical datum in the Court's analysis involved the nature of the differential grading. The distinction is unlike translation from

146. Id. at 351-62.
English to Spanish, which generally can be accomplished without significant loss of meaning.\textsuperscript{147} Instead, as Burger observed, the Washington grading system was superior in all categories, meaning that the top grade under the Washington system was more stringent than the top grade in the USDA system. Therefore, the practical effect of the North Carolina statute was to downgrade Washington apples being marketed in North Carolina.\textsuperscript{148} If we assume, as seems reasonable, that the relevant North Carolina apples are largely indistinguishable within USDA Grade A, but that they are not adequate to meet the highest Washington standard, then it is easy to appreciate the burden on commerce that the North Carolina regime imposes.\textsuperscript{149}

\textsuperscript{147} Of course, even here translation does not come without risk. For a somewhat ironic illustration, consider \textit{Castaneda v. Partida}, 430 U.S. 482 (1977), a case in which the Court rejected a \textit{Batson}-style challenge to Latino jurors excluded by peremptory strikes, where the prosecutor defended against the charge that he exercised his challenges in a race-conscious manner on the ground that he feared that native Spanish speakers would have difficulty following official translations. If one considers that the proffered race-neutral rationale is that struck jurors will follow the actual meaning of testimony given in Spanish rather than potentially erroneous translations (when the translation is accurate this risk does not arise), the result seems peculiar. In fact, however, the result makes good sense when we realize that the purpose is to ensure that the jury follows proceedings preserved in the written record on appeal, which would not be the case if the jurors declined to follow official translations. Of course, in the event of a false translation, the other side has the opportunity to raise appropriate objections, which will be preserved in the record.

\textsuperscript{148} While the \textit{Hunt} case assumed Washington apples to be superior, subsequent studies have revealed the Washington growers' focus on physical appearance compromises taste. See Timothy Egan, 'Perfect' Apple Pushed Growers Into Debt, \textit{N.Y. Times}, Nov. 4, 2000, at A1 (quoting apple grower as stating that people should not "feel sorry for us—we did it to ourselves ... For almost 50 years, we've been cramming down the consumer's throat a red apple with ever thicker skin, sometimes mushy, sometimes very good if done right, but a product that was bred for color and size and not for taste"); Bob Kasper, \textit{Big Red: In Apples, Color Doesn't Always Mean Quality}, \textit{Chi. Trib.}, Mar. 7, 2001, at 3A ("In the pursuit of a prettier, more uniform apple ... some Red Delicious apples have been bright red, but their flavor and crispness have suffered."). My own strong recommendation is Nittany apples when they are available, even though they are not nearly as attractive.

\textsuperscript{149} Revealed preferences appear to support, although they certainly do not prove, this assertion. As the statute reveals, the North Carolina apple industry had sufficient lobbying power to secure protectionist legislation. If the state's apple industry produced apples of equal or higher quality relative to those in Washington State, then they likely could have instead secured legislation making available a grading scheme that mimicked that in Washington. Had they done so, they could have used that scheme to demonstrate that their top grade apples were competitive with the top grade Washington apples, and perhaps superior to alternative apples imported from other states. Instead, they elected to prevent anyone from marketing above USDA Grade A, which suggests that in general, they would have been disadvantaged by the availability of a superior grade.
Chief Justice Burger further noted the potential nationwide impact of the North Carolina order:

In addition to its obvious consequence—prohibiting the display of Washington State apple grades on containers of apples shipped into North Carolina, the regulation presented the Washington apple industry with a marketing problem of potentially nationwide significance. Since the ultimate destination of [the stored apples] is unknown ... compliance with North Carolina's unique regulation would have required Washington growers to obliterate the printed labels on containers shipped to North Carolina, thus giving their product a damaged appearance. Alternatively, they could have changed their marketing practices to accommodate the needs of North Carolina, i.e., repack apples to be shipped to North Carolina in containers bearing only the USDA grade, and/or store the estimated portion of the harvest destined for that market in such special containers. As a last resort, they could discontinue the use of preprinted containers entirely.\footnote{150}

Burger then added that "in the event a number of other States followed North Carolina's lead, the resultant inability to display the Washington grades could force the Washington growers to abandon the State's expensive inspection and grading system."\footnote{151}

In evaluating the North Carolina order, Chief Justice Burger articulated the applicable test as follows: "When discrimination against commerce of the type we have found is demonstrated, the burden falls on the State to justify it both in terms of the local benefits flowing from the statute and the unavailability of non-discriminatory alternatives adequate to preserve the local interests at stake."\footnote{152} As applied to this case, the Chief Justice rejected the state's argument that the statute was necessary to prevent consumer confusion or marketing fraud,\footnote{153} noting that "[s]ince Washington grades are in all cases equal or superior to their USDA counterparts, they could only 'deceive' or 'confuse' a consumer to his
benefit, hardly a harmful result.” More importantly, Burger observed: “[I]t appears that nondiscriminatory alternatives to the outright ban of Washington State grades are readily available. For example, North Carolina could effectuate its goal by permitting out-of-state growers to utilize state grades only if they also marked their shipments with the applicable USDA label.”

Hunt demonstrates that in cases presenting neutral statutes that burden interstate commerce and that appear to be motivated by economic or protectionist interests, the relevant test is effectively the same as in cases involving facial discrimination where a state articulates a legitimate—meaning neither financial nor protectionist—purpose. In both cases, the Court will apply strict scrutiny, requiring that the state articulate a legitimate purpose and defend its choice of means by establishing the absence of a nondiscriminatory alternative. Thus, in both categories, the Court presumes against the constitutionality of the statute and places the burden on the state to overcome the burden. In Hunt, this rule seems appropriate given that the statute appears to have been the product of an effort by the North Carolina apple industry to benefit itself at the expense of out-of-state competitors, and at the expense of the in-state apple consumers who otherwise would have benefitted from the additional information and product availability that the premium for marketing superior grade apples would allow Washington exporters to secure in the North Carolina market. In addition, the North Carolina rule threatened to affect Washington apple marketing not only in North Carolina, but on a nationwide scale.

While the choice of rule in Hunt is relatively clear, its application appears problematic when we compare another case that also involves similar special interest legislation benefitting a narrow class of in-state firms at the expense of both out-of-state competitors and in-state consumers. In Exxon Corp. v. Governor of Maryland, Justice Stevens, writing for the majority, sustained a Maryland statute that prohibited refining companies from owning

154. Id. at 354.
155. Id. Burger added that “some potential for ‘confusion’ might persist. However, it is the type of ‘confusion’ that the national interest in the free flow of goods between the States demands be tolerated.” Id.
and operating retail service stations in Maryland against a dormant Commerce Clause challenge. As Stevens noted, the statute grew out of the 1973 oil embargo and the resulting petroleum shortage.\footnote{Id. at 121.} The Governor commissioned a study in response to the complaints of various independent service stations, and the study determined that service stations owned by producers or refiners received preferential treatment during the shortage period.\footnote{Id.}

Critical to Stevens' analysis was the fact that no producers or refiners of oil were located in Maryland, and that only about five percent of service stations in Maryland were producer or refiner owned. Stevens noted that "[s]ince Maryland's entire gasoline supply flows in interstate commerce and since there are no local producers or refiners ... claims of disparate treatment between interstate and local commerce would be meritless."\footnote{Id. at 125.} Stevens further rejected the argument that because the entire burden of divestiture fell on out-of-state companies, while in-state independents received a benefit, the statute should be struck down. Stevens concluded that "the Act creates no barriers whatsoever against interstate independent dealers; it does not prohibit the flow of interstate goods, place added costs upon them, or distinguish between in-state and out-of-state companies in the retail market."\footnote{Id. at 126.}

One difficulty with Stevens' analysis is that although the statute did not distinguish between in-state and out-of-state firms, and did not solely benefit in-state firms,\footnote{Out-of-state firms that were not vertically integrated also benefitted from the Maryland law.} the entire burden of the statute fell on an easily defined subset of out-of-state firms.\footnote{Id.} To appreciate the dynamics of the statute, we must consider why the commissioned study revealed differential treatment between the producer or refiner owned firms and their independent competitors, whether or not locally owned. Recall that the statute went into effect in response to the 1973 oil embargo. In this period, there was considerable uncertainty as to whether the multi-fold price increase
following the 1973 oil embargo would be followed by still further price shocks. As a result, producers and refiners were concerned about the effects of future price increases on their long-term supply contracts. To hedge against such increases, a rational pricing strategy would include adding the equivalent of a price insurance premium in long-term supply contracts. This price premium would leave independents with the following alternatives: (1) secure a long-term supply on less favorable terms, or (2) go to the spot markets, where they could secure the going market price, but subject themselves to unpredictable supply. In contrast, for service stations that the producers or refiners themselves owned, there would be no need to include a hedge against future price increases. Since the service station’s profits inured to the benefit of the parent company, the producers or refiners could immediately pass on the burdens or benefits of any future price shocks, thus providing the equivalent of spot market pricing to their retail service stations, while, at the same time, ensuring a steady supply.\footnote{A3}

In effect, the Exxon case is about the benefits associated with vertical integration in a period in which long-term supply contracts required a functional insurance premium to cover against unknown pricing contingencies beyond the supplier’s control. So viewed, this case appears structurally similar to Hunt. The beneficiaries of the prohibition against refiner-owned firms are in-state independent stations, which remove from competition those firms that can receive superior pricing and supply terms due to the ability of the parent companies to pass on actual costs without the need for a price insurance premium. The losers are out-of-state vertically integrated firms and in-state consumers who lose the benefits that such firms can provide in the marketplace in such a period of price fluctuation and uncertainty. And yet, despite these apparent

\footnote{A3. The analysis is a bit more complicated. The price premium would benefit vertically integrated retail service stations provided that there was no actual price shock, at least if the price were fixed, as opposed to being placed on some sort of sliding scale. But if the feared price shock were realized, then the independents would have secured the benefit, at least for the period of the contract, of a lower price than would actually be passed on to the vertically integrated retail service stations. The analysis suggests that the nature of contracts following a substantial but isolated price shock is likely to benefit vertically integrated firms. This characterizes the historical period during which the statute in Exxon was enacted and the case itself was decided.}
similarities, these two cases—both involving special interest legislation in the form of facially neutral statutes imposing an identifiable burden on commerce—are resolved in opposite fashion. This is among the apparent doctrinal inconsistencies that have been the focus of critics of the dormant Commerce Clause doctrine, and that the game theoretical model is intended to explain. We will now turn to another group of facially neutral statutes that burden commerce, but that involve instrumentalities rather than the flow of goods.

b. Instrumentalities of Commerce Cases

The principal contemporary dormant Commerce Clause case that we will consider before discussing the various doctrinal exceptions is Kassel v. Consolidated Freightways Corp. Before doing so, however, it will be helpful to consider briefly three earlier instrumentalities of commerce cases. In South Carolina Highway Department v. Barnwell Bros., Justice Stone, writing for the majority, upheld a state statute setting forth a maximum truck weight based upon a deferential rational basis test, where the state claimed that the statute promoted highway safety, even though trial evidence demonstrated that axle weight was more closely correlated with highway safety than total truck weight. Stone observed that "[f]ew subjects of state regulation are so peculiarly of local concern as is the use of state highways." Stone determined that because it was easier to identify truck weight than axle weight, South Carolina legislators had a rational basis for selecting their chosen means.

In Southern Pacific Co. v. Arizona ex rel. Sullivan, Justice Stone abandoned the rational basis test in considering the constitutionality of a state regulation setting forth a maximum train length. The Court determined that the heavily regulated area

164. See, e.g., Twyman, supra note 16, at 403 ("Thus, Exxon ... suggests a limited review for discriminatory effects produced by a regulation, a position that is inconsistent with the Court's analysis in Hunt.").
166. 303 U.S. 177 (1938).
167. Id. at 187.
168. 325 U.S. 761 (1945).
of trains, unlike highways, was of predominantly national concern. Thus, Stone stated:

The decisive question is whether in the circumstances the total effect of the law as a safety measure in reducing accidents and casualties is so slight or problematical as not to outweigh the national interest in keeping interstate commerce free from interferences which seriously impede it and subject it to local regulation which does not have a uniform effect on the interstate train journey which it interrupts. 169

Justice Stone struck down the law, finding the burdens the statute imposed on commerce outweighed the alleged safety benefits.

Finally, in Bibb v. Navajo Freight Lines, 170 Justice Douglas, writing for the majority, struck down an Illinois statute that alone required the use of curved mudflaps, where forty-five other states permitted straight mudflaps and one other state, Arkansas, prohibited curved mudflaps. Douglas observed that Bibb was "one of those cases—few in number—where local safety measures that are nondiscriminatory place an unconstitutional burden on interstate commerce." 171 The case most obviously appears in tension with Barnwell Bros., 172 given that both the South Carolina total truck weight regulation and the Illinois mudflap requirement imposed comparable burdens on commerce.

These cases provide the necessary doctrinal backdrop for the Court’s most recent major decision that involves the applicable standard in cases that present challenges to state highway safety regulations based upon the dormant Commerce Clause. Kassel is unusual in that it is a divided opinion in which no majority embraces a single test. 173 Although the case does not resolve the

---

169. Id. at 775-76.
171. Id. at 529.
172. See id. at 523 (distinguishing Barnwell Bros.).
173. See generally Kassel v. Consol. Freightways Corp., 450 U.S. 662 (1981). For an analysis that relies upon a lurking vote cycle in Kassel to explore implications for the Supreme Court's decision making rules, see MAXWELL L. STEARNS, CONSTITUTIONAL PROCESS: A SOCIAL CHOICE ANALYSIS OF SUPREME COURT DECISION MAKING (2000); Stearns, supra note 96. For present purposes, Kassel is important for its doctrinal implications on the dormant side of the Commerce Clause, more so than for its implications for Supreme Court decisionmaking.
choice of test,\textsuperscript{174} it provides the foundation for subsequent doctrinal formulations. In addition, the game theoretical model developed in Part II sheds light on the Supreme Court’s division in this group of cases as to which test to apply.\textsuperscript{175}

An Iowa statute prohibited the use of sixty-five foot twin trailers, and contained a series of exceptions benefitting only Iowa residents. Specifically, the statute allowed such trailers to make deliveries from out-of-state to border cities,\textsuperscript{176} to make deliveries from point to point within the state, and to allow Iowa truck manufacturers to ship trucks up to seventy feet in length. Otherwise, such trailers were prohibited even though they were permitted in all states that surrounded Iowa. As Justice Rehnquist observed in his dissent, while the states surrounding Iowa allowed sixty-five foot twin trailers, the states in the Northeast and Southwest corridors and in the District of Columbia, like Iowa, prohibited them.\textsuperscript{177} Consolidated challenged the statute, which required it to limit its shipments through Iowa to fifty-five foot singles or sixty-foot doubles, to detach sixty-five foot doubles and take each through the state separately, or to divert sixty-five foot doubles around the state. The state defended the statute, claiming that sixty-five foot twins were more dangerous than fifty-five foot singles and that the law promoted safety and reduced wear and tear on the state highways by diverting truck traffic out-of-state. The federal district court employed the balancing test previously articulated in \textit{Raymond Motor Transportation, Inc. v. Rice},\textsuperscript{178} under which the Court “weigh[ed] ... the asserted safety purpose against the degree

\textsuperscript{174} For an analysis demonstrating that because the two opinions consistent with the outcome are decided along different analytical dimensions, the narrowest grounds rule does not apply, see STEARNS, supra note 173, at 99-102.
\textsuperscript{175} See discussion infra Part III.B.2.a.
\textsuperscript{176} The state enacted the border cities exception and the Governor signed it into law after he vetoed the repeal bill. \textit{Kassel}, 450 U.S. at 666 n.6.
\textsuperscript{177} Id. at 688 (Rehnquist, J., dissenting).
\textsuperscript{178} 434 U.S. 429 (1978).
of interference with interstate commerce." Applying that test, the district court rejected the safety rationale on the ground that the prohibited sixty-five foot twins were no less safe than permitted fifty-five foot singles.

On appeal, the Supreme Court fractured. Justice Powell, writing for a plurality of four, struck down the statute. Justice Brennan, writing for two, concurred in the judgment. Then-Associate Justice Rehnquist, writing for three, dissented. Justice Powell began by observing that the mere incantation of a highway safety benefit was insufficient to preclude independent balancing under the Raymond test. Powell noted that the appropriate "weighing" requires "a sensitive consideration of the weight and nature of the state regulatory concern in light of the extent of the burden imposed on the course of interstate commerce." Applying this test, Powell found that "the Iowa truck-length limitations unconstitutionally burden interstate commerce." After going through and refuting the state's claimed safety justifications, Powell noted that the "special deference" normally accorded state highway safety regulations derives in part from the assumption that where such regulations do not discriminate on their face against interstate commerce, their burden usually falls on local economic interests as well as other States' economic interests, thus insuring that the State's own political processes will serve as a check against unduly burdensome regulations.

Here, Powell determined, less deference is appropriate because the statutory regulation "bears disproportionately on out-of-state residents and businesses."

Powell then reviewed the history of a 1974 bill that would have repealed the sixty-five foot twin restriction. In vetoing the bill, Governor Ray had stated:

180. Id. (quoting Raymond, 434 U.S. at 443).
181. Id. at 671.
182. Id. at 675 (quotation omitted).
183. Id. at 676.
I find sympathy with those who are doing business in our state and whose enterprises could gain from increased cargo carrying ability by trucks. However, with this bill, the Legislature has pursued a course that would benefit only a few Iowa-based companies while providing a great advantage for out-of-state trucking firms and competitors at the expense of our Iowa citizens.\textsuperscript{164}

Powell observed:

It is thus far from clear that Iowa was motivated primarily by a judgment that 65-foot doubles are less safe than 55-foot singles. Rather, Iowa seems to have hoped to limit the use of its highways by deflecting some through traffic.... [A] State cannot constitutionally promote its own parochial interests by requiring safe vehicles to detour around it.\textsuperscript{165}

After considering the evidence in support of the safety justification introduced at trial, Powell concluded that "[b]ecause Iowa has imposed this burden without any significant countervailing safety interest, its statute violates the Commerce Clause."\textsuperscript{166} Powell voted to strike down the law using a balancing test after considering and rejecting the preferred safety benefits.

Justice Brennan, concurring in the judgment, rejected the balancing test in the context of highway safety in favor of a test that inquired whether the Iowa legislature had a rational justification in support of the law at the time it enacted the statute. Brennan objected to the reliance in both the opinions of Justice Powell for a plurality, and Justice Rehnquist in dissent, on evidence in support of safety justifications offered initially at trial.\textsuperscript{167} In addition, while at various points he spoke in terms of a balancing inquiry, Brennan made clear that he preferred the rational basis

\textsuperscript{164} Id. at 677 (quotation omitted).
\textsuperscript{165} Id. at 677-78.
\textsuperscript{166} Id. at 678-79 (footnote omitted).
\textsuperscript{167} Thus, Brennan stated: "Both the opinion of my Brother Powell and the opinion of my Brother Rehnquist are predicated upon the supposition that the constitutionality of a state regulation is determined by the factual record created by the State's lawyers in trial court." Id. at 680 (Brennan, J., concurring in the judgment). Instead, Brennan asserted that "a court should focus ultimately on the regulatory purposes identified by the lawmakers and on the evidence before or available to them that might have supported their judgment." Id.
test. Thus, Brennan asserted: "It is not the function of the court to decide whether in fact the regulation promotes its intended purpose, so long as an examination of the evidence before or available to the lawmaker indicates that the regulation is not wholly irrational in light of its purposes."\textsuperscript{188} Reviewing the contemporaneous evidence, Brennan determined that it evinced a pure protectionist motive, and thus subjected the state's law to "a virtually per se rule of invalidity."\textsuperscript{189}

Finally, Justice Rehnquist, writing in dissent, highlighted the anomaly in the Court's opinions. Like Justice Brennan, Rehnquist rejected Powell's application of the balancing test. Other than to determine whether the stated rationale is a pretext for an illicit protectionist purpose, Rehnquist asserted:

\begin{quote}
It is emphatically not our task to balance any incremental safety benefits from prohibiting 65-foot doubles as opposed to 60-foot doubles against the burden on interstate commerce .... The question is rather whether it can be said that the benefits flowing to Iowa from a rational truck-length limitation are "slight or problematical." The particular line chosen by Iowa—60 feet—is relevant only to the question whether the limit is a rational one.\textsuperscript{190}
\end{quote}

While Rehnquist agreed with Brennan that other than to identify an illicit pretext, the only relevant inquiry was whether the law had a rational basis, he agreed with Powell that it was proper to consider evidence introduced by the state's lawyers at trial. Thus, Rehnquist stated: "Justice Brennan can cite no authority for the proposition that possible legislative purposes suggested by a State's lawyers should not be considered in Commerce Clause cases."\textsuperscript{191} He further observed that: "As I read the various opinions in this case ... only four Justices invalidate Iowa's law on the basis of the analysis in Raymond."\textsuperscript{192} While Rehnquist agreed that the Raymond test applied, based upon his review of the trial evidence, he determined that the law did rationally further a legitimate safety

\begin{flushleft}
\textsuperscript{188} Id. at 680-81 (Brennan, J., concurring in the judgment).
\textsuperscript{189} Id. at 686 (quoting City of Philadelphia v. New Jersey, 437 U.S. 617, 624 (1978)).
\textsuperscript{190} Id. at 697-98 (Rehnquist, J., dissenting).
\textsuperscript{191} Id. at 702.
\textsuperscript{192} Id. at 700 n.10.
\end{flushleft}
interest, and thus he voted to sustain the statute. The analysis demonstrates that while the Court generally agreed that something less than strict scrutiny was appropriate in this context, it was unable to agree on whether the relevant test was rational basis or the somewhat more stringent balancing test. 193

193. I have previously demonstrated that this case reveals a collective preference aggregation problem. See STEARNS, supra note 173, at 99-102. To explain the anomaly, it is important to articulate a premise that is fully consistent with the analyses in all three opinions: If the Court determines that the appropriate test is rational basis and if it applies the more liberal evidentiary rule, thus considering evidence in support of the chosen test introduced initially by the state’s trial lawyers, then it should reject the dormant Commerce Clause challenge to the Iowa statute. Based upon this assumption, we can identify a logical voting progression supporting the dissenting result. One majority favored the rational basis test (the Brennan plus Rehnquist camps for a total of five). A second majority favored admitting newly introduced evidence to determine if the chosen test is met (the Powell plus Rehnquist camps for a total of seven). And yet, the controlling majority voted to strike down the Iowa statute (the Powell plus Brennan camps for a total of six). Justice Rehnquist apparently recognized this anomaly. After noting that no one supported Brennan’s insistence upon contemporaneous legislative justifications for the Iowa statute, he further observed: “It should not escape notice that a majority of the Court goes on record today as agreeing that courts in Commerce Clause cases do not sit to weigh safety benefits against burdens on commerce when the safety benefits are not illusory.” Kassel, 450 U.S. at 682 n.4 (Rehnquist, J., dissenting). The majority he had in mind, of course, was the Brennan plus Rehnquist camps. In spite of this anomaly, the general consensus is that the applicable test is some form of balancing, albeit one that is more deferential than strict scrutiny, at least absent some clear evidence of pretext.
The following flow chart summarizes the Court’s dormant Commerce Clause analysis presented thus far:

**Table 3: Dormant Commerce Clause Flow Chart**

<table>
<thead>
<tr>
<th>Category</th>
<th>Rule</th>
<th>Illustrations/Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Facially Discriminatory</strong></td>
<td>1. Protectionist-/Economic motive</td>
<td>Per se rule of invalidity</td>
</tr>
<tr>
<td></td>
<td>Traditional</td>
<td>Tarriffs/Embargoes</td>
</tr>
<tr>
<td></td>
<td>2. Non-economic motive</td>
<td>Strict scrutiny with burden on state (requiring legitimate state interest and absence of non-discriminatory alternative)</td>
</tr>
<tr>
<td></td>
<td>Environmental Protection</td>
<td>Statutes; e.g., City of Philadelphia *<em>v.</em> New Jersey; Maine *<em>v.</em> Taylor; Sporhase *<em>v.</em> Nebraska ex rel. Douglas; Great Atlantic &amp; Pacific Tea Co. *<em>v.</em> Cotrell</td>
</tr>
<tr>
<td><strong>Facially Neutral</strong></td>
<td>3. Protectionist-/Economic motive</td>
<td>Strict Scrutiny (same test as in category #2)</td>
</tr>
<tr>
<td></td>
<td>Hunt *<em>v.</em> Washington. But see Exxon *<em>v.</em> Maryland</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Legitimate Interest with Incidental Burden on Commerce</td>
<td>Balancing test with burden on challenger (weighs claimed benefits of law against alleged burdens on commerce)</td>
</tr>
<tr>
<td></td>
<td>Raymond Motor Transp. *<em>v.</em> Rice; Bibb *<em>v.</em> Navajo Freight Lines; Kassel *<em>v.</em> Consol. Freightways</td>
<td></td>
</tr>
</tbody>
</table>
Table 3 summarizes the doctrinal discussion of the dormant Commerce Clause cases. While some case placements required extrapolations, set out in the prior discussion, from the Court's imprecise (e.g., City of Philadelphia, Sporhase) or conflicting (e.g., Kassel) doctrinal analyses, I based the vast majority of case categorizations entirely upon the Court's own doctrinal formulations. The table is ultimately the starting point in our analysis, as the next group of cases will show. In fact, the point of presenting this table now is to use it as a basis of comparison for the case categories in which the Court has exempted the challenged statutes from dormant Commerce Clause scrutiny.

Surprisingly, perhaps, given the per se rule of invalidity, the principal exception to the dormant Commerce Clause is the market participant doctrine, which appears to meet all of the criteria for Category 1. In fact, as we will see in the next subpart, the market participant doctrine removes entirely the relevant cases from presumptive invalidity under the dormant Commerce Clause doctrine notwithstanding facial discrimination and a clear discriminatory or economic purpose. Similarly, the export taxation doctrine removes statutes from strict scrutiny under Category 3 notwithstanding a clear intent to benefit the state economically at the expense of out-of-state purchasers of the exported good. And finally, we will consider the Article IV Privileges and Immunities doctrine, which effectively restores a kind of scrutiny similar to that employed in cases falling into Category 2, even though the case appears to satisfy the requirements of the market participant doctrine. The inconsistencies revealed thus far only scratch the surface.

3. The Market Participant Exception to the Dormant Commerce Clause

I will now describe the four principal market participant cases. In three cases, the Court created an exemption from ordinary

---
194 Portions of the discussion in this subpart are based upon Maxwell L. Stearns, A Private-Rights Standing Model to Promote Public-Regarding Behaviour by Government Owned Corporations, in FROM BUREAUCRACY TO BUSINESS ENTERPRISE: LEGAL AND POLICY ISSUES IN THE TRANSFORMATIONS OF GOVERNMENTAL SERVICES 121 (Michael J. Whincop, ed. 2003).
dormant Commerce Clause scrutiny. In the most recent of these four decisions, *South-Central Timber Development, Inc. v. Wunnicke*, 195 the Court summarized and distinguished the earlier three cases in a successful effort to bypass the market participant exception to the dormant Commerce Clause doctrine. In doing so, the *Wunnicke* Court applied the dormant Commerce Clause doctrine to strike down the State of Alaska's inclusion of an in-state processing requirement in a contract for the sale of forty-nine million board feet of lumber with a Japanese buyer. Without the benefit of the market participant exception, the case fell squarely into category one of the Court's dormant Commerce Clause jurisprudence, given the facial discrimination and the economic motive underlying the in-state processing requirement, in which the per se rule of invalidity applied. 196 The issue in *Wunnicke* was whether the state, acting as an entrepreneur rather than as a regulator, could not only select with whom it would deal, but also could establish its own terms of contracting without dormant Commerce Clause scrutiny. To support its argument that the market participant doctrine rather than the dormant Commerce Clause applied, the state relied upon the following three market participation cases.

In the first case, *Hughes v. Alexandria Scrap Corp.*, 197 an out-of-state processor of junked cars challenged a scheme in the State of Maryland designed to reduce the number of junked cars in the state. The Maryland legislature had established a "bounty" for cars that bore a Maryland license plate, and imposed more stringent documentation requirements on out-of-state scrap processors than on in-state processors. An out-of-state processor challenged the program, which facially discriminated in commerce, claiming that it violated the dormant Commerce Clause. The *Alexandria Scrap* Court rejected the challenge on the ground that the state was acting in an entrepreneurial rather than regulatory capacity. Thus, the Court stated: "Nothing in the purposes animating the Commerce Clause prohibits a State, in the absence of congressional action, from participating in the market and exercising the right to favor its own citizens over others." 198

---

196. See id. at 100.
198. Id. at 810 (footnotes omitted).
In the second case, Reeves, Inc. v. Stake, the Court rejected a dormant Commerce Clause challenge to a South Dakota law that restricted the sale of cement from a state-owned plant to state residents. The Reeves Court stated: "The basic distinction drawn in Alexandria Scrap between States as market participants and States as market regulators makes good sense and sound law." The Court then acknowledged "the long recognized right of trader or manufacturer, engaged in an entirely private business, freely to exercise his own independent discretion as to parties with whom he will deal." In describing this case, the Wunnicke Court stated: "In essence, the [Reeves] Court recognized the principle that the Commerce Clause [in its dormant capacity] places no limitations on a State's refusal to deal with particular parties when it is participating in the interstate market in goods.

Finally, in White v. Massachusetts Council of Construction Employers, Inc., the Supreme Court rejected a dormant Commerce Clause challenge to an executive order issued by the

---

200. Id. at 436.
201. Id. at 438-39 (quoting United States v. Colgate & Co., 250 U.S. 300, 307 (1919)).
202. S.-Cent. Timber Dev., Inc. v. Wunnicke, 467 U.S. 82, 94 (1984). In addition to benefitting in-state purchasers planning to use the cement secured at a favorable price, the Reeves Court implicitly acknowledged that the challenged scheme also likely benefitted South Dakota middlemen who would then charge a premium to out-of-state purchasers. Thus, the Court stated:

Nor has South Dakota cut off access to its own cement altogether, for the policy does not bar resale of South Dakota cement to out-of-state purchasers. Although the out-of-state buyer in the secondary market will undoubtedly have to pay a markup not borne by South Dakota competitors, this result is not wholly unjust. There should be little question that South Dakota at least could exact a premium on out-of-state purchases to compensate it for the State's investment and risk in the plan. If one views the added markup paid by out-of-state buyers to South Dakota middlemen as the rough equivalent of this "premium," the challenged program equates with a permissible result.

Reeves, 447 U.S. at 443 n.17. See also Saul Levmore, Interstate Exploitation and Judicial Intervention, 69 VA. L. REV. 563, 578 (1983) (describing out-of-state resale market facilitated by South Dakota scheme). If so, the scheme benefitted a narrow and organized group of relatively wealthy purchasers at the expense of dispersed state residents who would have benefitted from the direct sales to out-of-state purchasers at a higher price. This is consistent with the theory of this Article, which characterizes the market participant cases, as examples of in-state rent seeking that neither promotes mutual defection in a prisoners dilemma nor undermines the pro-commerce pure Nash equilibrium strategies of other states. See discussion infra Part III.A.

Mayor of Boston that required all city-funded construction projects to be performed by a workforce with at least fifty percent Boston residents. As the Court acknowledged, the critical difference between *White* on the one hand, and *Alexandria Scrap* and *Reeves* on the other, was that in *White*, the Mayor of Boston had demanded that a provision be included in contracts to which the city was not in privity. Specifically, the city required its contractors to demand that their subcontractors ensure a minimum fifty percent in-city employment. The *White* Court nonetheless sustained the municipal employment requirement, applying the market participant doctrine. The Court stated that while there were undoubtedly some limits on the power of a state or local government to impose restrictions beyond the immediate parties to a contract, it was not necessary to determine those limits in the present case. The Court relied upon what it deemed a “crucial fact” that “[e]veryone affected by the order [was], in a substantial if informal sense, ‘working for the city.”’\textsuperscript{204}

The *White* case is particularly interesting for two reasons. First, on its facts it was the closest to *Wunnicke* in that it imposed a restriction on a downstream transaction to which the state would not be a party. Second, as shown below,\textsuperscript{205} it is in virtually all respects factually identical to a case decided just one year later that appears to have produced a seemingly opposite result in the form of a remand under the Article IV Privileges and Immunities Clause.

It was against the backdrop of these three market participant cases that the divided *Wunnicke* Court considered whether to apply the dormant Commerce Clause doctrine or the market participant exception to Alaska’s in-state processing requirement. As stated above, because the contract provision was facially discriminatory and economically motivated, it was certain that under the dormant Commerce Clause doctrine the provision would fail. The *Wunnicke* plurality set about distinguishing the three prior market participant cases, thus holding the provision invalid under the dormant Commerce Clause doctrine. The plurality distinguished *Alexandria Scrap* on the ground that that case involved the direct purchase of goods, without the state imposing any downstream, or

\textsuperscript{204} Id. at 211 n.7.  
\textsuperscript{205} See discussion infra Part I.C.4.
out-of-privity, requirements. The plurality distinguished Reeves on the same basis, stating that the right to choose with whom the state deals did not include the right to impose conditions downstream. The plurality also noted that dormant Commerce Clause scrutiny might be more appropriate in Wunnicke, which involved the sale of a natural resource, than in Reeves, which involved the sale of cement, a complex, manufactured good. As stated above, the more difficult case was White, which did involve an out-of-privity restriction. The Wunnicke plurality held that while White allowed the imposition of such a provision, it did so in the relevant market in which the city was operating. Applying antitrust principles, the Court added: "Unless the 'market' is relatively narrowly defined, the doctrine has the potential of swallowing up the rule that States may not impose substantial burdens on interstate commerce even if they act with the permissible state purpose of fostering local industry."

As then-Associate Justice Rehnquist observed in his dissent, the Wunnicke plurality's economic analysis appears to have provided the timber purchaser a windfall, at least if we assume, as seems reasonable, that the contract price capitalized the in-state processing requirement. For present purposes, the more important point is to recognize the seeming incongruity that these cases pose for the dormant Commerce Clause doctrine. In each case, the Court has exempted the state from ordinary dormant Commerce Clause scrutiny, effectively giving the state a pass in the very case category in which it has insisted that a virtual per se rule of invalidity applies. Although the stated rationale—that the state is acting in an entrepreneurial rather than regulatory capacity—provides a doctrinal basis for distinction, it is not grounded in an obvious policy justification for giving the state preferential treatment. In fact, the incentives that the doctrine creates might well be perverse. If the state, when acting in an entrepreneurial capacity, is supposed to mimic private market actors, then the doctrine has the effect of allowing the state to select with whom it deals without the

206. The Court added that close scrutiny might also be more appropriate when dealing with foreign purchasers. See Wunnicke, 467 U.S. at 96.
207. Recall Justice Rehnquist's assertion in White that everyone was, at least in an informal sense, working for the city. See supra note 204 and accompanying text.
208. Wunnicke, 467 U.S. at 97-98.
competitive pressures that discipline private firms making such choices under market conditions. The doctrinal anomaly only deepens when considering the next case, in which on virtually identical facts, the Court identified another constitutional clause upon which to rest its decision to remove the case from the lax scrutiny of the market participant doctrine, effectively restoring a level of scrutiny closer to that arising under the dormant Commerce Clause doctrine.

4. Article IV Privileges and Immunities

In a case that appears to create a tension with the market participant doctrine, the Supreme Court reversed and remanded a decision declining to apply the Article IV Privileges and Immunities Clause to a challenged municipal ordinance that was in all relevant respects identical to the one sustained against dormant Commerce Clause scrutiny in White. In United Building & Construction Trades Council v. Mayor of Camden, the Court considered the constitutionality of an ordinance enacted by the city

209. For a recent paper in which I explore this theme in greater depth, see Stearns, supra note 194; see also Michael Wells & Walter Hellerstein, The Governmental-Proprietary Distinction in Constitutional Law, 66 Va. L. Rev. 1073 (1980) (describing different incentives confronting private firms and state actors operating as entrepreneurs). The doctrinal incentives become all the more perverse when we consider the recent decision, Florida Prepaid Post Secondary Education Expense Board v. College Savings Bank, 527 U.S. 627 (1999). In that case, the Court rejected a market participant analysis offered to deny an arm of the State of Florida the benefit of sovereign immunity when appellant, a private New Jersey bank, alleged that the state had engaged in unfair trade practices by making false claims in marketing its competing college annuity savings plan in violation of the Lanham Act, 15 U.S.C. § 1125(a) (2000); see also College Savings Bank v. Florida Prepaid Post Secondary Education Expense Board, 527 U.S. 666 (1999) (invalidating provision of federal statute waiving state sovereign immunity in case in which the same New Jersey bank alleged that Florida Prepaid had infringed its patent). If the Court is going to provide a state the benefits of selecting with whom to deal and on what terms under the market participant doctrine, even though the state is not subject to private sector competitive pressures in making its decisions, one could argue that the Court should at least be consistent and hold the state to the same legal obligations as its private competitors when the state puts on an entrepreneurial mantle.

210. Article IV states: "The Citizens of each State shall be entitled to all Privileges and Immunities of Citizens of the several States." U.S. Const. art. IV, § 2, cl. 1. As stated previously, see supra note 31, Article IV Privileges and Immunities do not apply to corporations. See Paul v. Virginia, 75 U.S. (8 Wall.) 168 (1868).

of Camden, New Jersey that required the city’s contractors to ensure a minimum of forty percent city employees in their contracts and their subcontractors’ contracts for all city contracts. The New Jersey Supreme Court had rejected a dormant Commerce Clause challenge on the ground that the state was acting as a market participant, and further rejected a challenge under the Article IV Privileges and Immunities Clause, holding that the clause applied only to state legislation, and not to municipal ordinances. 212

Writing for the majority, Justice Rehnquist held that under the circumstances of the case, the Article IV Privileges and Immunities Clause did apply, and remanded for further proceedings to determine if the two-part test—whether municipal employment is fundamental and whether out-of-state employment is a peculiar source of the problem that the ordinance seeks to remedy—was met. 213 In addition to the obvious tension with the then-recent ruling in White, the Camden ruling was unusual in that prior to Camden, it was not obvious that Article IV Privileges and Immunities applied at all to municipal ordinances that discriminated against all nonresidents, as distinguished from state statutes that discriminated against out-of-state citizens. 214 The challenged ordinance instead was passed by a city and seemed to discriminate equally against New Jersey citizens who resided outside Camden. Justice Rehnquist reasoned that because the Camden ordinance was enacted pursuant to a state-wide scheme that allowed individual municipalities within New Jersey to enact municipal employment preferences for construction work, thus ultimately benefitting the state’s residents as a whole, the Article IV Privileges and Immunities Clause applied. Otherwise, in theory, a state could pass a statute dividing itself into two units and then allow each subdivision to discriminate against citizens of the state that reside in the other subdivision in addition to discriminating against citizens of other states, thus producing an end run around the Article IV Privileges and Immunities Clause. 215

212. See id. at 212-13.
213. Id. at 221-22.
214. In Camden, Justice Rehnquist rejected this distinction on the grounds that the municipal ordinance itself was facilitated by a state statute that allowed municipalities to enact such preferences and that municipalities are political subdivisions of states. Id. 214-15.
215. For a case arising under the dormant Commerce Clause doctrine that also turns on
returning to, and revising Table 3, we have one more case to consider, which creates one more exception to the dormant Commerce Clause doctrine.

5. The Export Taxation Doctrine

In Commonwealth Edison Co. v. Montana,\textsuperscript{216} the Court, per Justice Stevens, addressed a challenge to a Montana statute that applied a thirty percent tax on the contract price for the severance of coal—substantially higher than that in most other states—when ninety percent of Montana coal was shipped out-of-state. Montana holds twenty-five percent of the nation’s coal reserves and over fifty percent of the nation’s low-sulfur coal reserves.\textsuperscript{217} The tax produced twenty percent of the state’s tax revenues. While the case met the criteria for category three, namely a facially neutral law that was economically motivated, thus appearing to subject it to strict scrutiny, the Court instead applied a four-part test that effectively translated to a form of rational basis scrutiny. Under the test, the tax must (1) be applied to an activity with a substantial nexus to the state; (2) be fairly apportioned; (3) not discriminate in interstate commerce; and (4) be fairly related to services provided by the state.\textsuperscript{218} The fair apportionment requirement provides the state considerably broader discretion than does the strict scrutiny rule in category three dormant Commerce Clause doctrine cases.

The Court rejected the dormant Commerce Clause challenge, stating that it was wrongly premised upon the assumption that out-of-state purchasers of a scarce resource are entitled to a reasonable price regardless of the price paid by in-state purchasers. Had the Court instead applied the tax and rebate analysis in \textit{C & A Preventing the states from employing a divide-and-conquer strategy, see Fort Gratiot Sanitary Landfill Inc. v. Michigan Department of Natural Resources, 504 U.S. 353, 361 (1992) (striking down Michigan statute barring private landfills from accepting solid waste from outside the county in which they are located and stating that “a State (or one of its political subdivisions) may not avoid the strictures of the Commerce Clause by curtailing the movement of articles of commerce through subdivisions of the State, rather than through the State itself”).\textsuperscript{216} 453 U.S. 609 (1981).\textsuperscript{217} \textit{Id. at} 638-42 (Blackmun, J., dissenting).\textsuperscript{218} \textit{Id. at} 617.
Carbone,219 and considered that twenty percent of the state's tax revenues derived from the coal export, then it would have recognized that those paying more for coal in-state are likely compensated for this burden through the corresponding reduction in their tax burdens. This is especially likely if we assume, as seems reasonable, that the actual purchasers are able to pass on the additional costs to a dispersed group of in-state consumers.220 So viewed, the case appears in tension with Justice Stevens' own analysis thirteen years earlier in West Lynn Creamery.221

We are now ready to reconsider the basic doctrinal framework set out in Table 3, this time including the additional inconsistencies from the three associated doctrines described above.

220. In other words, it seems plausible to assume that the demand over the relevant range was likely inelastic, thus ensuring that the incidence of the tax was not borne by the initial purchaser, but rather was spread to dispersed end purchasers. If this is correct, the incentives of those who initially bore the tax to invest in opposing it are substantially diminished, if not altogether removed.
### Table 4: The Dormant Commerce Clause and Related Doctrines: Inconsistencies Exposed

<table>
<thead>
<tr>
<th>Category</th>
<th>Rule</th>
<th>Illustrative Cases and Doctrines</th>
<th>Problem Cases and Doctrines or Other Difficulties</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Facially Discriminatory: Protectionist/Economic motive</td>
<td>Per se rule of invalidity</td>
<td>Traditional Tariffs/Embargoes; Sporhase; Great Atlantic &amp; Pacific Tea Co.</td>
<td>Market participant doctrine: e.g., Hughes, Reeves, White. But see Wunnicke, Camden</td>
</tr>
<tr>
<td>2. Facially Discriminatory: Non-economic motivation</td>
<td>Strict scrutiny with burden on state (requiring legitimate state interest and absence of non-discriminatory alternative)</td>
<td>Environmental Protection Statutes, e.g., City of Philadelphia v. New Jersey</td>
<td>Perverse incentives in Waste Disposal Cases; see also Maine v. Taylor; Sporhase v. Nebraska ex rel. Douglas; United Building &amp; Construction Trades Council v. Camden</td>
</tr>
<tr>
<td>4. Facially Neutral: Legitimate Interest with Incidental Burden</td>
<td>Balancing test with burden on challenger (weighs claimed benefits of law against alleged burdens on commerce)</td>
<td>E.g., Raymond Motor Trans. v. Rice; Bibb v. Navajo Freight Lines; Kassel v. Consol. Freightways</td>
<td>Lack of certainty concerning application of balancing test or rational basis scrutiny</td>
</tr>
</tbody>
</table>

HeinOnline -- 45 Wm. & Mary L. Rev. 66 2003-2004
Table 4 reveals a number of inconsistencies running through the four principal doctrinal categories under consideration: the dormant Commerce Clause doctrine, the market participant doctrine, the Article IV Privileges and Immunities Clause, and the export taxation doctrine. Let us now consider the exposed anomalies by category.

Category 1: In this case category, the Court appears to have provided the clearest guidance, applying the per se rule of invalidity to facially discriminatory statutes that have an obvious protectionist or economic motive. And yet, the Court has carved out a major exception that applies when the state operates in an entrepreneurial rather than regulatory capacity. The market participant exception applies notwithstanding facially discriminatory means and an obvious economic motive. Rather than applying the per se rule of invalidity, the Court effectively gives a free pass to discriminate in commerce. Moreover, the Court has created exceptions to the exception itself, either based upon a dubious factual distinction (whether the out-of-privity transaction that the state seeks to regulate is outside the relevant market), or based upon using the alternative textual hook of Article IV Privileges and immunities.

Category 2: The Court applies strict scrutiny in evaluating facially discriminatory statutes when the state articulates a non-protectionist, non-economically motivated purpose. In this category we have seen the Court strike down a restriction on waste imports even though the effect of the ruling appears likely to have reduced the provision of waste disposal services, whether accepting waste in-state or from interstate commerce, by encouraging the state to refuse necessary permits, or even to shut down existing facilities. In addition, while the Court applies strict scrutiny, Maine v. Taylor reveals that the test is not necessarily fatal. Finally, Sporhase v. Nebraska ex rel. Douglas reveals that the Court has created a rule of thumb against reciprocity agreements, when in fact, such agreements are likely the least restrictive means of promoting free trade among competitor states.

Category 3: The Court applies strict scrutiny to facially neutral laws that evince a protectionist or economically motivated purpose. Although the application of this test is usually fatal, the Court produced a seemingly inconsistent result in Exxon Corp. v. Maryland
based upon a questionable economic analysis. And in Commonwealth Edison Co. v. Montana, the Court carved out an exception, similar to that arising under the market participant doctrine in Category 1, when the state structures its burdensome law in the form of an export tax. This doctrine appears further in tension with West Lynn Creamery from Category 2.

Category 4: In this final category, we have seen a division within the Court concerning the appropriate test to apply. The division is of sufficient magnitude that in the most recent principal case to address the issue, the Court was so closely divided that the case appears to have produced an unstable doctrinal, or cyclical, result.

The game theoretical model cannot eliminate every one of these doctrinal anomalies or eliminate every apparent inconsistency within the relevant cases. But I hope to show that it is capable of explaining most of them, and most importantly, that it manages to do so by including, rather than excluding, the major doctrinal exceptions to the dormant Commerce Clause, which have plagued traditional doctrinal analysis. More importantly, the analysis provides a sound normative foundation for these much criticized doctrines and case results. Unlike most studies of the clause, which consider one doctrine or one category of cases within a given doctrine, the model presented in the next part cuts across all four doctrines that I have described. In the next Part, I set out the game theoretical model, and in the Part that follows, I explain its power in making sense of these much contested doctrines.
II. A GAME THEORETICAL MODEL OF THE DORMANT COMMERCE CLAUSE DOCTRINE

Company: Rent, rent, rent, rent, rent
We're not gonna pay rent

Mark & Roger: 'Cause everything is rent\textsuperscript{222}

A superficial reading of public choice literature might suggest a picture not unlike the refrain in the song “Rent” from Jonathan Larson’s 1996 Tony Award- and Pulitzer Prize-winning musical of the same name. The public choice caricature presents all legislative activity as a self-interested pursuit in which “everything is rent,” and recommends that the judiciary, which we are to assume—like the company—represents our collective interests, somehow ensures that “we’re not gonna pay.”

The following analysis rests not only on game theory, but also on an understanding of “rents” and “rent seeking.” While the latter terms are more closely associated with public choice, rents and rent seeking are highly relevant to analysis of the dormant Commerce Clause doctrine because, as the game theoretical analysis reveals, states can and do play cooperative and noncooperative games concerning various forms of rent. In the analysis developed below, however, the caricature of legislative behavior in which everything is rent—and in which all pursuits of rent are illicit—serves as a point of departure. The critical inquiry is not whether legislatures are prone to rent seeking (they are), or whether legislative rent seeking is good or bad (it’s both). Instead, the critical inquiry is how the federal judiciary furthers its legitimate role in a scheme of separation of powers by curbing particular manifestations of rent seeking that are of concern to the dormant Commerce Clause doctrine, while at the same time allowing state legislatures to pursue, subject only to state law constraints or other independent constitutional checks, other forms of legislative behavior that can also credibly be characterized as the product of rent seeking.

This Article shows that the dormant Commerce Clause doctrine, properly understood, does not target state law rent seeking as such,

\textsuperscript{222} Jonathan Larson, Rent, RENT (1996).
but rather targets two particular types of state rent-seeking laws. First, it targets those laws that, if sustained, would likely encourage other states to pursue similar harmful rents. The end result of such a prisoners’ dilemma game would be a regime of mutual defection. As a general matter, even those who are generally critical of the dormant Commerce Clause doctrine accept these case results. Second, in a more controversial group of cases, the doctrine targets state laws that undermine other states in their efforts to pursue cooperative, pro-commerce strategies in a multiple Nash equilibrium game. This occurs when a group of states, through tacit coordination, adopts a common regime from among two or more available pure Nash equilibrium strategies with the benign effect of reducing the impediments to interstate commerce. When an individual state enacts a law that undermines such a benign scheme, it has the effect of appropriating quasi-rents that would not have come into being but for the pro-commerce, pure Nash equilibrium strategy selected by the adversely affected states.

In this Part, I define and illustrate the concepts necessary to develop the game theoretical model of the dormant Commerce Clause doctrine. In the Part that follows, I apply that model to the cases and doctrines introduced in Part I. To place the two dominant games—the prisoners’ dilemma and the multiple Nash equilibrium game—in their appropriate context, it is important to define and illustrate several related economic concepts. This will also help to get past the superficial assertion that “everything is rent” by allowing us to distinguish benign rents from illicit rents, and further to distinguish among those rents that are illicit, and those that are within and without the proper reach of the dormant Commerce Clause doctrine. The analysis begins with a definition of “rent” and the various specialized forms of rent, including economic rents, legislative rents, Ricardian rents, and finally appropriable

223. See Denning & Reynolds, supra note 13, at 1112. The authors observe:
   Even Justice Scalia, who dissented in Camps Newfound, and who has been a
   vociferous critic of the Court’s dormant Commerce Clause jurisprudence, has
   accepted the doctrine insofar as it prohibits states from facially discriminating
   against interstate commerce or enacting protectionist legislation designed to
   benefit local producers at the expense of out-of-state commercial enterprises.
   Id. (footnotes omitted).

224. The economic foundation for legislative rent seeking is most commonly associated
   with the following seminal works: Gordon Tullock, The Welfare Costs of Tariffs, Monopolies,
quasi-rents. In addition, I will consider the closely related—and sometimes overlapping—concepts of transactions costs, bilateral monopoly, and empty core bargaining (or cycling). I first present an overview of the game theoretical model, and then, in a more detailed exposition, I define and illustrate each of these terms. After developing the game theoretical model in the remainder of this part, which includes the prisoners’ dilemma and the multiple Nash equilibrium games, in Part III, I will reevaluate the cases and doctrines discussed in Part I. Analyzing the cases and doctrines according to whether they are the likely product of efforts to secure rents that invite retaliation and thus mutual defection, or efforts to secure appropriable quasi-rents in a manner that undermines other states in their efforts to adopt benign Nash equilibrium strategies that facilitate the flow of commerce, provides both a positive explanation and a sound normative foundation for the Court’s dormant Commerce Clause and related doctrines.

A. A Brief Overview of the Model

Without disputing that many, if not most, of the cases discussed in Part I possess features that can properly be characterized as furthering some aspect of the public good, as a general matter it is not an outstanding theoretical accomplishment to identify the desire to secure some form of rent as the probable motive for securing the statutes subject to dormant Commerce Clause scrutiny in these cases. To illustrate, consider just a few of the more obvious cases. In Hunt, the North Carolina apple producers sought


225. Professors Martin H. Redish and Kirk J. Kaludis have offered a similar observation about the relationship between the assumptions of interest group theory and underlying legislative motivations:

While public choice theory’s extreme characterization of the legislative process appears to have little empirical support, it would be naïve to doubt the impact of interest groups and other questionable influences on the legislative process. Although legislatures will generally characterize their actions in public interest terms, in reality their motives often focus more on advancement of one interest group at the expense of competing groups.

to secure a rent in the form of additional profits that would result from effectively downgrading superior out-of-state competitive apples at the expense of in-state apple purchasers, who would benefit from the additional information and the superior quality apples that the Washington supplemental grading system would have provided.226 In Exxon, the Maryland independent service stations secured a rent in the form of additional profit that would result from removing competitors who, as a result of market conditions favoring vertically integrated retail service outlets in the relevant historical period, were able to secure more favorable price and supply terms, at the expense of in-state consumers who would benefit from this form of competition, and of the owners of the competitive retail gas outlets.227 Finally, in White, prospective municipal employees of city contractors secured a rent in the form of more favorable wages or opportunities for employment that would result from limiting the eligible labor pool for half of the contractor and subcontractor slots for construction jobs on behalf of the city at the expense of taxpayers who would offset the additional costs in terms of higher taxes and of other potential workers who did not reside in Boston.228 While each of these cases, and virtually all of the others described in Part I, can comfortably be characterized in rent-seeking terms, the results, and the doctrines that emerge from the cases, have been much criticized as inconsistent.

Although I begin with the premise that virtually all state legislation that has been challenged as a violation of the dormant Commerce Clause can reasonably be understood in terms of rent seeking, this premise does not contradict my earlier assertion that the underlying legislation in each case is also susceptible to a competing public goods characterization. Rather, I am asserting that even if we begin our analysis by imposing a common—and negative—rent-seeking story on each underlying set of case facts, the game theoretical model developed in this Article provides a positive account of why the Supreme Court has elected to countenance some rent-seeking statutes, while prohibiting others. More importantly, perhaps, in identifying the most likely rent-seeking explanation of each challenged statute, I will avoid the

226. See supra notes 145-55 and accompanying text.
227. See supra notes 156-64 and accompanying text.
228. See supra notes 203-07 and accompanying text.
inherent danger of employing a post-hoc classification method of looking more optimistically after the fact for the public good in those laws the Supreme Court has sustained, while scrutinizing with a more jaundiced eye those statutes that the Court has struck down. Employing a consistent method of classifying the underlying case facts thus facilitates a sharper focus in analyzing the various manifestations of state law rent seeking that underlie the challenged statutes. Doing so further allows us to determine whether there exists a meaningful pattern in those cases in which the Court sustains challenged state laws that allegedly infringe on commerce, and those cases in which the Court strikes them down.

While it is not difficult to characterize each challenged law as the product of rent seeking, the game theoretical model reveals that not all rents are created equal from the standpoint of the dormant Commerce Clause doctrine. Simply put, the dormant Commerce Clause is concerned with some manifestations of rent seeking, and is indifferent to others. To be clear, I do not import intuitions about public good versus rent seeking through the back door. I do not suggest, for example, that those forms of rent seeking that are beyond the purview of dormant Commerce Clause scrutiny are somehow more benign than those that are of particular concern to the dormant Commerce Clause. Indeed, some manifestations of state law rent seeking, which the Court sustains against a dormant Commerce Clause challenge, impose costs that are as great as or greater than those which the Court has struck down. But because it is the nature of the rent, and not the magnitude of the cost that the rent imposes, that determines whether to apply the dormant Commerce Clause doctrine, the game theoretical model proves essential in distinguishing permitted from prohibited rents.229

229. Professor Saul Levmore has offered a similar insight. See Levmore, supra note 202. Levmore distinguishes (1) exploitations ("the potential use of monopoly power to exploit other states"), (2) interferences ("laws that substantially burden out-of-state interests in nonexploitative fashion"), and (3) laws "that impose virtually all of their costs on in-state interests." Id. at 573; see also id. (positing that "some interferences can generate welfare losses that exceed those generated by exploitative monopolies, even though they do not exploit customers in other states"). As suggested in the text, I agree that the dormant Commerce Clause doctrine does not target those laws that impose burdens primarily on adversely affected in-state interests (Levmore's category three). I also agree that the potential for geographic exploitation helps to assess the various dormant Commerce Clause related doctrines. Professor Levmore and I offer different explanations, however, of the specific mechanisms that distinguish those laws adversely affecting out-of-state interests that the
Holding aside the practical difficulties with operationalizing the distinction, most would agree that in exercising its Commerce Clause powers, Congress is on more solid ground when enacting provisions that affect underlying conduct across more states than one. In fact, the game theoretical model developed below reveals that the theoretical difficulties associated with defining commerce in a manner that properly limits the scope of Congressional Commerce Clause powers are more problematic than in defining the scope of that term as it applies to the dormant Commerce Clause doctrine. There are two reasons. First, on the affirmative side of the Commerce Clause, at least if we accept the post-New Deal formulation, even as modified in *United States v. Lopez*, Congress can regulate any economic subject matter that substantially affects commerce. The substantial effects test, as the Court demonstrated throughout the post-New Deal period, raises intractable questions of degrees of impact. Indeed, prior to *Lopez* itself, the difficulty in defining meaningful categories had forced the Court into the business of drawing seemingly arbitrary lines. In contrast, the game theoretical account of the dormant Commerce Clause doctrine links permitted and prohibited state legislation not to the extent of harm that particular manifestations of rent seeking impose, but rather to different kinds of rent seeking or to whether rent seeking is likely to produce a particular form of interstate effect. Second, and relatedly, in the long course of developing its dormant Commerce Clause jurisprudence, the Court has identified —wittingly or not—a set of meaningful proxies that correlate with

---

Court sustains or strikes down. While Professor Levmore focuses on the more serious and persistent nature of exploitations and the inability of adversely affected states to retaliate against such laws as justifying a strong presumption against exploitations (in contrast with the more case-by-case approach taken in the context of interferences), see id. at 565-66, this Article asserts that the Court presumes most strongly against the constitutionality of challenged state laws that, if sustained, would likely promote defection by other states in a manner that would either induce mutual defection in a prisoners' dilemma or in a benign multiple Nash equilibrium game. For a discussion exploring the implications of these two approaches in assessing *Commonwealth Edison CO. v. Montana*, 453 U.S. 609 (1981), see infra note 278.


231. Of course, it remains an open question whether the tripartite *Lopez* formulation will stand the test of time. For a more detailed discussion of *Lopez* and its implications for the dormant Commerce Clause, see supra Part I.B.
the factual contexts in which these various kinds of rent seeking or rent seeking with particular interstate effects take place.

Articulating the economic foundation for these proxies will allow us not only to provide a positive picture of the present state of the dormant Commerce Clause doctrine, but also to establish a normatively defensible account for this much criticized body of default constitutional law. The dormant Commerce Clause doctrine, I argue, has been used primarily as a vehicle to check state laws that have the effect of undermining the laws or dominant practices of other states that would otherwise facilitate the flow of interstate commerce. So viewed, the doctrine is motivated by the effect of challenged laws on the relationships between and among states. It is not motivated by the effect of the challenged laws on the relationship between states and private business interests. It is for that reason, I claim, that the dormant Commerce Clause doctrine is fundamentally concerned with political, rather than economic, union.

We can thus appreciate the Court's application of the per se rule when faced with financially motivated facial discrimination, which predictably invites retaliatory measures by other states. In these cases, the Court's concern for the legislative reaction in other states, rather than its concern for the economic impact on adversely affected business interests, explains the application of the per se rule. But setting aside such cases, as a general matter rent-seeking legislation as such should be presumed beyond the bounds of the dormant Commerce Clause analysis. That is because while ordinary legislative rent seeking, especially of the sort that distributes wealth from diffuse groups (for example consumers or taxpayers) to organized special interests has an adverse economic effect, the magnitude of that effect is invariably at least as great if not greater at the state level than at the national level. 232 The same cannot be

---

232. It is perhaps for this reason that state constitutions, in contrast with the United States Constitution, routinely contain provisions that are specifically designed to establish a process for combating excessive in-state rents both before they are negotiated, and after they have been successfully passed by the legislature. For example, state constitutions routinely have provisions that appear nominally intended to limit rent seeking, including various forms of the item veto, term limits, and balanced budget amendments, when such proposals have not succeeded at the federal level. For a discussion of these differences between state and federal legislative processes, see Maxwell L. Stearns, The Public Choice Case Against the Item Veto, 49 WASH. & LEE L. REV. 385 (1992).
said, however, of the particular category of rent seeking that I contend is of central concern to the dormant Commerce Clause doctrine. Statutes that confer rents that have only become available as a consequence of the pro-commerce laws or practices of other states have an effect on commerce that transcends the economic burdens that such laws impose on the enacting state. 233

Just as it would be presumptively improper for Congress to intervene in state political processes under the guise of the Commerce Clause in an effort to minimize the probability that state legislatures pass inefficient rent-seeking statutes, so too it would be improper for the federal judiciary, relying upon the dormant side of the Commerce Clause, to strike down laws that are routine matters of in-state rent seeking. But there are some manifestations of in-state rent seeking that are the proper object of the dormant Commerce Clause doctrine. And it turns out that the Supreme Court has done fairly well—but by no means perfectly—in identifying the factors that correlate with such cases. As stated previously, the dormant Commerce Clause doctrine has been properly used to strike down state rent-seeking laws that have a considerable likelihood of inviting a retaliatory response, thus playing into the most obvious prisoners’ dilemma affecting interstate trade. The doctrine has also been used to isolate for presumptive invalidity those state laws that procure rents in a manner that undermines the pro-commerce, pure Nash equilibrium laws or dominant practices of other states. To identify the factors that correlate with the latter category of laws, we must introduce, and then generalize, the economic concept of appropriable quasi-rents. 234

A central insight of the transactions costs literature, appropriable quasi-rents become available after parties who have entered into contractual relationships under competitive conditions acquire specialized assets—either human or physical capital—to facilitate

233. To be clear, I am not suggesting that the Court engage in any sort of impact analysis, as for example, has been suggested by Julian N. Eule, Laying the Dormant Commerce Clause to Rest, 91 YALE L.J. 425, 437-43 (1982), which raises difficult questions of institutional competence. Instead, I am suggesting that the very proxies that the Court has been using correlate in a meaningful manner with the kind of rent seeking that is of central concern to the dormant Commerce Clause doctrine.

234. For a general discussion, see Benjamin Klein et al., Vertical Integration, Appropriable Rents, and the Competitive Contracting Process, 21 J.L. & ECON. 297, 298 (1978).
performance or receipt of performance of the respective contractual obligations. When this occurs, the parties find their relationship transformed from one entered into competitively, into one that is best understood in terms of a bilateral monopoly. Bilateral monopoly is characterized by opportunities to secure rents on both sides of the relationship.\(^{235}\) As a result, opportunities for strategic, post contractual behavior can plague long-term contractual relationships.\(^{236}\) One of the foundational insights of law and economics has been in recognizing the firm as an institution that ameliorates some of the difficulties of long-term contracting by allowing a single economic entity to coordinate the activities of those who produce positive synergies and then to allocate the gains from their collaborative efforts in a manner that avoids the potential strategic interactions that would plague the same set of relationships if handled contractually.\(^{237}\) Scholars have also recognized that one of the functions that management provides is in allocating the superadditive gains of contributing factors in a manner that promotes optimal productive incentives within the various components of the firm.\(^{238}\)

Because the concept of quasi-rents is generally used to study private institutions, some translation is required to apply the concept to this important area of public law. And translation always carries with it an attendant risk of loss in meaning. We know, for example, that states do not enter into formal bilateral or multilateral contracts. The Compact Clause expressly prevents them from doing so without prior Congressional approval.\(^{239}\) We also know that vertical integration is not an option available to states seeking to prevent strategic behavior by other states in the form of rent-seeking legislation enacted at their expense.\(^{240}\) What then are

\(^{235}\) Id. at 299-300.

\(^{236}\) See J.A. Brickley & F.H. Dark, The Choice of Organizational Form: The Case of Franchising, 18 J. FIN. ECON. 401, 406 (1987); Klein et al., supra note 234, at 301.


\(^{239}\) The Compact Clause states: "No State shall, without the Consent of Congress ... enter into any Agreement or Compact with another State ...." U.S. CONST. art. I, § 10, cl. 3.

\(^{240}\) In fact, while single states have divided throughout our history, never once have two
the circumstances under which states can seek to appropriate the functional equivalent of quasi-rents that become available only as the result of the laws or dominant practices of other states? When a group of states has formally or informally undertaken a coordinated pro-commerce regime, a single state can seek to appropriate the resulting quasi-rents by enacting legislation that operates to defeat that regime. Such legislation is different in kind from ordinary in-state rent seeking, which merely redistributes wealth internally from diffuse to organized constituencies. This sort of state law confers an in-state benefit that could only have come into being because of the opportunities that the coordinated efforts of other states presented, and any benefit that is conferred is at the direct expense of the other states.

The classic appropriable quasi-rent context transforms a competitively entered-into relationship into a sort of bilateral monopoly. The contractual relationship itself produces an opportunity for one party to gain at the expense of the other in a manner that is not consistent with either party's ex ante expectations. But this divergence between ex ante and ex post expectations is not limited to formal contracting. The concept of appropriable quasi-rents can be generalized to include a second context—empty core bargaining or cycling—in which a single player can secure a gain that thwarts what would otherwise have been a mutually beneficial regime achieved through formal or informal coordinated efforts among multiple players.

In the context of interstate rent seeking, empty core bargaining or cycling has the potential to arise when three or more states would benefit from a common legal regime and when a single state, by defecting from that regime, can prevent the other states from realizing those benefits. Using the language of game theory, the common legal regime produces a superadditivity, meaning an additional value that could not be realized if the individual states failed to coordinate their efforts.\(^{241}\) The superadditivity is much like a capital gain in that it presents the actors with a chance to increase the return to capital simply by coordinating the use of that

---

\(^{241}\) For a general discussion of core theory, see \textit{Lester G. Telser, Economic Theory and the Core} (1978); \textit{see also} John S. Wiley, Jr., \textit{Antitrust and Core Theory}, 54 U. Chi. L. Rev. 556 (1987).
capital with others. But with the creation of the capital gain comes the problem of allocation, and thus the incentive to seek appropriable quasi-rents. If a group of states shares a common legal regime that has the effect of facilitating a capital gain or superadditivity, for example that arising from a coordinated flow of commerce facilitated by a regime that permits a widely used variety of truck, mudflap, maximum shipment weight, or maximum train length, a single state in the middle of this group can effectively undermine the benefits of the coordinated scheme, taking a substantial amount of the available gains onto itself, simply by enacting a contrary rule.\textsuperscript{242} The problem is particularly acute in coordination games in which from a reasonable ex ante perspective, all would agree to one of two or more pure Nash equilibrium strategies, but in which a defecting state can benefit from the mere fact of defecting and thus producing instead a mixed-strategy equilibrium. The analysis shows that the defecting state is not seeking to supplant one possible pure Nash outcome with another, but rather is seeking to thwart the gains to other states by producing an undesirable, nonpure result.

If, for example, a state benefits by not having trucks in interstate commerce travel through it, either because of the reduction in the flow of traffic or because of the reduction in the cost of highway maintenance, then the contrary law takes on the characteristics of appropriable quasi-rents produced as a result of the pure Nash

\textsuperscript{242} Although he does not discuss Kassel or Bibb, or attempt to reconcile the general body of dormant Commerce Clause cases, in an important article Professor Richard Epstein has recognized a holdout problem among states in the production of interstate public goods. See Richard Epstein, Exit Rights Under Federalism, 55 LAW & CONTEMP. PROBS. 147, 159-61 (1992) [hereinafter Epstein, Exit Rights]; see also Richard A. Epstein, Bargaining with the State 127-45 (1993) [hereinafter Epstein, Bargaining] (providing comprehensive assessment of how individual states can obstruct interstate business practices and extending holdout analysis to explain discriminatory taxation). Epstein posits that the holdout problem is particularly acute when businesses require universal assent among states to promote conditions that facilitate interstate business practices. For that reason, Epstein maintains that federalism sometimes has the counter intuitive effect of undermining, rather than promoting, effective exit strategies for businesses. In an informative article on cyberspace, Professor Burk has extended Epstein's holdout analysis to describe Kassel and Bibb. See Dan Burk, Federalism in Cyberspace, 28 CONN. L. REV. 1095, 1123-26 (1996). For an analysis that distinguishes this Article's game theoretical analysis from the holdout analysis offered by Professors Epstein and Burk, see infra notes 290-97 and accompanying text (positing that defection from pure Nash equilibrium strategy provides a direct benefit to a defecting state, rather than any anticipated payoff, as in a holdout game, for eventual compliance with regimes of other states).
equilibrium, pro-commerce strategy of the other states. The opportunity for the rent could not have come about but for the dominant practices of other states, which the defecting state seeks to thwart. The divergence between ex ante and ex post expectations is highlighted if we consider that no reasonable set of legislators, had they been given the power to legislate for the entire group of states, including the defecting state, would have selected a regime in which one state in the center has a rule that is out of sync with those of the surrounding states. And state highway safety laws are not the only context in which the laws of other states create potential opportunities to secure appropriable quasi-rents.

A critical insight that follows from this analysis is that, contrary to traditional doctrinal approaches to the dormant Commerce Clause, the relevant inquiry should not be whether the subject matter of the challenged statute—whether it be truck safety regulations, the quality indicators for imported produce, or gasoline marketing—implicates the Commerce Clause versus state police powers. This question is unanswerable. Instead, the better inquiry is whether, without regard to the statutory subject matter, the challenged statute seeks to secure a quasi-rent that would not have become available but for the laws or dominant practices of other states.

The analysis further explains why the dormant Commerce Clause is necessarily a default doctrine of constitutional law. Because much dormant Commerce Clause jurisprudence is targeted against opportunities to secure appropriable quasi-rents, and because such rents can arise from coordinated schemes that would potentially admit of more than one possible Nash equilibrium strategy, the decision by one group of states to select a particular regime should not prevent Congress from changing from one such coordinated outcome to another. Provided that the outcome remains coordinated, and thus pure Nash (for example, either to allow straight mudflaps, curved mudflaps, or both), then the objectives of the Commerce Clause are met.

While Congress is well situated—better for example than the federal judiciary—to monitor and change dominant legal regimes, it might be less well situated than the federal judiciary to monitor

and punish states that seek to secure rents at the expense of other states. Public choice reveals that in situations that present intense conflicting lobbying pressures on both sides of a given issue, a common legislative response is to either decline to legislate altogether, or to delegate.\textsuperscript{244} Interstate disputes over commerce present just this sort of conflict paradigm, and the dormant Commerce Clause doctrine can be interpreted in a manner that is consistent with either of these Congressional responses. Congress' failure to legislate, with the knowledge that the federal judiciary stands ready to intervene in response to efforts by states to appropriate quasi-rents made available as a consequence of other states' Nash equilibrium, pro-commerce strategies, is the operational equivalent of a silent, or de facto, delegation. The difficulty, as we have seen, however, is that all state laws that are challenged as violating the dormant Commerce Clause doctrine can be characterized as a form of rent seeking because virtually all such laws share the characteristic of redistributing wealth from one group that is diffuse and poorly organized to another that is concentrated and well organized.\textsuperscript{245}

In the course of developing its dormant Commerce Clause jurisprudence, the Court has articulated tests that operate as stronger or weaker presumptions of validity or invalidity. This is captured in Table 3,\textsuperscript{246} which presents four sets of rules, which are often inconsistently applied. As Table 4\textsuperscript{247} reveals, once we introduce the most prominent doctrinal exceptions to the Court's dormant Commerce Clause doctrine, the apparent inconsistencies become even more pronounced. In short, the doctrine operates as a meaningful guide only if we accept at face value the Court's articulated exceptions. And those exceptions often appear hard to defend when we consider them in light of the Court's own dormant Commerce Clause analysis. I argue, however, that if we instead employ the game theoretical model developed more fully below, we can line these cases up along two complementary analytical spectrums. The two spectrums turn on the presence or absence of

\textsuperscript{244} See Peter H. Aranson et al., A Theory of Legislative Delegation, 68 Cornell L. Rev. 1 (1982).

\textsuperscript{245} See Mancur Olson, The Logic of Collective Action (1965) (setting out this thesis in rigorous detail).

\textsuperscript{246} See supra Part I.C.2.b.

\textsuperscript{247} See supra Part I.C.5.
the best available proxies for laws that, if sustained, are likely to provoke a retaliatory response from other states or laws that represent state efforts to appropriate quasi-rents that have become available only as a result of other states' pro-commerce, pure Nash equilibrium regimes.

B. Developing the Game Theoretical Model

1. The Prisoners' Dilemma

The prisoners' dilemma characterizes the conditions under which rational behavior leads two players to pursue individual strategies that yield outcomes for each player that are inferior to those associated with mutual cooperation. The payoffs in the standard prisoners' dilemma are such that without regard to what the other prisoner does, it is rational for each prisoner to defect. To illustrate, assume that two prisoners are separated and are prevented from communicating with each other. Each prisoner is told that if neither confesses, the state will be limited in its proof, and each prisoner will receive a six month sentence based upon a conviction for a minor offense. If one rats out the other while the other remains silent, the one who speaks will go free, while the other will be sentenced to eight years. If both rat out the other, each will get six years. These reciprocal payoffs are presented in Table 5.248

<table>
<thead>
<tr>
<th>(Payoffs for A, B)</th>
<th>A cooperates</th>
<th>A defects</th>
</tr>
</thead>
<tbody>
<tr>
<td>B cooperates</td>
<td>(6 months, 6 months)</td>
<td>(no time, 8 years)</td>
</tr>
<tr>
<td>B defects</td>
<td>(8 years, no time)</td>
<td>(6 years, 6 years)</td>
</tr>
</tbody>
</table>

The prisoners' dilemma reveals that without regard to what the other prisoner does, it is rational for each prisoner to defect. If B is silent, A can improve her position from six months to no time by

248. Please note that in Table 5, cooperation and defection are presented with reference to the remaining prisoner, rather than the police. Thus, cooperation means declining to rat out the other prisoner; defection means the opposite.
ratting out $B$. If $B$ defects, $A$ can improve her position from eight years to six years by ratting out $B$. The payoffs are reciprocal and therefore $B$ has the same incentives. The end result is that both $A$ and $B$ are motivated to defect even though mutual defection produces a payoff for each prisoner (six years) that is substantially lower than that available if the two prisoners instead pursued a strategy of mutual cooperation (six months). The payoffs in the lower right box, which represent the dominant set of strategies, are presented in bold.

Several scholars have recognized that the prisoners’ dilemma characterizes the relationships that confront states, and nations, in choosing whether to enact special interest legislation that limits free trade. Other scholars who have not formally relied upon game theory in their analyses have identified dynamics within the dormant Commerce Clause doctrine that can readily be recast in such terms. While each state would be better off in a free trade

249. As stated in the text, the prisoners' dilemma is built on the assumption that the prisoners cannot cooperate and that any implicit agreements cannot be enforced. The problem could be avoided in a regime in which the prisoners can reward cooperation and punish defection, as seen in the iterated prisoners' dilemma game. While this game is discussed in more detail below, it is important to emphasize two points here. First, infinite iterations do not solve the prisoners' dilemma; rather, by providing enforceable rewards for cooperation and punishments for defection in the next successive period, they alter the payoffs such that the game no longer is a prisoners' dilemma. Second, the iterated prisoners' dilemma game achieves a cooperative result only if there is no known end period. If the players know the end period, or can safely anticipate a probable end period, then the game "unravels" such that every period is subject to single period prisoners' dilemma payoffs. When this occurs, mutual defection is again the dominant strategy. See also infra note 254 (discussing implications of research on probabilistic end periods for this Article's analysis).


251. See, e.g., AXELROD, supra note 137, at 5-6, 16 (describing trade relationship between nations as prisoners' dilemma).

252. Thus, for example, Professors Dan T. Coenen and Walter Hellerstein have addressed the question why the Supreme Court allows state subsidies but not tax breaks under its
regime—one that promotes specialization and exchange—than in one of mutual defection, free trade regimes also have distributive consequences that can adversely affect particular industries that would fare poorly with direct competition from other states. Such industries have a strong incentive to secure legislation at the state level that will insulate them from interstate competition. As a result, special interests are strongly motivated to pressure their state legislatures to defect from the norm of free trade. And although such protectionist legislation harms diffuse constituents who are deprived of the superior products and lower prices that open trade brings, the extent of harm to any individual is likely to be sufficiently small that it will be less worthwhile for diffuse constituents to invest in lobbying to oppose protectionist measures than it will be for special interests who directly benefit to lobby in their favor. This familiar public choice insight,\textsuperscript{253} reveals that


[T]ax credits, exemptions, and the like are resistant to repeal because legislatures typically enact them as presumptively permanent features of state tax codes. In contrast, because subsidies involve the direct expenditure of funds, they routinely show up—and are subject to recurring reevaluation—as expense items in perennially controversial state budget bills.

Coenen, supra at 988 (footnotes omitted). Similarly, Hellerstein and Coenen argue that “[j]ust as surely as use of the will or the deed impresses upon the individual mind the significance of its contemplated act, consideration of a subsidy forces the mind of the public body to consider most pointedly the cost and consequences of moving forward.” Hellerstein & Coenen, supra at 869. While scholars have rightly noted that subsidies and tax breaks “may have the same effects,” Levmore, supra note 202, at 566, the Coenen and Hellerstein analyses, supra, suggest that the process through which the rent-seeking law is created might affect the probability of reciprocal behavior by other states. See also Regan, supra note 34. So viewed, the more transparent the special interest legislation, the more costly it is to procure. As a result, transparent rents are less likely to invite a retaliatory response from other states. Conversely, the more well-hidden the rent, the less costly it is to procure and thus the more likely it is to provoke retaliation. This somewhat counterintuitive observation (that hidden laws are more likely to invite retaliation than transparent laws), can be explained in terms of the prisoners' dilemma. Interest groups have a strong incentive to identify even well-hidden rent-seeking laws that adversely affect them in other states and to secure reciprocal protectionist measures in their own state. The Court's dormant Commerce Clause doctrine is consistent with this observation in that it appears to raise the cost to interest groups of securing retaliatory special interest legislation that is consistent with a regime of mutual defection in a standard prisoners' dilemma. For a more detailed discussion, see infra Part III.B.1.

\textsuperscript{253} See generally OLSON, supra note 245, at 133-67 (describing tendency of organized
behaving rationally, state legislatures are likely to provide protectionist legislation even though the aggregate effect reduces welfare. States that enact such legislation are responding rationally to interest group pressures, but if all states react in this manner, the effect is economic Balkanization, the game theoretical equivalent of mutual defection in a multilateral prisoners' dilemma game.

Players can avoid the prisoners' dilemma through unlimited repeat plays in which they anticipate the ability to punish the defector in any given period in the next round of play. In a game with endless iterations, the anticipated punishment that will necessarily follow from any defection alters the payoffs by reducing the benefits of defection and increasing the benefits of cooperation. The altered payoffs have the potential to produce a matrix in which it is rational for each player to pursue a cooperative strategy regardless of what the other player does. If so, mutual cooperation emerges the dominant strategy. If instead, however, the game has a known end period, the game "unravels." For example, if there are six periods, in the sixth and final period, the players behave as if there is no more opportunity to punish (because there is no seventh period), and therefore rationally defect. In period five (or n-1), the players again realize that there is no opportunity to punish, because they anticipate mutual defection in period six regardless of what happens in period five. The same problem confronts the players in periods four, three, and two. Eventually, this continues down to the first period, thus ensuring that the entire game will fall victim to mutual defection as the dominant outcome.\(^{254}\)

groups to secure special interest legislation at the expense of diffuse groups); MAXWELL L. STEARNS, PUBLIC CHOICE AND PUBLIC LAW: READINGS AND COMMENTARY 540-46 (1997) (describing legislative prisoners' dilemma).

254. For a general discussion, see STEARNS, supra note 253, at 540-46. The presentation in the text is admittedly stylized. As behavioral economists have observed, known or anticipated end periods do not invariably result in a defection regime. See Ronald J. Gilson & Robert H. Mnookin, Disputing Through Agents: Cooperation and Conflict Between Lawyers in Litigation, 94 COLUM. L. REV. 509, 520 (1994). The authors explain that in contrast with formal models, "[m]ore recent research ... suggests that cooperative behavior can develop in a multi-round prisoners' dilemma under certain conditions." Id. at 520. Depending on the payoff function, cooperation can result if the players in any given round suspect a high possibility of a subsequent round in which cooperation can be rewarded and defection can be punished. See id. Fortunately, it is unnecessary here to reconcile the formal models with the claimed contrary results from behavioral economics research. As explained in the text that follows, the single period prisoners' dilemma better captures the relationships between and among states not due to unraveling, but rather due to the stochastic nature of opportunities.
In the context of interstate trade, the single period prisoners’ dilemma likely provides a more apt description than either a game with unlimited iterations or an unraveling game. While the states may be repeat players in a general sense, laws that cater to narrow constituencies in most instances arise stochastically. In most instances, state A is unlikely to reciprocate in kind against state B in response to a particular law that state B has enacted affecting state A. In Hunt, for example, while the challenged North Carolina law targeted Washington apples, it is unlikely that Washington had a direct and ready means of punishing North Carolina for that isolated instance of defection. Because we are dealing with fifty states, rather than two, each state likely views itself as playing in what is effectively a single period prisoners’ dilemma with respect to potentially adverse trade laws of any particular state. This holds even if any given state is a repeat player with respect to the remaining states in general.

At a minimum, the dormant Commerce Clause doctrine can be understood as a judicial effort to prevent states from enacting laws that, if sustained, threaten a regime of mutual defection in a standard, noniterated prisoners’ dilemma game. If states were immune from challenge in enacting discriminatory legislation that is motivated by a protectionist purpose, as is widely understood to have been the case under the Articles of Confederation, then for retaliation against another state’s isolated but harmful protectionist measure.


256. There are exceptions. For certain exports, trade between adjacent states is more likely than trade with distant states. In that context, reciprocal punishments become more plausible. This likely describes the relationships between states enacting or affected by reciprocity statutes. See supra Part I.C.1.b and infra Part III.B.3.c.

257. It is contested historically whether in fact the Articles were unduly plagued by state laws obstructing interstate trade. See Edward Kitch, Regulation and the American Common Market, in Regulation, Federalism, and Interstate Commerce 9-19 (A. Tarlock ed., 1981). Without attempting to resolve this historical debate, my own intuition is that it is more relevant to identify what the Framers feared than it is to determine whether their fears were well grounded in historical experience. Accord Regan, supra note 34, at 1114 n.65. It is also worth noting that to the extent that trade barriers did motivate the enactment of the Constitution, some have argued that the import-export clause, rather than the Commerce Clause, was directed at such offensive state law practices. See BITTKER, supra note 106, at § 6.06, 6-35 to -36. It is for that reason that Professor Bittker contends that the reference to free markets in the famous Justice Jackson quote from H.P. Hood & Sons v. Du Mond, 336 U.S. 525, 539 (1949), "may stretch history a bit." BITTKER, supra note 106, at § 6.06, 6-35. Bittker explains:

The "commercial strife" that the Constitution was expected to pacify consisted
notwithstanding the aggregate gains to the individual states and to the nation as a whole from free trade, each state would instead have an incentive to cater to narrow constituencies, thus defecting from that norm. The mutual incentives to defect from a free trade regime would threaten to produce the lower payoffs by isolating each state as an economic unit than would arise in the absence of such defection.

While this story is widely understood, the fact remains that it fails to capture most, or at least the most interesting, cases. At one level that should not be surprising. If the legal doctrine solves an easy category of cases, then the doctrine should be credited rather than faulted when its obvious target cases discontinue, or arise only infrequently. So viewed, we might appreciate the per se rule of invalidity, set out in Category 1,"258 which applies to facially discriminatory statutes that are motivated by a protectionist or economic purpose, as the Court's effort to use the dormant Commerce Clause to prevent a mutual defection outcome in this prisoners' dilemma game.

Because most cases do not present such blunt attempts at discrimination in commerce, we can appreciate the Court's use of strict scrutiny as a presumption against those state laws that likely represent creative state legislative efforts to produce the same result through means that would otherwise be more likely to withstand judicial scrutiny. Thus, the Court applies strict scrutiny, presuming against the constitutionality of laws that discriminate in commerce, but that are arguably linked to some other legitimate purpose (Category 2) and against the constitutionality of laws that, although facially neutral, appear to have been motivated by protectionist or financial concerns (Category 3). In cases that fall into these two categories, the Court intuits that sophisticated state legislatures have packaged otherwise harmful state laws in a form that avoids the strictures of the per se rule. Strict scrutiny thus

primarily of taxes laid by seaport states on products in transit to and from inland islands—a fiscal measure that, of course, inured to the benefit of the residents of the taxing states, but in the form of revenue, not by aiding local producers; and the tax malady was addressed explicitly by the Import-Export Clause ....

Id. at 635 to -36.
258. See supra Table 3, Part I.C.2.b; Table 4, Part I.C.5.
raises the cost of mutual defection by signaling close review based
upon the nature or object of the challenged state law.

While the prisoners' dilemma thus advances our understanding
of the dormant Commerce Clause doctrine, it provides only a partial
explanation. Three problems remain. Two involve the prisoners'
dilemma theory itself. The third requires a complementary game
theoretical account that involves a different type of defection
strategy from a regime of beneficial cooperation. I will now sum-
marize each of these limitations with the traditional prisoners'
dilemma account.

First, in the context of waste disposal, a rule that prevents states
from discriminating in commerce does not necessarily transform a
potential regime of mutual defection into a probable regime of
mutual cooperation. That is because states that are prohibited from
discriminating against waste based upon point of origin retain an
alternative outlet for discrimination. As long as states retain the
ability to decline permit applications, forcing states to regulate
neutrally or not at all might have the effect of introducing the same
prisoners' dilemma in alternative form. While all states might in
theory benefit from a regime of open commerce in waste disposal,
if each state knows that others are permitted to deny permit
applications, thus closing off in-state waste disposal facilities, it
becomes rational to follow the same strategy. So viewed, cases like
City of Philadelphia v. New Jersey,\textsuperscript{259} and C & A Carbone v. Town
of Clarkstown,\textsuperscript{260} might have the perverse effect of limiting, rather
than expanding, outlets for waste by removing the incentives that
states would otherwise have to approve waste-processing permits
if they could capture the entire benefit of doing so by ensuring that
the waste outlet would service only those who traffic in or produce
waste within the state.

Second, in the context of reciprocity statutes, states have
 undertaken a regime that imposes limits on their partner states in
pursuing a defection strategy. While state $A$'s reciprocity statute,
providing that it will ensure free trade with state $B$ only if state $B$
ensures free trade with state $A$, does not undermine the incentives
of special interests to lobby for protectionist legislation in its
various forms, it does raise the costs to legislators of providing it.

\textsuperscript{259} 437 U.S. 617 (1978).
\textsuperscript{260} 511 U.S. 383 (1994).
Instead, the tit-for-tat game reveals that such statutes provide a filter that requires state legislators to account for those who would be harmed by the restrictive trade practices that will follow from their protectionist measures in the other state. The Court's rejection of these laws, unless Congress has approved them, further undermines the power of the prisoners' dilemma to provide a complete account.

Third, and finally, a significant category of cases in which the Court strikes down the challenged state law simply fails to fit a prisoners' dilemma paradigm. Most notably, the burden on commerce cases, for example the prohibition of sixty-five foot twin trailers struck down in Kassel, the requirement of curved mudflaps struck down in Bibb, and the train length limit struck down in Southern Pacific do not threaten to invite others to follow suit. In fact, in each of these cases, the Court struck down the challenged law because other states had adopted an opposite strategy. In short, if game theory is to do the work of explaining the dormant Commerce Clause doctrine, we need to expand its reach. In the next subpart, I offer a complementary game theoretical model that also draws upon elements of price theory and the theory of transactions costs.

2. The Multiple Nash Equilibrium Game

We will now introduce more formally the second game that will help us understand the Court's dormant Commerce Clause jurisprudence. As stated previously, it is helpful to apply a common framework, that of rent seeking, to each set of case facts. This will allow us to distinguish those rents that are benign from those that are illicit, and between those that although illicit are beyond the reach of the dormant Commerce Clause from those that are properly within its scope. In the multiple Nash equilibrium game, the players, without any formal coordination, have an incentive to pursue a common strategy to achieve higher payoffs from either of two or more pure Nash equilibrium strategies as compared with

261. See AXELROD, supra note 137.
the low payoffs associated with the alternative mixed-strategy equilibrium outcomes. To illustrate, let us return to the driving game.265

Imagine that automobiles are in their infancy and that no law or custom yet establishes whether to drive on the left or right side of the road. Assume a world with two drivers who must decide upon which of four possible combined driving regimes to adopt. The possibilities are presented in Table 6. Further assume that neither driver much cares about which side he or she drives on, but that for reasons of personal safety, both care greatly that the two drivers adhere to the same driving regime. When the drivers opt for the same regime they each receive a payoff of ten, but when they opt for different regimes, they each receive a payoff of zero.

Table 6: The Driving Game

<table>
<thead>
<tr>
<th>(Payoffs for A, B)</th>
<th>A drives left</th>
<th>A drives right</th>
</tr>
</thead>
<tbody>
<tr>
<td>B drives left</td>
<td>10, 10</td>
<td>0, 0</td>
</tr>
<tr>
<td>B drives right</td>
<td>0, 0</td>
<td>10, 10</td>
</tr>
</tbody>
</table>

Unlike the prisoners’ dilemma game presented in Table 5, in which the single outcome of mutual defection represents a stable equilibrium, in the driving game, two of the possible four combinations (represented in the upper left and lower right quadrants) represent stable pure Nash equilibria. Conversely, the two mixed-strategy equilibria (represented in the lower left and upper right quadrants) are unstable because the second mover could improve her payoffs by moving to the initial mover’s preferred regime.266 If

265. See supra text accompanying notes 10-12.

266. I do not intend to suggest that whenever actors confront games presenting multiple Nash equilibria, the result is invariably a pure Nash equilibrium. It is possible that if each player tries to anticipate the other player’s dominant strategy, but does so incorrectly, that the resulting regime will be a mixed strategy equilibrium even though each player has attempted to achieve a pure Nash equilibrium outcome. Professors Baird, Gertner, and Picker have explained this phenomenon as follows:

One can point to games in which the unique Nash equilibrium may not be the combination of strategies that the players would in fact adopt. Moreover, the Nash solution concept often does not identify a unique solution to a game. When there are multiple Nash equilibria, we may not be able to identify one of these
A drives right and B begins driving left, B can then increase her payoffs from zero to ten by changing to the right driving regime. The same incentives apply if A drives left and B begins driving right, or if B is the initial mover, whether she chooses right or left. As in Table 5, the pure Nash equilibrium results are presented in bold.

We will now consider a multiple Nash equilibrium game that involves the states, rather than individuals, as players. The extension raises a question as to the nature of any rent seeking that would encourage one state to defect from the benign cooperative regime pursued by other states. To answer that question, it will be helpful to introduce more formally the concept of appropriable quasi-rents, which grows out of the transactions cost literature. 267

Appropriable quasi-rents analysis is generally employed to explain the development and structure of firms, but has also been fruitfully used to explain various types of long term contracts, for example, those involved in licensing agreements or franchises. The essential insight is that individuals, or individual companies, entering into contracts under competitive conditions, often specialize their assets to facilitate performance under the contract. Thus if Bob contracts to paint Sue's house, Bob will purchase the necessary equipment, which will include a particular color of paint, appropriate brushes, a ladder, sanding materials, and the like. It is possible that all of these materials can be readily used on other jobs, such that if Sue reneges, Bob can redeploy any assets that he has acquired in anticipation of performing his contract with Sue at little or no additional cost. This is most likely if Sue selected a neutral color, if her home was in a standard development, and if it had no unusual architectural features requiring customized

as that which the players are likely to choose. Indeed, when there are multiple Nash equilibria, there is no guarantee that the outcome of the game is going to be a Nash equilibrium. Each player, for example, might adopt a strategy that is part of a different Nash equilibrium, and the combination of strategies might not be Nash.

Baird et al., supra note 243, at 22. In the hypothetical in the text, I have avoided this difficulty by presenting the decision of the two drivers sequentially, rather than simultaneously. Because the drivers are assumed to care only about sharing a common driving regime, whether right or left, sequential decisionmaking increases the probability of achieving a pure Nash equilibrium outcome.

267. See supra notes 234-38 and accompanying text; see also infra notes 273-74 and accompanying text.
equipment for access to areas in need of painting. Although this might well characterize most contracts to paint a home, it certainly does not capture all such contracts or all contracts generally.

In addition, parties seeking performance are also frequently forced to customize. When Ann considers purchasing a new car, she has a wide range of choices. She can select not only the make and model, but also who will perform necessary service. Once the purchase decision has been made, however, her service options become more limited. Depending upon the nature of the warranty, for example, she might be required to have all service work completed at a licensed dealership. If so, Ann has specialized her receipt of services to the dealership, thus inviting the dealership to seek to procure approvable quasi-rents. Most contractual arrangements require at least some level of customization in anticipation of performance, or of receipt of performance, and the degree of that customization can vary considerably from contract to contract. The degree of customization and the anticipated losses associated with sacrificing the economic benefits that motivated the contract are the causal factors that give rise to opportunities to appropriate quasi-rents.

To illustrate, assume that Sue lives in an old, Victorian home painted in a color that is sufficiently uncommon that it must be custom mixed, with architectural features that render access impossible without special equipment, and with wood that is no longer commonly used to build but that is in need of repair or replacement. To complete the job, Bob is required to make significant performance-specific investments. Assume for example that the contract is for $15,000, including supplies, and that the nonstandard supplies will cost Bob $2500. Bob might be able to return or sell off some specialized supplies in the event that Sue reneges, for example, special ladders. But other supplies—for example, the custom mixed paint and the supplemental wood—are of little or no value other than as used in the performance of the contract with Sue. If Bob could only recover $500 of the $2500 contract-specific investment, and if the cost and inconvenience of litigating exceed the difference of $2000, Sue could force Bob to incur up to that amount in additional performance costs as her approvable quasi-rent. Bob would be willing to perform unanticipated work up to that amount before it would be economically
feasible for him to withdraw on the ground that the additional demands constitute a material breach.

As stated above, the same phenomenon can arise in the other direction. Thus, if Ann has purchased a lemon, and if it would cost the dealership an additional $2000 to repair the car properly above whatever the cost of repairing it sufficiently to get the car through the warranty period, then assuming the cost of legal recourse to Ann exceeds $2000, the dealership can again seek to appropriate the quasi-rents created through the bilateral contracting relationship by shirking in its performance up to that amount.

I do not intend to suggest that the parties in these situations cannot devise contractual or other solutions to these sorts of difficulties as a means of limiting the opportunities on the other side to secure such rents. Indeed, my point is the opposite. Parties can and do devise any number of arrangements to avoid the difficulties that are associated with minimizing opportunities for post-contractual strategic behavior that result from appropriated quasi-rents. These solutions are remarkably varied. Within the economics literature, several important studies have identified the conditions that give rise to these sorts of post-contractual strategic bargaining, and the nature of various market solutions.\textsuperscript{268}

We can imagine Bob avoiding the problem with Sue by insisting that she purchase all customized materials and that he deduct the cost of those materials from the contract price. By arranging the contract in this manner, he will negatively affect Sue's overall costs,\textsuperscript{269} and will avoid a potential cost in the form of strategic behavior that can result in bargaining for a sum up to the amount of the appropriated quasi-rent. Similarly, we can imagine the automobile dealership bonding itself by providing a warranty and

\textsuperscript{268} See supra notes 234-38 and accompanying text; see also infra notes 271-72 and accompanying text.

\textsuperscript{269} In fact, he might affect her cost in a favorable manner. If we assume that Bob would include some premium to cover the contingency of post-contractual opportunistic behavior, then minimizing the opportunities for Sue to engage in such behavior can allow him to avoid adding that premium, thus lowering the contract price. So viewed, optimal contracting arrangements can reduce contracting costs by the product of the probability of producing an appropriated quasi-rent times the costs that would be imposed if the rent were realized. By reducing the contract price, the suggested purchasing arrangement is thus welfare enhancing.
a contract that specifies a low cost mediator in the event of shirking in servicing the vehicle. 270

There are other, more complicated solutions as well, depending upon the nature and depth of the problem. In the context of franchising, for example, in which the franchisor anticipates that some franchisees might shirk in ensuring quality output, thus compromising the brand name, we can imagine contract provisions that require all inputs be purchased from the franchisor along with periodic quality checks. To avoid the potential appropriable quasi-rent that could then result on the other side from raising costs above the market price for supplies, we can imagine linking the cost of supplies to some identifiable economic indicator, or fixing the annual rate of increase in advance. Of course, for some truly complicated contractual relationships, those involving a protracted performance period and an inability of the parties to anticipate the precise conditions that create appropriable quasi-rents, we can imagine vertical integration, or establishing a firm. This approach optimizes the use of superadditive gains, while reducing the feared depletion of quasi-rents through mutual strategic behavior. 271

The benefits of the firm in minimizing opportunities for strategic behavior among long-term contracting parties are well known, and are the focus of a large literature. 272 The critical point for present purposes is that merging institutions that would otherwise suffer contracting difficulties is a ready solution in the event that separate contract provisions prove inadequate to meet the needs of the parties. The effect of uniting productive resources within a single firm, like contractual solutions in less complex settings, is to promote behavior that is more consistent with the parties’ ex ante expectations, thus preventing the depletion of unnecessary

---

270. There are also other, noncontractual methods of signaling to prospective purchasers that a dealership, or manufacturer, is unlikely to shirk. A program of certified pre-owned vehicles with extended warranties that operate for a significant number of years or miles informs the prospective purchaser of a new car that the dealership retains an interest in the sold or leased vehicle even after the initial contract.

271. See Klein et al., supra note 234; Williamson, supra note 238.

resources in performance through efforts to secure appropriable quasi-rents or through insuring against such contingencies. As seen below, in the public law setting, splitting institutions is often an equally important response to the problem of avoiding strategic behavior. Specifically, supplemental institutions like the federal judiciary in the dormant Commerce Clause context often operate to devise solutions that the parties would likely have agreed to in advance, but that they are now unable to reach because one or the other has a rational incentive to behave strategically.

Before proceeding to other forms of rent, it is important to reiterate that appropriable quasi-rents become available only after the parties to a contract have selected each other as partners and ironed out their contracting terms, presumably under competitive conditions. The rent opportunity thus arises as a function of the contractual relationship. Once the contract has been formed, the parties are suddenly in a specialized relationship in which the competitive conditions that initially gave rise to the contract no longer hold.\footnote{\textsuperscript{273}}

\begin{quote}
The central insight that emerges from this analysis is that while parties have many choices at the stage of entering into even complex contractual relationships, once the contractual relationship is formed, the more the contract requires specialization of physical assets or of human capital for its performance, the more likely it becomes that the contract itself will transform the relationship from one characterized by competition into one that more closely resembles a bilateral monopoly. The contract transforms the relationship because while the contract itself produces a gain from
\end{quote}

\footnote{\textsuperscript{273}. Oliver Williamson has captured this intuition as follows: Idiosyncratic goods and services are thus ones where investments of transaction-specific human and physical capital are made and, contingent upon successful execution, benefits are realized. Such investments can and do occur in conjunction with occasional trades where delivery for a specialized design is stretched out over a long period (for example, certain construction contracts). The transactions that I wish to emphasize here, however, are exchanges of the recurring kind. Although large-numbers competition is frequently feasible at the initial award stage for recurring contracts of all kinds, idiosyncratic transactions are ones for which the relationship between buyer and supplier is quickly thereafter transformed into one of bilateral monopoly—on account of... transaction-specific costs .... This transformation has profound contracting consequences.}\n
Williamson, supra note 238, at 241.
trade to each party, the necessary specialization for completion of the contract, or for anticipating competition by the other side, creates an opportunity for the strategic player to behave in a manner that will allow him or her to receive a portion of the contractual gain that was, at the time of contracting, intended for the other party. But contracting is not the only means of creating wealth between parties, and post-contractual strategic bargaining is not the only opportunity to strip other parties of the gains that they reasonably anticipated from their interactions with others.

We can now state the problem in more general terms. Quasi-rents are created and become subject to appropriation when the relationship between the parties creates an increase in wealth, but the problem arises when that relationship itself provides an opportunity for one party to secure a part of the increase in wealth at the expense of the other party in a manner that was not reasonably anticipated by the terms of the contract or by the parties at the time of contracting. This form of rent thus arises when there is a divergence between the parties' ex ante expectations (at the time of contracting) as to how the wealth produced by contractual performance would be allocated, and the incentives produced ex post (after the contractual relationship is formed) with knowledge of the other party's specialization, and thus his or her attendant cost in redeploying contract specific assets to some other use. As shown below, appropriable quasi-rents aptly characterize the nature of rents one state can procure by disrupting a specialized relationship between and among other states that absent the disruption represents a benign pure Nash equilibrium strategy.

Rents that possess this characteristic divergence between ex ante and ex post expectations occupy only a subset of the cases in which two or more states find themselves in potential cooperative or noncooperative games implicating the dormant Commerce Clause doctrine. Because many other state laws challenged under the dormant Commerce Clause doctrine are the product of other specific forms of rent seeking, it is important to place appropriable quasi-rents in the broader context of rents and rent seeking.
a. Defining Other Forms of Rent

The following discussion will refer to Figure 1, produced below. We will begin with monopoly rent. Although this term is undoubtedly familiar, it is important to provide a precise definition for the analysis to follow. We must first distinguish monopoly profit from monopoly rent. Monopoly profit is the level of profit that a firm with market power can generate by engaging in marginal revenue, or monopolistic, pricing. Such a pricing strategy means that the firm reduces the level of output associated with competitive conditions, in which supply (assumed to equal marginal cost) meets demand, to the point where marginal revenue meets marginal cost. If we assume that the firm is unable to engage in price discrimination, then the firm faces a downward sloping marginal revenue curve as a consequence of its need to reduce the price for all purchasers as it sells more of its goods along the downward sloping demand curve. Because the firm must reduce the price for each additional unit sold, its revenue declines as it increases its output. The price maximizing strategy for the monopolistic firm is to set output where supply, or marginal revenue, meets marginal cost. This will allow the profit maximizing firm to then set a monopolistic price along the corresponding demand curve. In Figure 1, the monopoly price and output are indicated by Pm and Qm respectively, as compared with Pc and Qc under a non-monopoly (or competitive) pricing strategy. The monopoly profit is indicated by regions A plus B. Welfare economists are concerned about a monopolistic pricing strategy because it creates a welfare loss triangle, representing the additional amount consumers would pay for increased production under competitive production (region C) and the additional revenue that producers would receive as a consequence of that production (region D).

274. For a more detailed presentation of these various forms of rent, with accompanying graphical depictions, see STEARNS, supra note 253, at 113.
To distinguish monopoly profit from monopoly rent, we must now introduce Ricardian rents. Even under competitive conditions, meaning only that individual firms are price takers, some producers have greater productive talents or resources than others. Some farmers have superior land or livestock; some laborers have superior strength or talent; and, most significantly for our immediate purposes, some states have superior natural resources, whether for export, for example, water or coal, or for import, for example, land conditions that are better suited for long-term waste storage. Thus, for any given price set by competitive market conditions, some market suppliers will profit more than others as a function of superior resources or skill. As a result, some producers are capable of generating greater "profit" even if they cannot set price. This additional profit is known as Ricardian rent. 275 In Figure

275. Armen Alchian distinguishes Ricardian Rent from Differential Rent, both of which represent a form of infra-marginal competitive rent, as follows: "In sum, 'Ricardian rents' indicate differences in rents to units that are equal in their best alternative use values, but
1, Ricardian rents are represented in regions B plus D. Monopoly rent is the difference between monopoly profits and Ricardian rents, which is the profit such firms would receive under non-monopoly pricing. To calculate monopoly rent, therefore, we must subtract from the monopoly profit (A plus B) the Ricardian rents (B plus D). Because \((A + B) - (B + D) = (A - D)\), region A minus region D in Figure 1 represents the monopoly rent.

With this introduction to the various forms of rent, we can now define rent seeking. Rent seeking is the process of attempting to secure legislative protections that provide a value to the firm or industry of monopoly rents. From the perspective of welfare economics, it is important to encourage the pursuit of Ricardian rents, which is promoted through specialization and exchange, and to discourage rent seeking, which facilitates monopoly rents through artificial barriers to trade, precisely because competitors elsewhere have a comparative advantage in the particular industry.

Of course not all monopoly rents arise through legal protections. In industries with very high start up costs—for example, utilities—declining average costs tend to drive out competition in favor of a single dominant firm. In addition, the mere presence of a scarce resource in a given location can give those who control that resource substantial market power. Thus, a state that has a peculiar but highly valued export resource, say coal, can extract monopoly rents on coal by engaging in a monopolistic pricing strategy. This strategy will confer those rents without any obvious rent seeking, for example, that associated with a narrow constituency seeking to derive benefits from a widely dispersed constituency. This can prove significant for purposes of the dormant Commerce Clause doctrine because if the doctrine’s concern is that condoning state rent

different in their value here, while ‘differential rents’ are the premia to units that are the same value here but different in their best alternative use value.” Armen A. Alchian, Rent, in THE NEW PALGRAVE: THE WORLD OF ECONOMICS 591, 595 (John Eatwell et al. eds., 1987). In this context, the distinction is unimportant; rather, the critical point is that the infra-marginal competitive rent generates an upward sloping supply curve, as shown in Figure 1.

276. For simplicity, I assume that there are no recurring fixed costs; otherwise the infra-marginal rent equals B plus D minus recurring fixed costs. Because a monopolist in this situation incurs the same recurring fixed costs, there should be no difference on the margin between the infra-marginal rent and the monopoly rent with respect to those costs.

277. This is the traditional justification for regulating utilities. For a more detailed discussion, see WILLIAM J. BAUMOL & ALAN S. BLINDER, ECONOMICS: PRINCIPLES AND POLICIES 490-92 (5th ed. 1979); STEARNS, supra note 253, at 112-15.
seeking encourages retaliation by those adversely affected in other states, thus threatening to produce a regime of mutual defection in a standard prisoners' dilemma, then one can appreciate why monopolistic pricing strategies for scarce export commodities are presumed beyond the doctrine's reach. Simply put, this sort of rent seeking is unlikely to provoke a retaliatory response. The opportunities for states seeking to engage in marginal revenue pricing with respect to scarce export resources are limited by happenstance and those who possess such opportunities over one export commodity are unlikely to be those harmed by the efforts of other states that can pursue the same strategy over other export commodities. As a result, we might imagine the Supreme Court declining to treat such pricing strategies as candidates for strict dormant Commerce Clause scrutiny. This is so even though such a facially neutral regime, one that clearly burdens commerce, is economically motivated. So viewed, the export taxation exception fits nicely with the prisoners’ dilemma account of the dormant Commerce Clause doctrine. Let us now contrast economic rents resulting from scarce export resources that are secured through

278. The analysis in the text helps to explain a critical anomaly in Professor Levmore's analysis. While his analysis distinguishes between state interference and state exploitation, Levmore maintains that the Commonwealth Edison case is likely incorrect because of the challenged law's seemingly exploitative nature. Professor Levmore explains:

The major excise tax case that does not ‘fit’ is Commonwealth Edison Co. v. Montana, in which the Court upheld Montana's facially discriminatory severance tax on coal. Normatively, this case is troubling and was probably wrongly decided. It can, with a deep breath, be forced into the interference-exploitation scheme using the project-as-a-whole argument. Levmore, supra note 202, at 605 (footnote omitted). The project-as-a-whole argument recognizes that for certain projects, including, for example, toll facilities, investors who anticipate an inability to recoup monopolistic rents will be deterred in undertaking substantial original investments. See id. at 604. A simpler explanation, and one that does not require any “forcing” of the case facts, is set out in this Article. Simply put, whether or not the Montana severance tax was exploitative, sustaining it failed to afford adversely affected states the opportunity to respond in a manner that would result in mutual defection in a standard prisoners' dilemma or that would interfere with a benign pro-commerce Nash equilibrium game among states. As a result, despite its seeming unfairness to purchasers in other states, the challenged Montana tax did not fit the core value of the dormant Commerce Clause doctrine. This analysis, moreover, has important normative implications for the dormant Commerce Clause doctrine. By focusing on the relationships between states, as they are affected by challenged state laws, rather than on the burden that a particular law imposes on private actors from other states, the analysis underscores the motivation behind the dormant Commerce Clause doctrine as furthering political, rather than economic, union.
monopolistic strategies with the more common forms of legislative rent seeking.

In what is certainly among the most important articles in the field of public choice, Gordon Tullock challenged the then-prevailing conventional wisdom among welfare economists that the principal problem with monopolistic pricing is the welfare loss triangle. Instead, Tullock posited that the more problematic welfare loss was associated with incentives by special interests to secure the benefits of monopoly rents through the legislative process. Specifically, it is rational for special interests to invest up to the anticipated value of a monopoly rent in lobbying efforts to secure the rent. So viewed, the danger of rent seeking is not only the welfare loss triangle, however difficult to measure that might be, but also the further deadweight loss of attempting to secure monopoly rents through legislative means. Thus, organized groups will attempt to secure the benefits associated with actual market power (as in the coal hypothetical) through artificial legislative protection against out-of-state competition. Of course, some of the cases that we have already seen fit this paradigm. Thus, a tax-and-rebate scheme in which all sales of milk are taxed, but the funds are then distributed to in-state producers, is a classic case in which the industry receives the benefit of a differential tax against the interest of out-of-state purchases, thus conferring a rent. Similarly, a law that prevents an out-of-state competitor from advertising its superior product in state operates as a legislatively conferred rent.

At this point, we have defined four different kinds of rent: monopoly rent, Ricardian rent, legislative rents, and of course, appropriable quasi-rents. As stated previously, the dormant Commerce Clause doctrine is concerned with those forms of state rent seeking that encourage defection either in a prisoners' dilemma or multiple Nash equilibrium game. We have already explored the manner in which various forms of rent seeking do or do not encourage mutual defection in a standard prisoners' dilemma. We must now consider how state efforts to secure quasi-rents can thwart other states in their efforts to benefit from pure Nash equilibrium strategies that facilitate the flow of commerce.

279. See Tullock, supra note 224; see also Krueger, supra note 224.
This will further allow us to determine the nature of rents that are of particular concern to the dormant Commerce Clause doctrine. The opportunities for states to appropriate quasi-rents takes a somewhat different form than the same opportunities among parties to a contract. For example, states do not formally enter into bilateral or multilateral agreements with other states, at least without prior Congressional approval, and when they do, any resulting rents, because they would be subject to that approval, would not be challenged under the dormant Commerce Clause doctrine. The concept of appropriable quasi-rents must therefore be recast to allow us to identify the nature of the underlying rent seeking in multiple Nash equilibrium games between and among states that implicate the dormant Commerce Clause doctrine. The analysis requires a brief exploration of the closely related economic concept of transactions costs.

b. Defining Transactions Costs

Like rent seeking, "transactions costs" is a ubiquitous term and one that is often used to express a range of meanings. As Stanley Fisher has noted: "Transactions costs have a well-deserved bad name as a theoretical device ... because there is a suspicion that almost anything can be rationalized by invoking suitably specified transactions costs." And as Oliver Williamson has stated: "[T]he concept wants for definition." The pervasive interest in transactions costs, of course, dates back to Ronald Coase's early study on the firm, and his later study on the problem of social cost. In his first study, Coase posited that the firm is best understood as a nexus of contracts, which avoids many of the problems associated with long-term relational contracting. In the second, for which he won the Nobel Prize in economics in 1991,

282. See supra note 239 and accompanying text.
284. Williamson, supra note 238, at 233.
Coase considered whether and when the assignment of property rights affects resource allocation. The Coase Theorem posits that in a world with zero transactions costs and perfect information, resources will flow to their most highly valued uses without regard to initial property endowments. While the article was widely read to suggest that transactions costs are generally irrelevant to resource allocation, Coase's point was just the opposite. His essential insight was that because transacting is most often costly, it is important for the legal regime to mimic the parties' ex ante expectations concerning the allocation of property rights, lest transactions costs themselves inhibit the efficient flow of resources to their most highly valued uses. For our immediate purposes, it is important to begin with the zero transactions costs assumption. We do not do this because transactions costs are zero, but rather because the model is intended to inform us as to the nature of state law strategies, taking the form of transactions costs, that can inhibit a benign pure Nash equilibrium regime among states that facilitates the flow of resources to their most highly valued uses within the context of interstate commerce.

\textit{c. Empty Core Bargaining as a Transactions Cost}

We can illustrate Coase's essential insight by imagining a world with two entities, a laundry and a factory that pollutes into a river to the detriment of the laundry. Assume that the factory is worth $11,000, but that as a result of its pollution, it reduces the value of the laundry from a potential of $40,000 to $24,000. Further assume that for the laundry to receive the maximum benefit of its output, and thus to be valued at $40,000, it must close the polluting factory down. In a world with zero transactions costs and in which the parties have perfect information, the factory will close and the laundry will operate. This result will be achieved regardless of whether the laundry holds the property right to prevent the factory from polluting or the factory holds the property right to pollute.

\textsuperscript{288} See Coase, \textit{Social Cost}, \textit{supra} note 286.

\textsuperscript{289} The following hypothetical is adapted from Varouj A. Aivazian & Jeffrey L. Callen, \textit{The Coase Theorem and the Empty Core}, 24 \textit{J.L. \\& ECON.} 175, 176-81 (1981). The hypothetical that follows is the actual version that appears in that article. For my earlier analysis of this article, see Stearns, \textit{supra} note 96, at 1234-40.
without regard to the harm to the laundry. If the factory has the right to pollute, the laundry will pay up to $16,000—the difference in its value with and without the factory polluting—to purchase that right from the factory. Because the factory is worth only $11,000 even with the right to pollute, it has an economic incentive to sell the pollution right to the laundry. If instead the laundry owns the right to prevent the factory from polluting, then the factory will not be able to justify purchasing from the laundry the right to pollute because the factory values that right at $11,000, which is $5000 less than the laundry values the contrary right.

In this simple story, resource allocation is indifferent to liability rules for one very good reason: we have assumed away all of the complexities that can plausibly inhibit the claimed efficient result. Of course we can readily envision any number of costs that might break the deal. For example, the factory owner might derive psychological satisfaction from keeping the factory open, the laundry might not know the relative value of the factory with and without pollution and might decline to invest in acquiring that necessary information, or the parties might simply not wish to deal with one another even if there is a potential financial gain from doing so. There are numerous costs that can inhibit any potentially fruitful deal, whether they are psychological or informational in origin. For now, let us simply follow Coase’s lead and assume that these costs, or any other costs that could inhibit the transactions, are zero. In the original version of the laundry/factory hypothetical, Professors Aivazian and Callen demonstrated that in a world with no transactions costs and perfect information, empty core bargaining itself can prevent the flow of resources to their most highly valued uses.

To illustrate, we will now alter the facts to restore the original hypothetical. This time, assume that instead of one polluting factory operating to the detriment of the laundry, there are two factories, with a combined value of $11,000. Assume that operating alone, factory A is worth $3000 and factory B is worth $8000. As before, the laundry, C, is worth $24,000. Further assume that any combination of two will increase the value to the coalition members. If the factories merge, then they increase their output from $11,000 to $15,000 due to economies of scale. If factory A merges with the laundry, then that factory will close down and the merger will
increase the value of the laundry from $24,000 to $31,000, leaving the value of factory B unaffected. If factory B merges with the laundry, factory B closes down and the merger will increase the value of the laundry from $24,000 to $36,000, leaving the value of factory A unaffected. And if both factories join a grand coalition with the laundry, they both close down, increasing the value of the laundry from $24,000 to $40,000. For every coalition that includes the laundry, all of the value that the coalition produces results from the laundry operating alone and without the pollution that the other coalition member would have generated if it were not in the coalition. The resulting values of the possible coalitions are follows, where V means “value,” the parenthetical includes the parties to the coalition, and the bracketed entries represent the amounts earned (in $1000 increments) within or outside the coalition:

\[
\begin{align*}
V (A) [3] + V (B) [8] + V (C) [24] &= $35 \\
V (AB) [15] + V (C) [24] or V (AC) [31] + V (B) [8] or \\
V (BC) [36] + V (A) [3] &= $39 \\
V (ABC) &= $40
\end{align*}
\]

In this hypothetical, a stable outcome arises if the laundry possesses the property right to prevent the factories from polluting. The combined value of the two firms, now $15,000, is insufficient to bribe the laundry, which increases in value by $16,000 if the firms close down, into allowing them to operate. But if instead there is no pollution liability rule, meaning that the factories are free to pollute, then there is no stable outcome. To illustrate, assume that we begin with a two-party coalition, for example (AB), and that they evenly divide their superadditive profits from $11,000 to $15,000, such that A now earns $5000 (from $3000), B now earns $10,000 (from $8000), and the excluded C earns $24,000. C can now lure A away and offer to split evenly the additional $2000 that A and C can collectively earn in the superior (AC) coalition. In this superior coalition, A earns $6000 (from $5000), B earns $8000, and C earns $25,000 (from $24,000). B, who is now excluded can approach C and offer to split the $3000 superadditive profits that would arise in a superior (BC) coalition. In this superior coalition, A earns $3000, B earns $9500 (from $8000), and C earns $26,500 (from $25,000). A can approach B, yet again, and offer to split the superadditive
profits of $15,000, which exceed their combined earnings in the \((BC)\) coalition by $2500.

We have now come full circle, from \((AB)\) to \((CA)\) to \((BC)\) to \((AB)\). In each round, the defector and new coalition member have achieved superadditive gains.\(^{290}\) The same anomaly arises if we instead began with the grand \((ABC)\) coalition, in which the three members divide evenly the $5000 superadditive profits, at $1666 each. A now earns $4666, B earns $9666, and C earns $25,666. A and B can now evenly divide the difference between their superadditive profits of $15,000 and their present combined earnings of $14,332, placing them in a superior coalition. At this point, we are at the initial state (albeit with different initial payoffs) from which the cycle began in the two-party coalition game.\(^{291}\)

Empty core bargaining games like this one are easy to criticize because they abstract from the prevalent rules that tend to produce stable outcomes in most real world situations. But the criticism misses the point. The games are helpful in analyzing why such stabilizing rules emerge in the first place, even though their effect is often to produce a result that is normatively inferior, given the payoffs, to some conceivable alternative. For our purposes, the critical point to glean from the empty core game is that it produces an opportunity for one or more entities (here a laundry or two firms) to secure the functional equivalent of appropriated quasi-rents that arise in a contract setting. From an ex ante perspective,

\(^{290}\) In response to this hypothetical, Ronald Coase presented two arguments. First, he observed that the regime envisioned is peculiar in that it anticipates multiple coalitions that could be entered into and breached at will. Second, Coase claimed that the hypothetical was trivial because if the parties consistently divided the superadditive gains evenly, they would discover that the payoffs asymptotically approach the highest amount as they move toward the grand coalition. See Ronald H. Coase, The Coase Theorem and the Empty Core: A Comment, 24 J.L. & Econ. 183 (1981). On both grounds Coase is correct. But the first criticism is founded on something of a trick. While a contract damages rule would deplete any gains from defection in favor of a superior coalition, a contract damages rule is not a rule establishing an initial property right, which, along with zero transactions costs and perfect information, is all that the Coase theorem posits is necessary for efficient resource allocation. As for the second argument, nothing in the Coase theorem dictates how superadditive gains are to be allocated, and thus the even division assumption again derives from outside the Coase theorem itself. More importantly, whether the hypothetical is significant on its facts, it does demonstrate an outcome that in a zero transactions cost world does not ensure the predicted result of the Coase theorem.

\(^{291}\) For a more detailed presentation that walks through each step, see Stearns, supra note 96, at 1234-40.
most would agree that given the values attached in the hypothetical to each economic activity and holding all else constant, the optimal result would be to close the factories in favor of the laundry, and to divide the surplus evenly among the players. Indeed, many legal rules follow such a default pattern when one could formalize an empty core bargaining game. And yet, despite the apparent appeal that such a solution holds, we do see shadows of empty core bargaining in the real world.

While most situations in which one can infer possible empty core payoffs produce some actual meaning noncyclicals outcome, sophisticated economic actors understand the genuine dangers that opportunities for strategic bargaining over this form of appropriable quasi-rents can produce. Thus, it is well known that a company, like Disney Corporation, seeking to acquire a large piece of land would be ill advised to announce the superadditivity in advance, and offer up a reasonable portion for affected landowners to share evenly if each agrees to sell. Disney understands that one or more potential sellers will likely try to extract a disproportionate share of the rent by “holding out” for a superior deal, even if the effect is to thwart the entire set of transactions. After all, a landowner in the middle of a potential theme park has the potential to seek to appropriate unto herself a hugely disproportionate amount of the available rent that would arise if all the land were converted into the more highly valued use.

Legal scholars have recognized that individual states can “hold out” in the production of a public good by defecting from what I

292. This includes inheritance laws. For a more detailed illustration that draws upon social choice theory, see STERNS, supra note 173, at 54-58.
293. When this sort of event arises, the parties do not cycle into oblivion, but the result and payoffs reached are “arbitrary” in the sense that some other set of ultimate arrangements could have provided a superior benefit to some alternative coalition. It is possible to hold out too long. Thus, when a developer seeks to acquire a large plot with the intent to develop the land into a substantially more highly valued use, the final holdout or group of holdouts are roughly in a game of chicken with the corporation. If the holdout fails to jump off short of the cliff, thus accepting a credible final bid, the prospective buyer might elect to build around holdouts. See also David McGowan, Innovation, Uncertainty, and Stability in Anittrust Law, 16 BERKELEY TECH. L.J. 729 (2001) (noting connection between holdout and chicken games in intellectual property context involving technical innovations). For a recent illustration of the merger of these two games, see Tom Gorman, When Residents Won’t Sell, Mogul Builds Around Them, BALT. SUN, Nov. 29, 2002, at 6A (quoting one of the final holdouts of Las Vegas resort development as stating “[i]f Wynn [the developer] continues at this ... pace, he’ll make these homes uninhabitable”).
have presented in this Article as a benign pro-commerce solution to a multiple Nash equilibrium game. But unlike in the standard holdout game, those seeking compliance—namely those states whose Nash equilibrium, pro-commerce strategy is thwarted by the holdout state's defection—have no direct means of paying off the defecting state to secure compliance in the provision of the public good. Instead, the payoff to the defecting state comes not from a hopeful payoff from the threat of defection as in the Disney hypothetical, but rather comes somehow from the defection itself. For this reason, it is helpful to recast the defecting state's effort from holding out in the provision of a multistate public good to rent seeking.

Appropriate quasi-rents, including those that become available as a result of empty core bargaining games, can obstruct otherwise beneficial transactions. Recall the Coase theorem: In a world with zero transactions costs and perfect information, resource allocation is indifferent to liability rules. In the actual Aivazian and Callen hypothetical, the more highly valued use of the resources would come about if the party who valued the property right more highly—the laundry—held the right in the first instance. But if the less valued polluting firms instead held the right, then the Coase theorem result is no longer guaranteed. One possible theoretical escape hatch is to include as a transactions cost the very form of appropriable quasi-rents, namely empty core bargaining, that threatened to obstruct efforts to bring about the desired result. While this “rescues” the Coase theorem, it does so through a seemingly dissatisfying ploy. Including as a transactions cost whatever prevents the desired Coasian result from being realized threatens to turn the theorem into a tautology. It is perhaps for this reason that in his response to the Aivazian and Callen hypothetical, Coase did not take this approach.

294. See Epstein Bargaining, supra note 242; Burk, supra note 242.
295. Unlike the holdout game described supra note 293, the interstate commerce game does not threaten to become a game of chicken. In the multiple Nash equilibrium game that arises in the context of interstate commerce, the defecting state is not motivated to discourage the other states from adopting a contrary strategy; rather, the defecting state directly benefits from the fact that other states have adopted a common strategy from which it can defect.
Even so, economists have recognized appropriable quasi-rents as a transactions cost.\textsuperscript{296} Whether this is satisfying in light of the Coase theorem, it is a useful characterization for our purposes. If we accept the proposition that one of the objects of the Commerce Clause is to facilitate a common Nash equilibrium strategy among the states that facilitates commerce, at least unless Congress says otherwise, then the question arises: What prevents Congress and the states from achieving the desired pro-commerce result: And here, appropriable quasi-rents—generalized to encompass empty core bargaining games—reveals a critical cost that can impede “transactions” among states, left to their own devices, to achieve that preferred regime. That is because the relationships between and among the states themselves, like the relationship between contracting parties, give rise to a divergence between ex ante and ex post expectations.

\textit{d. Recasting the Multiple Nash Equilibrium Game in Terms of Transactions Costs}

To complete the model it is important to add one more layer to the preceding analysis. In the above hypothetical, the cycling problem arose when we split a single polluting firm into two, creating three businesses for which every two- or three-party coalition produced a superadditivity. We will now consider a variant of the driving game previously introduced.\textsuperscript{297} We will begin with two players, this time the states themselves, rather than individuals within a state, and then we will introduce a third. As before, the two options are driving on the right or the left. With two states and two driving options, the matrix presented in Table 6\textsuperscript{298} characterizes the choice of regime as with two drivers in a state. If we assume that vehicles are designed to drive on one side of the road or the other—for example, left steering wheels for driving on the right as in the United States or right steering wheels for driving on the left as in Britain—then states seeking to facilitate the flow of interstate commerce will have an incentive to adopt the same regime, whether it is (right, right) or (left, left). Conversely, an individual state can

\textsuperscript{296} See supra notes 235-38, 273-74 and accompanying text.
\textsuperscript{297} See supra text accompanying notes 10-12.
\textsuperscript{298} See supra Part II.B.2.
improve its position by moving from either of the two available mixed-strategy equilibria—(right, left) or (left, right)—to a pure Nash equilibrium outcome.

Even if the states desire such a benign outcome, it is by no means guaranteed. Thus, if we assume that the states would prefer to share a common regime, and if we further assume that they were unaware of the other states’ choices at the time that they had to select their own, then the result would be a mixed-strategy equilibrium. This means that each would guess at what the others will choose, with a fifty percent chance of success. While the individual states are attempting to secure the benefit of a pure Nash equilibrium strategy, the collective outcome might not be a pure Nash equilibrium. If the decisions are not made simultaneously, as will most often be the case, this problem is likely to be avoided. Path dependence implies that returns rise when others follow the lead of the initial mover. In this context, if one of a group of states elects driving on the right, it is likely that others will follow suit precisely to secure the benefits flowing from a common regime. In this situation, there is little risk of a mixed-strategy equilibrium, at least assuming that the incentive is to benefit from a common traffic regime.

But now imagine that a group of states has succeeded in adopting a common driving regime. Further imagine that a single state, or city, for example Manhattan, would like to reduce its own traffic. One might imagine a proposal to limit driving to in-city taxicabs or limousines. The city might approach this in any number of ways, for example, by passing a law that prevents anyone with a license that is not issued with a Manhattan address from driving in the city, or prohibiting all cars other than registered Manhattan taxicabs. It seems quite probable that such laws would violate the dormant Commerce Clause, and perhaps also the Article IV Privileges and Immunities Clause. Now imagine that the city chooses a different means of achieving the same objective. The city will permit all drivers with valid licenses to drive through Manhattan, but whereas the rest of the nation drives on the right side of the road in vehicles with steering wheels on the left, driving in Manhattan will be on the left side of the road with steering wheels on the right.

299. See BAIRD ET AL., supra note 243, at 22.
Assuming that such a regime were legal, only those with a very strong incentive to invest in a conforming vehicle would do so. Local taxi drivers and wealthy urban residents might fit this description, but few others would.

Notice that by introducing the left side driving regime, Manhattan is not rejecting the chosen solution to the multiple Nash equilibrium game because the wrong pure Nash outcome was selected. This is most easily illustrated by imagining that the rest of the nation had instead followed the British driving rule. In that case, Manhattan would have elected the United States driving rule. The whole point from the perspective of the state or city passing the defecting law is to have a rule that is contrary to the prevalent regime among other states. Also notice that the benefit accruing to Manhattan could not have arisen but for the dominant pro-commerce regime of other states.\(^{300}\) And finally, the rent that Manhattan achieves imposes a direct cost on other states, which have chosen to facilitate a common regime that promotes the flow of traffic throughout the nation. But Manhattan’s goal is not to have the surrounding states purchase its submission, as in the standard holdout game. And it is for this reason, I argue that the holdout analysis does not fully capture the dynamics of the dormant Commerce Clause doctrine. Instead, the Manhattan driving rule is motivated by the desire to divert traffic around Manhattan, and thus to secure whatever “rent” derives from the very fact of enacting the contrary rule. Stated differently, the benefit to the defecting state is the act of defection itself, not the anticipated payoff by others hoping to entice eventual compliance. Because that rent arises only as a result of the relationships established through pure Nash equilibrium, pro-commerce laws of other states, Manhattan’s effort can be fairly characterized as an effort to appropriate quasi-rents made available through the benign pure Nash equilibrium strategies of affected states.\(^{301}\)

---

300. Such a rent would not be available, for example, if the sum of the other states’ strategies produced a mixed-strategy equilibrium, rather than one of the two preferred pure Nash equilibria.

301. The difficulty of allowing a single state or city to thwart a pure Nash equilibrium outcome can be further illustrated by imagining that the driving regimes in all states were regulated by Congress. We could readily imagine Congress selecting a right or left driving regime. But it seems implausible to imagine Congress electing a mixed-strategy equilibrium regime.
The game theoretical account of the dormant Commerce Clause doctrine not only provides a more robust account of the various cases and doctrines, but it also helps to explain several peculiar features of the doctrine. Among those features is the default nature of the resulting constitutional doctrine, which Congress is at liberty to change through ordinary legislative means. The default nature of the dormant Commerce Clause doctrine is most easily understood by recognizing that defection from a pure Nash equilibrium strategy represents a special kind of transactions cost impediment to the flow of interstate commerce that the Court can reduce or eliminate by striking a challenged law under its dormant Commerce Clause doctrine, subject to the caveat that the resulting regime might prove inferior to another potential pure Nash outcome over time.

To illustrate, imagine that driving regimes could be altered without cost. In this zero transactions cost world, the Manhattan rule would introduce a cycle. The rest of the states start with right driving and Manhattan defects to left driving. Because the other states care more about the benefits of coordination than about whether driving is left or right, they follow suit and switch to left driving. But since Manhattan also does not care about which side its residents drive on, provided it is contrary to the rest of the nation (or at least the Northeast corridor), it then switches to right driving. Now the other states switch back, and on and on it goes.

\[ e. \text{Disrupting Path-Induced Equilibrium (or Network Externalities) as a Transactions Cost} \]

Of course the transactions costs of switching driving infrastructures and investing in new vehicles make the hypothetical cycle seem implausible, perhaps even absurd. To complete the model, therefore, we must introduce more formally the concept of path dependence. Once a state or group of states selects from one of two or more potential pure Nash equilibria, the decisions of other states to follow suit create increasing returns to all states—those that previously selected the initial strategy and those that followed suit—relative to a mixed-strategy equilibrium. While economists usually assume that as the amount of any given activity increases, marginal returns are diminishing, when activities are path-dependent, meaning that the activities produce positive network
externalities, the opposite assumption holds.\textsuperscript{302} Path dependence has been applied to a variety of subject matters, including such discrete goods as typewriter keyboards\textsuperscript{303} and VCRs,\textsuperscript{304} political\textsuperscript{305} and economic systems,\textsuperscript{306} and various legal doctrines, including stare decisis.\textsuperscript{307} In each case, the coordination of the activity produces positive gains for others who benefit from their common use. It is the fact of coordination, whether express or tacit, that increases returns to those who elect to follow the lead strategy.

Because of the high transactions costs of shifting from one set of pro-commerce regimes to another, path dependence characterizes the choice among states of common legal regimes that facilitate the flow of commerce. So viewed, the harm from a single state's defection from a commerce-based multiple Nash equilibrium game can now be recast in terms of undermining the superior gains


associated with path-induced increasing returns resulting from positive network externalities. These two consistent characterizations help to underscore the nature of the rent seeking at issue in these cases. The facts of *Kassel* and *Bibb*, for example, fairly resemble efforts by defecting states to secure benefits simply by thwarting a pro-commerce pure Nash equilibrium outcome that is dominant in the surrounding states. While all states would benefit from a common, pure Nash equilibrium outcome, a defecting state can appropriate a peculiar rent by deliberately thwarting that strategy and thus undermining the gains to other states from following a pure Nash regime. The likely benefit in these cases is diverting traffic around the state and reducing the maintenance costs associated with the flow of truck-based interstate commerce. The benefit is most pronounced in *Kassel*, a case in which the governor expressly acknowledged these objectives.

While the Court uses the dormant Commerce Clause doctrine to prevent mutual defection in a prisoners’ dilemma game and to restore a benign multiple Nash equilibrium game, the Court does not use the doctrine to eliminate all forms of rent seeking. Some rent seeking distributes wealth from diffuse to organized groups, but does so at the expense of interests in-state, as well as at the expense of private interests out-of-state. Because such rent seeking, which provides special interests with the equivalent of economic rents, has such a distributional effect within the state, we can understand the Court’s disinclination to direct the dormant Commerce Clause doctrine against rent seeking as such. First, there are political forces within the state to counteract such rent seeking, especially since the burdens are at least as great within as outside the state. Second, to the extent that these forces are overcome by the stronger lobbying incentives of special interests, the power of individuals to vote with their feet imposes at least some additional discipline.\textsuperscript{308} Finally, even if this proves inadequate, the fact remains that the Commerce Clause has not been—and in my view should not be—used as a subterfuge for economic substantive due process.\textsuperscript{309} The Commerce Clause in its

\textsuperscript{308} See Charles M. Tiebout, *A Pure Theory of Local Expenditures*, 64 J. POL. ECON. 416 (1956) (positing that ability of local residents to vote with their feet disciplines governmental abuses of taxation and expenditures).

\textsuperscript{309} While a normative defense of this proposition is beyond the scope of this Article,
dormant capacity is directed at laws that affect commerce. While the other two categories—mutual defection in a prisoners' dilemma and restoring a multiple Nash equilibrium game—fit this description, intrastate redistributional legislative rent seeking does not.

3. Summary

We have now completed the formal model, and are ready to revisit the cases set out in Part I. Before doing so, I will briefly summarize the three relevant case categories that emerge from the foregoing analysis. As we will see in Part III, these case categories can best be viewed as endpoints on a spectrum. The task then is to identify those factors that can be used to place cases closer to the most relevant endpoint.

1. State Laws that Risk Promoting a Regime of Mutual Defection: While the per se rule of invalidity has largely eliminated the most obvious state law efforts to secure legislative rents in a manner that is likely to invite retaliation by other states and thus a regime of mutual defection, state legislatures are sufficiently sophisticated that they are able to devise other methods of achieving the same objectives. The prisoners' dilemma analysis provides a means of evaluating these types of state laws and of understanding the Court's use of strict scrutiny to assess those categories of laws that are likely substitutes for blunt regulations that would have been subject to the per se rule. Even in the context of cases in which a prisoners' dilemma analysis applies, however, anomalies remain. In the waste cases, for example, the Court's refusal to allow statutes that discriminate against waste in commerce threatens to transform, rather than to eliminate, the prisoners' dilemma. And in the

which is motivated by the need for a positive account of existing doctrine, suffice to say that in general the same structural justifications for allowing in-state political processes to counter inefficient rent-seeking laws apply regardless of whether the failure of these processes to prevent undesirable rent-seeking legislation results in a substantive due process or a dormant Commerce Clause challenge. Even if one rejects this process-based argument, however, that does not undermine my argument that reliance upon the Commerce Clause is improper to challenge what is in effect a claim resting on principles of economic substantive due process. My own view remains that it is better to debate the merits of economic substantive due process in the context of the Due Process Clause than in the context of the Commerce Clause, which is targeted to the very specific concern of facilitating political union among states and not to demanding efficient state laws.
reciprocity cases, the Court has eliminated a mechanism through which states unilaterally discourage defection by partnering states. Third, and most importantly, the prisoners’ dilemma fails to account for those cases in which states secure rents at the expense of pro-commerce regimes of other states and in which other states are seeking to act in concert, rather than to defect. In short, the prisoners’ dilemma provides a useful starting point in thinking about the dormant Commerce Clause, but falls short of providing a comprehensive model.

2. State Laws that Disrupt Benign Multiple Nash Equilibrium Games: The most controversial dormant Commerce Clause cases involve statutes that are facially neutral and that are linked to a purpose that the Court admits is legitimate. It is for that reason that in Category 4, within the framework in Part I, the Court has gone back and forth on the appropriate test, variously suggesting that the balancing test or the rational basis test should apply. And yet, while the Court does not apply strict scrutiny in this context, it has struck down laws alleged to burden commerce that fit this paradigm. The game theoretical model provides a sound normative justification for the Court’s decisions that strike down state statutes grounded in admittedly legitimate concerns over highway safety if those laws appear to fit the paradigm of thwarting what would otherwise have been a simple multiple Nash equilibrium game by introducing a third, mixed-strategy regime, the effect of which is not truly to advance safety, but rather to secure an appropriable quasi-rent at the expense of the pro-commerce regimes or dominant practices of other states. So viewed, these cases reveal that rather than operating on the periphery of the Court’s dormant Commerce Clause jurisprudence, as reflected in the Court’s ambivalence over the choice of test, they represent a second core value of this doctrine. These cases further underscore the importance of maintaining a default regime in this area to allow Congress to select an alternative pure Nash outcome (as distinguished from a mixed-strategy equilibrium) should Congress determine that the dominant pure Nash outcome selected by the early moving states (which may well be the product of path dependence) is inferior to such an alternative outcome.

3. Intrastate Legislative Rent Seeking: Because both of the two preceding categories lie at the core of the Court’s dormant
Commerce Clause jurisprudence, the Court should apply an opposite presumption to those laws that fall into neither category. The market participant cases and the export taxation cases fit this description. While market participant cases involve laws that discriminate on their face against commerce and that are economically motivated, they operate in a manner that is more like a subsidy that distributes wealth from diffuse to organized groups within the state. The laws are rent-seeking, and they burden commerce in the sense that all rent-seeking laws produce inefficiencies. But the burden falls at least as heavily on the enacting state as on any outside interests. As a result, if sustained, these laws are not likely to provoke a retaliatory response or a regime of mutual defection. In addition, these laws do not operate at the expense of pure Nash equilibrium, pro-commerce regimes of other states. In fact, they do not affect the decisions of other states to pursue or decline to pursue the same sorts of schemes on their own. Because market participant cases fall into neither core category, we can appreciate the Court’s decision to carve out a doctrinal exception involving the state as market participant.

A similar analysis applies to the export taxation doctrine. In this context, the opportunities of other states to retaliate is limited because of the random allocation among states of scarce resources that might be of value to the state that initially enacted the burdensome law. In addition, while the law “burdens commerce” by imposing a heavy tax on foreign purchasers, it does not burden commerce in the sense of undermining coordinated pro-commerce regimes of other states. The burden here falls on private parties, not states, and is likely to have a limited effect in encouraging states to respond.

Although the market participant cases and the export taxation doctrine are often viewed as enigmatic, the game theoretical model reveals that they fall outside the categories of prisoners’ dilemma or multiple Nash equilibrium games. Of course the cases will not always be as neat as the case paradigms in the model. As stated above, the model is intended to reveal meaningful end points on two spectrums along which the actual cases can be graded.

We are now ready to revisit the cases and doctrines introduced in Part I in light of the game theoretical model.
III. APPLYING THE GAME THEORETICAL MODEL: THE DORMANT COMMERCE CLAUSE CASES REVISITED

In Part I, I reviewed the cases from the dormant Commerce Clause, the market participant exception, the export taxation doctrine, and the Article IV Privileges and Immunities doctrine. The presentation was motivated by the desire to set out the principal doctrinal categories and then to expose the inconsistencies within those categories. Applying the model developed in Part II, I now start at the back end, explaining away the most anomalous categories—the market participant doctrine and export taxation—and then proceed to the dormant Commerce Clause cases themselves. In doing so, I also articulate a vision of the dormant Commerce Clause and related doctrines that provides a sturdier normative foundation than its critics would have us believe.

A. The Exceptions that Help Define the Rule: Market Participation, Export Taxation, and Article IV Privileges and Immunities

While most analyses of the dormant Commerce Clause doctrine exclude the market participant and export taxation doctrines, the game theoretical analysis provides both a positive explanation and a normative foundation for their different treatment. It also allows us to understand the Article IV Privileges and Immunities doctrine, which functions as an exception to the market participant doctrine, as more than a clever exercise in pleading. That said, this Article does not contend that all of these cases should receive the level of scrutiny attached under the various doctrines. Rather, the market participant cases are problematic in a particular respect. But the important point for our purposes is that this Article's objection to those cases is not grounded in concerns that relate to the Commerce Clause.

The Court articulated the market participant doctrine in a trilogy of cases: Hughes v. Alexandria Scrap Corp.,310 Reeves, Inc. v. Stake,311 and White v. Massachusetts Council of Construction

---

Employers, Inc. In the first two cases, the Court exempted the challenged statute from its ordinary dormant Commerce Clause scrutiny, asserting that when the state operates in an entrepreneurial capacity, it can select with whom it deals. In the third case, White, it extended the principle to allow the state to impose downstream conditions upon its contractors, suggesting that the state not only can choose with whom to deal, but also on what terms. The Court's more recent decision, South-Central Timber Development, Inc. v. Wunnike, appears to cut back on the White extension by suggesting that if the out-of-privity contract requirement operates in a different market from that in which the contract takes place, then the state is beyond the proper bounds of its entrepreneurial functions. The effect, then, is to reintroduce ordinary dormant Commerce Clause scrutiny. As applied to the case facts, the result was to subject Alaska's in-state processing requirement for its forty-nine million board feet of lumber to the virtual per se rule of invalidity. Finally, in a context that is factually closest to White, United Building & Construction Trades Council v. Mayor of Camden, the Court remanded a case involving a forty percent municipal employment requirement for Camden contractors and subcontractors for findings on whether it met the stringent scrutiny imposed under the Article IV Privileges and Immunities Clause.

The initial trilogy of market participant cases have been criticized on the ground that they sustain laws that expressly discriminate in commerce based solely on the fact that the discrimination takes a different form. The game theoretical analysis, however, provides a sound normative basis for their separate treatment. These cases each involve a fairly simple in-state rent-seeking story, in which the entrepreneurial activity operates as an effective subsidy to an identifiable in-state interest, and does so in a manner that operates to the detriment of a readily identifiable, albeit diffuse, group of in-state taxpayers. Thus, in Alexandria Scrap, the state elected to subsidize those who

313. See Reeves, 447 U.S. at 440; Alexandria Scrap, 426 U.S. at 810.
314. See White, 460 U.S. at 209-10.
316. Id. at 100.
trafficked in junked cars within Maryland, at the expense of those within the state who would have helped to defray the costs of the state's entrepreneurial efforts, but who would not have received the benefit.\footnote{318} While those who trafficked in junked cars out-of-state would have preferred the opportunity to receive the benefit of the more favorable terms in Maryland, the state's decision to exclude them was unlikely to provoke any retaliatory scheme that resulted in a regime of mutual defection. Simply put, the scheme redistributed wealth from one group of Maryland residents to another, and if other states sought to engage in a similar scheme of redistribution, they were free to do so.

This case did not involve an interstate prisoners' dilemma. The scheme did not burden an out-of-state interest in a manner likely to foment state law retaliation. Nor did it involve a multiple Nash equilibrium game in which a defecting state was attempting to secure quasi-rents made available only as a consequence of other states' pro-commerce strategies. Again, the effect of the scheme was to redistribute wealth through a legislative conferral of rent within Maryland. Such a policy might have been unwise, but one of the benefits of a federalist scheme—captured in the Tiebout model\footnote{319}—is that it might well be meritorious at the federal level to leave such policy decisions, however unwise they might be, to the states.\footnote{320}

The more difficult task is to explain the exceptions to the market participant doctrine itself, especially given the striking similarities between \textit{White} and \textit{Camden}. In \textit{White}, the Court sustained a fifty percent municipal employment requirement against a dormant Commerce Clause challenge,\footnote{321} applying the market participant doctrine. In \textit{Camden}, the Court remanded for additional findings on whether a forty percent municipal employment requirement violated the Article IV Privileges and Immunities Clause.\footnote{322} The reconciliation does not grow out of the prisoners' dilemma and Nash

\footnote{318} \textit{Alexandria Scrap}, 426 U.S. at 799.\footnote{319} Tiebout, \textit{supra} note 308; see also ALBERT HIRSCHMAN, EXIT, VOICE AND LOYALTY 40-41 (1970) (positing that while the Tiebout model might understimate the difficulty of relocation as a disciplining technique for interjurisdictional competition, voice provides more powerful discipline at state and local levels than at the national level).\footnote{320} A similar analysis can be used to characterize the \textit{Reeves} decision.\footnote{321} \textit{White} v. Mass. Council of Constr. Employers, Inc., 460 U.S. 204, 214-15 (1983).\footnote{322} \textit{Camden}, 465 U.S. at 222-23.
equilibrium analyses, at least directly. These games reveal the conditions under which the Court presumes the dormant Commerce Clause doctrine inapplicable to in-state rent seeking that takes the form of state entrepreneurial efforts. It does not suggest anything else about the soundness or constitutionality of such schemes. While an analysis of the purposes underlying Article IV Privileges and Immunities is beyond the scope of this Article, suffice to say that the clause expresses concern for the manner in which a home state treats a citizen of a foreign state when that foreign state citizen is in the home state. It is certainly a credible construction of this clause to assert that employment is among the privileges that a state cannot confer upon its own citizens but deny to the citizens of other states, especially in a context that involves construction, as opposed, for example, to state or local governance.  

The Wunnicke exception remains problematic. In Wunnicke, the Court rejected the application of the market participant doctrine, which itself is an exception to the dormant Commerce Clause doctrine, by importing a quasi-antitrust analysis to create a further doctrinal exception that restores dormant Commerce Clause scrutiny. The result, as then-Associate Justice Rehnquist observed in his dissent, appears dissatisfying because it provides the purchaser with a clear windfall, at least if we make the seemingly reasonable assumption that the contract price capitalized any additional costs that the purchaser was required to bear as a result of the in-state processing requirement. If that assumption holds, then the effect of the requirement is to offset in-state contract revenues (benefitting Alaskans generally), the governmental conferred rents paid to the processing industry. This is classic in-state rent seeking that is unlikely to engender any reciprocal efforts within other states and that does not undermine the pro-commerce, pure Nash equilibrium regimes of other states.

323. While this does not answer the objection that the clause speaks to states, rather than to municipalities within states, the relative ease of an end-run around the clause, as seen in the split-the-state hypothetical developed in Fort Gratiot Sanitary Landfill v. Michigan Department of National Resources, 504 U.S. 353, 361 (1992), and the fact that the municipal scheme grew out of a facilitating state statute, provide credible bases for this doctrinal extension. But if I am wrong, this simply undermines the Court's application of the Privileges and Immunities doctrine, not its decision to apply that doctrine separately from the dormant Commerce Clause doctrine.


325. Id. at 102-03 (Rehnquist, J., dissenting).
Therefore, the law does not undermine any public interest readily identified with the dormant Commerce Clause doctrine. Moreover, because the case likely produced a windfall, applying the market participant doctrine would not likely have adversely affected any significant private interests. Perhaps the fact that the buyer was foreign,\textsuperscript{326} and the difficulty in fitting the case facts into the confines of the seemingly more applicable Import-Export Clause, explain the Court's disinclination to exempt the contract provision from scrutiny. Regardless, the purpose of the model is not to justify the outcome in every single case, but rather is to explain more generally the relationships between and among the cases and doctrines under review.

Before proceeding to the dormant Commerce Clause cases themselves, it is important to consider Commonwealth Edison,\textsuperscript{327} which the Court treated as an export tax case, rather than as a dormant Commerce Clause case. The case fits the game theoretical model nicely. The peculiar factual circumstances giving rise to export tax opportunities were sufficiently rare that sustaining the law was unlikely to invite retaliation and thus a regime of mutual defection in a standard prisoners' dilemma. And the tax in question did not undermine any pure Nash equilibrium, pro-commerce strategies in other states.

While the case fits the model, it remains disturbing because Montana's high concentration of low sulphur coal deposits affords it a seemingly unfair opportunity to exploit neighboring states.\textsuperscript{328} Commonwealth Edison implicates the difficult question of how to determine the appropriate tax level assessed in one state when the burdens fall in significant part on those residing out-of-state, a problem exacerbated by the apparent inelastic demand over the relevant range for low-sulfur coal at the time the law was challenged.\textsuperscript{329} In the ordinary course, we presume that those who pay taxes receive some set of benefits, or largess, that correlates with the amount paid in. In Commonwealth Edison, that is a difficult proposition to defend. Clearly, Montana understood that it was exporting a considerable portion of its tax burdens to

\textsuperscript{326} See supra note 206, and accompanying text.
\textsuperscript{328} See supra note 278 (discussing Levmore's analysis of Commonwealth Edison).
\textsuperscript{329} See supra note 2220 and accompanying text.
nonresidents, and did so based upon its market power with respect to an export good. Here there was no need for legislative rent seeking. Instead, the legislature taxed the good knowing that the inelastic demand would allow out-of-state buyers to fill the state's tax coffers with the proceeds. The Court's decision to decline to apply dormant Commerce Clause scrutiny, even though the case falls well within Category 3 (facially neutral/financially motivated) in Part I, can be attributed in part to the inability of other states to retaliate. But there is one additional justification for the result, having to do with institutional competence. While the facts of the Commonwealth Edison case are extreme, if the Court applied ordinary dormant Commerce Clause principles, it would necessarily invite claims that rest upon tax laws that allegedly impose disproportionate obligations on nonresidents that are substantially closer to a seemingly appropriate line.

The difficulty here is not merely one of judicial burdens, but also one of judicial competence. Incidence analysis is extraordinarily difficult even for those with the requisite training, and it requires the person undertaking the analysis to undertake assumptions that are invariably contestable. The Court's decision to allow Montana, which had a scarce natural resource, to maximize its tax revenues by linking a seemingly disproportionate tax burden on exports is likely attributable in large part to the Court's own appreciation that the federal judiciary is ill-suited to undertake the kind of analysis required if it were to open the federal courts up generally to such suits.

B. The Dormant Commerce Clause Cases Revisited

We have now seen how the game theoretical model reconciles the most criticized exceptions to the Court's dormant Commerce Clause doctrine. We are now ready to return to the dormant Commerce Clause cases. We begin with cases that reveal the core values of the Court's dormant Commerce Clause jurisprudence and then consider cases that do not fall into the previously discussed doctrinal exceptions, but in which the Court has nonetheless applied more relaxed dormant Commerce Clause scrutiny. The analysis concludes with two tables that replace the decision tree in Tables 3 and 4, and that place the combined set of doctrines along two normative
spectrums that together summarize the game theoretical analysis of the dormant Commerce Clause doctrine.

1. The First Core Value: Inhibiting a Regime of Mutual Defection in a Standard Prisoners' Dilemma

a. City of Philadelphia Revisited

We begin with City of Philadelphia v. New Jersey, in which the Court struck down a New Jersey statute that limited waste intake from outside New Jersey. The Court articulated the per se rule of invalidity and the balancing test, but appears to have applied strict scrutiny. The state could have achieved its legitimate objective of prolonging the life of its landfills by limiting the intake of waste without regard to the waste’s point of origin. Thus, even though it had a sufficient justification for its law, it did not select an available waste-neutral means.

In some respects, the challenged law represents a paradigm case of facial discrimination. And one might imagine a regime in which other states reciprocate defection by enacting similar state-specific waste-intake laws. Rather than facilitating this regime of defection dominance, the Court struck down the law as inconsistent with the dormant Commerce Clause doctrine. The difficulty, however, is that the very decision to prevent New Jersey from providing its residents a waste outlet might not have the desired effect of promoting a free trade regime among states over waste intake. Instead, it might simply change the outlet for mutual defection in waste. In this prisoners’ dilemma game, New Jersey joins other states in failing to approve waste disposal facilities, leaving those who generate the waste—whether in-state or not—with no waste outlet. Scholars have noted this problem, and in the context of low-level radioactive waste, it was the primary justification for federal legislation attempting to coerce states to

331. Id. at 626-27.
332. Notice that in this context the geographical proximity of the importing and exporting states makes the possibility of the threat of reciprocal defection, and of rewards for cooperative strategies, all the more plausible.
334. See, e.g., McGreal, supra note 124, at 1199-1200.
provide waste outlets. In *New York v. United States*, the Court struck down the challenged amendments applying the newly articulated anticommandeering doctrine. While that case arose on the affirmative side of the Commerce Clause, the conceptual difficulty that Congress faced was by no means limited to low-level radioactive waste. Thus, one could imagine a comparable waste management crisis confronting the nation—perhaps it has already—respecting ordinary solid and liquid waste.

If states respond to the inability to provide state-specific solutions by denying permits altogether, then the effect of the *City of Philadelphia* ruling is not to prevent a prisoners’ dilemma, but to push it into another form. The problem with the Court’s ruling is that it creates a default rule that Congress generally has been unable to change. If states were required to grant permits to those who qualified, then the *City of Philadelphia* solution would be entirely sound. It may well be that certain states have soil conditions that allow for Ricardian rents in processing solid and liquid waste. A regime that promotes the creation of waste without regard to point of origin would encourage the pursuit of such economically beneficial rents. On the other hand, if the dormant Commerce Clause requires state neutrality in the provision of waste storage facilities, but is not coupled with any obligation to approve valid permit requests, *City of Philadelphia* instead promotes the perverse result that Rehnquist feared in his dissent. And if Congress were to coerce permit approval subject to specified regulatory criteria, it would risk running afoul of the anticommandeering principal. At a minimum, the analysis highlights the need for the Court to consider more closely the two sides of its Commerce Clause jurisprudence. Perhaps the Supreme Court should be more willing to accommodate states in restricting waste based upon point of origin under the dormant Commerce Clause doctrine when the Court itself has applied its affirmative Commerce Clause jurisprudence to prevent Congress from devising solutions that might encourage states to continue providing waste outlet facilities either on a commerce-neutral basis or by allowing the states to discriminate in commerce if the chosen method involves commandeering.

---

b. West Lynn Creamery Revisited and Camps
Newfound/Owatonna, Inc. v. Town of Harrison

In West Lynn Creamery, Inc. v. Healy, 337 the Court, per Justice Stevens, rejected a state regime that combined two facially neutral measures—a tax scheme that applied equally to all milk sales and a rebate scheme benefitting only Massachusetts milk producers—on the ground that the combined scheme had the effect of removing those who would stand in the shoes of the adversely affected out-of-state milk producers and who would therefore be inclined to oppose the tax and rebate scheme. 338 In effect, the majority opinion recognized that while the per se rule of invalidity applied only to facially discriminatory measures, interest groups can cleverly devise facially neutral schemes that have the same aggregate effect. As with the facially discriminatory scheme, at least some facially neutral measures are likely to promote a regime of mutual defection.

In his West Lynn Creamery dissent, Justice Rehnquist asserted that “[a]nalysis of interest group participation in the political process may serve many useful purposes, but serving as a basis for interpreting the dormant Commerce Clause is not one of them.” 339 In fact, while interest group analysis is not helpful in predicting particular case results, it is helpful more generally in explaining the evolution of legal doctrines. Certainly the more obvious method of providing an advantage to in-state milk producers would be to impose a differential tax on milk sales depending upon the state of origin. But this would just as obviously have violated the per se rule. The West Lynn Creamery Court recognized the subterfuge of joining two separate schemes that have the same effect and thus prevented the challenged regime from invoking the very retaliatory response that the dormant Commerce Clause doctrine is designed to prevent. So viewed, the challenged law, like the facially discriminatory statute that is financially motivated, falls within the first core prohibition of the dormant Commerce Clause doctrine.

338. Id. at 201.
339. Id. at 215 (Rehnquist, J., dissenting).
The *West Lynn Creamery* ruling, applying strict scrutiny and striking down the challenged law, had the effect of discouraging other states from retaliating against the enacting state and thus of discouraging mutual defection in a prisoners' dilemma game. Before leaving *West Lynn Creamery*, let us consider the case discussion involving the strong presumption in favor of sustaining state subsidy schemes. Although it is true that such schemes are facially discriminatory—only in-state constituents receive the benefit—and are financially motivated, the Court suggested that such programs withstand dormant Commerce Clause scrutiny. Thus, the *West Lynn Creamery* Court reasoned that the problem was in joining the two halves of its tax-and-rebate scheme together with the knowledge that the tax revenues went into a segregated fund used for the rebate scheme. Had the subsidy come from general taxpayer revenues, however, the Court strongly suggested that the case would have come out otherwise.

In contrast, in the subsequent decision, *Camps Newfound/Owatonna, Inc. v. Town of Harrison*, the Court struck down a real estate tax provision in a Maine statute that provided a general tax exemption for charitable organizations, but that excepted from the rule those institutions primarily serving nonresidents of Maine. A camp serving members of the Christian Science faith, who were primarily from out-of-state, challenged the exemption on dormant Commerce Clause grounds. Justice Stevens, writing for a majority, stated that the case presented an issue that the Court had not previously addressed, namely "the disparate real estate tax treatment of a non-profit service provider based on the residence of the consumers that it serves." The Court quoted *West Lynn Creamery* for the proposition that "[t]he paradigmatic ... law discriminating against interstate commerce is the protective [import] tariff or customs duty, which taxes goods imported from other States, but does not tax similar products produced in

---

340. See id. at 200.
341. Id. at 201-02.
342. 520 U.S. 564 (1997). For an informative analysis discussing the relationship between these two cases in a manner that is largely consistent with the analysis presented here, see Coenen, supra note 252.
343. The Court noted that ninety-five percent of the campers came from out-of-state. *Camps Newfound*, 520 U.S. at 573.
344. Id. at 572.
The Court further noted that "[s]uch tariffs are 'so patently unconstitutional that our cases reveal not a single attempt by a State to enact one.'" The Court went on to explain, however, that if the state tax were allowed to stand, states could enact the functional equivalent of prohibited tariffs by providing "special real estate tax[es] on property" and then "gearing the increased tax to the value of the imported goods at issue."

As explained in Part II, the Court's differential treatment of the state as market participant and state-law subsidies on the one hand, and differential taxation on the other, can be reconciled as a function of the ease with which adversely affected interests in other states can secure reciprocal legislative protections. The more transparent the special interest benefit, the more costly it is to procure. Conversely, the more well hidden the special interest benefit, the less costly it is to procure. Despite the economic equivalence of these two sorts of legislative preferences to the affected businesses or nonprofit organizations, the game theoretical analysis reveals a difference that is worthy of respect in the Court's dormant Commerce Clause doctrine. Specifically, to the extent that the doctrine is motivated by the desire to inhibit a regime of mutual defection in a standard prisoners' dilemma, we might imagine the Court's results to be graded according to the transparent nature of the differential protectionist measure. So viewed, the market participant doctrine, rather than serving as an anomaly, falls squarely in the category of cases least likely to invite reciprocal defection. Moreover, the analysis is consistent with the intuition that the dormant Commerce Clause doctrine is not targeted against rent seeking as such. Instead, it is targeted against those forms of rent-seeking activity that undermine a beneficial regime of mutual cooperation among states.

345. Id. at 575 (quoting West Lynn Creamery, 512 U.S. at 193).
346. Id. (quoting West Lynn Creamery, 512 U.S. at 193).
347. Id. The Court further held that the rule prohibiting differential taxation on private businesses applied to nonprofits. Id. at 583.
348. See Levmore, supra note 202.
### c. Summary

Table 7 summarizes the preceding discussion.

#### Table 7: The Prisoners’ Dilemma Cases

<table>
<thead>
<tr>
<th>Category</th>
<th>Market Participant Doctrine; Export Taxation</th>
<th>Subsidy Cases</th>
<th>Differential Taxation</th>
<th>Tarriffs, Exclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases</td>
<td>Reeves; Alexander Scrap; White. But see Wunnicke</td>
<td>West Lynn Creamery</td>
<td>Camps Newfound / Owatonna</td>
<td>City of Philadelphia; C &amp; A Carbone</td>
</tr>
<tr>
<td>Comments</td>
<td>Challenged provisions take form of visible wealth transfers from diffuse to organized groups, which are politically costly to procure and thus less likely to invite retaliation.</td>
<td>Suggests that Court generally presumes in favor of subsidy for same reason as prior category unless interest group analysis reveals dynamic that masks functional equivalent of differential taxation.</td>
<td>Because differential taxes are hidden, and thus less costly to pass, Court is less likely to sustain them as they are more likely to invite retaliation.</td>
<td>Because these cases present the most obvious geographical barriers to trade, Court presumes that they threaten to invite mutual defection. Problem is that in waste context, states retain option to decline permits, thus re-inviting defection.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Challenged Statute</th>
<th>Not Likely to Promote</th>
<th>Likely to Promote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regime of Mutual Defection</td>
<td></td>
<td>Regime of Mutual Defection</td>
</tr>
</tbody>
</table>
2. The Second Core Value: Restoring a Benign Multiple Nash Equilibrium Game

a. The Paradigm Cases

In Kassel v. Consolidated Freightways Corp., the Court struck down Iowa's prohibition against sixty-five foot twin trailers even though the state had some evidence to support its claim that such vehicles were unsafe, highway safety was traditionally an area in which the Court had stated that deference applied, and along the East Coast and in the District of Columbia, the Iowa rule was dominant. And in Bibb v. Navajo Freight Lines, Inc., the Court struck down an Iowa statute that required curved mudflaps when forty-five other states allowed them and one other state prohibited them. These cases present the clearest examples of laws that if sustained would disrupt a multiple Nash equilibrium game among those states that had adopted a common, pro-commerce regime. The effort to secure appropriable quasi-rents is seen most easily in Kassel, where the governor made plain that the benefit to the state from disallowing a kind of truck that was allowed in surrounding states was to reduce the wear and tear on state highways. Assuming that the two dominant trucks for the relevant interstate transit were sixty-five foot twins or fifty-five foot singles, then had the surrounding states prohibited sixty-five foot twin trailers, but allowed as a substitute fifty-five foot singles, Iowa would have been able to secure the quasi-rent by disallowing the fifty-five foot singles in favor of the sixty-five foot twins. Further, notice that Iowa only truly benefitted provided that the remaining states retained their common, contrary regime. Otherwise, Iowa, like the states whose scheme it thwarted, would no longer have benefitted from the reduced cost of commerce to Iowa, facilitated by that common regime, which was furthered by the three exceptions to the

350. Id. at 685-86.
351. Id. at 688 & n.1 (Rehnquist, J., dissenting).
353. Id. at 523.
sixty-five foot trailer ban, including, most notably, the border cities exception.

The critical point is that the rent does not arise from the substance of the non-uniform law. Rather, it arises from the fact that the law is non-uniform. As in the Manhattan hypothetical, Iowa secures the quasi-rent only by disrupting whichever pure Nash equilibrium result the surrounding states adopted. A similar analysis applies in Bibb. Whether in fact there was a benefit to straight versus curved mudflaps, when a scheme disrupts one of two pure Nash equilibrium strategies pursued in numerous states, the Court presumes a likely intent to disrupt a multiple Nash equilibrium game, rather than a genuine effort to further interests of highway safety. In effect, had the Court sustained these statutes by applying low-level scrutiny, it would have invited clever state legislators to turn what is essentially a coordination game between and among states into a game in which a defiant state introduces a third mixed-strategy equilibrium option that solely benefits itself at the direct expense of interstate commerce. Whether characterized as disrupting a multiple Nash equilibrium game or as appropriating quasi-rents produced through the other states' benign pro-commerce strategies, the result is the same. These cases reveal why the Court attempts to facilitate among the states a simple multiple Nash equilibrium game by taking the option to the defecting state of procuring quasi-rents and thus introducing a mixed-strategy equilibrium off the table.

Even though the states in these cases cannot formally coordinate, in the absence of a defecting strategy, the probability of a benign pure Nash equilibrium outcome among cooperative states is improved because the decisions of the various state legislatures are not simultaneous. Instead, one state or a group of states sets out a lead policy, and as a consequence of path dependence, this policy results in increasing marginal returns from more of the same activity, and the surrounding states follow the lead of the early mover or movers. And notice that this need not result from formally enacted rules. Simply declining to prohibit that which other states allow facilitates the desired pro-commerce regime.

Of course the effect of forcing a mixed-strategy equilibrium by adopting a contrary option is potentially enormous. The Court has captured this intuition by labeling such efforts as imposing
unacceptable burdens on commerce. It is perhaps not surprising then that in *Bibb*, Justice Douglas noted that “[i]t is one of those cases—few in number—where local safety measures that are non-discriminatory place an unconstitutional burden on interstate commerce.” When there are two dominant regimes, for example curved or straight mudflaps, each of which constitutes a Nash equilibrium, and one has become dominant over time, defying the path-induced equilibrium by introducing a nonconforming rule will produce a quasi-rent that no participating state would have reasonably intended a defecting state to appropriate had they thought about the choice of regime ex ante. While some might have preferred one regime or the other, none would have preferred a mixed regime. Aside from the specific benefit of appropriating a quasi-rent, this is even true for the defecting state.

While we should not expect to see cycling of the sort hypothesized in Part II between potential pure Nash equilibria and a mixed-strategy equilibrium, defection states produce an outcome that undermines the positive network externalities of the surrounding states. It is for that reason that some scholars have characterized these cases as involving holdouts in the production of a public good. But unlike the holdout game, there is no realistic possibility of a payoff by adversely affected states to purchase the defecting state’s cooperation. Instead, the benefit comes from the act of defection itself. So viewed, we can appreciate the *Kassel* and *Bibb* holdings as the Supreme Court’s decision to remove from the table the option of one state to introduce a mixed-strategy equilibrium when doing so allows the defecting state to appropriate a quasi-rent, but when it appears improbable that the motivation for the nonconforming law is to secure the benefits of a superior legal regime. Just as preventing a regime of mutual defection—the most common economic explanation for the dormant Commerce Clause doctrine—represents a core value of the Court’s doctrine, so too does facilitating a benign multiple Nash equilibrium game by removing the mixed-strategy equilibrium option. If we accept the proposition that the Commerce Clause, operating in its dormant capacity, has the power to invalidate state laws that undermine political union,

356. See supra Part II.B.2.d.
then certainly the clause must come into play when a challenged law's only purpose is to secure a benefit at the expense of the other states' benign pure Nash equilibrium outcomes. And that is just the effect of the challenged laws in Kassel and Bibb.

b. A Comment on the Default Nature of the Dormant Commerce Clause Rules

Before moving to the next group of cases, it is important to consider the justification for treating the Court's dormant Commerce Clause holdings as default rules. In Kassel and Bibb, the effect of removing the disrupting mixed regime option was to facilitate the dominant pure Nash equilibrium outcome. Notice, however, that in Kassel, the enacting state was not unique and that there were at least some policy arguments to support the rejected regime. To the extent that these cases suggest that the Supreme Court applies the dormant Commerce Clause doctrine to restore a multiple Nash equilibrium game and to prevent state efforts to secure appropriable quasi-rents, path dependence suggests that the doctrine also has the effect of supporting the first mover. The first mover might not, however, have selected the optimal regime or the regime that will prove optimal over time. The choice to allow or disallow sixty-five foot twins or to demand curved or straight mudflaps might well be different from the choice of right or left hand driving in one critical respect. The latter choice is pure coordination. The former choices combine competing policy judgments with a coordination or path dependence game. The Court's dormant Commerce Clause doctrine reflects the intuition that the benefits of even a superior highway safety regulation can outweigh the burdens of disrupting even a somewhat inferior outcome of a coordination game. This intuition is reflected in the Kassel plurality's use of a balancing test.

359. The Bibb Court appeared to recognize this point:
   Such a new safety device—out of line with the requirements of the other States—may be so compelling that the innovating State need not be the one to give way. But the present showing—balanced against the clear burden on commerce—is far too inconclusive to make this mudguard meet that test. Bibb, 359 U.S. at 530.
The analysis further helps to explain the default nature of these rules. The Court is institutionally incapable of using the *Kassel* case as a means of imposing on *other states* the Iowa regime prohibiting sixty-five foot twins. If the Court had that power and if the Iowa regime were in fact superior, such a ruling would simultaneously solve the coordination problem and avoid codifying an inferior regime based upon the high probability that the first mover had a systemic influence in establishing the dominant regime. A similar analysis can be applied in *Hunt*. While it might seem improbable, it is at least possible to imagine that there are benefits to the simpler USDA grading system that outweighed the informational benefits of the alternative Washington grading system or even of a combined regime. Again, however, the Court lacked the constitutional authority to use *Hunt* as a vehicle for imposing the challenged North Carolina regime on the nation as a whole.

The well known problem of Congressional inertia renders the Court’s entry into this area problematic because even selecting a default constitutional rule might, as a practical matter, entrench that outcome indefinitely. That said, if the chosen regime does prevent private producers from securing Ricardian rents, or economic rents associated with unique conditions that allow it to produce a product in commerce for which there are limited substitutes, there is at least an incentive to employ the political process in Congress to bring about a change in that rule. I would not be so naïve as to suggest that Congress routinely ensures that potential efficiency gains are facilitated through legislation pursuant to the Commerce Clause. But the analysis of the multiple Nash equilibrium cases provides a strong normative justification for the shift from treating the commerce power as one in which state and federal powers are hermetically sealed (as was the case in an earlier era) to a regime in which Congress can change Supreme Court rulings through ordinary legislation. Although this argument might appear more compelling in the multiple Nash equilibrium cases than in the prisoners’ dilemma cases, the waste cases reveal that it is sometimes applicable in both core areas of the Court’s dormant Commerce Clause jurisprudence. The Court’s decision to

strike down state laws that restrict the flow of waste based upon point of origin might have a greater normative foundation because of the Court's willingness to allow Congress to choose an opposite regime. As suggested previously, however, to the extent that the anticommandeering doctrine developed on the affirmative side of the Court's Commerce Clause jurisprudence prevents Congress from enacting alternative solutions—including coercing the states to create even state-specific solutions to their own waste storage problems—\textsuperscript{361} the analysis further highlights the need for the Court to be more attentive to the relationship between both sides of its Commerce Clause jurisprudence.

This intuition is reinforced by the fact that it would appear most implausible to imagine that absent some justification \textit{other than} facilitating appropriable quasi-rents that Congress would ever select a mixed-strategy equilibrium regime in a competing Nash equilibrium context.\textsuperscript{362} Congress would either leave the Court's selected dominant regime in place, thus prohibiting the outlier statute, or substitute a contrary, but uniform, regime. Similarly in \textit{Hunt}, although it seems unlikely that the informational benefits of the Washington grading system were outweighed by the benefits of simplicity in the USDA system, the Court's ruling at least left Congress the option to declare otherwise.

This point can be generalized. To the extent that the Court's dormant Commerce Clause rules are the product of efforts to

\textsuperscript{361} This was essentially the Congressional solution in the Low Level Radioactive Waste Policy Amendments of 1986, through which Congress required states to either provide in-state waste storage or to join a regional pact. The Court struck down this regime in \textit{New York v. United States}, 505 U.S. 144 (1992), holding that Congress lacked the power to commandeer the states by coercing them to become self-sufficient or to suffer draconian sanctions.

\textsuperscript{362} In fact, Congress has demonstrated its ability to adopt rules that limit the power of states to inhibit the flow of commerce in this area. In \textit{The Surface Transportation Act} of 1982, apparently in exchange for other provisions that imposed detrimental taxes on truckers, Congress eliminated state restrictions on doubles traveling interstate highways. \textit{See} 49 U.S.C. § 2316, \textit{repealed by} Pub. L. No. 103-272, 108 Stat. 1393 (1994). In subsequent amendments enacted in 1984, Congress cut back on some of these gains by authorizing the Secretary of Transportation, on the basis of highway safety or on petition of state governors, to prohibit doubles on interstate highways. This suggests that Congress can facilitate a pure Nash strategy equilibrium, or allow exceptions to a uniform regime in the event that a nationwide Nash equilibrium outcome proves inferior in particular states or regions. But the critical point is that while the federal judiciary can only sustain or strike down a challenged state law, Congress has the wherewithal to enact as a uniform rule either the majority or minority rule among the states.
limit states in their attempts to disrupt benign multiple Nash equilibrium games and to appropriate quasi-rents at the expense of commerce, that suggests that particular Supreme Court rulings cannot be cast in terms of whether the clause anticipates the Court’s ruling. Nothing in the Commerce Clause informs the selection of straight versus curved mudflaps, allowing or prohibiting sixty-five foot twins, or allowing or prohibiting grading systems for produce with finer top gradations. But this does not undermine the Court’s rulings in this area. Although the Commerce Clause does not inform these specific choices, it does inform the Court’s scrutiny in assessing state laws the most logical construction of which is an effort to secure a rent that would not have come into being but for commerce, and that has the effect of undermining the pure Nash equilibrium, pro-commerce regimes of other states.

c. The Proxy Cases: The Extraterritorial Effects and Antitakeover Cases

Another body of dormant Commerce Clause cases that fits this paradigm, which I have not previously introduced, involves state laws with extraterritorial effect.363 In a series of cases, the Court has addressed a group of state laws, primarily involving liquor pricing, that required those selling liquor from out-of-state to post retail prices in the regulating state and to affirm that the posted prices were lower than other identified states for a specified period of time. In the most prominent recent decision, Healy v. Beer Institute (Healy II),364 the Supreme Court struck down a Connecticut statute that required out-of-state liquor shippers to affirm that their posted prices for products sold in-state were no higher than those in the bordering states of Massachusetts, New York, and Rhode Island. The challenged statute was an amended

363. For an essay (or more precisely the second of a pair of essays) that argues that the constitutional notion of extraterritoriality is not grounded in any single clause, including the Commerce Clause, see Donald H. Regan, Siamese Essays: (I) CTS Corp. v. Dynamics Corp. of America and Dormant Commerce Clause Doctrine; (II) Extraterritorial State Legislation, 85 MICH. L. REV. 1865 (1987). Whether or not extraterritoriality resides in a single clause, it is important here to consider its implications for interstate commerce. The Court’s rulings in this area, not surprisingly, have rested upon a construction of the Commerce Clause operating in its dormant capacity.
version of one that the United States Court of Appeals for the Second Circuit struck down and that the Supreme Court summarily affirmed in *Healy I*.\(^{365}\) The earlier version required the shipper to affirm that their prices would remain no higher than the lowest prices they would charge for beer in the bordering states for the effective period of the posting. The version at issue in *Healy II* limited the lowest price affirmation to the time of the posting. In between the two cases, the Supreme Court issued *Brown-Forman Distillers Corp. v. New York State Liquor Authority*.\(^{366}\) In that case, a New York law required liquor distillers and wholesalers in the state to affirm that bottles or cases of liquor were sold in New York at a price no higher than the lowest price in any other state during the month of the price affirmation. Twenty years earlier in *Seagram & Sons, Inc. v. Hostetter*,\(^{367}\) the Court upheld a New York price of liquor affirmation statute that required sellers to affirm that the price sold in New York was no higher than that in any state in the United States for the preceding month. In that case, the Court grounded its holding in part upon the Twenty-First Amendment’s broad grant of regulatory power concerning liquor to states.\(^{368}\) Thus, the Court has issued decisions involving affirmation statutes with prospective (*Healy I*), retrospective (*Seagram & Sons*), and present (*Healy II*) effect.

The *Healy II* Court also discussed one other case that involved a statute with extraterritorial effect. In *Edgar v. MITE Corp.*,\(^{369}\) the Court struck down an Illinois antitakeover statute that required a tender offer for a target company in which ten percent of shareholders or more resided in Illinois to register with the Secretary of State and that prevented the takeover from having effect for twenty days pending administrative evaluation to rule out inequity or fraud. In a subsequent decision, *CTS Corp. v. Dynamics Corp.*,\(^{370}\) the Court sustained against a dormant Commerce Clause challenge an Indiana statute that permitted control shares in an Indiana corporation to be voted only if other shareholders passed an


\(^{366}\) 476 U.S. 573 (1986).

\(^{367}\) 384 U.S. 35 (1966).

\(^{368}\) See id. at 42.

\(^{369}\) 457 U.S. 624 (1982).

approving resolution. In *Edgar*, in contrast, a plurality invalidated the Illinois antitakeover law, finding that it "directly regulate[d] transactions which take place across state lines, even if wholly outside the State of Illinois."\(^{371}\)

Before considering the *Healy II* Court's analysis, it is worth noting an analytical similarity between that case, which struck down the challenged state law, and *Exxon*, which achieved an opposite result. As the *Healy II* Court noted, Connecticut had no breweries or brewers,\(^{372}\) and thus all brewers and importers were located out-of-state.\(^{373}\) While the *Exxon* Court rejected the dormant Commerce Clause challenge to the restriction on vertically integrated retail service stations in part on the ground that the challenged statute did not draw a line between in-state and out-of-state firms,\(^{374}\) in *Healy II*, the Court declined to apply the same reasoning. Even though all liquor came into Connecticut from out-of-state, the Court struck down the law based upon its extra-territorial effect.\(^{375}\) In doing so, the *Healy II* Court overruled *Seagram & Sons*.\(^{376}\)

As stated above, the *Healy II* Court relied both on the earlier liquor affirmation cases and on *Edgar v. MITE* to reject the revised Connecticut statute. After explaining why it no longer construed the Twenty-First Amendment as a barrier to dormant Commerce Clause scrutiny in this area,\(^{377}\) the *Healy II* Court noted that the law in question was narrower than those it had previously reviewed: "[T]he statute requires only that out-of-state shippers affirm that their prices are no higher than the prices being charged in the border States as of the moment of affirmation."\(^{378}\) Despite

\(^{371}\) 457 U.S. at 641.
\(^{373}\) Recall that in *Exxon*, Maryland had no refiners or processors of gasoline, so all gasoline products were imported. *Exxon Corp. v. Governor of Maryland*, 437 U.S. 117, 123 (1978).
\(^{374}\) *Id.* at 125-26.
\(^{375}\) *Healy II*, 491 U.S. at 340-41.
\(^{376}\) *Id.* at 342-43.
\(^{377}\) The Court relied upon *Brown-Forman* for the proposition that "[a]lthough the ... [Twenty-First] Amendment vested in New York considerable authority to regulate the domestic sale of alcohol, the Amendment did not immunize the State from the Commerce Clause's proscription of state statutes that regulate the sale of alcohol in other States." *Id.* at 334-35.
\(^{378}\) *Id.* at 335.
the statute's narrower reach, the Court held that it violated the dormant Commerce Clause doctrine. The Court distilled the prior cases as follows:

Taken together, our cases concerning the extraterritorial effects of state economic regulation stand at a minimum for the following propositions: First, the Commerce Clause ... precludes the application of a state statute to commerce that takes place wholly outside of the State's borders, whether or not the commerce has effects within the State ... and, specifically, a State may not adopt legislation that has the practical effect of establishing a scale of prices for use in other states.... Second, a statute that directly controls commerce occurring wholly outside the boundaries of a State exceeds the inherent limits of the enacting State's authority and is invalid regardless of whether the statute's extraterritorial reach was intended by the legislature. The critical inquiry is whether the practical effect of the regulation is to control conduct beyond the boundaries of the State.... Third, the practical effect of the statute must be evaluated not only by considering the consequences of the statute itself, but also by considering how the challenged statute may interact with the legitimate regulatory regimes of other States and what effect would arise if not one, but many or every, State adopted similar legislation. Generally speaking, the Commerce Clause protects against inconsistent legislation arising from the projection of one state regulatory regime into the jurisdiction of another State.... And, specifically, the Commerce Clause dictates that no State may force an out-of-state merchant to seek regulatory approval in one State before undertaking a transaction in another. 379

The Court went on to explain that the Connecticut statute operated in a manner that was inconsistent with the actual, or potential, pro-commerce regimes of those states in which the law had an extraterritorial effect by "preventing brewers from undertaking competitive pricing [in those states] ... based on prevailing market conditions." 380

These cases suggest that the Court has identified as a significant proxy for state efforts to disrupt benign multiple Nash equilibrium

379. Id. at 336-37 (internal quotations and citations omitted).
380. Id. at 338.
games, and to secure appropriable quasi-rents, those statutory provisions that directly implicate the laws of other states. While Exxon itself reveals that the Court has not consistently applied the second finding in the Healy II doctrinal summary, namely presuming against the constitutionality of laws that affect private business conduct beyond the regulating state’s borders, the Court has done substantially better at applying the third finding, namely evaluating state regulations in light of their actual or potential impact on the regulatory regimes of other states. This approach is consistent with both core values of the dormant Commerce Clause identified in this Article. After all, sustaining a law that would result in a regime of mutual defection with other states has a strong negative impact on the regulatory regimes of other states, which without provocation would be more likely to favor commerce. By inhibiting states in their efforts to disrupt benign multiple Nash equilibrium games among other states, the Court further prevents one state from undermining the pro-commerce regimes of another.

In addition, this group of cases reveals that the Court is particularly concerned if the cumulative effect of a statute, if the statute were also adopted by other states, would undermine the ability of private entities to function in commerce. In effect, the prohibited Illinois antitakeover statute at issue in Edgar could altogether block a tender offer that would be allowed in other states, just as the Kassel and Bibb regimes undermined the pro-commerce driving regimes that were common to the surrounding states. This helps to distinguish Edgar and CTS. These two cases establish that although states have free reign to regulate their own corporations, however inefficient the state’s corporations law might be, the dormant Commerce Clause doctrine will prevent a single state from undermining the acquisition of corporations through tender offer procedures that are antithetical to the laws of other states in which the corporation is principally located or doing business. This is particularly appropriate in the corporations context given the ability of shareholders to sell off shares in corporations based in states with inefficient regulatory policies.381

381. Indeed, it is for that reason that the Tiebout model holds the greatest promise in assessing the relative efficiency of the stock market, given that shareholders are better able to vote with their feet in this context than in the context of choosing states or nations. For a more detailed discussion on this point, see Stearns, supra note 194.
This suggests that the dormant Commerce Clause doctrine is not concerned with the efficiency of state corporations law per se, except to the extent that such laws appear to disrupt the pro-commerce strategies of other states and to the extent that such laws provide in-state constituents with the functional equivalent of appropriable quasi-rents that become available only as a result of the pro-commerce laws or practices of other states. The same analysis explains the extraterritoriality cases more generally. In each of these cases, the Court expressed the concern that the state with the affirmation statute threatened to undermine the operation of competitive forces in other states that did not employ similar schemes. The Court found fatal the mere possibility that the challenged statute could have had the effect of undermining the pro-commerce regime of these other states. In Healy II it did so even though, as in Exxon, the statute did not discriminate between in-state and out-of-state firms (given that all brewers and importers were out-of-state).

The analysis suggests that whereas Exxon was treated as an example of inefficient in-state rent seeking, the extraterritorial reach of the affirmation statute at issue in Healy II placed it instead closer to the multiple Nash equilibrium game cases. The cases are distinguishable because they present different dimensions of the underlying game theoretical problem. When the challenged statute primarily harms those in-state, as in Exxon, the Court is more willing to allow the state's own political processes to operate as the final check. This analysis does not hold, however, when the rent-seeking statute confers a benefit, as in Healy II, that threatens to undermine pro-commerce strategies of other states that do not have a like regulatory regime. The risk here is not one of retaliation. Rather it is in undermining pricing structures that emerge as a result of the cooperative, pro-commerce strategies of other states.


383. For a fuller treatment of Exxon, see discussion infra Part III.B.3.b.
3. The Hard Cases: Those Containing Elements of Prisoners’ Dilemma and Multiple Nash Equilibrium Games

a. Hunt Revisited

In Hunt v. Washington State Apple Advertising Commission, the Supreme Court struck down a North Carolina statute that contained features consistent with an effort to secure appropriable quasi-rents. The North Carolina statute prohibiting the import of apples in cartons bearing other than USDA labels prevented Washington apple producers, using an alternative set of standards created under Washington law, from signaling superior apple quality relative to other apples marketed throughout the United States as USDA Grade A, and thus from securing whatever additional rents were associated with that superior quality. The inability to secure the additional profit resulting from signaling superior quality presumably undermined the incentives to market the apples across the United States. In Hunt, the appropriable quasi-rents did not result from North Carolina’s disrupting a simple coordination game that involved two competing Nash equilibria, as in Kassel and Bibb. Instead, the rents arose from what looks, at a surface level, like ordinary in-state legislative rent seeking. Here, the North Carolina apple producers, a relatively concentrated group, received a benefit at the expense of in-state apple consumers, a relatively dispersed group. The critical difference between this case and one that involves pure in-state rent seeking, however, is that but for the Washington State legal regime (permitted in other states), which promoted commerce by allowing producers of superior quality produce to signal that superior quality in marketing, the opportunity to secure this particular rent could not have arisen.

The best means of appreciating the nature of this rent is to identify the divergence between ex ante and ex post expectations. From an ex ante perspective, it is inconceivable that two states would agree to allow producers of an inferior product in one to prevent their competitors from out-of-state to signal that their

385. See id. at 343-44.
competing product is superior. This case might also present a multiple Nash equilibrium-type game among more than two states. If it is inefficient for the Washington producers to customize their packaging on a per state basis, then the effect of complying with the North Carolina law would be to select either the North Carolina regime, which presumably would not violate the laws in any other state, or to limit its marketing to states other than North Carolina. The latter option would not affect interstate coordination, although it would effectively strip Washington apple producers of one significant state-wide market. The former option, however, would undermine the dominant practices—if we assume, as seems reasonable, that other states allowing the Washington grading system do so by failing to prohibit it—which, again, are pro-commerce. In effect, Washington has coordinated with other states for a common pro-trade regime in which it is permissible to signal quality that is at least as valuable to consumers as USDA grading. If the Court sustained the North Carolina statute, and if Washington producers elected to make that their uniform marketing rule, then the effect would be to secure a rent at the expense not only of Washington apple producers and North Carolina apple consumers, but of potential consumers of Washington apples elsewhere throughout the United States.

b. Exxon Revisited

We now reconsider a case that at a surface level appears to present a doctrinal conflict not only with the extraterritoriality cases, as previously explained, but also with Hunt. In Exxon, Justice Stevens, writing for a majority, upheld a Maryland statute that prohibited producers or refiners of gasoline from owning or operating service stations. As explained in Part I, from the perspective of interest group analysis, the two cases appear

---

386. See supra notes 149-51 and accompanying text.
387. Professor Bittker has made a similar observation: “North Carolina's requirement forced the Washington growers either to alter their long-established inspection and grading practices at substantial cost or to abandon the North Carolina market.” BITTKER, supra note 106, § 6.06[A], at 6-41. The critical implication is that abandoning its long-established inspection and grading practices would force the Washington growers to alter their practices in other states whose pro-commerce laws or practices permit Washington-based grading.
identical. In each case, an identifiable in-state interest group—the North Carolina apple producers in *Hunt* and the independent service stations in *Exxon*—procured a legislatively conferred rent at the expense of a diffuse group, in-state consumers, with a private out-of-state counterpart. In each case, the legislatively conferred rent produced an inefficiency at the expense of actors in commerce. The North Carolina statute in *Hunt* threatened to deprive in-state apple consumers of a superior product that they would have been willing to purchase at the required premium to make exporting cost-effective to Washington apple producers. The Maryland statute in *Exxon* threatened to deprive in-state drivers with the benefit of a lower price and more regular supply at some service stations that could only be secured through the additional profit that the owners of vertically integrated stations would secure by not having to hedge against future price increases through the economic equivalent of an insurance premium on the present price of gasoline.

The question then is why these two cases were decided differently. The *Exxon* Court’s nominal justification for declining to apply strict scrutiny—that all gas comes from out-of-state and thus interstate commerce will remain unaffected—is unpersuasive. While the statute does not draw a line between in-state and out-of-state firms, and might have operated to the benefit of some out-of-state firms, the fact remains that among affected firms, an identifiable subclass of out-of-state firms bore the full economic burden of the statute. The better explanation is that unlike in *Hunt*, the challenged statute in *Exxon* did not confer rents that only could have become available as a result of the pro-commerce laws or practices of other states.

The *Exxon* statute did not undermine a Nash coordination game, as in *Kassel*, because there would be no benefit to other states in seeking to change their laws as a consequence of the Maryland legal regime. The challenged statute conferred rents on in-state independents at the expense of in-state consumers. If other states wished to allow the same type of inefficient rent seeking, they could do so, but their decision would remain unaffected by the presence or absence of the Maryland statute. Any incentive for other states to follow Maryland’s lead would be in response to the pressures of

389. *Id.* at 125.
their own independent service stations rather than in response to those business interests disadvantaged by the Maryland rule, a very different group comprising vertically-integrated firms. Moreover, unlike in Hunt, the Maryland statute did not undermine any other state's pro-commerce practices or laws. Instead, it primarily affected the business decisions of private firms. The decisions of other states to allow or to prevent economically efficient producer-owned or refiner-owned retail service stations were entirely unaffected by a decision by the Maryland legislature either to allow or to prohibit such firms.

This is not the case in Hunt. While the effect of sustaining the North Carolina statute on the Washington apple producers' ultimate marketing practices remained an empirical question, at a minimum, sustaining the proscription against non-USDA grading threatened to force those producers to adopt a uniform marketing strategy that would retain the North Carolina market for its growers, thus preventing whatever additional premium was attached to the apples if graded on the Washington scale. The result could have been a potentially significant reduction in sales throughout the nation. Alternatively, if the Washington producers elected to have more than one marketing scheme to accommodate the North Carolina statute, then other states might have followed suit, insisting on scaled-down USDA grading whenever another state allowed its producers to signal superior quality with respect to competitive produce that the USDA grading system could not disclose.

The Exxon case is difficult because the rent could not have arisen but for commerce, but the rent was not the product of—and thus did not threaten to undermine—the pro-commerce laws or dominant practices of other states. Exxon thus supports the intuition that the dormant Commerce Clause doctrine is concerned more with the undermining of pro-commerce regimes of other states than with securing the efficient allocation of resources that can be compromised through in-state rent seeking. As such, the game theoretical analysis of Exxon and Hunt, and of the dormant Commerce Clause generally, bolsters the intuition that the doctrine is designed to promote political rather than economic union. We are now ready to revisit the final puzzle, namely, why the Court has
disallowed reciprocity statutes that appear to impose barriers to mutual defection in a prisoners’ dilemma.

c. The Reciprocity Cases Revisited

In Sporhase v. Nebraska ex rel. Douglas,\(^{390}\) the Supreme Court struck down a provision of a Nebraska statute that conditioned the withdrawal of groundwater for export on a reciprocal right to have such water imported from the intended state of destination. While the Court upheld other provisions of the Nebraska statute that were linked to conservation,\(^{391}\) it applied strict scrutiny to strike down the reciprocity provision. As suggested previously, applying a simple tit-for-tat analysis suggests that the Nebraska statute was indeed pro-commerce. After all, if affected states are choosing whether to permit or prohibit water exports, they would presumably be favorably influenced, and thus more likely to permit such experts, with the Nebraska statute in place.

In addition, different states have different degrees of market power over particular commodities. A state that is a relatively minor player in water exports might be subject to in-state pressures by conservationists to retain water for in-state use. The conservation interests in another state that is a bigger player in the water market might take the Nebraska statute as an opportunity to justify a similar measure. The Nebraska statute at issue in Sporhase, if sustained, threatened to confer a rent upon those who favored conservation at the expense of commerce in a direct sense. Other states might take the bait and use a decision to sustain the reciprocity statute as an opportunity to enact anti-trade measures. Whatever benefit Nebraskans would receive from their conservation efforts would thus threaten to undermine interstate trade by having a direct and deleterious effect on the otherwise pro-trade practices or laws of neighboring states. The difficulty with this story, however, is that if Nebraska perceived itself to be a small player that could be harmed by opening up such an option to other states, it would presumably have a disincentive to provide other states that option through the reciprocity statute. Moreover, such statutes can be narrowly tailored to the market—here groundwater—in which

\(^{391}\) See supra note 134 (quoting relevant provision).
even a peripheral player generally possesses substantial market power.

The preceding analysis, however, suggests that the Court might presume that whenever a state law directly implicates the laws of another state, as in the extraterritoriality cases, the probable explanation is to secure a rent that would not be available but for the pro-commerce laws or practices of the other state. If so, then one possible explanation for the counterintuitive holdings in the reciprocity cases is that the Court has implicitly categorized these cases on the wrong side of its dormant Commerce Clause analysis. If the Court treated those cases for what they are—cases that present laws intended to limit mutual defection in a prisoners' dilemma—then the Court would have a strong normative foundation for presuming in their favor. But by instead focusing on the proxy of extraterritorial effect, the Court has implicitly and erroneously assumed that the law intends to confer a rent at the expense of commerce. While this provides a potential positive explanation for the case results, it does not provide a compelling normative foundation. The fact remains that such laws are likely welfare-enhancing. That said, the cost of the Court's rule is probably relatively low since any protectionist laws that are more likely to pass without a reciprocity law in another jurisdiction in place are also likely to be an independent violation of the dormant Commerce Clause doctrine.

d. Summary

Table 8 summarizes the preceding discussion.

Table 8: Multiple Nash Equilibrium Cases

<table>
<thead>
<tr>
<th>Category</th>
<th>Disrupting Nash or Path Induced Equilibrium Game</th>
<th>Extra-Territorial Effects; Antitakeover</th>
<th>Facially Neutral Law that Potentially Limits Market Conditions Out-of-State</th>
<th>Intrastate Rent Seeking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case</td>
<td>Kassel; Bibb</td>
<td>Healy I and II; Edgar v. MITE</td>
<td>Hunt</td>
<td>Exxon; CTS</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td>------------------------------</td>
<td>------</td>
<td>------------</td>
</tr>
<tr>
<td>Comments</td>
<td>Challenged laws intended to divert traffic around state, rather than to select preferred alternative pure Nash equilibrium, with effect of thwarting positive gains associated with network externalities in neighboring states. Cases reveal importance of default status of dormant Commerce Clause doctrine, in event that Congress determines rejected Nash outcome to be superior.</td>
<td>Challenged laws seek to protect in-state consumers by limiting application of market forces in other states, and thus to confer rents that could not have arisen but for the pre-commerce regimes or practices of other states (Healy I and II), or seek to protect local shareholders at the expense of efficient tender offer rules in other jurisdictions (Edgar).</td>
<td>Challenged law seeks to benefit in-state apple producers by conferring a rent that can only be made available by limiting the operation of a widely accepted marketing regime from a competitor state, with the threat to force a common marketing regime that would prevent consumers of superior apples from identifying and paying a premium for that superior quality.</td>
<td>Challenged laws confer benefits to in-state interests, but do so in a manner that transfers wealth from diffuse to organized interests. The resulting inefficiencies are presumed beyond the limits of the dormant Commerce Clause doctrine.</td>
</tr>
</tbody>
</table>

Presumption of Effort to Disrupt Benign Multiple Nash Equilibrium Game | Presumption of Intrastate Rent Seeking |

4. A Preliminary Assessment of Maine RX

In the October 2002 term, the Supreme Court issued two decisions that implicate the dormant Commerce Clause doctrine. The decisions neither change the contours of the dormant
Commerce Clause doctrine in any significant respect nor do they present any substantial tension with the analysis set out in this Article. Because one of these decisions, *Hillside Dairy, Inc. v. Lyons*, 392 focused solely on the question whether a federal statute was intended to exempt a California milk marketing order from dormant commerce clause scrutiny and does not address the merits of the underlying dormant Commerce Clause challenge, 393 it is not necessary to review that decision here. While *Pharmaceutical Research and Manufacturers of America v. Walsh (Maine RX)* 394 also arose in a posture that prevented the Court from fully assessing the dormant Commerce Clause issue, it is worth offering a brief assessment of that decision, which represents the Supreme Court's most recent pronouncement in this area.

*Maine RX* is more important for its preliminary resolution of an important question of Medicaid preemption than it is for its relatively cursory treatment of the dormant Commerce Clause issue. That said, the relationship between the two issues, and the dormant Commerce Clause analysis itself, provide the basis for a significant additional datum supporting this Article's game theoretical analysis. To understand the dormant Commerce Clause issue, it is first necessary to review the preemption issue.

In *Maine RX*, the Supreme Court affirmed the reversal in the United States Court of Appeals for the First Circuit of a federal district court order granting a preliminary injunction against Maine RX, a program established in 2000, and similar to those in several states, through which the State of Maine provides low-cost pharmaceuticals to needy residents who do not meet the eligibility criteria for Medicaid. 395 The challenged program required pharmaceuticals to enter into rebate agreements with Maine RX, the proceeds of which were then distributed to participating pharmacies in Maine to compensate for offering the

393. See id. (holding that federal regulation concerning the composition and labeling of fluid milk does not exempt California scheme requiring purchasers of out-of-state fluid milk to pay into a price equalization pool from dormant commerce clause scrutiny).
395. One factual ambiguity was whether the program, because it was broadly worded, was open to all Maine residents without regard to financial need, *Maine RX*, 123 S. Ct. at 1866, or whether the incentives were such that any residents with an employer provided prescription drug program would neither have an incentive to use, or be covered if she elected to use, *Maine RX*. *Id.* at 1862-63 n.14.
covered drugs at a reduced cost. Those pharmaceuticals declining to provide rebates equal to those for Medicaid purchases were subject to notification to the Department of Health and Human Services (HHS), and more significantly, to the costly prior authorization process for the Medicaid program as a precondition to dispensing the medication through the state’s Medicaid program.\footnote{396}

Without resolving several factual disputes concerning the Maine RX program, the district court entered a preliminary injunction on the ground that the program threatened to limit access to drugs to Medicaid patients to benefit non-Medicaid patients. As a result, the district court concluded that the program did not further a Medicaid-related purpose and was therefore preempted by federal law.\footnote{397} The Court of Appeals reversed on three grounds: first, because the federal Medicaid program authorized states to require prior authorization, the court determined that there was no actual conflict between Maine RX and the federal program; second, the court concluded that absent an actual conflict, the mere fact that the imposed restriction failed to advance a Medicaid purpose did not warrant the “strong medicine” of preemption; and third, the court determined that even assuming the relevance of Maine's motivation to the question of preemption, the goal of providing medical services to poor—but non-Medicaid eligible—residents might be consistent with the federal Medicaid program’s overall objective of advancing health care for persons in need.\footnote{398}

Because the case involved the propriety of a preliminary injunction, the Supreme Court did not conclusively resolve the merits of the underlying preemption claim. Writing in part for a

\footnote{396. In a part of his opinion commanding a majority, Justice Stevens asserted that Congress effectively ratified the practice by the Secretary of Health and Human Services (the “Secretary”) of approving prior authorization programs for drug manufacturers not providing rebates in the Omnibus Budget Reconciliation Act of 1990 (OBRA). \textit{Id.} at 1861. In 1993, Congress further amended OBRA to allow states to use formularies subject to strict limitations provided they comply with provisions in the 1990 Act requiring return calls within twenty-four hours and, except for certain excluded drugs, the dispensing of emergency supplies covering a seventy-two hour period. \textit{Id.} at 1862. The program exempts single source medications that “fulfill[] a unique therapeutic function,” from the preauthorization requirement, and establishes a “Drug Utilization Review Committee” to make such determinations. \textit{Id.} at 1863.}

\footnote{397. \textit{Id.} at 1865.}

\footnote{398. \textit{Id.} at 1865-66.
majority and in part for a plurality of four, Justice Stevens issued what appears to be the narrowest grounds opinion on the likely success of the preemption question, as needed to determine that the court of appeals properly vacated the preliminary injunction.\textsuperscript{399} Justice Stevens determined that the district court had improperly construed the objectives of Medicaid too narrowly by failing to consider three possible Medicaid-related objectives: helping needy non-Medicaid eligible state residents, reducing Medicaid expenses by helping borderline aged and infirm residents to avoid eventual reliance on Medicaid, and facilitating the benefits of prior authorization when used.\textsuperscript{400} While identifying any possible Medicaid purpose would not be sufficient to uphold the Maine RX program against a preemption challenge, Stevens concluded that the district court erred in assuming that in light of the discretion that the program affords states in implementation, any impediment to Medicaid drug choice, even if intended to further the interests of non-Medicaid residents, was sufficient to preliminarily enjoin Maine RX.\textsuperscript{401}

In the part of his opinion rejecting a dormant Commerce Clause challenge as the basis for the preliminary injunction, Stevens

\textsuperscript{399} Justice Thomas determined that the competing policy considerations within the federal medicaid program belied the claim that the overriding objective was to provide pharmaceuticals to Medicaid patients, and also included considerations of cost. \textit{Id.} at 1859, 1874-75 (Thomas, J., concurring in the judgment). As a result, he would have found a Medicaid purpose, or at least would have deferred to an agency finding locating such a purpose, applying \textit{Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.}, 467 U.S. 837 (1984). Justice Scalia determined that OBRA contained its own remedy, authorizing the Secretary to cut off funding for noncompliant state programs, without intending federal statutory preemption. \textit{Id.} at 1873 (Scalia, J., concurring in the judgment). Justice O'Connor, writing for three, concluded that the program furthered no Medicaid purpose and was therefore preempted. \textit{Id.} at 1879, 1880 (O'Connor, J., concurring in part and dissenting in part) (asserting that "[a] State may not . . . impose prior authorization to generate revenue for purposes wholly unrelated to its Medicaid program" and "that the court did not abuse its discretion in concluding that petitioner demonstrated a likelihood of success on its pre-emption claim"). Justice Breyer, who joined the relevant parts of Stevens' opinion, also produced a separate opinion that does not alter the line up of the Court.

\textsuperscript{400} \textit{Id.} at 1867-68.

\textsuperscript{401} \textit{Id.} at 1868-69. Stevens also rejected the argument that because Maine offered no Medicaid related purpose it had effected a waiver, asserting instead that Maine simply maintained it had no obligation to offer a Medicaid purpose. \textit{Id.} at 1867. Stevens did not rule on whether the Secretary's approval was required before the challenged program could go into effect and did not speculate on the propriety of any potential responses to the program by the Secretary. \textit{Id.} 1869-70.
commanded a majority. First, Justice Stevens rejected the claim that Maine had undertaken an extraterritorial regulation in violation of *Healy v. Beer Institute*, observing that the scheme does not regulate any transactions arising out-of-state. More significantly, Stevens rejected an argument based upon *West Lynn Creamery* that the program effected a seemingly neutral tax only to then distribute the proceeds to in-state interests that would otherwise oppose the scheme. Unlike in *West Lynn Creamery*, Stevens noted that Maine RX did not tax members of the same industry in- and out-of-state and pay off the in-state members of the taxed industry. Instead, all pharmaceutical companies were subject to the required rebate negotiations (on threat of prior authorization), and the proceeds of all obtained rebates were distributed to a different group altogether, namely participating in-state pharmacies, as compensation for offering the covered drugs at a discounted price. Because the regulation operated neutrally but effectively burdened out-of-state businesses, Stevens' analysis appears at first blush to place Maine RX closer to *Exxon* than to *West Lynn Creamery*.

On this reading, this case does not appear surprising. When viewed from a game theoretical perspective, the challenged law appears most obviously to represent an in-state wealth transfer. It imposes costs on Medicaid participants who will experience delays in obtaining medications for which the pharmaceutical is subject to prior authorization, and who will possibly be required to obtain alternative approved drugs. So viewed, the program appears to be the product of a political conflict between two sets of constituents, Maine's Medicaid patients and Maine's borderline non-Medicaid eligible residents. The apparent political victory of Maine's uninsured might appear in tension with interest group theory, given that this constituency is poor and not well organized, in contrast

---

402. *Id.* at 1870-71. Justices Thomas and Scalia would have rejected any dormant commerce clause challenge that does not involve a facially discriminatory state statute. See *id.* at 1878 (Thomas, J., concurring in the judgment); see *id.* at 1873 (Scalia, J., concurring in the judgment).


405. Thus Stevens noted that "[a] manufacturer could not avoid its rebate obligation by opening production facilities in Maine and would receive no benefit from the rebates even if it did so..." *Id.*. For an analysis that places this case closer to *Hunt*, see infra at 153-54.
with Medicaid recipients, who although poor might have superior means of political identification as a recognized constituency. A more seasoned reading of public choice, however, recognizes that the complex processes through which successful political coalitions sometimes form can result in payoffs to groups of varying wealth, size, and organization.

Regardless of whether the scheme challenges intuitions about interest group participation, on its most obvious reading, the case does not present a substantial challenge to this Article’s game theoretical model. The burdens of the law fall primarily on an identifiable in-state constituency—Medicaid recipients—to benefit another identifiable in-state constituency—those who are not insured and who are not Medicaid eligible. If viewed as an intra-state transfer of wealth between these two groups, and thus as a form of rent seeking, Maine RX is unlikely to cause other states to follow suit. Individual states can, through their own political processes, determine the appropriate payoffs to non-Medicaid eligible infirm and elderly constituents for implementing the Medicaid program. As a result, sustaining this law does not appear likely to promote mutual defection in a prisoners’ dilemma. And because the case appears to constitute an in-state wealth transfer, sustaining Maine RX also appears unlikely to undermine any identifiable pure Nash equilibrium, pro-commerce strategy among other states.⁴⁰⁶

An alternative reading, however, suggests a possible threat to something resembling a benign pure Nash equilibrium game. If we assume that pharmaceuticals depend upon a certain market share to support the needed research and development costs of issuing new medications, even if that market share is subject to Medicaid rebates, then the Maine RX program might have the effect of diminishing that market share and thus burdening beneficiaries of newly produced drugs not only in Maine, but in other states. Additionally, the pharmaceuticals likely depend upon the non-discounted sales within each state to offset the discounted Medicaid

⁴⁰⁶. For an article published prior to the Supreme Court decision which advocates an opposite outcome, see Brannon P. Denning, The Maine Rx Prescription Drug Program and the Dormant Commerce Clause Doctrine: The Case of the Missing Linkage, 29 Am. J. L. & MED. 7 (2003) (arguing that challenged program is facially discriminatory and burdens out-of-state drug sellers).
sales. In either case, by attempting to leverage Medicaid rebates to benefit the non-Medicaid eligible residents on threat of removing Medicaid market share (or at least delaying sales through prior authorization), the Maine RX program threatens to compromise the complex pricing scheme—one presumably facilitated by the practices of those other states not seeking to leverage their Medicaid rebates to benefit non-Medicaid eligible residents—through which high volume discount (Medicaid) sales plus non-discount sales (through employer health plans and to uninsured residents) combine to ensure the required profitability to encourage the research and development of emerging pharmaceuticals. On this reading, along the relevant margin, residents in other states will at least potentially be forced to bear some of the costs associated with Maine’s attempt to benefit its non-Medicaid eligible uninsured residents. In that respect the case might move closer to Hunt than to Exxon.

As stated above, the procedural posture of Maine RX prevented the Court from finally assessing the dormant commerce clause challenge. It will be interesting to watch, perhaps with the benefit of an administrative determination and one subject to Chevron deference, how this case will eventually unfold.

CONCLUSION

A common critique of game theory—and of rational choice generally—is that those who employ these methodologies tend to rely upon the very efficiency-based premises that they are seeking to further in their construction of analytical models. A careful game theoretical analysis, however, has the potential to refute as well as to verify the importance of rules or institutional practices the principal purpose of which is to promote efficiency. The game theoretical model of the dormant Commerce Clause doctrine does not show that the Court has generated outcomes the best explanation of which is to ensure that resources flow to their most highly valued uses, unobstructed by state laws that have the capacity to undermine a unified national market. Instead, the model reveals a set of competing concerns that prove more

407. Maine RX, 123 S. Ct. at 1866-67 (noting that following a hearing, the Secretary's determination would be presumptively valid).
consistent with a political rather than economic vision of national union. The Court routinely countenances laws that appear inconsistent with efficiency concerns and that impose potentially significant costs upon the national economy. At the same time, the Court sometimes strikes down state laws that appear well-grounded in concerns for economic efficiency. And yet, I have argued, the game theoretical model provides a basis for understanding and for reconciling many of the most criticized results.

I do not contend that the Court's rulings in this area are uniformly correct, or even that they are better than available alternatives in all cases. Rather, I suggest that the Court's rulings reflect a concern that states not enact laws affecting commerce that undermine political union either by encouraging other states to pursue like strategies, or by feeding off the pro-commerce cooperative strategies already in place in other states. I have no doubt that the Court could have resolved certain cases and devised certain doctrines in a manner that would produce more pleasing (dare I say efficient!) results. But constructing a set of doctrines and case results that encourage mutual respect between and among states regarding their commerce-related laws or practices is certainly a compelling—maybe even beautiful—project.