

MOLLIE LEE

Environmental Economics: A Market Failure Approach to the Commerce Clause

ABSTRACT. Congressional authority to enact environmental legislation has been called into question by recent Supreme Court cases suggesting that Commerce Clause regulation is valid only if Congress is regulating economic activity. This Note proposes a market failure approach to guide the new economic inquiry. Under this approach, statutes that correct market failures should be understood as economic in nature. The proposed approach draws on the insights of environmental economics to explain how environmental regulation targets market failures, and it supports upholding environmental statutes—in particular, the Endangered Species Act—as a permissible exercise of Commerce Clause authority.

AUTHOR. Yale Law School, J.D. 2006; University of Georgia, M.A. 2001; New College of Florida, B.A. 1999. Thanks to David Lenzi for superb editing and to Ian Ayres, Sarah Lipton-Lubet, Hari O’Connell, and Jaynie Randall for helpful comments on earlier drafts. I am especially indebted to Professor Daniel Esty, who has supported this work since its inception and has offered insightful feedback at every step.



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INTRODUCTION

When Congress passed the United States' major environmental statutes in the 1970s and early 1980s,¹ it acted under its constitutional authority to "regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes."² At the time, courts and Congress shared an expansive understanding of the Commerce Clause.³ The idea that there were limits on Congress's Commerce Clause authority was an "intellectual joke,"⁴ and the standard law school treatment of Commerce Clause powers boiled down to the explanation that "Congress can do whatever it wants."⁵

However, congressional authority to enact environmental legislation has been called into question by recent Supreme Court cases suggesting that Commerce Clause regulation is valid only if Congress is regulating "economic

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1. See, e.g., Federal Environmental Pesticide Control Act of 1972, Pub. L. No. 92-516, 86 Stat. 973 (codified as amended at 7 U.S.C. §§ 136-136y (2000)); Toxic Substances Control Act, Pub. L. No. 94-469, 90 Stat. 2003 (1977) (codified as amended at 15 U.S.C. §§ 2601-2692 (2000)); Endangered Species Act (ESA) of 1973, Pub. L. No. 93-205, 87 Stat. 884 (codified as amended at 16 U.S.C. §§ 1531-1544 (2000)); Federal Water Pollution Control Act Amendments (Clean Water Act) of 1972, Pub. L. No. 92-500, 86 Stat. 816 (codified as amended at 33 U.S.C. §§ 1251-1387 (2000)); Marine Protection, Research, and Sanctuaries (Ocean Dumping) Act of 1972, Pub. L. No. 92-532, 86 Stat. 1052 (codified as amended at 33 U.S.C. §§ 1401-1487 (2000)); Safe Drinking Water Act, Pub. L. No. 93-523, 88 Stat. 1660 (1974) (codified as amended at 42 U.S.C. § 300f (2000)); Resource Conservation and Recovery Act of 1976, Pub. L. No. 94-580, 90 Stat. 2795 (codified as amended at 42 U.S.C. §§ 6901-6992k (2000)); Clean Air Amendments of 1970, 91 Pub. L. No. 604, 84 Stat. 1676 (codified as amended at 42 U.S.C. §§ 7401-7671q (2000)); Clean Air Act Amendments of 1977, Pub. L. No. 95-95, 91 Stat. 685 (codified as amended at 42 U.S.C. §§ 7401-7671q (2000)); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, Pub. L. No. 96-510, 94 Stat. 2767 (codified as amended at 42 U.S.C. §§ 9601-9675 (2000)).
 2. U.S. CONST. art. I, § 8, cl. 3.
 3. See Jonathan H. Adler, *Judicial Federalism and the Future of Federal Environmental Regulation*, 90 IOWA L. REV. 377, 387 (2005) ("Congress adopted environmental statutes governing a wide range of activities and phenomena never-before subject to federal regulation without questioning whether any such legislation might exceed the scope of Congress's enumerated powers."); see, e.g., *United States v. Bishop Processing Co.*, 287 F. Supp. 624, 630 (D. Md. 1968) ("The commerce power may be exercised to achieve socially desirable objectives, even in the absence of economic considerations." (citing *Brooks v. United States*, 267 U.S. 432, 436 (1925))), *aff'd*, 423 F.2d 469 (4th Cir. 1970).
 4. Deborah Jones Merritt, *Commerce!*, 94 MICH. L. REV. 674, 691 (1995).
 5. Brannon P. Denning & Glenn H. Reynolds, *Rulings and Resistance: The New Commerce Clause Jurisprudence Encounters the Lower Courts*, 55 ARK. L. REV. 1253, 1257 (2003).

activity.”⁶ While lower courts applying this new doctrine have held that environmental regulation is valid Commerce Clause regulation, they have had difficulty explaining why. In particular, they have struggled to identify the economic activity regulated by certain environmental statutes.

The Endangered Species Act (ESA) is especially vulnerable under the Court’s new Commerce Clause analysis. Many environmental statutes may be upheld because they directly regulate industrial activity, which courts regard as sufficiently “economic” for Commerce Clause purposes.⁷ This logic is more difficult to apply to the ESA, however, because the statute seeks to protect threatened and endangered species by prohibiting *any* actions that harm designated species, rather than by regulating specific types of commercial activity. For decades, the wide reach and strict prohibitions of the ESA have generated resistance,⁸ and the Court’s new Commerce Clause doctrine has created an opening for a wave of legal challenges to the statute. In response to the Court’s renewed attention to the economic nature of Commerce Clause legislation, opponents of the ESA have challenged applications of the statute that have only a questionable link to economic activity.

In particular, they argue that Congress lacks the authority to regulate intrastate activity impacting species that have no commercial value and that exist entirely within a single state.⁹ These arguments have gained a certain degree of traction, with respected jurists such as then-Judge John Roberts expressing doubt that “regulating the taking of a hapless toad that, for reasons of its own, lives its entire life in California constitutes regulating ‘Commerce . . . among the several States.’”¹⁰ Currently, this remains the minority understanding, and all of the circuit courts hearing Commerce Clause challenges to the ESA have upheld the statute. However, they have failed to present a convincing account of how the ESA can be understood as economic regulation.

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6. See *Gonzales v. Raich*, 545 U.S. 1, 24-26 (2005); *United States v. Morrison*, 529 U.S. 598, 610-11 (2000); *United States v. Lopez*, 514 U.S. 549, 561 (1995).
 7. See, e.g., *Allied Local & Reg’l Mfrs. Caucus v. EPA*, 215 F.3d 61, 82 (D.C. Cir. 2000) (upholding provisions of the Clean Air Act); *United States v. Olin Corp.*, 107 F.3d 1506, 1510 (11th Cir. 1997) (upholding provisions of CERCLA).
 8. See, e.g., *Clean Water, Fisheries, and Wildlife Endangered Species Act Reauthorization: Hearing Before the S. Comm. on Environment & Public Works*, 103d Cong. 2 (1994) (statement of Sen. Bob Graham) (noting that the ESA has been described as the “pit bull of environmental laws”).
 9. See, e.g., *GDF Realty Invs., Ltd. v. Norton*, 326 F.3d 622 (5th Cir. 2003); *Rancho Viejo, LLC v. Norton*, 323 F.3d 1062 (D.C. Cir. 2003); *Gibbs v. Babbitt*, 214 F.3d 483 (4th Cir. 2000).
 10. *Rancho Viejo, LLC v. Norton*, 334 F.3d 1158, 1160 (D.C. Cir. 2003) (Roberts, J., dissenting from denial of rehearing en banc).

This Note argues that the ESA and other environmental statutes *do* address economic activity, although not in the various ways suggested by the circuit courts. Instead, I draw on environmental economics to argue that environmental statutes should be understood as a response to market failures. These market failures occur because environmental damage is likely to be an externality, environmental benefits are a public good, and environmental assets are frequently common resources. All too often, these factors lead rational people to engage in environmentally damaging behavior because it confers a net personal benefit, even though it imposes a net cost on society. On this account, the economic activity regulated by environmental statutes is the economic decision to pursue an activity despite its cost to society.

Part I explains how the Court's continued focus on distinguishing between economic and noneconomic activities threatens environmental regulation generally and the ESA in particular. It begins with a brief overview of the ESA and its legislative history. It then explores the growing importance of the economic inquiry in the Supreme Court's recent Commerce Clause cases. Part I concludes by assessing the ways in which lower courts have responded to this new doctrinal turn and focuses on their attempts to describe the ESA as regulation of economic activity.

In Part II, I propose a market failure approach as a more convincing way to identify the economic activity regulated by the ESA and other environmental statutes. Under this approach, courts should find that a statute regulates economic activity if Congress could have enacted the statute to address a market failure. The market failure approach would supplement, rather than replace, the Court's current Commerce Clause analysis. This approach draws on environmental economics literature, which explains environmental harm in economic terms. It translates this understanding into a doctrinal context, suggesting that environmental regulation is economic in nature because it changes commercial actors' economic calculations by requiring them to internalize the environmental externalities of their decisions. I present doctrinal support for this approach, identify its limitations, and demonstrate how it could be used to uphold the ESA.

I. THE COMMERCE CLAUSE THREAT TO THE ENDANGERED SPECIES ACT

A. *The Endangered Species Act*

When Congress enacted the ESA, it did so with very little debate and with overwhelming public support.¹¹ The environmental movement was at its peak,¹² and a nation of newfound environmentalists was eager to respond to well-publicized stories about threats to the bald eagle, blue whale, polar bear, and other “charismatic fauna.”¹³ Endangered species already received some protection from statutes enacted in the prior decade,¹⁴ but these statutes were limited in scope, and it soon became apparent that they were inadequate to prevent further extinctions.¹⁵ Thus, in 1973 Congress adopted the ESA as a comprehensive approach to protecting threatened and endangered species throughout the nation. Congress relied chiefly on its Commerce Clause powers in passing the statute,¹⁶ but the legislative history contains no explicit discussion of this constitutional authority. However, congressional findings and testimony suggest that Congress understood species extinctions as a problem with both commercial causes¹⁷ and commercial consequences.¹⁸ The

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11. See SHANNON PETERSEN, *ACTING FOR ENDANGERED SPECIES: THE STATUTORY ARK* 29-30 (2002).
 12. BRIAN CZECH & PAUL R. KRAUSMAN, *THE ENDANGERED SPECIES ACT: HISTORY, CONSERVATION BIOLOGY, AND PUBLIC POLICY* 23 (2001).
 13. *Id.* at 23-24.
 14. *E.g.*, Ocean Dumping Act, 92 Pub. L. No. 532, 86 Stat. 1052 (codified as amended at 33 U.S.C. §§ 1411-1420 (2000)); Endangered Species Conservation Act of 1969, Pub. L. No. 91-135, 83 Stat. 275 (repealed 1973); Endangered Species Preservation Act of 1966, Pub. L. No. 89-669, 80 Stat. 926 (repealed 1973).
 15. See DONALD C. BAUR & WILLIAM ROBERT IRVIN, *ENDANGERED SPECIES ACT: LAW, POLICY, AND PERSPECTIVES* 15-16 (2002).
 16. Bradford C. Mank, *Can Congress Regulate Intrastate Endangered Species Under the Commerce Clause?*, 69 *BROOK. L. REV.* 923, 937 (2004) (noting that, in addition to the Commerce Clause, Congress “also continued to use its authority under the Property Clause to regulate federal lands and the Spending Clause to regulate federal agencies and provide incentives for cooperation by states”).
 17. See, *e.g.*, CONG. RESEARCH SERV., SER. NO. 97-6, *A LEGISLATIVE HISTORY OF THE ENDANGERED SPECIES ACT OF 1973*, at 141 (1982) [hereinafter *LEGISLATIVE HISTORY*] (“The threat to animals may arise from a variety of sources; principally pollution, destruction of habitat and the pressures of trade.”); *id.* at 144 (“Man can threaten the existence of species of plants and animals in any of a number of ways, by excessive use, by unrestricted trade, by pollution or by other destruction of their habitat or range.”); *id.* at 200 (“Pollution is driving animals out of their natural ranges, and those that have not yet been threatened by impure

causal link between commercial activity and species extinction is particularly prominent in the legislative findings for the statute. There, Congress noted that “various species of fish, wildlife, and plants in the United States have been rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation.”¹⁹ While this finding suggests that Congress understood economic activity to be a primary cause of species extinction, Congress did not choose to protect endangered species by directly regulating economic activity. Instead, the ESA prohibited *any* activity that would jeopardize the continued survival of threatened and endangered species.

The operative provisions of the statute reflect this focus on species rather than on the various activities that threaten them. Section 4 of the ESA requires the Secretary of the Interior and the Secretary of Commerce to identify threatened and endangered species and to “list” such species.²⁰ The Secretary is also required to designate critical habitat for each listed species.²¹ Entire species are protected by section 7, which requires federal agencies to consult with the Fish and Wildlife Service to ensure that their actions will not jeopardize the continued survival of listed species.²² Individual members of threatened and endangered species are protected by section 9, which prohibits any person from taking, selling, importing, or exporting any protected species.²³ Section 9 applies to private actors as well as federal agencies,²⁴ and therefore it “raises the most concerns about the scope of congressional authority because it relies on the Commerce Clause to regulate all non-federal lands, including private property.”²⁵

air and water face increasing danger from those entrepreneurs who find a profit in trapping and selling endangered animals.”).

18. *Id.* at 144 (“From the most narrow possible point of view, it is in the best interests of mankind to minimize the losses of genetic variations. The reason is simple: they are potential resources.”).
19. Endangered Species Act of 1973, 16 U.S.C. § 1531(a)(1) (2000).
20. *Id.* § 1533(c)(1). A species is endangered if it “is in danger of extinction throughout all or a significant portion of its range,” *id.* § 1532(6), and a species is threatened if it “is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range,” *id.* § 1532(20).
21. *Id.* § 1533(a)(3).
22. *Id.* § 1536(a)(2).
23. *Id.* § 1538(a).
24. *Id.* §§ 1532(13), 1538(a).
25. Mank, *supra* note 16, at 941.

For this reason, recent cases challenging the ESA have focused on section 9, arguing that the prohibition against species takes is unconstitutional as applied to private landowners. “Take” is a term of art that the ESA defines to mean “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or . . . attempt to engage in any such conduct.”²⁶ The prohibition against “harming” listed species has acquired particular significance. Department of Interior regulations define harm as “an act which actually kills or injures wildlife,” including “significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.”²⁷ The Supreme Court upheld this definition in *Babbitt v. Sweet Home Chapter of Communities for a Great Oregon*,²⁸ with the result that individuals may commit illegal takes through development activities that alter the habitat of threatened or endangered species.

In the initial version of the ESA, Congress placed an extremely high value on endangered species. The statute prohibited *any* taking of threatened or endangered species, and it did not provide a mechanism for balancing other economic considerations against the value of preserving a species.²⁹ Shortly after the ESA was enacted, however, the absolute prohibition against species takes led the Supreme Court to enjoin completion of the Tellico Dam, a massive federal development project.³⁰ The dam was near completion in 1975, when the Secretary of the Interior added to the endangered species list the snail darter, a small species of perch with no commercial value.³¹ The only known population of snail darters would be destroyed by the dam,³² and opponents of the dam argued that its completion would therefore violate the ESA. The Supreme Court agreed, noting that even though the dam would create significant social and economic benefits, “[t]he plain intent of Congress in

26. 16 U.S.C. § 1532(19).

27. Endangered and Threatened Wildlife and Plants Definitions, 50 C.F.R. § 17.3 (2005).

28. 515 U.S. 687, 708 (1995).

29. See Jason F. Shogren & Patricia H. Hayward, *Biological Effectiveness and Economic Impacts of the Endangered Species Act*, 32 LAND & WATER L. REV. 531, 537 (1997).

30. The Tellico Dam was a part of a “multipurpose regional development project designed principally to stimulate shoreline development, generate sufficient electric current to heat 20,000 homes, and provide flatwater recreation and flood control, as well as improve economic conditions.” *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 157 (1978) (footnote omitted).

31. See STANFORD ENVTL. LAW SOC’Y, *THE ENDANGERED SPECIES ACT* 21-23 (2001).

32. *Tenn. Valley Auth.*, 437 U.S. at 161.

enacting this statute was to halt and reverse the trend toward species extinction, whatever the cost.”³³

The Court’s decision received significant media attention,³⁴ and Congress quickly responded by amending the ESA to include two mechanisms that allowed consideration of economic factors.³⁵ First, 1978 amendments to section 7 created the Endangered Species Committee,³⁶ a “God Squad” with the power to exempt projects from the ESA when the economic benefits of the project clearly outweigh the harm of the species loss.³⁷ Second, Congress changed section 4 to allow the Secretary to consider economic impact when deciding whether to designate an area as a critical habitat.³⁸ Thus, while still requiring private and public actors to recognize the social value of preserving endangered species, the ESA now contains mechanisms for weighing this social value against more immediate economic concerns.

In sum, the ESA is a comprehensive regulatory scheme designed to limit species extinctions. The legislative history of the statute suggests that Congress understood extinctions as a problem with diverse causes and even more diverse effects. As described below, courts hearing Commerce Clause challenges to the ESA have focused on the economic effects of extinction.³⁹ As this Section has demonstrated, however, there is a strong case to be made that Congress was at least as concerned with the economic causes of this phenomenon. Ultimately, attention to both economic causes and economic effects may be required if the ESA is to survive scrutiny under the Court’s new Commerce Clause doctrine. The following Sections explore this doctrine and the threat it poses to the ESA.

B. The Supreme Court’s Economic Requirement

For those concerned about the fate of environmental statutes and other social welfare legislation,⁴⁰ a worrisome part of the Supreme Court’s new

33. *Id.* at 184.

34. See PETERSEN, *supra* note 11, at 51, 60.

35. See Shogren & Hayward, *supra* note 29, at 537-38.

36. Endangered Species Act Amendments of 1978, Pub. L. No. 95-632, 92 Stat. 3751, 3753-58 (codified at 16 U.S.C. § 1536(e)-(h) (2000)).

37. See STANFORD ENVTL. LAW SOC’Y, *supra* note 31, at 21-22.

38. See *id.* at 22.

39. See *infra* Section I.C.

40. *E.g.*, Adler, *supra* note 3, at 405-06; Louis J. Virelli III & David S. Leibowitz, “Federalism Whether They Want It or Not”: *The New Commerce Clause Doctrine and the Future of Federal*

Commerce Clause jurisprudence is the heightened attention to whether statutes regulate “economic” activity. When Congress enacted the ESA in 1973, the Court’s Commerce Clause analysis appeared to be a mere formality, and Congress spent little time evaluating the economic bases of its Commerce Clause legislation.⁴¹ However, the era of heightened deference to Commerce Clause legislation ended in 1995 with the Supreme Court’s decision in *United States v. Lopez*.⁴² In that case, the Court struck down federal legislation regulating the possession of guns in school zones, holding that this activity was too far removed from interstate commerce to fall under Congress’s Commerce Clause powers.⁴³ In *Lopez* and subsequent cases,⁴⁴ the Court narrowed its interpretation of Congress’s Commerce Clause authority by holding that this authority extends only to three categories of activity: the channels of interstate commerce, the instrumentalities of interstate commerce, and activities that substantially affect interstate commerce.

The ESA does not regulate the channels or instrumentalities of interstate commerce, and therefore post-*Lopez* Commerce Clause review of the statute would ask whether the ESA substantially affects interstate commerce. *Lopez* directed courts to answer this question by considering four factors: the economic character of the regulated activity, the presence of a jurisdictional element that would limit the statute’s reach, legislative history linking the regulated activity with interstate commerce, and the strength of the relationship between the regulated activity and interstate commerce.⁴⁵ Of these four factors, the economic character of the regulated activity has proven the most elusive and the most significant.

In determining that the gun possession statute did not regulate economic activity, the *Lopez* Court did not explain what would make an activity “economic.” Instead, it answered the economic question by comparing the statute with activities at issue in prior Commerce Clause cases. The Court noted that it had upheld congressional regulation of a variety of intrastate activities including coal mining, credit transactions, and discriminatory service in restaurants and hotels.⁴⁶ The Court asserted that even *Wickard v. Filburn* — a

Civil Rights Legislation After *United States v. Morrison*, 3 U. PA. J. CONST. L. 926, 951-54 (2001).

41. Adler, *supra* note 3, at 387.

42. 514 U.S. 549 (1995).

43. *Id.* at 567-68.

44. *Gonzales v. Raich*, 545 U.S. 1 (2005); *United States v. Morrison*, 529 U.S. 598 (2000).

45. 514 U.S. at 561-67.

46. *Id.* at 559.

1942 case holding that the Commerce Clause gave Congress the authority to regulate a farmer's consumption of homegrown wheat⁴⁷ — “involved economic activity in a way that the possession of a gun in a school zone does not.”⁴⁸ In contrast to these other regulations, the gun possession statute was “not an essential part of a larger regulation of *economic* activity, in which the regulatory scheme could be undercut unless the intrastate activity were regulated.”⁴⁹

Five years after *Lopez*, the Court's decision in *United States v. Morrison*⁵⁰ underscored the importance of the economic inquiry to the new Commerce Clause jurisprudence. In *Morrison*, the Court used the *Lopez* framework to analyze and invalidate the federal civil remedy authorized by the Violence Against Women Act of 1994 (VAWA).⁵¹ As in *Lopez*, the Court indicated that the noneconomic nature of the regulation was a key factor in holding that it exceeded Congress's Commerce Clause authority.⁵² The Court asserted that violent crimes motivated by gender animus were in no way economic, and it discounted congressional findings showing that these crimes had a negative impact on interstate commerce.⁵³ It also observed that “thus far in our Nation's history our cases have upheld Commerce Clause regulation of intrastate activity only where that activity is economic in nature.”⁵⁴ As in *Lopez*, however, the Court did not explain how to determine whether an activity was “economic in nature.”

The Court began to give substance to the economic inquiry in *Gonzales v. Raich*,⁵⁵ a recent decision upholding the Controlled Substances Act (CSA) as applied to medical marijuana users in California. In *Raich*, the Court concluded that this application of the CSA survived rational basis review, in part because the manufacture, distribution, and possession of controlled substances are “quintessentially economic” activities.⁵⁶ To support this proposition, the Court cited a dictionary definition of “economics” as “the production, distribution,

47. 317 U.S. 111 (1942).

48. *Lopez*, 514 U.S. at 560.

49. *Id.* at 561 (emphasis added).

50. 529 U.S. 598 (2000).

51. Pub. L. No. 103-322, §§ 40,001-40,703, 108 Stat. 1902, 1902-55 (codified as amended in scattered sections of 42 U.S.C.).

52. *Morrison*, 529 U.S. at 613.

53. *Id.* at 614-15.

54. *Id.* at 613.

55. 545 U.S. 1 (2005).

56. *Id.* at 25.

and consumption of commodities.”⁵⁷ Guided by this definition, the Court was easily able to describe the CSA as economic regulation because it regulated “the production, distribution, and consumption of commodities for which there is an established, and lucrative, interstate market.”⁵⁸

In addition to the definition of “economics,” several other aspects of *Raich* are relevant for constitutional analysis of environmental statutes. First, *Raich* minimized the importance of the other three *Lopez* factors.⁵⁹ Second, the Court suggested a return to a more deferential rational basis review.⁶⁰ Finally, the Court revived an older strain of Commerce Clause analysis permitting Congress to enact comprehensive legislation even if the legislation would regulate some instances of noneconomic activity.⁶¹ Remarking that “[w]e have never required Congress to legislate with scientific exactitude,” the Court observed that “when Congress decides that the ‘total incidence’ of a practice poses a threat to a national market, it may regulate the entire class.”⁶² Notably, while *Lopez* claimed that the wheat statute in *Wickard* regulated economic activity, *Raich* suggested that *Wickard* did not involve economic activity but was nonetheless correct under the comprehensive scheme approach⁶³: “*Wickard* thus establishes that Congress can regulate purely intrastate activity that is not itself ‘commercial,’ in that it is not produced for sale, if it concludes

57. *Id.* (citing WEBSTER’S THIRD NEW INTERNATIONAL DICTIONARY 720 (1966)).

58. *Id.* at 26. As I will argue *infra* Part II, the *Raich* definition of economics makes sense for a class of regulation targeting particular industries or commodities, but it does not capture the full scope of economic activity that Congress should be able to regulate under its Commerce Clause powers.

59. The Court did not discuss the presence or absence of a jurisdictional hook and barely mentioned attenuation and aggregation. The Court did consider the legislative history of the CSA, but it observed that while legislative findings may help establish a link between a statute and commerce, the absence of findings is never harmful. *Id.* at 21.

60. *Id.* at 22 (“We need not determine whether respondents’ activities, taken in the aggregate, substantially affect interstate commerce in fact, but only whether a ‘rational basis’ exists for so concluding.”).

61. The Court described the comprehensive scheme approach with reference to *Wickard v. Filburn*, 317 U.S. 111 (1942), *Perez v. United States*, 402 U.S. 146, 151 (1971), and *Maryland v. Wirtz*, 392 U.S. 183, 196 n.27 (1968), *overruled by Nat’l League of Cities v. Usery*, 426 U.S. 833 (1976), *overruled by Garcia v. San Antonio Metro. Transit Auth.*, 469 U.S. 528 (1985). *Raich*, 545 U.S. at 16-17.

62. *Raich*, 545 U.S. at 17 (quoting *Perez*, 402 U.S. at 154).

63. In characterizing *Wickard* as a comprehensive scheme case, the Court blurred the distinction between activities surviving Commerce Clause review because of their aggregated effects and those surviving because they were part of a comprehensive scheme.

that failure to regulate that class of activity would undercut the regulation of the interstate market in that commodity.”⁶⁴

In sum, *Raich* suggests that when a court considers whether a challenged statute regulates economic activity, it should first determine whether the statute is part of a broader regulatory scheme. If so, the relevant activity for the economic inquiry is the larger class of activity regulated by that scheme, not the particular local activity at issue. This analysis provides guidance for a certain set of cases, but it still requires courts to determine if the larger class of activities is “economic.”

One way to understand *Raich* is as a retreat from the Court’s new Commerce Clause jurisprudence, thus reading *Lopez* and *Morrison* as mere aberrations.⁶⁵ This interpretation of *Raich* has led some commentators to conclude that environmental statutes are no longer threatened by the Court’s new Commerce Clause jurisprudence. For instance, in a post-*Raich* commentary, Michael Blumm and George Kimbrell wrote that “the Court’s recent embracing of the comprehensive scheme rationale immunizes the ESA take provision from the sort of as-applied attacks property rights activists have previously brought against its application.”⁶⁶ But this argument relies on the assumption that the Court would find the ESA as a whole to be a valid regulatory scheme. Blumm and Kimbrell are confident that it would:

The ESA is . . . a comprehensive regulatory scheme—aimed in part at preserving the economic benefits of biodiversity and avoiding economically destructive interstate competition—that would be fatally undercut if piecemeal species extinction was permitted simply because

64. *Raich*, 545 U.S. at 18. When the respondents attempted to distinguish their case from *Wickard* by arguing that Roscoe Filburn was engaged in commercial activity, the Court insisted that *Wickard* involved noncommercial activity: “[E]ven though Filburn was indeed a commercial farmer, the activity he was engaged in—the cultivation of wheat for home consumption—was not treated by the Court as part of his commercial farming operation.” *Id.* at 20.

65. See, e.g., Jonathan H. Adler, *Is Morrison Dead? Assessing a Supreme Court Drug (Law) Overdose*, 9 LEWIS & CLARK L. REV. 751 (2005); Michael C. Blumm & George A. Kimbrell, *Gonzales v. Raich, the “Comprehensive Scheme” Principle, and the Constitutionality of the Endangered Species Act*, 35 ENVTL. L. 491, 497 (2005). But cf. Robert J. Pushaw, Jr., *The Medical Marijuana Case: A Commerce Clause Counter-Revolution?*, 9 LEWIS & CLARK L. REV. 879, 884 (2005) (“[I]t is impossible to determine whether the majority or the dissent correctly applied the *Lopez* and *Morrison* standards, because they are so malleable as to justify either result.”).

66. Blumm & Kimbrell, *supra* note 65, at 496.

the specific listed species or activity causing the take alone lacked a substantial effect on interstate commerce.⁶⁷

As *Morrison* showed, however, the fact that a statute may have economic benefits does not guarantee that it will survive constitutional scrutiny.⁶⁸ Furthermore, the promise of the comprehensive scheme approach should be balanced against the perils of *Raich*'s narrow definition of "economics." The Court has repeatedly equated economic regulation with regulation of specific commodities, and this poses a serious threat to environmental regulation. Even a comprehensive regulatory scheme must have a close economic nexus to be valid Commerce Clause regulation.⁶⁹ And the economic nexus requirement is where the ESA is most vulnerable.

C. *The Lower Courts' Response*

To understand why the ESA might not survive the Court's new Commerce Clause analysis, it is helpful to compare it to other environmental statutes that are more clearly economic in nature. For example, some environmental statutes can be characterized as economic regulation because they directly regulate commercial activity. In the easiest case, a challenged provision may contain a jurisdictional hook expressly limiting application of the statute to commercial endeavors. The D.C. Circuit relied on just such a jurisdictional hook to uphold the constitutionality of Clean Air Act provisions regulating emissions of volatile organic compounds.⁷⁰ The challenged provisions applied only to manufacturers, processors, distributors, importers, or suppliers of "consumer or commercial products for sale or distribution in interstate commerce in the United States."⁷¹ The D.C. Circuit found that this jurisdictional limitation demonstrated the economic character of the regulated activity and also answered the distinct jurisdictional element inquiry.⁷²

Even when environmental statutes do not contain a jurisdictional hook, they may regulate specific activities that are easy to identify as part of

67. *Id.* at 492.

68. See *supra* text accompanying notes 50-54.

69. Without the economic requirement, any general health-and-welfare or criminal statute could be redescribed as a comprehensive scheme, and this would create exactly the type of unbounded power that concerned the Court in *Lopez* and *Morrison*.

70. *Allied Local & Reg'l Caucus v. EPA*, 215 F.3d 61 (D.C. Cir. 2000) (upholding Clean Air Act Amendments of 1990 § 183(e), 42 U.S.C. § 7511b(e) (2000)).

71. 42 U.S.C. § 7511b(e)(1)(C)(i).

72. *Allied Local*, 215 F.3d at 82.

commercial endeavors.⁷³ In this vein, the Fifth Circuit upheld Clean Air Act provisions regulating asbestos removal,⁷⁴ finding this to be a commercial activity because asbestos removal is a booming industry and because such projects are almost always motivated by a commercial purpose. As the court put it, “[H]andling toxic carcinogens is not something many people enjoy for its own sake.”⁷⁵

Most other environmental statutes are even more clearly targeted at governmental or commercial actors. The National Environmental Policy Act of 1969 (NEPA)⁷⁶ regulates a broad range of activity, but it applies only to federal actions⁷⁷ and therefore avoids Commerce Clause challenges altogether.⁷⁸ The provisions of the Resource Conservation and Recovery Act of 1976 (RCRA)⁷⁹ regulating private actors apply only to those who deal with hazardous waste—generators, transporters, and treatment, storage, and disposal facilities.⁸⁰ The Toxic Substances Control Act (TSCA)⁸¹ and the Federal Environmental Pesticide Control Act of 1972⁸² govern manufacturers of toxic substances, a group of individuals who are clearly commercial actors. Unlike these Acts, the ESA lacks the limited scope or jurisdictional hook that would protect it from Commerce Clause attacks.

Even without a clear nexus to economic activity, the ESA has survived the immediate aftermath of *Lopez*. The Supreme Court has thus far declined to

73. See Adler, *supra* note 3, at 405 n.187 (citing Steven M. Johnson, *United States v. Lopez: A Misstep, but Hardly Epochal for Federal Environmental Regulation*, 5 N.Y.U. ENVTL. L.J. 33, 65 (1996)).

74. *United States v. Ho*, 311 F.3d 589, 602 (5th Cir. 2002). *Ho* considered a challenge to several provisions of the Clean Air Act, including the work practice standard provision. See 42 U.S.C. § 7412(h) (2000). Applying the *Lopez* test, the court observed that “the regulated intrastate activity, asbestos removal, is very much a commercial activity in today’s economy.” *Ho*, 311 F.3d at 602.

75. *Ho*, 311 F.3d at 602.

76. 42 U.S.C. §§ 4321-4370f (2000).

77. Section 102 of NEPA requires an environmental impact statement for “legislation and other major Federal actions significantly affecting the quality of the human environment.” *Id.* § 4332(2)(c).

78. When regulating federal agencies, Congress can rely instead on its Spending Clause powers. See Mank, *supra* note 16, at 937.

79. 42 U.S.C. §§ 6901-6992k (2000). Subtitle D of the Act, 42 U.S.C. §§ 6941-6949(c), governs state solid waste management programs. While these provisions governing the disposal of solid waste could have a broad impact, they regulate only the EPA and the states.

80. *Id.* §§ 6922-6924.

81. 15 U.S.C. §§ 2601-2692 (2000).

82. 7 U.S.C. §§ 136-136y (2000).

hear Commerce Clause challenges to the statute,⁸³ which means that circuit courts have been the final arbiters of recent cases. All of the circuit courts that have heard challenges to the ESA have upheld the statute, finding that the ESA regulates economic activity. However, each court has presented a different explanation as to how the ESA satisfies the “economic” requirement, and none of these explanations is ultimately convincing.

In *Gibbs v. Babbitt*,⁸⁴ the Fourth Circuit considered an as-applied challenge to a restriction on the hunting of red wolves. The Fish and Wildlife Service issued the regulation under authority delegated to it by the ESA,⁸⁵ and the regulation included provisions governing the treatment of red wolves on private land.⁸⁶ Affected landowners challenged the constitutionality of the regulation, arguing that “as applied to the red wolves occupying private land in eastern North Carolina, [the regulation] exceeds Congress’s power under the interstate Commerce Clause.”⁸⁷ The Fourth Circuit rejected this challenge, holding that the regulated activity had a substantial effect on interstate commerce and, alternatively, that the regulation was enacted as part of a valid regulatory scheme.

In analyzing this application of the ESA, the *Gibbs* court identified the regulated activity as the taking of red wolves and offered two explanations for why this constituted economic activity. First, it observed that the taking of the wolves was motivated by economic concerns—the ranchers shot the wolves to protect their livestock.⁸⁸ Second, it found a direct relationship between the wolves and interstate commerce because if all the wolves were taken, there would be no wolf-related tourism, scientific research, or trade in pelts.⁸⁹ The Fourth Circuit’s alternative reason for upholding the regulations was that they were enacted as part of a comprehensive regulatory scheme.⁹⁰ However, this explanation relied on the premise that “Congress undoubtedly has the constitutional authority to pass legislation for the conservation of endangered

83. *E.g.*, *GDF Realty Invs., Ltd. v. Norton*, 326 F.3d 622 (5th Cir. 2003), *cert. denied*, 545 U.S. 1114 (2005); *Rancho Viejo, LLC v. Norton*, 323 F.3d 1062 (D.C. Cir. 2003), *cert. denied*, 540 U.S. 1218 (2004); *Gibbs v. Babbitt*, 214 F.3d 483 (4th Cir. 2000), *cert. denied*, 531 U.S. 1145 (2001).

84. 214 F.3d 483.

85. This delegation of authority is codified at 16 U.S.C. § 1533(d) (2000), which grants the Fish and Wildlife Service authority to issue regulations necessary to conserve threatened species.

86. 50 C.F.R. § 17.84(c) (2005).

87. *Gibbs*, 214 F.3d at 489.

88. *Id.* at 492.

89. *Id.*

90. *Id.* at 497.

species.”⁹¹ As support for this proposition, the court cited *Sweet Home* and *Tennessee Valley Authority v. Hill*,⁹² although neither involved a direct challenge to the constitutionality of the ESA.⁹³

Each of *Gibbs*'s alternative holdings fails as a general model for sustaining the ESA. The court was convincing in describing the taking of red wolves as economic activity and in linking this activity to interstate commerce, but its reasoning applies only to predators and commercially valuable species. Thus, it provides no defense for most applications of the ESA. In contrast, the court's remarks about the ESA as a comprehensive regulatory scheme could be an argument for upholding the statute, but the court failed to adequately support this argument.

While the Fourth Circuit focused on the economic nature of the taking itself, the D.C. Circuit has considered a variety of economic links but has ultimately upheld applications of the ESA because the activity leading to the taking was economic in nature. The D.C. Circuit first considered this question in *National Ass'n of Home Builders v. Babbitt (NAHB)*,⁹⁴ a 1997 case challenging the application of the ESA to construction activity that was determined to jeopardize the continued existence of an endangered species. The species at issue in *NAHB* was the Delhi Sands flower-loving fly, an insect found only in a small area in Southern California. The two circuit judges who rejected this Commerce Clause challenge identified a number of ways in which the ESA could be considered economic regulation.⁹⁵ Judge Wald looked to the potential commercial value of an endangered species⁹⁶ and the possibility of destructive interstate competition.⁹⁷ In contrast, Judge Henderson's reasoning focused on commercial impacts resulting from the interconnectedness of species in an ecosystem⁹⁸ and the commercial nature of the regulated development.⁹⁹

91. *Id.*

92. *Id.* (citing *Babbitt v. Sweet Home Chapter of Cmty. for a Great Or.*, 515 U.S. 687 (1995); and *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 194 (1978)).

93. In *Sweet Home*, the Court held that the Secretary of the Interior acted reasonably in issuing regulations stating that habitat modification and degradation could constitute “harm” under the ESA. 515 U.S. at 708. In *Tennessee Valley Authority*, the Court held that the ESA was not a balancing statute and rejected arguments that it should consider the cost of preserving species. 437 U.S. at 193-94; see *supra* text accompanying notes 30-33.

94. 130 F.3d 1041 (D.C. Cir. 1997).

95. See *id.* at 1045-57 (Wald, J.); *id.* at 1057-60 (Henderson, J., concurring).

96. See *id.* at 1052-54 (Wald, J.).

97. See *id.* at 1054-57.

98. *Id.* at 1059 (Henderson, J., concurring) (“Given the interconnectedness of species and ecosystems, it is reasonable to conclude that the extinction of one species affects others and

Judge Wald's opinion in *NAHB* did not give serious consideration to the economic inquiry but instead observed that "[a] class of activities can substantially affect interstate commerce regardless of whether the activity at issue—in this case the taking of endangered species—is commercial or noncommercial."¹⁰⁰ However, this interpretation of *Lopez* was later undermined by *Morrison*, and when the D.C. Circuit returned to the economic inquiry in a subsequent case, it focused on Judge Henderson's suggestion that the regulated activity in *NAHB* was *construction*, not the takings. In *Rancho Viejo, LLC v. Norton*,¹⁰¹ a developer planning to build a residential development in San Diego County challenged the application of the ESA to its project.¹⁰² The site of the proposed development included a habitat for the endangered southwestern arroyo toad, and the Fish and Wildlife Service determined that executing the development plan would jeopardize the toad's continued existence.¹⁰³ The D.C. Circuit upheld this application of the ESA, finding that the regulated activity at issue was the construction of a housing development, which was plainly an economic enterprise.¹⁰⁴ In justifying this interpretation, the court emphasized that "the ESA regulates takings, not toads. . . . [The] regulated activity is Rancho Viejo's planned commercial development, not the arroyo toad that it threatens. The ESA does not purport to tell toads what they may or may not do."¹⁰⁵

By defining the regulated activity with reference to the construction project rather than to the endangered species, the *Rancho Viejo* court applied *Lopez* in a way that allowed it to uphold the ESA.¹⁰⁶ However, there are two problems with this approach. First, it is only useful in as-applied challenges in which the taking has occurred as part of a commercial activity. It leaves open the possibility that prohibiting noncommercial takings would be beyond Congress's Commerce Clause powers. Second, it is difficult to distinguish this

their ecosystems and that the protection of a purely intrastate species . . . will therefore substantially affect land and objects that are involved in interstate commerce.").

99. *Id.* at 1058.

100. *Id.* at 1049 (Wald, J.).

101. 323 F.3d 1062 (D.C. Cir. 2003).

102. *Id.* at 1065–66.

103. *Id.* at 1065.

104. *Id.* at 1068.

105. *Id.* at 1072.

106. In assessing the other three *Lopez* factors, the D.C. Circuit found that while the ESA contained neither a jurisdictional hook nor helpful legislative findings, the construction project did have a substantial effect on interstate commerce. *See id.* at 1068–70.

reasoning from that in *Lopez*.¹⁰⁷ There, the defendant convicted under the Gun-Free School Zones Act (GFSZA)¹⁰⁸ brought the gun to the school as part of a gun sale.¹⁰⁹ If the ESA is constitutional when applied to commercial development that results in a taking, then the GFSZA should be constitutional when applied to the commercial activity of selling guns.¹¹⁰ That *Lopez* did not reach this result suggests that applications of a statute to commercial activity are not sufficient to make the statute “economic in nature.”

Finally, in *GDF Realty Investments, Ltd. v. Norton*,¹¹¹ the Fifth Circuit stated that the relevant economic activity was the economic nature of the comprehensive regulatory scheme embodied in the ESA, but it offered only weak support for the contention that the “ESA’s protection of endangered species is economic in nature.”¹¹² In *GDF Realty*, developers sought to build housing and commercial developments on a parcel of land containing a network of caves. The caves were home to six endangered species of small invertebrates (the “cave species”). The developers sought declaratory relief holding that the application of the ESA to their proposed activity exceeded the scope of the Commerce Clause.¹¹³ The district court had rejected this challenge, observing that one of the proposed developments contained a Wal-Mart and noting that the court would be “hard-pressed to find a more direct link to interstate commerce than a Wal-Mart.”¹¹⁴ On appeal, however, the Fifth Circuit rejected this approach, distinguishing between the regulated activity (the taking of species) and the nonregulated conduct leading to the activity (development).¹¹⁵ In holding that the substantial effects test should look only at the expressly regulated activity, the Fifth Circuit noted the two weaknesses mentioned in the above discussion of *Rancho Viejo*.¹¹⁶ First, focusing on the nonregulated conduct “would allow application of otherwise unconstitutional

107. See Adler, *supra* note 3, at 409-10.

108. 18 U.S.C. § 922(q) (1994), *invalidated by* United States v. Lopez, 514 U.S. 549 (1995).

109. See United States v. Lopez, 2 F.3d 1342, 1345 (5th Cir. 1993).

110. Cf. Gonzales v. Raich, 545 U.S. 1, 52 (2005) (O’Connor, J., dissenting).

111. 326 F.3d 622 (5th Cir. 2003).

112. *Id.* at 639.

113. *Id.* at 626.

114. *Id.* at 627 (quoting *GDF Realty Invs., Ltd. v. Norton*, 169 F. Supp. 2d 648, 662 (W.D. Tex. 2001)).

115. *Id.* at 630-31.

116. The Fifth Circuit tried to reconcile its approach with those in *NAHB* and *Gibbs* by observing that while these opinions did, at times, look “to the nature of the actor’s general conduct,” in both cases this “was not the sole basis for finding economic activity or a substantial effect on interstate commerce.” *Id.* at 635.

statutes to commercial actors, but not to non-commercial actors.”¹¹⁷ Second, this line of reasoning should have led to the upholding of the statutes in *Lopez* and *Morrison*.¹¹⁸

While *GDF Realty* identified the key weaknesses of the conduct-based approach, it struggled to articulate an alternate explanation of how the ESA is economic regulation. The court rejected proposals that takes of the cave species alone had a substantial effect on interstate commerce based on the species’ scientific interest or future commercial benefits.¹¹⁹ Instead, it found that the regulation of cave species takes was an essential part of a broader regulatory scheme.¹²⁰ The court recognized that under this approach, “the larger regulation must be directed at activity that is economic in nature.”¹²¹ Insofar as it endorsed the comprehensive scheme approach and acknowledged the enduring importance of the economic inquiry, the Fifth Circuit would be vindicated by the Supreme Court’s decision in *Raich*.

However, *GDF Realty* still could not answer the central question posed by these ESA cases: how can the ESA as a whole be understood as regulation of economic activity? The Fifth Circuit attempted to answer this question by observing that the ESA’s drafters were concerned with the economic effects of species loss¹²² and that most of the takes prohibited by the statute would occur in the course of economic activity. Yet neither of these considerations establishes that the ESA is economic regulation. First, as the Supreme Court has repeatedly stated, “[s]imply because Congress may conclude that a particular activity substantially affects interstate commerce does not necessarily make it so.”¹²³ Second, as the *GDF Realty* court already recognized, the application of a statute to commercial actors is not sufficient to make the statute itself economic in nature.¹²⁴

Ultimately, then, all of these approaches fail to convincingly cast environmental protection as economic regulation. They also fail to distinguish environmental regulations from the statutes invalidated in *Lopez* and *Morrison*.

117. *Id.* at 634.

118. *Id.* at 635 (“Concomitantly, the facial challenges in *Lopez* and *Morrison* would have failed.”).

119. *See id.* at 636-38.

120. *See id.* at 638-39.

121. *Id.* at 639.

122. The court cited the ESA’s legislative history for the proposition that the drafters of the ESA were concerned that extinctions were a genetic loss of incalculable value. *Id.*

123. *United States v. Morrison*, 529 U.S. 598, 614 (2000) (quoting *United States v. Lopez*, 514 U.S. 549, 557 (1995)).

124. *See supra* text accompanying notes 116-118.

Nonetheless, as I argue in the following Part, these environmental statutes can be understood as economic regulation: they responded to a concern that commercial actors pursued economic growth without due regard for environmental considerations. Though the Supreme Court's new Commerce Clause jurisprudence requires courts to reconsider the economic underpinnings of the ESA and other environmental laws, this inquiry should not be fatal to the statutes. Because economic activity was understood as a primary cause of environmental devastation, legislation addressing this problem can fairly be characterized as regulation of economic activity.

II. THE MARKET FAILURE APPROACH: ENVIRONMENTAL PROTECTION AS ECONOMIC REGULATION

In this Part, I propose that courts use a market failure approach to determine whether certain statutes regulate economic activity. Although the "economic" determination was a small piece of the analytic framework announced in *Lopez*,¹²⁵ it has become the key factor in subsequent cases, and it poses the greatest challenge to arguments that environmental regulation is a valid exercise of Commerce Clause authority.¹²⁶ The market failure approach suggests that when Congress enacts statutes correcting market failures, that legislation should be understood as economic in nature. Thus, it offers a way to think about economic activity that would allow courts to uphold environmental regulation as a constitutionally permissible response to the market failures that create environmental harm.

Application of the market failure approach would vary depending on how broadly a court defined the relevant market for Commerce Clause purposes. Under a broad definition of the market,¹²⁷ any factor perceived to be undervalued could be regarded as evidence of a market failure.¹²⁸ While this definition offers a way to uphold a variety of social welfare legislation under the Commerce Clause, it would also subject the market failure approach to the Supreme Court's concern about Commerce Clause analyses that make it

125. See *supra* text accompanying notes 44-45.

126. See *supra* text accompanying notes 50-63.

127. See, e.g., Darren Bush, *The "Marketplace of Ideas:" Is Judge Posner Chasing Don Quixote's Windmills?*, 32 ARIZ. ST. L.J. 1107, 1109 n.17 (2000) (noting that all of human behavior can be understood as exchange relationships).

128. As Professors Henry Butler and Jonathan Macey have observed, "[V]irtually everything that anybody does is an externality when viewed from somebody's perspective." HENRY N. BUTLER & JONATHAN R. MACEY, USING FEDERALISM TO IMPROVE ENVIRONMENTAL POLICY 5-6 (1996).

“difficult to perceive any limitation on federal power.”¹²⁹ In contrast, a narrower version of the market failure approach would recognize market failures only when they have a direct impact on “an established . . . interstate market.”¹³⁰ In effect, it would only recognize market failures that result from the cost-benefit analyses of commercial actors in regional, national, or international markets. This approach would protect fewer regulations from Commerce Clause challenges, but it would also be easier to defend as consistent with *Lopez*, *Morrison*, and *Raich*.

Below, I argue that courts should use the narrow market failure approach to uphold environmental statutes as valid Commerce Clause legislation. I begin by explaining how the interaction of environmental and economic concerns led a generation of environmental economists to describe environmental harm as a market failure. I then translate this insight into a doctrinal argument for upholding environmental statutes as regulations of market activity. Finally, I analyze the ESA under the proposed market failure approach, concluding that even the ESA—arguably the most far-reaching piece of environmental regulation—should be upheld as constitutional Commerce Clause regulation because it addresses market failures.

A. *Environmental Harm as a Market Failure*

Since the 1960s, scholars and policymakers have often analyzed environmental problems through an economic lens. Economist William Baxter expressed a common sentiment when he wrote in 1974 that “environmental problems are economics problems, and better insight can be gained by application of economic analysis.”¹³¹ While the economic approach has its critics,¹³² it has become a dominant mode—perhaps *the* dominant mode—of

129. *United States v. Morrison*, 529 U.S. 598, 613 (2000) (quoting *United States v. Lopez*, 514 U.S. 549, 564 (1995)).

130. *Gonzales v. Raich*, 545 U.S. 1, 26 (2005).

131. WILLIAM F. BAXTER, *PEOPLE OR PENGUINS: THE CASE FOR OPTIMAL POLLUTION* 17 (1974).

132. See, e.g., MARK SAGOFF, *THE ECONOMY OF THE EARTH: PHILOSOPHY, LAW, AND THE ENVIRONMENT* 6 (1988) (arguing against an economic understanding and claiming that environmental problems “are primarily moral, aesthetic, cultural, and political and that they must be addressed in those terms”); James L. Nicoll, *The Irrationality of Economic Rationality in the Restoration of Natural Resources*, 42 ARIZ. L. REV. 463, 479 (2000) (“Thus, the fundamental problem with the unthinking application of economic valuation to determine the scope of primary restoration is that the theory of economic value treats social objectives like commodities and expects public policy to serve as a transmission belt for relatively uninformed and unreflective consumer preferences.”).

thinking about environmental policy.¹³³ This development makes it particularly ironic that courts have struggled to identify the economic elements of environmental regulation. Instead of reinventing the wheel, courts should draw on the rich literature of environmental economics, which explains how rational economic decision-making can lead to disastrous environmental outcomes.

From an economic perspective, environmental damage can often be explained as the inefficient use of environmental goods due to market failure.¹³⁴ This understanding reflects economic theories about the relationship between markets and social welfare. As a matter of public policy, the allure of a free-market system is the promise that when each individual pursues his or her own interests, the aggregate individual activity will promote the public interest.¹³⁵ Theorems of welfare economics stipulate conditions necessary for this to occur: “(1) a complete set of markets with well-defined property rights exists . . . ; (2) consumers and producers behave competitively by maximising benefits and minimising costs; (3) market prices are known by all consumers and firms; and (4) transaction costs are zero so that charging prices does not consume resources.”¹³⁶ When one or more of these conditions is not met, a market failure may result in the inefficient allocation of resources. Key sources of market failures include externalities, public goods and commons problems, and

133. See ROBERT V. PERCIVAL ET AL., ENVIRONMENTAL REGULATION: LAW, SCIENCE, AND POLICY 24 (4th ed. 2003) (“Because economic concepts and terminology are so prevalent in this field, it is vital that everyone approaching environmental law be conversant with those concepts and terminology – if only so that criticism of them can be informed and astute.”).

134. See generally Mark Sagoff, *The Economy of the Earth*, in LAW AND THE ENVIRONMENT: A MULTIDISCIPLINARY READER 49 (Robert V. Percival & Dorothy C. Alevizatos eds., 1997) (summarizing the economic perspective on environmental problems); Daniel C. Esty, *Toward Optimal Environmental Governance*, 74 N.Y.U. L. REV. 1495, 1503-08 (1999) (describing market failures as an underlying cause of environmental harms).

135. This is the invisible hand theory that Adam Smith laid out in *The Wealth of Nations*:

[E]very individual . . . generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it. By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention.

ADAM SMITH, *THE WEALTH OF NATIONS* 423 (Edwin Cannan ed., The Modern Library 1937) (1776).

136. NICK HANLEY ET AL., ENVIRONMENTAL ECONOMICS IN THEORY AND PRACTICE 24 (1997).

monopolies.¹³⁷ All of these, except monopolies, frequently occur in environmental contexts.¹³⁸

For instance, environmental damage is often described as an externality, a cost that is imposed on society at large rather than internalized by the individual causing the damage.¹³⁹ Industrial pollution is a common example of an environmental externality.¹⁴⁰ Because the benefits of pollution control measures are shared by society at large, while the costs of these measures are imposed on the polluter, the rational individual polluter will continue to pollute unless forced to internalize the costs of pollution. As Professors Henry Butler and Jonathan Macey have explained, “Since individuals in a market system respond only to the benefits and costs that they actually receive and pay for, the market system may be inadequate to deal with externalities.”¹⁴¹

The public good nature of many environmental assets is another cause of environmental market failures. Public goods are assets that are nonrival and nonexcludable, meaning that they are “available to all and one person’s consumption does not reduce another person’s consumption.”¹⁴² Clean air is one example of a public good;¹⁴³ ecosystem benefits such as the water purification provided by wetlands or carbon sequestration provided by forests are other examples.¹⁴⁴ Public goods pose challenges for free-market systems

137. See ROBERT COOTER & THOMAS ULEN, *LAW & ECONOMICS* 44-47 (4th ed. 2004); Michael J. Trebilcock & Edward M. Iacobucci, *Privatization and Accountability*, 116 HARV. L. REV. 1422, 1431-35 (2003); see also TOM TIETENBERG, *ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS* (6th ed. 2003) (discussing environmental regulation as targeted at externalities). See generally ARTHUR CECIL PIGOU, *THE ECONOMICS OF WELFARE* (photo. reprint 2002) (1932) (identifying divergent social and private costs as one source of market failure, along with monopolies and information imbalances).

138. See HANLEY ET AL., *supra* note 136, at 22-56.

139. E.g., Esty, *supra* note 134, at 1503-04 (“All too often, prices in the marketplace do not capture the social costs . . . of pollution As a result, both companies and individuals shift environmental costs that they generate onto others or society at large. These externalities must be internalized if the market is to produce efficient outcomes.”).

140. See, e.g., Rudy Perkins, Note, *Electricity Deregulation, Environmental Externalities and the Limitations of Price*, 39 B.C. L. REV. 993, 994 (1998) (describing air pollution from a coal plant as an externality).

141. BUTLER & MACEY, *supra* note 128, at 5.

142. HANLEY ET AL., *supra* note 136, at 42-43.

143. See, e.g., Kirsten H. Engel, *The Dormant Commerce Clause Threat to Market-Based Environmental Regulation: The Case of Electricity Deregulation*, 26 *ECOLOGY L.Q.* 243, 251 (1999) (“Environmental regulation is necessary from an economic standpoint because it corrects for the market’s failure to internalize the costs of pollution or to generate an efficient amount of public goods such as clean air.”).

144. HANLEY ET AL., *supra* note 136, at 43.

because they are already provided at no cost. This creates the potential for free-rider problems: people may conceal their interest in the good to avoid paying for it, with the ultimate result that the good is provided at less-than-efficient levels.¹⁴⁵

Commons problems arise when it is difficult or impossible to deny access to a resource.¹⁴⁶ The classic commons contains desirable natural resources and is an open access area, available for use by all.¹⁴⁷ Commons are vulnerable to overexploitation because individuals have no way to capture the benefits of measured extraction and therefore are likely to destroy the resource by using it at unsustainable levels. For instance, over-fishing can destroy the population of commercially valuable fish in a given area.¹⁴⁸ Because no fisherman owns a specific piece of the ocean, any one fisherman's attempt to conserve fish would be defeated by competition from other fishermen, who would take the remaining fish. As H. Scott Gordon explained in 1954, "Wealth that is free for all is valued by none because he who is foolhardy enough to wait for its proper time of use will only find that it has been taken by another."¹⁴⁹

While externalities, public goods, and commons are analytically distinct concepts, they implicate the same basic problem: when public costs and private costs diverge, private decisions are likely to lead to inefficient resource use. As Garrett Hardin explained in *The Tragedy of the Commons*,¹⁵⁰ the net effect of a series of such decisions can lead to unsustainable use that has both public and private consequences. In the 1960s and 1970s, Hardin's essay and other accounts of environmental damage¹⁵¹ began to influence federal legislators,

145. *Id.*

146. *Id.* at 37.

147. The term "commons" and early descriptions of the commons suggested a choice between two systems of property ownership: private property or common property. As James Acheson and others have observed, however, there is a significant distinction between communally owned property and open access property. When property is communally owned, the joint owners are likely to develop rules for resource exploitation, thereby avoiding the tragedy of the commons. See JAMES M. ACHESON, *THE LOBSTER GANGS OF MAINE* (1988). In contrast, the tragedy of the commons arises when property is open access, with no community controls on its use.

148. See H. Scott Gordon, *The Economic Theory of a Common-Property Resource: The Fishery*, 62 J. POL. ECON. 124 (1954).

149. *Id.* at 135.

150. Garrett Hardin, *The Tragedy of the Commons*, 162 SCIENCE 1243 (1968), reprinted in *ECONOMICS OF THE ENVIRONMENT* 5 (Robert Dorfman & Nancy S. Dorfman eds., 3d ed. 1993).

151. E.g., RACHEL CARSON, *SILENT SPRING* (1962) (blaming the chemical industry for significant environmental pollution, and describing the effects of this pollution on bird populations).

who started to craft environmental laws designed to regulate activities that had historically ignored environmental factors. Members of Congress lamented the “failure to foresee and control the untoward consequences of modern technology,” including “the runoff into rivers of nitrogen fertilizers, the smog from automobiles, the pesticides in the food chains, and the destruction of topsoil by strip mining.”¹⁵²

One way Congress responded to these market failures was by trying to force the internalization of externalities.¹⁵³ For instance, congressional testimony in the 1960s and 1970s identified interstate pollution spillovers as a key reason why federal environmental regulation was necessary,¹⁵⁴ and Congress responded by establishing national pollution guidelines in the Clean Air Act and the Clean Water Act. As one court interpreting the Clean Water Act observed:

[T]he primary purpose of the effluent limitations and guidelines was to provide uniformity among the federal and state jurisdictions enforcing the NPDES program and prevent the “Tragedy of the Commons” that might result if jurisdictions can compete for industry and development by providing more liberal limitations than their neighboring states.¹⁵⁵

Soon, however, Congress began to focus on environmental damage as an externality imposed not just by states, but also by commercial entities. Recognizing that the decision to pollute in the first place was also a problem of externalities, Congress crafted legislation that imposed economic penalties on pollution, thus requiring polluters either to avoid producing pollution or to internalize its costs.¹⁵⁶

While theories about markets, commons, and externalities have been incorporated into environmental law and have spawned a rich body of literature about environmental law and policy, this Note is concerned only with the fundamental predicate of these theories: that when individuals and businesses decide to engage in a particular activity, the private costs and

152. H.R. REP. NO. 91-378, at 3 (1969), *reprinted in* 1969 U.S.C.C.A.N. 2751, 2753.

153. See Robert F. Blomquist, “*Clean New World*”: *Toward an Intellectual History of American Environmental Law, 1961-1990*, 25 VAL. U. L. REV. 1, 25 (1990).

154. See Daniel C. Esty, *Revitalizing Environmental Federalism*, 95 MICH. L. REV. 570, 601 (1996).

155. *Natural Res. Def. Council, Inc. v. Costle*, 568 F.2d 1369, 1378 (D.C. Cir. 1977).

156. Blomquist, *supra* note 153, at 25. Both the Clean Air Act and the Clean Water Act now contain provisions mandating pollution penalties. See *id.* at 25-26 (describing section 120 of the Clean Air Act and section 309 of the Clean Water Act as “the intellectual offspring of Hardin’s idea for preventing ‘the tragedy of the commons’”).

benefits of that activity may differ from the public costs and benefits.¹⁵⁷ In this situation, the invisible hand of the market fails to align individual self-interest with broader social interests, and the government may need to intervene to ensure public welfare.¹⁵⁸ The intervention could take a variety of forms—command-and-control regulation, permit systems, incentive programs, pollution taxes, or compensation for victims of pollution.¹⁵⁹ Or the government could decide that the costs of intervention are greater than the costs imposed by the negative externality and that therefore the best course of action is no action at all.¹⁶⁰ Which response is best is a policy question, but in our system of enumerated powers, the authority of the federal government to respond at all is a legal question.

Under current Commerce Clause jurisprudence, the answer to that legal question depends in part on whether the government is regulating economic activity. As the above discussion indicates, in a free-market system, there are many circumstances in which people profit by measuring the environmental costs of their activities in terms of individual cost rather than social cost. This cost asymmetry is a market failure, and congressional action to address the market failure should be understood as regulation of economic activity.

B. Doctrinal Support for a Market Failure Analysis

The proposed market failure approach fits within the Court's new Commerce Clause doctrine by offering a way to determine whether a statute is economic in nature. The market failure approach is compatible with *Lopez* and *Morrison*, in which the Court provided little guidance about how to determine whether a statute regulates economic activity.¹⁶¹ Furthermore, while it would

157. LAW AND THE ENVIRONMENT, *supra* note 134, at 33 (“Environmental problems occur because individuals using the commons do not bear the full social costs of their actions.”).

158. See, e.g., *id.* (“Economics provides strong support for some form of collective action to correct market failures and to provide public goods like environmental protection.”); Esty, *supra* note 134, at 1503 (“Where, however, private costs, which are the basis for market decisions, deviate from social ones, market failures occur, resulting in allocative inefficiency in general and suboptimal resource consumption or pollution levels in particular.”).

159. See, e.g., Engel, *supra* note 143, at 254-57 (identifying marketable permits, government subsidies, and pollution taxes as three incentive-based responses to environmental harm).

160. See, e.g., Carol M. Rose, *Rethinking Environmental Controls: Management Strategies for Common Resources*, 1991 DUKE L.J. 1, 37-38 (“Management of ‘commons’ resources is always expensive and . . . it may not be worth the effort to adopt a management system for some given commons resource . . .”).

161. *United States v. Morrison*, 529 U.S. 598, 613 (2000) (“Gender-motivated crimes of violence are not, in any sense of the phrase, economic.”); *United States v. Lopez*, 514 U.S. 549, 566

expand *Raich's* proposed definition of economics,¹⁶² this approach shares with *Raich* the conviction that economic activity should be understood with reference to markets. In *Raich*, the Court attempted to understand economic activity with reference to commodities that have market value. The market failure approach widens the frame of analysis and looks at the decision-making processes that lead to the ultimate manner in which commodities are produced, distributed, and consumed. Because the market failure analysis is concerned with the moment of decision, rather than the end result of a decision, it is cognizant of goods and services whose value is not fully reflected by the market. However, the underlying inquiry is the same—the market failure analysis, like the commodity-based analysis, is concerned with determining whether an activity affects the way that a market functions.

At root, the market failure approach depends on the premise that Congress can use its Commerce Clause authority to regulate market functioning. Doctrinal support for this premise is available from two lines of cases. First, a variety of Commerce Clause cases have upheld statutes that regulated markets in response to market failures. Second, dormant Commerce Clause cases suggest that a key function of the Commerce Clause is to maintain smoothly functioning national markets and thereby prevent the market failures that result from state acts of economic protectionism. While neither line of jurisprudence directly establishes that statutes responding to market failures are sufficiently “economic” to fall within the Commerce Clause powers, taken together they provide substantial indirect support for this proposition.

Of all Commerce Clause legislation, the Sherman Antitrust Act is perhaps the clearest example of market failure regulation. The Sherman Act regulates monopolies, which often occur when commercial actors seek to increase their profits by establishing exclusive control over a market.¹⁶³ Monopolies eliminate the pressure for competitive pricing and harm consumers through higher prices. The legislative history of the Sherman Act does not identify the specific harms Congress sought to address, and Congress’s intent in passing the Act is

(1995) (“[A] determination whether an intrastate activity is commercial or noncommercial may in some cases result in legal uncertainty.”).

162. *Gonzales v. Raich*, 545 U.S. 1, 25 (2005) (defining economics as “the production, distribution, and consumption of commodities” (citing WEBSTER’S THIRD NEW INTERNATIONAL DICTIONARY 720 (1966))).
163. The Sherman Act makes it a felony for any person to “monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations.” 15 U.S.C. § 2 (2000).

a topic of debate.¹⁶⁴ However, a dominant strain of antitrust scholarship treats the Sherman Act as a response to the inefficiencies created by monopolies.¹⁶⁵ The Supreme Court has endorsed this approach in antitrust cases,¹⁶⁶ supporting the proposition that the best way to understand the Sherman Act is as market failure legislation. While the Sherman Act was designed to regulate monopolies that were perceived to be beyond the power of the states to control,¹⁶⁷ the Act was soon applied to intrastate monopolies as well. In response to early Commerce Clause challenges to the Sherman Act, the Court upheld the application of the Act to local stock trades that would eliminate competition between railroad companies¹⁶⁸ and to a purely intrastate monopoly.¹⁶⁹ Because these challenges to the Sherman Act did not allege that the Act failed to regulate economic activity, the Court's holdings do not establish conclusively that market failure regulation constitutes economic regulation. However, they do confirm that the Commerce Clause gives Congress the power to regulate at least some market failures.

Other cases support the application of the market failure approach to legislation that extends beyond purely economic areas. For instance, in *United States v. Darby*¹⁷⁰ the Court considered a challenge to the Fair Labor Standards

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164. See, e.g., HERBERT HOVENKAMP, *FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE* 49 (3d ed. 2005) (explaining that the specific legislative intent of the Sherman Act is a topic of dispute and has been variously identified as achieving neoclassical economic efficiency, endorsing general notions of justice, preventing wealth transfers from consumers to monopolists, or responding to small business special interests); Peter James Kolovos, Note, *Antitrust Law and Nonprofit Organizations: The Law School Accreditation Case*, 71 N.Y.U. L. REV. 689, 696 (1996) ("There is no consensus position regarding what policy, or combination of policies, Congress intended the Sherman Act to implement. The legislative history of the Sherman Act suggests that Congress had a number of goals in mind when adopting the Act . . .").
165. See Malcolm B. Coate & Jeffrey H. Fischer, *Can Post-Chicago Economics Survive Daubert?*, 34 AKRON L. REV. 795, 807 (2001); Robert H. Lande, *Wealth Transfers as the Original and Primary Concern of Antitrust: The Efficiency Interpretation Challenged*, 34 HASTINGS L.J. 65, 83-86 (1982); Christopher R. Leslie, Comment, *Achieving Efficiency Through Collusion: A Market Failure Defense to Horizontal Price-Fixing*, 81 CAL. L. REV. 243, 250 (1993).
166. See, e.g., *Reiter v. Sonotone Corp.*, 442 U.S. 330, 342 (1979) ("The essence of the antitrust laws is to ensure fair price competition in an open market.").
167. Bruce Johnsen & Moin A. Yahya, *The Evolution of Sherman Act Jurisdiction: A Roadmap for Competitive Federalism*, 7 U. PA. J. CONST. L. 403, 406 (2004) (citing Andrew I. Gavil, *Reconstructing the Jurisdictional Foundation of Antitrust Federalism*, 61 GEO. WASH. L. REV. 657, 658-59, 660 & n.9, 689, 690 & n.147, 691 (1993)).
168. *N. Sec. Co. v. United States*, 193 U.S. 197 (1903).
169. *Swift & Co. v. United States*, 196 U.S. 375 (1905).
170. 312 U.S. 100 (1941).

Act (FLSA), which regulated working conditions.¹⁷¹ The Court held that even though the FLSA regulated manufacturing activities, these activities had a substantial effect on interstate commerce because a failure to comply with specified labor standards could give companies a competitive advantage in interstate commerce.¹⁷² Decades later, in *Maryland v. Wirtz*,¹⁷³ the Court used similar reasoning to uphold the 1961 amendments to the FLSA.¹⁷⁴ The 1938 Act applied to individual employees who were engaged in commerce, and in the new amendments Congress adopted an “enterprise concept” to extend the Act to cover any employees who worked for an enterprise engaged in commerce. The Court observed that this competitive advantage could exist regardless of whether or not the employees themselves were personally engaged in commerce.¹⁷⁵ The race-to-the-bottom reasoning evident in both *Darby* and *Wirtz* speaks to the same policy concerns as the market failure approach and can be understood as a variation of that approach. In market failure terminology, Congress could have enacted the FLSA because it was concerned that individual employers would seek to maximize their profits by maintaining poor working standards, although the net result of these standards would be harmful and costly to society at large.

In contrast to these Commerce Clause cases, which concerned federal statutes, dormant Commerce Clause cases review state legislation. The dormant Commerce Clause, which is derived from the Commerce Clause, prohibits states from erecting barriers to free trade that discriminate against out-of-state businesses. These barriers are per se invalid when they are facially discriminatory, and they are subject to a balancing test when they are enacted to further legitimate local interests and burden interstate commerce only incidentally.¹⁷⁶ For example, the Supreme Court recently invalidated state laws that permitted shipments of wine from in-state suppliers but restricted the ability of out-of-state suppliers to make similar shipments, noting that “[s]tates may not enact laws that burden out-of-state producers or shippers

171. 29 U.S.C. § 201 (2000).

172. *Darby*, 312 U.S. at 122.

173. 392 U.S. 183 (1968), *overruled by* *Nat’l League of Cities v. Usery*, 426 U.S. 833 (1976), *overruled by* *Garcia v. San Antonio Metro. Transit Auth.*, 469 U.S. 528 (1985).

174. *Id.* at 188. As an alternative holding, the Court read *NLRB v. Jones & Laughlin Steel Corp.*, 301 U.S. 1 (1937), to indicate that the potential effects of labor unrest on the channels of interstate commerce supported upholding the amendments to the Act. *Wirtz*, 392 U.S. at 191-92.

175. *Wirtz*, 392 U.S. at 190.

176. *See City of Philadelphia v. New Jersey*, 437 U.S. 617, 624 (1978).

simply to give a competitive advantage to in-state businesses.”¹⁷⁷ In its concern with preserving fair competition and nationwide markets, “the Supreme Court’s dormant commerce clause jurisprudence might be said to embrace a pro-competition stance, consistent with the ideology and goals of the neoclassical economics framework, in which law sees its primary role as intervening to correct for market failure.”¹⁷⁸ Thus, while dormant Commerce Clause cases do not speak directly to the constitutional limits on congressional powers, they do suggest that market failures are an appropriate subject of congressional regulation.

In sum, the idea that Congress can regulate certain market failures has been a background principle in cases decided during all eras of Commerce Clause jurisprudence. Using this principle to guide the “economic” inquiry maintains the *Lopez* framework for examining substantial effects, and it builds on existing Commerce Clause precedent.

C. *Defending the Market Failure Approach*

The market failure approach is consistent with background principles of Commerce Clause analysis, but if it is to sustain environmental statutes in the courts it must also conform to the requirements of *Lopez*, *Morrison*, and *Raich*. In this regard, the primary conceptual challenge to the market failure approach is identifying a limiting principle. As economic theories have colonized diverse realms of legal analysis,¹⁷⁹ scholars have used market principles to explain an increasingly broad set of legal issues.¹⁸⁰ This development threatens to render the market failure approach meaningless by suggesting that anything valued in a market system is economic and that anything not valued is an externality indicating a market failure.

177. *Granholm v. Heald*, 544 U.S. 460, 472 (2005).

178. Jim Rossi, *Political Bargaining and Judicial Intervention in Constitutional and Antitrust Federalism*, 83 WASH. U. L.Q. 521, 533 (2005); see also Richard A. Posner, *The Constitution as an Economic Document*, 56 GEO. WASH. L. REV. 4, 17 (1987) (observing that “interstate competition is not perfect” and identifying the dormant Commerce Clause as a constitutional provision with “an implicit economic logic”). Rossi argues that the dormant Commerce Clause should be understood as a response to political as well as economic market failures. See Rossi, *supra*, at 535-36.

179. See COOTER & ULEN, *supra* note 137, at 3 (“Like the rabbit in Australia, economics found a vacant niche in the ‘intellectual ecology’ of the law and rapidly filled it.”).

180. See Bush, *supra* note 127, at 1108 (“[T]he appeal of economics’ logical neatness and general theories has led to its increasing prominence in law . . .” (footnote omitted)).

However, the above concern is particular to the broad market failure approach. In contrast, the narrower approach maintains the link between market failures and interstate commerce by looking for market failures that take place in the context of “an established . . . interstate market.”¹⁸¹ Thus, the narrower approach requires not only that there be a market failure, but also that the market failure be traced to the economic decisions of commercial actors. Under the narrow market failure approach, when there is evidence that commercial actors engage in economic calculations in a way that undervalues the social cost of their activities, Congress should be able to regulate that behavior.

Perhaps the most useful test of the market failure approach is to apply it to the facts of *Lopez* and *Morrison*. As discussed in Section I.C, a fundamental problem with most of the circuit court cases upholding environmental statutes is that their logic would also uphold the statutes invalidated in *Lopez* and *Morrison*. In contrast, the narrow market failure approach offers a way to distinguish environmental statutes from the GFSZA and VAWA. Like environmental statutes, these statutes were arguably concerned with social cost, and the crimes they sought to prevent can be understood as market failures.¹⁸² Much of the social cost of environmental damage, however, results from commercial actors’ failure to account for environmental costs in their pursuit of profit. In contrast, there is no indication that Congress understood the problem of gun violence as resulting from commercial actors’ failure to value either guns or the victims of gun violence. Similarly, VAWA did not treat gender-motivated violence as a problem caused by profit-seeking behavior.¹⁸³ Of these three kinds of regulation, only environmental regulation is commonly understood as addressing a problem caused in large part by the profit-seeking activities of commercial actors.¹⁸⁴

181. *Gonzales v. Raich*, 545 U.S. 1, 26 (2005).

182. See, e.g., Richard A. Posner, *Economics, Politics, and the Reading of Statutes and the Constitution*, 49 U. CHI. L. REV. 263, 265 (1982) (describing the public interest theory of legislation as conceiving “both the ideal and the actual function of legislation to be to increase economic welfare by correcting market failures such as crime and pollution”).

183. To the contrary, Congress was focused on establishing the economic *effects* of violence against women, and the legislative history of the Act suggests that Congress was concerned that these economic effects were not recognized at all, not that they were inappropriately valued.

184. Of course, neither the GFSZA nor VAWA was analyzed under the market failure approach. It is possible to describe the statutes as a response to market failures, and a court employing highly deferential rational basis review and applying the broad market failure analysis could have upheld them under this theory.

One way to understand the distinction between environmental statutes and the criminal statutes invalidated in *Lopez* and *Morrison* is by considering the particular types of market failures at issue. The market failure associated with crime can be understood as a problem of public goods. Public safety, like national defense, is best understood as a nonrival and nonexclusive good. In theory, people can benefit from public safety services without indicating their willingness to pay, and one person's use of these services does not necessarily make them less available for another person. Thus, while gun possession in a school zone or gender-motivated crimes may represent market failures, they are not market failures that can be traced to commercial actors. In contrast, while some environmental problems can be explained in terms of public goods, most environmental regulation is targeted at the aspects of environmental damage that result from commercial actors' failure to internalize externalities or their tendency to overuse the commons.

In sum, the Commerce Clause authority over economic activity should be understood to give Congress the authority to address market failures. However, this authority is still limited by the other requirements of the Supreme Court's new Commerce Clause framework. The market failure approach is only useful in determining whether a statute regulates economic activity. For that statute to be held constitutional, a court would still need to consider the other *Lopez* factors and make a subsequent decision about whether the regulated activity substantially affects interstate commerce. The following Section explores the application of the market failure analysis within the larger *Lopez* framework.

D. Evaluating the Endangered Species Act as a Response to Market Failures

The most persuasive attacks on the Endangered Species Act have been made by private developers asserting that Congress does not have the constitutional authority to regulate intrastate activities that threaten noncommercial species.¹⁸⁵ These cases present as-applied challenges to section 9 of the ESA, which prohibits "any person" from "taking" a species that is listed as threatened or endangered;¹⁸⁶ action that modifies or degrades critical habitat for a listed species is understood to harm that species and therefore

185. See, e.g., *GDF Realty Invs., Ltd. v. Norton*, 326 F.3d 622 (5th Cir. 2003); *Rancho Viejo, LLC v. Norton*, 323 F.3d 1062 (D.C. Cir. 2003); *Nat'l Ass'n of Home Builders v. Babbitt*, 130 F.3d 1041 (D.C. Cir. 1997).

186. 16 U.S.C. § 1532(19) (2000).

constitutes a take.¹⁸⁷ This is why development activity is the source of so many ESA challenges—the process of developing land triggers the ESA if it jeopardizes a species’s survival by destroying its habitat. As discussed in Section I.C, although the circuit courts have upheld the ESA in the face of these attacks, they have not been able to articulate a convincing rationale for their decisions. This Section demonstrates how the market failure approach would give courts a more logically coherent and doctrinally faithful way to uphold these applications of the ESA.

A court hearing such a challenge would begin with *Lopez*’s three-pronged test. This type of challenge is about purely intrastate activity that does not implicate the channels or instrumentalities of interstate commerce. A court would consider the challenge under the third prong of *Lopez* and ask whether the regulation was within congressional “power to regulate activities that substantially affect interstate commerce.”¹⁸⁸ Following *Lopez*, a court should make this determination by considering the four factors discussed earlier: the economic nature of the regulated activity, the presence of a jurisdictional hook, the legislative history of the statute, and the degree of attenuation between the activity and interstate commerce.¹⁸⁹

Because the ESA is a comprehensive regulatory scheme,¹⁹⁰ the economic inquiry should be directed at the larger class of activity regulated by the ESA, rather than any particular application of the challenged statute.¹⁹¹ Thus, an initial task of the Commerce Clause analysis is to identify the class of activity regulated by the ESA. In *Raich*, the Court characterized the Controlled Substances Act as regulating the activities involved in producing, distributing, and consuming commodities traded in an interstate market.¹⁹² At a similar level of generality, the ESA might be described as regulating the pursuit of economic growth that disregards the national value of threatened and endangered species.¹⁹³

187. *Babbitt v. Sweet Home Chapter of Cmty. for a Great Or.*, 515 U.S. 687 (1995); see *supra* notes 26-28 and accompanying text.

188. *Gonzales v. Raich*, 545 U.S. 1, 17 (2005).

189. *United States v. Lopez*, 514 U.S. 549, 559-67 (1995).

190. See, e.g., *GDF Realty*, 326 F.3d at 639; *Gibbs v. Babbitt*, 214 F.3d 483, 487 (4th Cir. 2000); *Blumm & Kimbrell*, *supra* note 65.

191. See *Raich*, 545 U.S. at 17.

192. *Id.* at 26.

193. See Endangered Species Act of 1973 § 2(a)(3), 16 U.S.C. § 1531(a)(3) (2000) (finding that threatened and endangered “species of fish, wildlife, and plants are of esthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people”).

While the comprehensive scheme approach helps identify the relevant activity, a court would still need to determine whether there is a rational basis for finding that this class of activity substantially affects interstate commerce. This is the point at which a court would undertake the economic inquiry and at which the market failure analysis becomes relevant. Under the narrow market failure approach, a court should find that a statute regulates economic activity if the statute corrects a market failure by regulating the behavior of commercial actors in the marketplace.

The ESA would survive this inquiry. Congress enacted the ESA in response to findings that the extinction of particular species was due to economic growth without regard to conservation.¹⁹⁴ The market failure described by these findings is the divergence between the social costs and individual costs of economic growth—Congress found that commercial actors placed too little value on endangered species.¹⁹⁵ This market failure can be explained as a problem of externalities. A developer whose activity eliminates a particular species receives all of the profit of the development but bears only a fraction of the social cost of eliminating the species. The remaining cost is an externality that is imposed on society at large. The ESA internalizes this externality by mandating that commercial actors increase the value that they place on listed species. Thus, the precise economic activity regulated by the ESA is the cost-benefit analysis in which developers assign to species loss a lower value than that assigned to it by society at large.

The economic inquiry is the primary obstacle to sustaining the ESA as constitutional Commerce Clause legislation. After using the market failure approach to determine that the ESA regulates economic activity, a court would have little difficulty concluding that the regulated activity “substantially affects” interstate commerce. Although the ESA does not contain a jurisdictional hook, the legislative history links environmental protection with economic activity in a way that supports finding that a substantial effect exists.¹⁹⁶ More importantly, the aggregate effects of changing commercial actors’ cost-benefit analyses would be expected to have a substantial impact on interstate commerce.¹⁹⁷

194. *Id.* § 2(a)(1).

195. See Shogren & Hayward, *supra* note 29, at 532 (“The Endangered Species Act (ESA) was enacted in 1973 to correct for the market failure associated with the unpriced social benefits of species and their habitats.”).

196. See *supra* notes 17–18.

197. See *United States v. Olin Corp.*, 107 F.3d 1506, 1511 (11th Cir. 1997) (upholding CERCLA as applied as valid Commerce Clause legislation because the defendant’s conduct had a substantial effect on interstate commerce). In that case, the Eleventh Circuit found that on-

In cases involving developers and other commercial actors, the above analysis would be sufficient to establish congressional authority to regulate their activity. However, the market failure approach could also be combined with the comprehensive scheme analysis to uphold the ESA in response to a challenge involving noncommercial actors. While it is important that Congress have a rational basis for expecting the statute to change commercial actors' market behavior, it is not necessary that it regulate *only* commercial actors.¹⁹⁸ If commercial actors were prevented from taking endangered species but private actors were not, there would be immense pressure for individual landowners to "shoot, shovel and shut up,"¹⁹⁹ in the hope that this would make their land more attractive to developers. In order to make regulation of governmental and commercial actors effective, Congress might well have thought it needed to regulate more broadly to prevent noncommercial species takes from undermining the regulatory goal.²⁰⁰ As a historical matter, the legislative history of the ESA shows that the need for comprehensive legislation was in fact one of the key reasons that Congress enacted the statute.²⁰¹

Ultimately, then, the market failure analysis supports upholding the ESA as constitutionally permissible Commerce Clause legislation. This approach explains how the ESA is economic regulation, and, in combination with the comprehensive scheme analysis applied in *Raich*, it supports upholding the statute as applied to both commercial and noncommercial actors.

site waste disposal was an economic activity because "to the extent a chemical plant can dispose of its waste on-site free of regulation, it would have a market advantage over chemical companies that lack on-site disposal options." *Id.* The court explained that the aggregate effects of this kind of market advantage could lead to a substantial effect on interstate commerce by altering "economic conditions in the chemical industry." *Id.* at 1511 n.11.

198. Statutes may have multiple purposes, and the source of congressional power need not perfectly map onto the ultimate goals of a statute. *See, e.g.,* Heart of Atlanta Motel, Inc. v. United States, 379 U.S. 241, 250 (1964) (upholding Title II of the Civil Rights Act of 1964 as constitutional Commerce Clause legislation even though the "fundamental object of Title II was to vindicate 'the deprivation of personal dignity that surely accompanies denials of equal access to public establishments'" (quoting S. REP. NO. 872, at 16-17 (1964))).

199. Mark Sagoff, *Muddle or Muddle Through?: Takings Jurisprudence Meets the Endangered Species Act*, 38 WM. & MARY L. REV. 825, 826 (1997).

200. As the Court noted in *Raich*, the congressional judgment that a significant exemption "would undermine the orderly enforcement of the entire regulatory scheme is entitled to a strong presumption of validity." *Gonzales v. Raich*, 545 U.S. 1, 28 (2005).

201. *See, e.g.,* LEGISLATIVE HISTORY, *supra* note 17, at 146.

CONCLUSION

This Note has introduced a new way to evaluate the constitutional basis of Commerce Clause legislation. The proposed market failure approach suggests that statutes responding to market failures should be understood as economic regulation. This approach is intended to supplement the Court's recent definition of economics as "the production, distribution, and consumption of commodities."²⁰² Sometimes regulated activity will have a direct effect on commodities, and a commodity-based inquiry will be the most sensible way to identify effects on the market. In other circumstances, though, regulated activity will affect less visible aspects of commercial enterprises, and it will be more difficult to link an activity with its effect on a particular commodity. In these circumstances, the market failure approach provides an alternative perspective from which to evaluate the economic character of challenged regulation.

This Note has developed the market failure approach by drawing on the insights of environmental economics to explain how environmental regulation is economic in nature. However, the proposed approach could also be used to evaluate the economic basis of other types of regulation.²⁰³ Ultimately, the market failure approach is offered not merely as a tool for upholding environmental statutes but as a way that courts can work within the Supreme Court's new analytic framework to make the economic inquiry both more flexible and more meaningful.

202. *Raich*, 545 U.S. at 25 (citing WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY 720 (1966)).

203. For instance, discrimination may be a market failure, see Susan Schwochau & Peter David Blanck, *The Economics of the Americans with Disabilities Act, Part III: Does the ADA Disable the Disabled?*, 21 BERKELEY J. EMP. & LAB. L. 271, 274-75 (2000), insofar as it represents an affront to the rationality of the marketplace or an information imbalance that leads commercial actors to undervalue the labor or the spending power of disfavored groups, see Michael Ashley Stein, *The Law and Economics of Disability Accommodations*, 53 DUKE L.J. 79, 152 (2003). Thus, civil rights statutes could be understood as a response to market failures, and they might be amenable to the proposed approach. See Richard H. McAdams, *Cooperation and Conflict: The Economics of Group Status Production and Race Discrimination*, 108 HARV. L. REV. 1003, 1074-82 (1995) (proposing a model that views antidiscrimination laws as potentially correcting a market failure).