

Average Reciprocity of Advantage: “Magic Words” or Economic Reality—Lessons from *Palazzolo*

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I. Average Reciprocity of Advantage Is a Legal Term of Art Without a Settled Definition

“AVERAGE RECIPROCITY OF ADVANTAGE” (ARA) is a legal term of art without a settled definition,¹ a phrase even more vexing to regulatory takings than the *Penn Central* test.² ARA means nothing outside the narrow confines of land use law. Even within the practice of land use law, Supreme Court and lower court decisions have obscured rather than clarified the concept. Law journal articles mostly gloss over the phrase; only a handful of articles deal with ARA in depth and only one of these

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1. Something of an oxymoron, as a “term of art” is a word or phrase that has a precise meaning in a particular subject area. *BLACK’S LAW DICTIONARY* 1511 (8th ed. 2004).

2. *See Lingle v. Chevron U.S.A., Inc.*, 544 U.S. 528, 539 (2005) (“The *Penn Central* factors—though each has given rise to vexing subsidiary questions—have served as the principal guidelines for resolving regulatory takings claims that do not fall within the physical takings or *Lucas* rules.”).

is not polemic.³ Without a settled meaning for ARA,⁴ the contention of some legal scholars that ARA “justifies a law of regulatory takings that is confined to truly extreme cases”⁵ has no substantive support. This article will investigate whether average reciprocity of advantage is accurately described by Gideon Kanner as a “triumph of ‘magic words’ over economic reality.”⁶

A. *Cases Contain Opposing Descriptions of What the Phrase Means*

The phrase has been interpreted narrowly, following *Florida Rock IV*’s “reciprocity of advantage test” as labeled by the Alaska Supreme Court,⁷ and broadly following Justice Brennan’s application of Justice Brandeis’ dissent in *Pennsylvania Coal* cited, for example, in *Andrus v. Allard*, as “a burden borne to secure ‘the advantage of living and doing business in a civilized community.’”⁸ Practitioners of regulatory takings law struggle to divine the meaning of the two interpretations. Inconsistent applications of average reciprocity of advantage within takings jurisprudence reveal the usefulness of a fresh look at what each version might mean and how each might relate to evidence presented at trial and its evaluation.

B. *Benefits of Economic Insight about Average Reciprocity of Advantage*

Average reciprocity of advantage will benefit from economic insight because ultimately the phrase calls for an evaluation of the benefits and

3. Articles representing the polar extremes of disinterested scholarship and polemic discourse, discussed *infra*, are Lynda J. Oswald, *The Role of the “Harm/Benefit” and “Average Reciprocity of Advantage” Rules in a Comprehensive Takings Analysis*, 50 VAND. L. REV. 1449, 1489 (1997), and Andrew W. Schwartz, *Reciprocity of Advantage: The Antidote to the Antidemocratic Trend in Regulatory Takings*, 22 UCLA J. ENVTL. L. & POL’Y 1 (2004).

4. See generally John E. Fee, *The Takings Clause as a Comparative Right*, 76 S. CAL. L. REV. 1003, 1058 & nn.227–30 (2003) (reaching the same conclusion).

5. John D. Echeverria, *A Turning of the Tide: The Tahoe-Sierra Regulatory Takings Decision*, 32 ENVTL. L. REP. 11235, 11249 (2002), available at http://www.law.georgetown.edu/gelpl/current_research/documents/RT_pubs_Law_ELRTahoesierra.pdf. See also Schwartz, *supra* note 3, at 61 (viewing *Tahoe-Sierra* as a harbinger of “wider reliance on reciprocity of advantage in takings cases.”).

6. Gideon Kanner, *The Lie That the Regulated Benefit*, NAT’L L.J., Apr. 29, 1996, at A17 (“[N]ext time you come across a brief or court opinion going on about ‘average reciprocity of advantage,’ check the context carefully. Chances are that what lurks behind it is a situation neither average, nor reciprocal, nor of advantage to the landowner on the short end of the regulation. . . . [I]t is more likely a triumph of ‘magic words’ over economic reality.”) (emphasis added). As Oscar Wilde said to the painter James Whistler after some *bon mot*, “I wish I had said that.” To which, Whistler responded, “I’m sure you will.” So, thanks to Mr. Kanner for the title.

7. *R & Y, Inc. v. Mun. of Anchorage*, 34 P.3d 289, 299 (Alaska 2001).

8. *Andrus v. Allard*, 444 U.S. 51, 67 (1979) (quoting *Pennsylvania Coal v. Mahon*, 260 U.S. 393, 422 (1922) (Brandeis, J., dissenting)).

burdens of a particular regulation. The context of the phrase involves trade-offs in either of its applications in case decisions from *Plymouth Coal Co.*⁹ to *Lingle*¹⁰ and *Brace*.¹¹ What better discipline than economics to evaluate the efficiency and distribution of trade-offs? Executive Order No. 12,866 requires federal agencies to conduct an economic analysis of all proposed rules:

[I]n choosing among alternative regulatory approaches, agencies should select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity). . . . Each agency shall base its decisions on the best reasonably obtainable scientific, technical, economic, and other information concerning the need for, and consequences of, the intended regulation.¹²

The Office of Management and Budget (OMB) even issued a guidance document explaining how to conduct the required economic analysis of proposed regulations.¹³ Is it too much to expect that the Supreme Court could explain what average reciprocity of advantage actually means? In the absence of Supreme Court guidance, recent decisions in the Court of Federal Claims have staked out opposing interpretations of average reciprocity of advantage, which have then been cited in state courts to reach a conclusion.¹⁴

With millions of dollars and people's plans and aspirations at stake, courts should rely on available hard economic evidence of regulatory

9. *Plymouth Coal Co. v. Pennsylvania*, 232 U.S. 531 (1914).

10. *Lingle v. Chevron U.S.A., Inc.*, 544 U.S. 528, 537–38 (2005). The decision says nothing about ARA per se but affirms that “the *Penn Central* inquiry turns in large part, albeit not exclusively, upon the magnitude of a regulation’s economic impact and the degree to which it interferes with legitimate property interests.” *Id.* at 539. Just when the Federal Claims Court has figured out how to evaluate interference with distinct or reasonable investment backed expectations, see *Florida Rock Indus. v. United States (Florida Rock V)*, 45 Fed. Cl. 21 (1999), the Supreme Court had to invent another obscure phrase, “interference with legitimate property interests.” This brings to mind “Dwight Merriam’s immortal dictum that when the Supreme Court coins a new term in the landuse field, that means that landuse lawyers will be buying new cars in the next three years.” Gideon Kanner, *Making Laws and Sausages: A Quarter-Century Retrospective on Penn Central Transportation Co. v. City of New York*, 13 WM. & MARY BILL RTS. J. 679, 768 (2005).

11. *Brace v. United States*, 72 Fed. Cl. 337 (2006) (relying on the broad version of reciprocity although the decision hinges on the facts of the case largely related to experts’ opposing theories of valuation). The decision never uses the term “reciprocity of advantage,” but echoes the *Andrus/Kirby Forest* language about the general advantages of living in a civilized society. *Id.* at 356.

12. Exec. Order No. 12,866.1.b, 58 Fed. Reg. 51,735 (Oct. 4, 1993).

13. OFFICE OF MANAGEMENT AND BUDGET, ECONOMIC ANALYSIS OF FEDERAL REGULATIONS UNDER EXECUTIVE ORDER 12,866, 1 (Jan. 11, 1996), available at <http://www.whitehouse.gov/omb/inforeg/riaguide.html>.

14. See generally *R & Y, Inc. v. Mun. of Anchorage*, 34 P.3d 289, 298 (Alaska 2001) (citing *Florida Rock Indus. v. United States (Florida Rock IV)*, 18 F.3d 1560 (D.C. Cir. 1994), on remand 45 Fed. Cl. 21 (1999) (*Florida Rock V*)); *K & K V*, 705 N.W.2d at 384 (citing *Walcek v. United States*, 49 Fed. Cl. 248, 270 (2001)).

benefits and burdens instead of legal argument. Estimating the distribution of the benefits and burdens of any regulatory imposition is the bailiwick of economics. Economists are qualified to estimate whether “some public program [merely adjusts] the benefits and burdens of economic life to promote the common good,”¹⁵ or disproportionately slams a selected few property owners. Hard evidence of regulatory impacts is as relevant to a court’s discerning whether reciprocal benefits govern the legal decision as benefits and costs are to state and federal agencies guided by Executive Order No. 12,866.¹⁶

C. *Palazzolo 2004 Trial Testimony Contained Economic Analysis of Average Reciprocity of Advantage*

In contrast to other reported cases invoking ARA, economic experts testified in the 2004 *Palazzolo* remand trial in Wakefield County, Rhode Island.¹⁷ Their testimony dealt with elements of the *Penn Central* test including average reciprocity of advantage. While the case was decided largely on the basis of the effect of the mean high-tide line on the size of Mr. Palazzolo’s private property and the engineering costs of developing his land above that Public Trust demarcation,¹⁸ economists on both sides of the case developed insights into and evidence of reciprocal benefits. Their testimony will be used in this article to illustrate the underlying economic principles that bear upon reciprocity in view of the state of flux of legal theories of average reciprocity.

D. *Overview of the Article*

Part II of this article provides a summary of the implications about average reciprocity of advantage from economic thought, hoping to induce the legal audience to read Parts IV and V. Part III explores different treatments of average reciprocity of advantage in case law and legal scholarship and reveals that the original meaning of the phrase in *Plymouth Coal* has been broadened in some case decisions, but not

15. *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 124 (1978).

16. John D. Echeverria, *Regulatory Takings After Brown*, 33 ENVTL. L. REP. 10626, 10629 (2003) (calling for an evaluation of the fairness of government actions under the Takings Clause to be “assessed by considering both the burdens imposed and the benefits conferred by government activity”).

17. *Palazzolo v. State*, C.A. No. WM 88-0297, 2005 WL 1645974, at *1 (R.I. Super. Ct. July 5, 2005). Dr. James Opaluch, Professor of Economics at the University of Rhode Island, testified for the state. Co-author Wade testified for Mr. Palazzolo. Both are resource economists trained and experienced in dealing with environmental values that were at issue in the case.

18. Facts of the case are discussed in Part V, *infra*.

supplanted by the emphasis on benefit values to the general public in *Penn Central* and *Keystone*.¹⁹ Part IV examines economic principles that bear upon ARA. Efficiency and equity are discussed in context with broad and narrow views of ARA. Part V discusses measurement issues with benefits and burdens that have appeared in recent takings economic literature and illustrates these issues with reference to testimony on narrow and broad reciprocity presented by opposing economists in the 2004 *Palazzolo* remand trial in Wakefield, Rhode Island. Each section has its own conclusion.

II. Summary: Economic Implications of Broad and Narrow Views of ARA

Average reciprocity of advantage is not some vague notion that over the long run, things even out. An economist can interpret average reciprocity under takings law in terms of benefits and costs, or in the language of takings law, benefits and burdens. Clearly, the claimant's burdens are at issue, or no lawsuit would exist. But whose benefits to estimate? Following the narrow test as described in *Florida Rock IV*,²⁰ the economist would evaluate reciprocity as "direct compensating benefits" of the regulation to the petitioner's remaining uses of the property.²¹ Following Justice Brennan's broad interpretation,²² the economist might evaluate reciprocity by measuring general welfare enhancement to society caused by the restriction. Either way, infusing economic rigor into ARA calculations will reduce part of the vexation with the *Penn Central* test.

An economist can evaluate average reciprocity to discover if positive externalities of the regulation, whether broadly or narrowly defined, sufficiently benefit the owner's remaining uses of the property to offset demonstrated losses. Understanding what to measure and how to evaluate the reciprocal benefits inspired by the phrase will improve legal decisions. The question for this article becomes, how do economic concepts govern narrow or broad views of ARA? Can economics provide empirical support for a compensation decision rule with either view of average reciprocity?

Economics does not support the conclusion that the benefits of living in a civilized society offset specific losses directed to property owners.

19. *Keystone Bituminous Coal Ass'n v. Debenedictis*, 480 U.S. 470, 491–92 (1987).

20. 18 F.3d at 1570–71.

21. *Id.* at 1571.

22. See *Andrus v. Allard*, 444 U.S. 51, 67 (1979) (citing *Pennsylvania Coal*, 260 U.S. at 422).

Regulatory change that denies use of the property, heretofore enhanced by civilization, requires first a showing that enforcement is economically efficient and second a determination about equity of compensation. The state is assumed to maximize social welfare as a matter of policy. The economic literature is clear that the state's nonpayment for taken property leads to inefficient underinvestment, which would not achieve maximum social welfare. For example, the chaos in the Middle East underscores the value of the "advantage of living and doing business in a civilized society." But that value cannot logically offset the cost to the individual of government takings and condemnations, because some individuals bear substantially greater costs than others while all benefit equally from civilization. The good fortune of birth into a civilized society is neither an economic theory nor a legal theory related to regulatory takings. Justice Brandeis likely did not envision creating a broad legal theory that would revamp the intent of the Fifth Amendment through a single offhand remark in his *Pennsylvania Coal* dissent.

Neither does economics support the conclusion that average reciprocity is met when a plaintiff's share of general benefits created by the regulation equals everyone else's share. Only if the benefits to the property owner could be measured and shown to offset the burdens could the economist support nonpayment based on economic theory. Generality of the regulation, therefore, is not a sufficient reason for nonpayment. Proponents of social reciprocity fail to recognize that the larger the benefit to society of the regulatory proscription, the greater the inducement for payment to the impacted few (assuming away harm prevention).

Aside from the early cases, virtually none of the legal record of average reciprocity of advantage includes any substantial evidence of relative magnitude of benefits and burdens. If the phrase is relevant to a takings determination, some specific direct evidence is required of the scientific support for and magnitude of the regulation's reciprocal benefits to the claimant. Economic practice shows that quantitative evidence of beneficial values for resources at stake in a regulatory takings lawsuit is needed to address the fundamental efficiency of prohibiting a particular development. Legal arguments and unsupported expert opinions are not a sufficient basis to evaluate and balance reciprocal benefits against specific economic impacts at stake in a case.

Equity of payment is distinct from economic efficiency of policy. Equity considers who should pay and tends to conclude that beneficiaries of regulation should bear the costs. But this is a value judgment, not an economic theory. Beyond measuring the distributional effects, economics is not well suited to evaluate fairness issues, which ultimately

are based on moral grounds. The “fairness and justice” criterion in *Armstrong v. United States*²³ would be a sufficient test in a perfect judicial system. Unfortunately, case holdings suggest that fairness is susceptible to whimsical and perhaps political considerations.

The broad view of average reciprocity invokes measurement of beneficial values to the entire community. The economic evaluations required to support the social version of average reciprocity could have transaction costs too large to realistically implement. In *Palazzolo*, the State of Rhode Island presented no empirical evidence of the societal benefits of preserving Mr. Palazzolo’s salt marsh,²⁴ likely for this very reason. Despite the large transaction cost, the calculation would provide no theoretical support for nonpayment even if the evaluation were shown to be efficient.

The narrow view of ARA is more tractable and does not preclude consideration of the environmental values that may be at stake in relation to the regulatory proscription. Two obvious economic decision rules consistent with the narrow view of ARA that align with both goals of efficiency and fairness are:

- If the regulatory proscription at issue confers beneficial services to the community with *less measurable benefit* than the cost to affected private property owners, do not enforce the regulation.
- If the proposed regulation confers beneficial services to the community with *more measurable benefit* than the cost to targeted private property owners, enact the regulation and compensate the owners for their losses.

But government could hardly continue if compensation were a “bright line” requirement. The critical fairness question in takings cases remains whether specific regulations impose such large costs on an individual or group that they clearly suffer a net loss that goes beyond what one should be willing to accept as part of living in a civilized society. This remains a judicial or political question.

III. Treatment of Average Reciprocity of Advantage 1914–2006

This section briefly reviews the development and application of average reciprocity of advantage in takings cases where the phrase has played a

23. 364 U.S. 40, 49 (1960) (recognizing that “the Fifth Amendment’s guarantee . . . [is] designed to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole”).

24. See generally *Palazzolo v. State*, C.A. No. WM 88–0297, 2005 WL 1645974 (R.I. Super. Ct. July 5, 2005); see also Part V.B. *infra*.

prominent role in the decision.²⁵ The economist in a takings case must know what the law dictates to be measurable criteria for the courts to evaluate. The case history reveals two opposing legal theories, both of which can lead to quantifiable evidence. As will be seen in Part V *infra*, this led the opposing economists to present information about two different views of average reciprocity in the *Palazzolo* remand trial. In a sense, their testimony amounted to a zig and a zag; neither rebutted the other.

A. *Justice Holmes Evaluated Reciprocal Benefits
in Two 1922 Decisions*

The notion of average reciprocity of advantage arose in *Plymouth Coal v. Pennsylvania*, wherein coal miners were required by the Anthracite Mining Act of 1891²⁶ to leave large blocks of coal in place between adjoining mines (“a common burden for the benefit of all such owners”),²⁷ to prevent tunnels from collapsing and to prevent underground water from flooding adjoining mine tunnels owned by others.²⁸ Both sides of the “pillars” clearly benefited in a concretely demonstrable reciprocal manner by protecting the safety of miners working in both mineshafts. Reciprocal benefits formed the basis of compensation for what otherwise could be a compensable regulatory taking.

Justice Holmes subsequently created the phrase “average reciprocity of advantage” in *Pennsylvania Coal v. Mahon*,²⁹ building on *Plymouth Coal*; but ARA was neither further elucidated nor had anything to do with

25. Oswald, *supra* note 3, provides in-depth discussion of cases prior to 1997. This section keys on cases subsequent to that date.

26. Anthracite Mining Act, 1891 Pa. Laws 176; *Plymouth Coal Co. v. Pennsylvania*, 232 U.S. 531, 539–40 (1914).

27. *Commonwealth v. Plymouth Coal Co.*, 81 A. 148, 149 (Pa. 1911) (quoting *Mapel v. John*, 24 S.E. 608, 611 (W. Va. 1896)).

28. *Plymouth Coal*, 232 U.S. at 540 (“Legislation requiring the owners of adjoining coal properties to cause boundary pillars of coal to be left of sufficient width to safeguard the employees of either mine in case the other should be abandoned and allowed to fill with water cannot be deemed an unreasonable exercise of the power. In effect it requires a comparatively small portion of the valuable contents of the vein to be left in place, so long as may be required for the safety of the men employed in mining upon either property.”).

29. *Pennsylvania Coal v. Mahon*, 260 U.S. 393, 415 (1922). The 1922 decision held that surface property owners explicitly did not purchase in 1878 the right to expect the coal company to support buildings and roads built above the mine. *Id.* The Kohler Act, passed forty-three years later in 1921, required protection of surface rights, but abrogated the original agreement between surface and mining rights owners. *Id.* at 412. Justice Holmes agreed with the coal company’s assertion that it could not profitably operate the mine because of the Kohler Act and concluded that the mining company’s losses went “too far.” *Id.* at 415. In contrast, *Plymouth Coal* held competent the legislature’s requirement to leave a pillar of coal along the line of adjoining property as a barrier sufficient for the “safety of the employees of either mine in case the other should be

the outcome of that case. *Plymouth Coal* was decided against the mining company on the basis of real reciprocal benefits, but *Pennsylvania Coal* was decided for the claimant on the basis of another fateful phrase that “if regulation goes too far it will be recognized as a taking.”³⁰ While ARA is remembered from the second coal case, Justice Holmes referred to ARA in another 1922 case decided two months earlier, *Jackman v. Rosenbaum Co.*³¹ *Jackman* involved maintenance of a common wall between two properties to the mutual benefit of both due to safety and the economic advantage of sharing the wall to support both buildings.³² Reciprocal benefits again carried the decision against the claimant.

Plymouth Coal and *Jackman* established average reciprocity in case law by evaluating the directly offsetting benefits and burdens of the regulatory requirement. Specific concrete benefits to the claimants were identified in both cases—mutual boundary walls that enhanced safety and provided other specific services to the property. In both cases, the burden was deemed less than the benefit of requiring the mutual walls and the rulings went against the claimant. Professor Oswald in her 1997 article generalizes these decisions into a rule: “[I]n its original form, the rule stated that a land use regulation that resulted in benefits to regulated landowners roughly equal to the burdens imposed on them did not violate the United States Constitution.”³³

B. *Justice Brandeis’ Offhand Remark Became the Basis for Subsequent Revision of Average Reciprocity of Advantage*

Justice Brandeis’ dissent in *Pennsylvania Coal* responded to the majority’s finding of no reciprocal benefits as the basis for its decision:

Reciprocity of advantage is an important consideration, and may even be essential [to avoid compensation], where the State’s power is exercised for the purpose of conferring benefits upon the property of a neighborhood. . . . But where the police power is exercised, not to confer benefits upon property owners, but to protect the public from detriment and danger [related to the use of the property], there is . . . no room for considering reciprocity of advantage . . . unless it be *the advantage of living and doing business in a civilized community*.³⁴

abandoned and allowed to fill with water.” 232 U.S. at 540. “But that was a requirement for the safety of employees invited into the mine, and secured an *average reciprocity of advantage* that has been recognized as a justification of various laws.” *Pennsylvania Coal*, 260 U.S. at 415 (emphasis added).

30. *Pennsylvania Coal*, 260 U.S. at 415. What is “too far” seems to be the root cause of most of the vexation.

31. 260 U.S. 22, 30 (1922).

32. *Id.* at 32.

33. Oswald, *supra* note 3, at 1489.

34. *Pennsylvania Coal*, 260 U.S. at 422 (Brandeis, J., dissenting) (emphasis added).

The last remark seems ironic, at best. Perhaps it was written to prod his colleagues to deeper thought.³⁵ Justice Brandeis was absolute in his opinion that the state needs no justification to exercise police power to prevent harm.³⁶ The advantage of living and doing business in a civilized community was never intended as a reciprocal benefit to tradeoff as a justification for preventing harm.

C. *Rehnquist Emphasized Reciprocal Benefits
in Dissenting from Brennan's Transformation
of Brandeis' Offhand Remark*

The phrase "average reciprocity of advantage" next appears half a century later in Justice Rehnquist's *Penn Central* dissent.³⁷ Justice Brennan's majority holding that the New York Landmarks Law was not a taking claimed that, although "[i]t is, of course, true that the Landmarks Law has a more severe impact on some landowners than on others, . . . that in itself does not mean that the law effects a 'taking.' Legislation designed to promote the general welfare commonly burdens some more than others."³⁸ Justice Rehnquist "made the lack of reciprocity the linchpin of his dissent," according to Professor Eagle.³⁹

[When] all property owners in a designated area are placed under the same restrictions, not only for the benefit of the municipality as a whole but also for the common benefit of one another[, i]n the words of Mr. Justice Holmes, speaking for the Court in *Pennsylvania Coal Co. v. Mahon*, there is an average reciprocity of advantage. Where a relatively few individual buildings, all separated from one another, are singled out and treated differently from surrounding buildings, no such reciprocity exists. The cost to the property owner, which results from the imposition of restrictions applicable only to his property and not that of his neighbors, may be substantial . . . with no comparable reciprocal benefits.⁴⁰

35. For insight into the workings of Justice Brandeis' mind, see Felix Frankfurter, *Mr. Justice Brandeis and the Constitution*, 45 HARV. L. REV. 33, 77-78 (1931):

A philosophy of intellectual humility determines Mr. Justice Brandeis' conception of the Supreme Court's function: an instinct against the tyranny of dogma and skepticism regarding the perdurance of any man's wisdom, though he be judge. No one knows better than he how slender a reed is reason – how recent its emergence in man, how powerful the countervailing instincts and passions, how treacherous the whole rational process. . . . Truth and knowledge can function and flourish only if error may freely be exposed. And error will go unchallenged if dogma, no matter how widely accepted or clearly held, may not be questioned.

Id.

36. See Judge Diarmuid F. O'Scannlain, United States Circuit Judge for the Ninth Circuit, Keynote Address at the Federalist Society Conference: Property Rights After *Tahoe* (Jan. 30, 2003), available at <http://www.fed-soc.org/Publications/Transcripts/tahoeoscannlain.pdf>.

37. *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 140 (1978) (Rehnquist, J., dissenting).

38. *Id.* at 133 (emphasis added).

39. STEVEN J. EAGLE, *REGULATORY TAKINGS* 799 (3d. ed., Michie 2005).

40. *Penn Cent.*, 438 U.S. at 140 (Rehnquist, J., dissenting).

Justice Rehnquist concluded that,

[A] multimillion dollar loss has been imposed on [Penn Central]; it is uniquely felt and is not offset by any benefits flowing from the preservation of some 400 other “landmarks” in New York City. [New York City] has imposed a substantial cost on less than one one-tenth of one percent of the buildings in New York City for the general benefit of all [of] its people. It is exactly this imposition of general costs on a few individuals at which the “taking” protection is directed.⁴¹

Rehnquist’s argument was consistent with the earlier decisions, *Plymouth Coal*, *Pennsylvania Coal*, and *Jackman*, which required reciprocity to be evaluated with direct benefits to the regulated parties. He specifically argued that reciprocity of advantage is not satisfied where the benefits flow to the general public.⁴² Direct reciprocal benefits give ARA substance and empiricism. The focus on broad benefits to the general public allows subjective results, perhaps influenced by political considerations.

Penn Central’s skewed distribution effect is yet another reason to believe that *Penn Central* initiated jurisprudence about economics with little clarity or insight about the economic issues. In addition to his opposition to the majority’s focus on benefits of the Landmarks Law to society at large, Justice Rehnquist’s dissent in *Penn Central* called attention to the Brennan majority’s lack of definition for “reasonable return” or “economically viable” language⁴³ and concluded that a rule without definitions poses “difficult conceptual and legal problems.”⁴⁴ He appears to point out politely that the majority was not schooled in the meanings of the economic terms used in their language.⁴⁵ The extensive literature on regulatory takings and *Penn Central* confirms that attorneys have struggled to divine what economic values are relevant to create a consistent, predictable *Penn Central* test.

The majority opinion’s lack of insight into its economic language within the 1978 decision, together with the skewed distributional effects

41. *Id.* at 147.

42. *Id.* at 148–49.

The benefits that appellees believe will flow from preservation of the Grand Central Terminal will accrue to all the citizens of New York City. There is no reason to believe that appellants will enjoy a substantially greater share of these benefits. If the cost of preserving Grand Central Terminal were spread evenly across the entire population of the city of New York, the burden per person would be in cents per year—a minor cost. . . . Instead, . . . appellees would impose the entire cost of several million dollars per year on Penn Central. But it is precisely this sort of discrimination that the Fifth Amendment prohibits.

Id.

43. *Id.* at 149 n.13.

44. *Id.* at 149.

45. *Id.*

of their ruling, emphasizes that the *Penn Central* decision started this body of jurisprudence off on the wrong economic foot.⁴⁶ Economics would imply that public programs to “[adjust] the benefits and burdens of economic life to promote the common good”⁴⁷ could be paid for by the public if, indeed, the burdens are concentrated on a few for the benefit of the many.⁴⁸ The *Penn Central* majority ruled otherwise:

[T]he application of New York City’s Landmarks Law has not effected a “taking” of appellants’ property. The restrictions imposed are substantially related to the promotion of the *general welfare* and not only permit reasonable beneficial use of the landmark site but also afford appellants further opportunities to enhance . . . the Terminal. . . .⁴⁹

Penn Central plunged takings law into an economic morass.

D. Brennan’s View of “Social Reciprocity” Linked to Brandeis’ Remark

Exactly why the Brennan majority adopted an expansive version of average reciprocity to key on benefits to the unaffected general public in place of measurable reciprocal benefits to the claimant is unknown.⁵⁰

46. See William Wade, *Penn Central’s Economic Failings Confounded Takings Jurisprudence*, 31 URB. LAW. 277 (1999). This article discusses problems with Justice Brennan’s law clerk’s understanding of the Frank Michelman article that has become bedrock for the “parcel as a whole” theory of the denominator. Frank I. Michelman, *Property, Utility and Fairness: Comments on the Ethical Foundations of Just Compensation Law*, 80 HARV. L. REV. 1165 (1967). Wade’s article also highlighted New York Chief Judge Breitel’s “doctrine” of legal-economic nonsense: “[P]roperty may be capable of producing a reasonable return for its owners even if it can never operate at a profit,” which might have served as the social justification for requiring *Penn Central* to maintain the facade of the Grand Central Terminal. *Penn Cent. Transp. Co. v. New York City*, 366 N.E.2d 1271, 1276 (N.Y. 1977). For more on the social underpinnings of the *Penn Central* decision (in lieu of either law or economics), see Kanner, *supra* note 10.

47. *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 123 (1978).

48. See *infra* Part IV (discussing economic principles that would govern whether government should pay compensation).

49. *Penn Cent.*, 438 U.S. at 138 (emphasis added). Given that *Penn Central* ceased to exist as a railroad in 1976 and was being operated as Conrail under federal bankruptcy protection at the time of the 1978 decision, we wonder what funds the Court imagined might be used for these further enhancements. *Penn Central* became the largest bankruptcy in United States history—the Enron of its day. Metro North, a subsidiary of New York’s MTA, took over operation of Grand Central Terminal in 1983 under a lease from *Penn Central*. Metro North described its takeover of Grand Central in 1983 as salvaging it from “the wreckage of *Penn Central*.” Telephone Interview with Marge Anders, Public Information, Metro North (Sept. 22, 1998). Ironically, Grand Central Terminal was eventually restored at public expense by the MTA. De facto, the public, not *Penn Central*, paid the cost of maintaining the façade of Grand Central. This factual outcome speaks more about the lack of economic insight in the *Penn Central* decision than thousands of words in erudite journals since.

50. Kanner’s 2005 *Penn Central* article may provide the best insight for shifting the burden back to the owners of *Penn Central* in terms of political pressures brought by city elites to preserve Grand Central and the city’s impecunious budgetary situation. See Kanner, *supra* note 10.

The property owners argued that they were “solely burdened and unbenefited by the Landmarks Law.”⁵¹ The decision rejected this argument and found “that the preservation of landmarks benefits all New York citizens and all structures, both economically and by improving the quality of life in the city as a whole . . . conclud[ing] that the owners of the Terminal have . . . benefited by the Landmarks Law.”⁵²

1. AVERAGE RECIPROCITY VIEWED AS SOCIAL RECIPROCITY

Professor Oswald characterized this thinking as a revised form of the average reciprocity of advantage rule: “If a land use regulation results in benefits to society as a whole roughly equal to the burdens imposed upon the regulated land owners, no taking has occurred.”⁵³ Oswald labels this version of ARA “social reciprocity”⁵⁴ and traces its origin to Justice Brandeis’ dissent in the *Andrus v. Allard*⁵⁵ opinion decided eighteen months after *Penn Central*.⁵⁶ Justice Brennan wrote the decision “stating that regulated property owners could not complain of a ‘burden borne to secure the advantage of living and doing business in a civilized community.’”⁵⁷ Oswald labels this application of social reciprocity:

[A] bastardization of what Justice Brandeis actually meant. . . . Nothing in his opinion indicated that he intended to imply that generalized benefits to society as a whole were sufficient to offset the burdens inflicted upon a particular property owner as a result of a[n] . . . action that conveyed benefits but did not prevent harms.⁵⁸

2. AVERAGE RECIPROCITY AS THE DUTY OF PROPERTY OWNERS FOR THE PRIVILEGE OF SOCIAL ORDER

Professor Coletta argued in 1990 for the expansive version of average reciprocity stretching Brennan’s position to conclude that the benefits to regulated individuals in their roles as citizens can be seen to offset their burdens experienced in their role as landowners, to allow the notion of

51. *Penn Cent.*, 438 U.S. at 106.

52. *Id.* at 134–35.

53. Oswald, *supra* note 3, at 1489.

54. *Id.* at 1506.

55. 444 U.S. 51, 67–68 (1979) (Brandeis, J., dissenting).

56. Oswald, *supra* note 3, at 1512.

57. *Andrus*, 444 U.S. at 67–68 (“It is true that appellees must bear the costs of these regulations. But, within limits, that is a burden borne to secure ‘the advantage of living and doing business in a civilized community.’ We hold that the simple prohibition of the sale of lawfully acquired property in this case does not effect a taking in violation of the Fifth Amendment.”) (citation omitted).

58. Oswald, *supra* note 3, at 1512–13.

regulatory takings to be much more limited.⁵⁹ The linchpin of Coletta's argument states:

Reciprocity analysis allows us to view property rights within the context of the socio-cultural milieu of our society. A system of reciprocal benefits and burdens underlies the complex ordering of the social and individual spheres. . . . Given the [cornucopia of privileges streaming to landowners from the public weal], it is reasonable to view the restrictions placed upon landowners by the state in order to preserve the public well-being as part of their duty as social participants.⁶⁰

Andrew Schwartz, discussed next, cites Professor Coletta's article in the development of his thought process.⁶¹

E. *Tahoe-Sierra and San Remo Hotel Focus on Social Benefits as the Basis for Reciprocity*

Following his victory in *San Remo Hotel*,⁶² Andrew Schwartz, attorney for the City of San Francisco, called attention to the Supreme Court's *Tahoe-Sierra*⁶³ decision and the California Supreme Court's *San Remo Hotel* decision in a 2004 article.⁶⁴ Schwartz quoted Justice Brandeis' remark out of context in the same way that the *San Remo Hotel* decision had, to argue that "Justice Brandeis concluded that reciprocity of advantage should be construed to uphold regulation that generally confers 'the advantage of living and doing business in a civilized community.'"⁶⁵ Schwartz traced the Court's expansive view of reciprocity through *Keystone*, which he labels "the Supreme Court's clearest and best-developed expression of reciprocity of advantage."⁶⁶

Schwartz sees *Tahoe-Sierra* as a harbinger of wider reliance on reciprocity of advantage in takings cases. "[The decision] suggests that

59. Raymond R. Colletta, *Reciprocity of Advantage and Regulatory Takings: Toward a New Theory of Takings Jurisprudence*, 40 AM. U.L. REV. 297, 363-66 (1990).

60. *Id.* at 363.

61. Schwartz, *supra* note 3, at 4.

62. *San Remo Hotel v. City of San Francisco*, 41 P.3d 87 (Cal. 2002). *See also* *San Remo Hotel v. City of San Francisco*, 545 U.S. 323 (2005).

63. *Tahoe-Sierra Pres. Council, Inc., v. Tahoe Reg'l Planning Agency*, 535 U.S. 302 (2002).

64. Schwartz, *supra* note 3, at 3-4.

65. *Id.* at 48; *San Remo Hotel*, 41 P.3d at 108 (citing *Pennsylvania Coal v. Mahon*, 260 U.S. 393, 422 (1922)).

66. *Id.* at 53 (citing *Keystone Bituminous Coal Ass'n v. Debenedictis*, 480 U.S. 470, 491-92 (1987)). Schwartz misstates the amount of coal required to be left in place as 50% instead of the correct amount, 2%. The misstatement enhances Mr. Schwartz's argument that leaving 50% of coal in the ground to support the surface estate was a reasonable burden to bear. The evidence within the decision shows that the Subsidence Act required 27 million tons to be left in place to support the surface. The total coal in place in the mines surveyed at 1.46 billion tons; thus, the Act only affected two percent of the coal in place, not fifty percent. The petitioner's lawyers brought this takings case with no discernable economic damages, and with only a lame response to the question about the lack of proof of damages to their clients: "[A]n assessment of the actual impact that the

courts should presume that a regulation effects an average reciprocity of advantage in most circumstances where legislative regulation is applied to a class of property owners and the regulation does not effect a categorical taking.”⁶⁷ This seems to be a variant of Professor Echeverria’s notion that:

the concept of “reciprocity of advantage,” that is, the idea that regulations often simultaneously benefit and burden affected owners . . . [and] explain why regulations that, considered in isolation, appear to seriously reduce the value of a claimant’s property may not in fact have any net adverse effect at all. It supports a law of regulatory takings that is confined to truly extreme cases.⁶⁸

1. JUSTICE REHNQUIST’S *TAHOE-SIERRA* DISSENT ESPOUSED NARROW TAKINGS JURISPRUDENCE

Schwartz espouses a new theory of takings jurisprudence based on his view of reciprocity of advantage. “Takings should accordingly be limited to those narrow cases where the claimant proves a categorical taking and the complete absence of reciprocity, not just from the regulation in question, but from the whole system of applicable economic regulations, of which the particular regulation is just a part.”⁶⁹ Direct reciprocal benefit to the owner is completely ignored. The practical effect of such a doctrine is to claim that in exchange for the privilege of living in a civilized society, citizens must tolerate whatever rules and regulations are imposed without recourse to the “fairness and justice” doctrine articulated in *Penn Central*.⁷⁰

Unless legal activists succeed in repealing the Fifth Amendment, efforts to improve assessment of “fairness and justice” in regulatory takings cases will not disappear. Other scholars and judges remain focused on a notion of balanced interpretation of “fairness and justice” that would disallow a view of reciprocal benefits stemming simply from life in a civilized community. Justice Rehnquist remained adamant

Act has on petitioners’ operations ‘will involve complex and voluminous proofs,’ which neither party [is] currently in a position to present.” *Keystone*, 480 U.S. at 493. The critical economic fact of *Keystone* was that the support coal was worth a great deal to the surface landowners, while it had little value to the miners, and no demonstrated value within the case; i.e., the present value of the last two percent of the coal was zero.

67. Schwartz, *supra* note 3, at 61.

68. John D. Echeverria, *Partial Regulatory Takings Live, But . . .*, http://www.law.georgetown.edu/gelpi/current_research/documents/RT_Pubs_Law_Tahoesierraaftermath.pdf (last visited Feb. 26, 2007).

69. Schwartz, *supra* note 3, at 64.

70. *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 123 (1978) (“[T]his Court has recognized that the ‘Fifth Amendment’s guarantee . . . [is] designed to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole.’” (quoting *Armstrong v. United States*, 364 U.S. 40, 49 (1960)).

throughout his tenure that average reciprocity is not satisfied where only the general public is advantaged.⁷¹ At the end of his 2002 dissent in *Tahoe-Sierra*, he wrote:

[A]s is the case with most governmental action that furthers the public interest, the Constitution requires that the costs and burdens be borne by the public at large, not by a few targeted citizens. Justice Holmes' admonition of 80 years ago again rings true: "We are in danger of forgetting that a strong public desire to improve the public condition is not enough to warrant achieving the desire by a shorter cut than the constitutional way of paying for the change."⁷²

2. JUSTICE BRANDEIS' SINGLE OFF-HAND REMARK IS NOT A BASIS FOR TAKINGS JURISPRUDENCE

John Fee succinctly articulates an opposing viewpoint to Mr. Schwartz:

[T]he Supreme Court [recently] has muddled the concept of reciprocity of advantage. It has sometimes applied the reciprocity concept broadly, suggesting that a regulation is not a taking if it results in benefits to society as a whole. As members of society, landowners are benefited by reasonable regulations imposed on them and others, and they therefore receive some reciprocity of advantage from all regulations. This line of reasoning, if taken seriously, would unravel the entire regulatory takings doctrine. . . .⁷³

Scholars and jurists who argue the Schwartz point of view might refresh their insight from Justice Brandeis' offhand remark. Doubtless, he did not envision that he was spawning a broad legal theory in his *Pennsylvania Coal* dissent that would revamp the intent of the Fifth Amendment.

F. Florida Rock Cases Viewed Reciprocity as "Direct Compensating Benefits"

Reciprocity surfaced as an important element in the *Florida Rock* line of cases, notably *Florida Rock IV* and *V*.⁷⁴ The Federal Circuit Court restored the narrow alignment of benefits and burdens and the Court of Federal Claims carefully analyzed reciprocal benefits and Florida Rock's burden.

71. *Tahoe-Sierra Pres. Council, Inc., v. Tahoe Reg'l Planning Agency*, 535 U.S. 302, 350 (2002) (Rehnquist, J., dissenting).

72. *Id.* at 354 (quoting *Pennsylvania Coal v. Mahon*, 260 U.S. 393, 416 (1922)).

73. Fee, *supra* note 4, at 1059.

74. *Florida Rock Industries v. United States* entered the court system twenty-two years ago over denial of a permit by the Corps of Engineers to mine ninety-eight acres of a 1,560 acre parcel of aggregate limestone purchased in 1972, before the regulatory prohibition subsequently imposed by federal law. *Florida Rock I*, 8 Cl. Ct. 160 (1985). The Court of Claims found in favor of the plaintiff. The case was reversed by the United States Court of Appeals for the Federal Circuit in 1986, in *Florida Rock II*, 791 F.2d 893 (1986); retried by Claims Court in 1990, *Florida Rock III*, 21 Cl. Ct. 161 (1990); and reversed again in 1994 by the Federal Circuit, *Florida Rock IV*, 18 F.3d 1560 (1994). Valuation testimony on remand was heard in April 1996 in *Florida Rock V*. After three years, Judge Loren Smith issued his decision on August 31, 1999, holding that compensation was due for the originally foreclosed ninety-eight acres of limestone aggregate.

1. FEDERAL CIRCUIT ESTABLISHED AN AVERAGE
RECIPROCITY OF ADVANTAGE TEST

In *Florida Rock IV*, the appeals court directed the trial court on remand to deal with reciprocity in the original sense of evaluating whether direct compensating benefits to the property offset the requirement to compensate the property owner:

When there is reciprocity of advantage, paradigmatically, in a zoning case, *e.g.*, *Euclid v. Ambler Realty Co.*, 272 U.S. 365 (1926), then the claim that the Government has taken private property has little force: the claimant has in a sense been compensated by the public program “adjusting the benefits and burdens of economic life to promote the common good.” . . . In addition, then, to a demonstration of loss of economic use to the property owner as a result of the regulatory imposition . . . the trial court must consider: are there *direct compensating benefits* accruing to the property, and others similarly situated, flowing from the regulatory environment? Or are benefits, if any, general and widely shared through the community and the society, while the costs are focused on a few? . . . In short, has the Government acted in a responsible way, limiting the constraints on property ownership to those necessary to achieve the public purpose, and not allocating to some number of individuals . . . , a burden that should be borne by all?⁷⁵

Subsequently, the Supreme Court of Alaska described this as a “reciprocity of advantage test.”⁷⁶ That decision upheld the lower court finding that because plaintiff’s economic losses were so minor, they did not overcome the benefits conferred to claimant’s remaining uses of his property by wetlands preservation. Extensive testimony in the decision deals with the measurement of and assessment that plaintiff’s losses were a very small percentage of the whole property’s value in contrast to the importance of services provided “broadly to all landowners” by wetlands protection.

2. COURT OF FEDERAL CLAIMS EXAMINED
RECIPROCAL BENEFITS OF THE REGULATION

Federal Claims Trial Judge Loren Smith wrote the watershed *Florida Rock V* decision.⁷⁷ Evaluating the evidence within the economic impact

Florida Rock V, 45 Fed. Cl. 21 (1999). On March 28, 2000, the Court of Federal Claims entered final judgment on the partial taking of the ninety-eight acre parcel for \$752,444, plus interest from October 2, 1980 plus attorney and expert costs of \$1,320,377, and urged the parties to negotiate an award related to the remaining 1,462 acres. 2000 WL 331830 (Fed. Cl. 2000). The appeal of the 1999 and 2000 decisions was dismissed by the Federal Circuit, at the request of the parties upon their reaching a settlement, September 12, 2001. No. 00-5081, 2001 WL 1173172. The federal government finally paid Florida Rock \$21 million in the fall of 2001 to settle the pending case and dispose of the claim with respect to the remaining 1,462 acres. *Florida Rock Industries, Inc. Receives Condemnation Proceeds and Announces an Agreement to Purchase Rock Quarry in Chattanooga, Tennessee*, BUSINESS WIRE (Sept. 24, 2001), available at http://www.findarticles.com/p/articles/mi_m0EIN/is_2001_Sept_24/ai_78549472.

75. *Florida Rock IV*, 18 F.3d at 1570–71 (emphasis added) (citation omitted).

76. *R & Y, Inc. v. Mun. of Anchorage*, 34 P.3d 289, 298 (Alaska 2001). For further discussion of this case see *infra* Part III.H.

77. For more information about the significance of the *Florida Rock V* decision to determination of compensable takings, see William W. Wade, “*Sophistical and*

prong of the *Penn Central* test, he specifically contrasted “diminution in value” with “reciprocity of advantage” as two parts of the economic impact prong. The decision threads its way through both the *Penn Central* language dealing with benefits to the community and the original formulation of average reciprocity, which dealt exclusively with “direct offsetting benefits” of the regulation required to avoid payment of compensation:

The economic impact of certain land use controls, when shared by other members of the community, has been held to be non-compensable. . . . Here, the surrounding community benefits from the wetland’s filtering action, stabilizing effect, and provision of habitat for flora and fauna. Florida Rock benefits from being a member of a community which has the potential for a better environment. But there can be no question that Florida Rock has been singled out to bear a much heavier burden than its neighbors, without reciprocal advantages. Limestone mines that are still allowed to operate nearby, to the east of the Dade-Broward Levee, are among those who enjoy Florida Rock’s beneficence without sharing its burden. . . . Florida Rock has paid, and continues to pay, a much higher price for its benefit than have other members of the community. The court finds that Florida Rock’s disproportionately heavy burden was not offset by any reciprocity of advantage.⁷⁸

The decision reiterated this finding in context with the economic prongs of the *Penn Central* test, “Florida Rock suffered a severe economic impact when the Corps denied claimant’s application for a dredge and fill permit. . . . That diminution in value was not offset by any reciprocity of advantage.”⁷⁹

G. *Walcek Adopted Social Reciprocity* *Two Years Later*

Two years following *Florida Rock V* in the Court of Federal Claims, *Walcek v. United States* found no regulatory taking in a wetlands case based, in part, on benefits to the public at large.⁸⁰ “At the same time, the existence of the wetland regulations in question, as well as their application to the property, indisputably serves an important public purpose—one which benefits plaintiffs as members of the public at large.”⁸¹ In contrast to *Florida Rock V*, the decision analyzes reciprocity within the last prong of the *Penn Central* test, “character of the governmental action.”⁸²

Abstruse Formulas” Made Simple: Advances in Measurement of Penn Central’s Economic Prongs and Estimation of Economic Damages in Federal Claims and Federal Circuit Courts, 38 URB. LAW. 337 (2006). The decision was path-breaking in its application of the *Penn Central* test to a partial taking.

78. *Florida Rock V*, 45 Fed. Cl. at 36–37 (citation omitted).

79. *Id.* at 38.

80. *Walcek v. United States*, 49 Fed. Cl. 248, 270 (2001).

81. *Id.*

82. *Id.* at 269.

Walcek describes the character of the governmental action prong as: requir[ing] the court to consider the purpose and importance of the public interest underlying the regulatory imposition focusing, in particular, on whether the challenged restraint would constitute a nuisance under state law. In analyzing these criteria, courts must inquire into the degree of harm created by the claimant's prohibited activity, its social value and location, and the ease with which any harm stemming from it could be prevented.⁸³

This section does not cite to the Federal Circuit's "reciprocity of advantage" test.⁸⁴

Walcek relied on an earlier case, *Kirby Forest*,⁸⁵ in its rationale, but did not find that the burdens should be redistributed to the public:

"[W]hile most burdens consequent upon government action undertaken in the public interest must be borne by individual landowners as concomitants of *the advantage of living and doing business in a civilized community*, the Supreme Court has stated, 'some are so substantial and unforeseeable, and can so easily be identified and redistributed, that justice and fairness require that they be borne by the public as a whole.'"⁸⁶

Kirby Forest ultimately rests on the slender thread of the single 1922 remark by Justice Brandeis. This is slim support for the substance of the underlying theory of social reciprocity and a thin basis for the decision in *Walcek*, which seems to have been a close call:

Yet, it is also beyond peradventure that plaintiffs here are disproportionately burdened by those policies—a fact evident to anyone who observes that the Property is surrounded on all four sides by extensive developments that apparently were approved under prior regulatory regimes. . . . Further, the Clean Water Act and the wetlands regulations issued thereunder are generally applicable to all similarly situated property owners and can in no way be viewed as being directed at plaintiffs. Accordingly, while the absence of a nuisance certainly cuts in favor of a finding of a taking other circumstances in this case ameliorate somewhat the impact of the third *Penn Central* factor in this regard.⁸⁷

83. *Id.* (citing *Creppel v. United States*, 41 F.3d 627, 631 (Fed. Cir. 1994)).

84. *R & Y, Inc. v. Mun. of Anchorage*, 34 P.3d 289, 299 (Alaska 2001) (citing *Florida Rock IV*, 18 F.3d at 1570–71). In fact, the *Walcek* decision calls attention to specific disagreements with the way the Federal Circuit analyzed the economic impact prong of the *Penn Central* test, criticizing the "use of inflation adjustments in [economic impact] computations." *Walcek*, 49 Fed. Cl. at 267, 271 n.37. Suffice to say, economists routinely rely on inflation indices to adjust dollars to a common metric to avoid the apples and oranges problem of comparing dollars of different vintages.

85. *Kirby Forest Indus., Inc. v. United States*, 467 U.S. 1 (1984). Case involved the condemnation of plaintiff's forest property for government use as a national park. Protracted negotiations and disagreement over the appraised fair market value of the land and taking date led the dispute to the Supreme Court, which ruled on the date and the fair market value of the property at that date. Plaintiff's foregone uses during the years of negotiation were deemed, it would seem, the cost of doing business in a civilized society. "[W]e do not find, prior to the payment of the condemnation award in this case, an interference with petitioner's property interests severe enough to give rise to a taking under the foregoing theory. Until title passed to the United States, petitioner was free to make whatever use it pleased of its property." *Id.* at 14–15.

86. *Walcek*, 49 Fed. Cl. at 270 (citing *Kirby Forest*, 467 U.S. at 14) (emphasis added).

87. *Id.* at 270–71.

The fact that the Claims Court decision interpreted average reciprocity of advantage broadly in *Walcek*, in conflict with *Florida Rock IV's* circuit court direction and in contrast to *Florida Rock V's* narrow interpretation, emphasizes the need for a consistent theory of the concept within takings jurisprudence. Based on the information in the decision, Judge Allegra might have adopted the *Florida Rock V* position that “when a regulation singles out a few property owners to bear [the] burdens, while benefits are spread widely across the community,” equity demands that society compensate the few.⁸⁸ *Walcek's* “social benefits” argument⁸⁹ was subsequently cited in the 2005 Michigan appellate decision, *K & K Construction, Inc. v. Department of Environmental Quality*,⁹⁰ as a precedent for overturning the lower court decision that found a taking.⁹¹

The most recent takings decision from the Court of Federal Claims, *CCA Associates v. United States*, looked into reciprocal benefits of the regulation that brought the lawsuit under the character of the governmental action prong.⁹² The decision describes the analysis required under this prong in remarkably different language from that cited above from the *Walcek* decision:

“A court must consider the purpose and importance of the public interest reflected in the regulatory imposition, [and] balance the liberty interest of the private property owner against the [g]overnment’s need to protect the public interest through imposition of the restraint.” This analysis focuses not only on the intended benefits of the governmental action, but also on whether the burdens the action imposed were borne disproportionately by relatively few property owners.⁹³

88. *Florida Rock V*, 45 Fed. Cl. at 37 (citing *Creppel*, 41 F.3d at 631).

89. *Walcek*, 49 Fed. Cl. at 270 (citing *Kirby Forest*, 467 U.S. at 14). Judge Allegra’s most recent decision in *Brace* cited the same language from *Kirby Forest*:

“[W]hile most burdens consequent upon government action undertaken in the public interest must be borne by individual landowners as *concomitants of the advantage of living and doing business in a civilized community*,” the Supreme Court has stated, “some are so substantial and unforeseeable, and can so easily be identified and redistributed, that justice and fairness require that they be borne by the public as a whole.”

Brace v. United States, 72 Fed. Cl. 337, 355–56 (2006) (emphasis added). The opinion concluded, “[T]he United States has a legitimate public welfare obligation to preserve our nation’s wetlands” and “the government’s actions in this case were well directed to that end. . . . [W]etlands regulations here served important public purposes, . . . and [were] not targeted on plaintiff.” *Id.* at 25.

90. *K & K Constr., Inc. v. Mich. Dep’t of Env’tl. Quality (K & K V)*, 705 N.W. 365 (Mich. Ct. App. 2005).

91. *Id.* at 384; John D. Echeverria, *The Triumph of Justice Stevens and the Principle of Generality*, 7 VT. J. ENVTL. L. 22, 40 & n.106 (2005) (referring to the *K & K V* decision as “a particularly thoughtful application of the principle of generality in the context of wetlands regulation”).

92. *CCA Associates v. United States*, No. 97–334C, 2007 WL 315350 (Fed. Cl. Jan. 31, 2007). The phrase “average reciprocity of advantage” does not appear in the decision.

93. *Id.* at *26 (quoting *Loveladies Harbor, Inc. v. United States*, 28 F.3d 1171, 1176 (1994); *Cienega Gardens v. United States (Cienega IX)*, 67 Fed. Cl. 434, 466 (2005)). See also *Armstrong v. United States*, 364 U.S. 40, 49 (1960).

The *CCA Associates* case is another in the line of cases about the provision of low-income housing under Department of Housing and Development (HUD) provisions.⁹⁴ The government argued that “ensuring that subsidized housing remained in place for thousands of poor families . . . promoted an important government objective.”⁹⁵ The decision countered that the regulation at issue “did not place the burden of maintaining low-income housing on all taxpayers, but instead targeted only the owners of low-income housing”⁹⁶ and concluded the government’s argument to be “fatally flawed.”⁹⁷ The benefits conferred to low-income renters by the regulation at issue did not mitigate the taking. In contrast to the *Walcek* decision, which found a rationale for holding for the government because “the wetlands regulations . . . are generally applicable to all similarly situated property owners and can in no way be viewed as being directed at plaintiffs,”⁹⁸ the *CCA Associates* decision narrowly viewed the offsetting benefits of the regulation directly to the plaintiffs and found for the plaintiffs.

H. *K & K Appellate Decision Adopted Social Reciprocity De Novo and Overturned Lower Court Finding of a Taking*

K & K plaintiffs were stopped in 1988 from ongoing development of an outdoor sports complex with substantial open areas for baseball, other sports, and a related onsite sports bar restaurant in Waterford Township, Michigan. Wetlands were discovered “within the property” (without defining where).⁹⁹ After a trial in December, 1991, the Michigan Court of Claims determined that the Michigan Department of Natural Resources (MDNR) denial of the permit had rendered the property essentially worthless and required the Department of Natural Resources (DNR) to compensate plaintiffs for the full value of the property, \$5.9 million.¹⁰⁰ On appeal by the state, the Michigan Court of Appeals unanimously affirmed.¹⁰¹ Subsequently, the Michigan Supreme Court remanded the case to reevaluate the original trial court decision narrowly considering

94. See *Independence Park v. United States*, *Cienega Gardens v. United States* and *Chancellor Manor v. United States* in the Federal Claims and Circuit Courts. Economic issues of the *Penn Central* test and damages calculations are discussed in the article cited *supra* note 77.

95. *CCA Associates*, 2007 WL 315350 at *24 (citing Defendant’s Brief at 46–48).

96. *Id.* at *25.

97. *Id.* at *26.

98. *Walcek v. United States*, 49 Fed. Cl. 248, 270 (2001).

99. Stop Work Order from MDNR Wetland Protection Unit to *K & K Constr., Inc.* (May 9, 1988).

100. *K & K v. Mich. Dep’t of Natural Res.*, No. 88-12120-CM (Mich. Ct. Cl. Nov. 5, 1992) (*K & K I*).

101. *K & K v. Mich. Dep’t of Natural Res.*, 551 N.W.2d 413 (Mich. Ct. App. 1996) (*K & K II*).

the parcel-as-a-whole and whether all of the four subparcels should be included in the denominator of the whole parcel.¹⁰² After another trial, *K & K IV* found a taking on the basis of the *Penn Central* test and ordered damages of \$16.5 million to plaintiffs in 2002.¹⁰³

A new panel of the Michigan Court of Appeals introduced *de novo* significant new rhetoric related to average reciprocity of advantage, reversing and dismissing the entire case,¹⁰⁴ holding that with respect to wetland regulations:

Michigan's wetland regulations, like zoning regulations, are comprehensive and universal throughout this state. . . . Our Legislature made clear, within the very text of the WPA, that the regulation and protection of Michigan's wetlands is intended to benefit the people of this state in a variety of ways. All property owners in this state share these benefits relatively equally, and all property owners [and] all prospective owners are relatively equally subject to the burdens placed on much of the property in this state by the wetland regulations.¹⁰⁵

The decision cites to *Walcek's* social reciprocity and to *R & Y* to invoke support for:

conclud[ing] that the character of the government action was a wide-reaching, regulatory action that seeks to protect the rights of the public and to provide an "average reciprocity of advantage," and that this factor weighs heavily against finding that a compensable regulatory taking has occurred here. . . . [T]he challenged land-use regulation here, like traditional zoning, is comprehensive and universal so that plaintiffs are relatively equally benefited and burdened by the challenged regulation as other similarly situated property owners. . . .¹⁰⁶

This finding rested on the decision's description of the *Penn Central* factors that concluded:

Where, as here, the regulation serves an important public interest and is widespread and ubiquitous, we conclude that, to sustain a regulatory taking claim, a plaintiff must prove that the economic impact and the extent to which the regulation has interfered with distinct investment-backed expectations are *the functional equivalent of a physical invasion* by the government of the property in question.¹⁰⁷

102. *K & K v. Mich. Dep't of Natural Res.*, 575 N.W.2d 531 (Mich. 1998) (*K & K III*).

103. *K & K v. Mich. Dep't of Env'tl. Quality*, No. 88-12120-CM (Mich. Ct. Cl. May 24, 2002) (*K & K IV*).

104. *K & K v. Mich. Dep't of Env'tl. Quality*, 705 N.W.2d 365 (Mich. Ct. App. 2005) (*K & K V*); see also Plaintiff's Petition for Writ of Certiorari to the Supreme Court of the United States, *K & K Constr., Inc. v. Mich. Dep't of Env'tl. Quality*, No. 06-1071, 2007 WL 276147 (U.S. Jan. 29, 2007).

105. *K & K V*, 705 N.W.2d at 384-85.

106. *Id.* at 386.

107. *Id.* at 380 (emphasis added). This is not the federal law, nor was it the law in Michigan before this decision. The law is clear that effects of regulatory impositions need not be tantamount to physical invasion. *Agins II* clarified the *Penn Central* 3-prong balancing test by requiring compensation if the regulation denies the owner "economically viable use" of the property. *Agins v. City of Tiburon*, 447 U.S. 255, 260 (1980) (the second *Agins* requirement, that the regulation advance legitimate state interests, was deleted by *Lingle*). Michigan law parallels *Agins*: compensation is required where a land-use regulation denies a landowner all economically viable use of the land. *Volkema v. Dep't of Natural Res.*, 542 N.W.2d 282, 283 (Mich. Ct. App.

The *K & K* appellate decision missed the point of *R & Y* that although all would agree that wetlands protection is important, plaintiff's losses in Alaska were demonstrably insignificant.¹⁰⁸ *K & K*'s losses were demonstrably large.¹⁰⁹ "Though the alleged economic impact in *R & Y* is less than the alleged economic impact here, the reasoning and analysis of *R & Y* is equally applicable here."¹¹⁰ Not so. Economics mattered to the *R & Y* decision. *K & K V* misconstrued the logic in its application of *R & Y*'s notion of average reciprocity of advantage.

In *R & Y*, the developers owned twenty-seven acres that were encumbered by a requirement that development be set back a specific distance from a lake.¹¹¹ The owners challenged municipal action that expanded the setback requirement by twenty feet. The property value was reduced three percent by the additional setback requirement.¹¹² The property had a substantial post-regulation value of \$2,395,700 and the regulatory impact of the additional setback requirement was \$79,400.¹¹³ The developers were able to develop most of the property as commercial property, which was benefited by the lake preserved in part by the regulations.¹¹⁴ Thus, in *R & Y*, "the landowners were not singled out and made to suffer unduly burdensome economic loss."¹¹⁵ In *R & Y*, the developers' significant remaining property was enhanced by the marginal reduction in value caused by the setback requirement, a reciprocity that might reasonably be deemed similar to a typical zoning amendment.

R & Y was decided against the plaintiff, in part, because the plaintiff's losses were but "a small percentage when viewed in the context of the entire property."¹¹⁶ While the decision cited no explicit measurement of reciprocal benefits, the decision implied that wetlands protection provided direct beneficial services to the plaintiff's remaining allowable uses of the property, preserving most of its value. In contrast, uncontroverted testimony in the *K & K* trial showed that prohibiting the sports

1995). Protection of wetlands that denies plaintiff economically viable use of the property requires compensation. The Michigan appellate court's demand that a taking be the functional equivalent of a "physical invasion" destroys the balancing test.

108. *R & Y, Inc. v. Mun. of Anchorage*, 34 P.3d 289, 294 (Alaska 2001).

109. Trial court awarded damages of \$5.94 million for taking of Parcel 1, plus interest and court costs. Order, *K & K Constr., Inc. v. Mich. Dep't of Env'tl. Quality*, No. 88-12120-CM (Mich. Ct. Cl. Sept. 30, 2002).

110. *K & K IV*, No. 88-12120-CM, at 20 n.40 (Mich. Ct. Cl. filed May 24, 2002).

111. *R & Y*, 34 P.3d at 291.

112. *Id.* at 294. The decision says 1.5% to 2.0%, which does not match the authors' math.

113. *Id.* at 295.

114. *Id.* at 298.

115. *Id.* at 300.

116. *Id.* at 296.

complex development eliminated most of the development value of the entire parcel, while providing no demonstrable benefits to remaining uses of the property.¹¹⁷ *R & Y* is a precedent for narrow reciprocity of advantage.

K & K V's broad language interpreting average reciprocity of advantage effectively eliminated a rational context for the character of government action prong of the *Penn Central* test. *K & K V* analogizes wetlands regulations to zoning, which does not apply equally well to protection of environmental resources, such as wetlands. While zoning regulations may apply to everyone in the area zoned, wetlands are not distributed in such a way to automatically assure equal burden among landowners. The surrounding community may benefit from the wetland's provision of habitat for flora and fauna, while plaintiff is singled out to bear the burden of providing those benefits to the local community.¹¹⁸ Evidence to provide a factual basis to understand and balance reciprocal benefits at stake is missing from the *K & K V* decision.

I. *Ninety-Two Years of Average Reciprocity of Advantage in the Courts Confirms That "Magic Words" Confound Economic Reality*

Differing opinions about narrow or social reciprocity in federal and state courts in recent years and the Alaska Supreme Court's reliance on the Federal Circuit narrow view of average reciprocity of advantage test reveal that it is a mistake to claim that interpretation of average reciprocity of advantage has evolved to a more general standard in more recent times. Justice Brandeis' offhand remark offers slim underpinnings for weighing burdens to the claimant against benefits to society as a basis for claiming that plaintiff has received reciprocal benefits by living in a civilized society that militate against payment of compensation for a regulatory taking.

Rulings discussed within this article have muddied whatever Justice Holmes might have had in mind, shifting the "fairness and justice" standard along a continuum from matching burdens with benefits to distributing benefits to society at large and allocating costs to a select few landowners. Mr. Fee is correct.¹¹⁹ Court decisions evidence no

117. Co-author Wade testified for *K & K Construction* on the financial measurement of *Penn Central*'s two economic prongs.

118. *K & K*'s land sits idle today while still paying taxes. Plaintiff's Petition, *supra* note 104, at *29.

119. See *supra* text accompanying note 73.

discernable pattern, no measurement of benefits and burdens to balance, and no predictable decision rules regarding that balance. Lawyers trying Fifth Amendment cases are baffled by the phrase “average reciprocity of advantage.” Clearly, buildings could not be supported by such a thin engineering theory; nor could the Federal Reserve make monetary policy with such slim underpinnings. Yet, several state, federal, and Supreme Court decisions trace their arguments to the single remark by Justice Brandeis—in fact, to the bastardization of the remark, according to Professor Oswald.

In view of the missing consistency in the legal cases, turn now to economics to establish benchmarks for the concepts implicit within the phrase “average reciprocity of advantage.” Economic theory can provide the necessary rigor to examine the implications of either the narrow or social versions of ARA for judicial decisions related to payment for regulatory takings.

IV. Economic Considerations Bearing on Average Reciprocity of Advantage

Infusing economic rigor into “average reciprocity of advantage” may reduce part of the vexation with the concept. An economist can interpret reciprocity under takings case law to discover if positive externalities of the regulation benefit the owner’s remaining uses of the property sufficiently to offset instant losses. Following *Florida Rock IV*, the economist would measure reciprocity as a direct compensating benefit of the regulation to the complainant. Following social reciprocity, the economist would measure the general welfare enhancement to society of denying the permit, along with complainant’s losses in some empirical manner.

Economics departs from the judicial treatments of reciprocity by requiring quantitative evidence of the reciprocal benefits and burdens at stake. A takings case requires no less quantitative evidence than a tort case; in fact, it needs more. A takings case requires a broader evidentiary showing than the typical common law tort case. Most common law and statutory causes of action consist of providing sufficient evidence on each of the prima facie elements of the case. The fact finder (judge or jury) then determines whether the plaintiff has produced a preponderance of the evidence on each of the elements. Alleged damages must be demonstrated to be more than mere speculation. The corollary would be true for takings cases; average reciprocity, whether social or narrow, must be shown to be more than mere speculation, whether by defendant counsel, trial or appellate judges.

In a regulatory takings case, specific prima facie requirements are only a beginning. The Supreme Court determined that the evidence must be evaluated within the *Penn Central* balancing test, without providing guidance on how the elements of the test are to be weighted and balanced. Part of this balancing entails evaluation of the average reciprocity of advantage. When the fact finder considers this balancing test, the same preponderance of the evidence standard applies to the weighing and balancing. In short, quantitative evidence of benefits and burdens are required to introduce average reciprocity of advantage into the *Penn Central* test.

Economic concepts embedded in average reciprocity of advantage include financial and economic values, economic efficiency, equity, and distribution of impacts. The relevant question becomes, how do narrow or social views of average reciprocity of advantage govern the economic concepts to measure? Can economics rigorously support a compensation decision rule with either view of average reciprocity? This question distinguishes the instant quest from the substantial body of legal and economic scholarship that has been directed at defining optimal rules for payment of compensation for both physical and regulatory takings.¹²⁰

A. *Efficiency and Equity Background Principles*

In the context of takings, efficiency deals with resource allocations in terms of optimal levels of investment or regulation. One 2001 article lends a workable definition for applying economic efficiency criteria to takings law:

[T]he efficiency rationale for the Takings Clause is to ensure that the state exercises its eminent domain power only when the aggregate benefit exceeds the aggregate cost. Compensation for takings . . . forces the state to take into account the cost of its actions. . . . [T]he state's failure to internalize the cost of takings creates fiscal illusion and inefficiency. . . .¹²¹

120. See, e.g., Lawrence Blume, Daniel Rubinfeld & Perry Shapiro, *The Taking of Land: When Should Compensation Be Paid*, 99 Q.J. ECON. 71 (1984); Timothy J. Brennan & James Boyd, *Political Economy and the Efficiency of Compensation for Takings*, 24 CONTEMP. ECON. POL. 188 (2005); William Fischel & Perry Shapiro, *A Constitutional Choice Model of Compensation for Takings*, 9 INT'L REV. L. & ECON. 115 (1989); Benjamin E. Hermalin, *An Economic Analysis of Takings*, 11 J.L. ECON. & ORG. 64 (1995); Robert Innes, *Takings and Compensation for Private Land*, 76 LAND ECON. 195 (2000); Jed Rubinfeld, *Usings*, 102 YALE L.J. 1077 (1993); Perry Shapiro, *Compensation for Takings: Efficiency and Equity*, U.C. Santa Barbara, Department of Economics Discussion Paper (2005), <http://www.econ.ucsb.edu/conferences/takings06/docs/Shapiro.doc>.

121. Abraham Bell & Gideon Parchomovsky, *Givings*, 111 YALE L.J. 547, 553–54 (2001).

Rules and regulations passed by federal agencies require that a benefit-cost analysis be performed to show that the benefits exceed the costs. Should the judicial branch of government be influenced by the same guidelines as the legislative and administrative branches?¹²²

The Regulatory Right-to-Know Act¹²³ requires a report to Congress on the costs and benefits of federal regulations. A key feature of this report is that it reviews and summarizes the estimates of the total costs and benefits of regulations reviewed by the Office of Management and Budget (OMB). The 2006 report estimates annual benefits of major federal regulations reviewed from October 1, 1995, to September 30, 2005, to range from \$94 billion to \$449 billion, while the estimated annual costs range from \$37 billion to \$44 billion.¹²⁴ The underlying studies reviewed by OMB do not include judicial case outcomes. Nor do they consider distributional effects. Benefits and burdens have not been measured in most court settings—in spite of the requirement to “average” reciprocal benefits in some fashion.

Benefit-cost studies begin by identifying the people who will receive the aggregate benefits and incur the costs. The twofold purpose of this initial step is to determine that these are the same people (an equity and political consideration); and assure that all benefits and costs within the boundary are elicited and counted. Social reciprocity reveals that this first step of standard benefit-cost analysis is not an adequate stand-alone starting point. Distributional effects also must be considered. Does the

122. See generally *K & K IV*; *K & K V* (likely environmental benefits very small for denying permit to develop fifty-five acres of a one-square-mile urban and upland land area, found to contain twenty-seven acres of poor quality wetlands). The *K & K* property already contained a 10,000 square foot office building, owned by plaintiff, plus a restaurant and a large apartment complex owned by third parties. The surrounding area was completely built up. Close substitute and higher quality wetlands abound in the township. Plaintiff's monetary losses were demonstrated to be large and sufficient to pass the *Penn Central* test. Foregoing development of the planned restaurant and sports complex might have provided limited environmental habitat services of small benefit value, but also would have caused tax revenue losses to state and local governments and large recreation benefit losses to residents of Waterford Township, Michigan. None of the appropriate elements of social reciprocity were measured and evaluated within the case. Social reciprocity likely would have cut in favor of the plaintiff. The generality of wetlands protection in no way protected significant wetlands at issue that might have supported the appellate court's reversal based on economic efficiency criteria. Narrow reciprocity clearly would not have revealed any direct compensating benefits to the plaintiffs remaining uses of land sufficient to offset instant losses of permit denial. See also *infra* Part III.I.

123. Treasury and General Government Appropriations Act of 2001, Pub. L. No. 106-554, 31 U.S.C. § 1105 (2006).

124. Office of Management and Budget, *Executive Summary*, DRAFT 2006 REPORT TO CONGRESS ON THE COSTS AND BENEFITS OF FEDERAL REGULATIONS (2006), at 1, available at http://www.whitehouse.gov/omb/inforeg/reports/2006_draft_cost_benefit_report.pdf.

complainant incur the costs while benefits accrue to the community at large? Is the complainant's share of benefits adequate to offset instant losses? Both efficiency and distribution effects must be considered to give an ARA rule validity and substance.

1. ECONOMIC EFFICIENCY IN THE LITERATURE TENDS TO CALL FOR PAYMENT OF COMPENSATION

Much economic literature on takings assesses the efficiency of the regulation in terms of trade-offs between diminution in value of affected landowners' property and gains to society.¹²⁵ These articles agree that no compensation is due when preventing harm ("noxious uses"), but struggle to discover a compensation rule when the regulation promotes public benefits. For example, Joseph Sax argues (according to Miceli and Segerson) that "the government should pay compensation when it regulates property in the process of behaving like an enterprise (for example, when it provides public goods), but it should not pay compensation when it merely arbitrates private disputes."¹²⁶ Miceli and Segerson characterize William Fischel's position on the matter as "compensation is due if the regulation requires the landowner to exceed the social norm, as when it requires him to 'confer a benefit' on the community . . . [unless] the benefits of the regulation exceed the cost to the private landowner."¹²⁷

The cited literature tends to conclude that regulations that improve efficiency require that just compensation be paid, unless sufficient *direct* reciprocal benefits accrue to the landowner. This finding is akin to the Federal Circuit Court of Appeals reciprocity of advantage test: evaluate whether "*direct compensating benefits accruing to the property, and others similarly situated, flowing from the regulatory environment,*" or whether the "benefits [are] general and widely shared through the community . . . while the costs are focused on a few."¹²⁸

Economic efficiency, also labeled "Pareto efficiency" since the early twentieth century, implies that resources should be used and traded so that all parties and society are made better off by the outcome, or at least made no worse off.¹²⁹ In applying this construct to takings jurisprudence,

125. See generally Thomas J. Miceli & Kathleen Segerson, *Regulatory Takings: When Should Compensation Be Paid?*, 23 J. LEGAL STUD. 749 (1994).

126. *Id.* at 754 (citing Joseph Sax, *Takings and the Police Power*, 74 YALE L.J. 36 (1964); *Takings, Private Property and Public Rights*, 81 YALE L.J. 149 (1971)).

127. *Id.* at 755 (citing WILLIAM FISCHEL, *THE ECONOMICS OF ZONING LAWS* 156-57 (1985)). But if this were true, why would the landowner file the lawsuit?

128. *Florida Rock Industries v. United States (Florida Rock IV)*, 18 F.3d 1560, 1571 (1994) (emphasis added).

129. VILFREDO PARETO, *MANUALE D'ECONOMICA POLITICO* (1906).

the economist asks, is the loss in property value due to the regulation greater or less than the local public's gain from the regulation? If the loss is less, society is better off with the foreclosed use of the property; if greater, the regulation that forecloses the owner's use of the property can be said to lead to an inefficient use of resources and reduce societal welfare.¹³⁰

Effects of policy changes on social welfare are described as Pareto-improvements if those who gain could afford to compensate the losers. If not, the policy would cause a net loss of society's goods and services. This is another term for evaluating the policy for economic efficiency. A similar test is cited as the Kaldor-Hicks efficiency criteria after their independent 1939 research reaching a similar finding.¹³¹ The key difference between Pareto efficiency and Kaldor-Hicks efficiency is the question of compensation. Kaldor-Hicks does not require that compensation actually be paid, merely that the possibility for compensation exists. Pareto efficiency does require payment to make each party better off (or at least no worse off).

2. EQUITY ULTIMATELY DEVOLVES TO ARMSTRONG

Equity considers who should pay and tends to conclude that beneficiaries of regulation should bear the costs.¹³² Takings cases arise when those who bear the costs of a regulation and those who enjoy its benefits are not the same people. When "some people alone are forced to bear public burdens which, in all fairness and justice, should be borne by the public as a whole,"¹³³ economists label this an adverse distribution effect; i.e., benefits and costs are distributed unevenly. This is not the same thing as saying that benefits are less than costs. At the end of their article dealing with efficiency criteria for payment of compensation, Miceli and Segerson argue for a compensation criterion based on *Armstrong's "fairness and justice"*¹³⁴—after an efficiency screening. If the landowner has been singled out to bear the cost, compensation should

130. See *supra* note 122 (suggesting that permit denial in *K & K* led to an inefficient outcome, as the investment planned for the community likely would have made better use of the land than preserving the meager wetlands).

131. J. Hicks, *The Foundations of Welfare Economics*, 49 *ECON. J.* 696 (1939); N. Kaldor, *Welfare Propositions in Economics and Interpersonal Comparisons of Utility*, 49 *ECON. J.* 549 (1939).

132. Shapiro, *supra* note 120, at 5. Shapiro's 2005 working paper, motivated by *Kelo v. City of New London*, 545 U.S. 469 (2005), defines an equitable compensation rule as one which, *ex post*, provides the same income to those whose land is taken and those whose land is not taken; or, which, *ex ante*, provide all landowners the same expected income. *Id.*

133. *Armstrong v. United States*, 364 U.S. 40, 49 (1960).

134. *Id.*

be paid either if his land use decisions were shown to be efficient or if the regulation was shown to be inefficient.¹³⁵

Beyond measuring the distributional effects, economics is not well suited to evaluate fairness issues, apart from providing empirical estimates of benefits and burdens as a basis for evaluation. On the other hand, case law on average reciprocity of advantage does not appear to be well suited to deal with efficiency issues, which is the comparative strength of economics. Judicial decisions do not mandate that regulatory action be shown to make the local community better off. Average reciprocity asks whether one person should incur the costs to make the community better off for the rest of us. Fairness is ultimately grounded on moral grounds. *Armstrong's* single fairness criterion would be a sufficient test in a perfect judicial system. Unfortunately, case decisions suggest that fairness is susceptible to whimsical, even political, considerations.

*B. Shift from Pareto Efficiency to Kaldor-Hicks
Efficiency Does Not Govern Compensation*

Average reciprocity of advantage has dealt with equity in decisions cited above—who should pay?—not with regulatory efficiency, whether Pareto or Kaldor-Hicks. On efficiency grounds, if the benefits to society of the regulation exceed the costs to individuals within society, the economist can only conclude that if the government enacts or enforces the regulation and compensates the losers, society will be better off. The economist, however, will insist on quantitative measurement and comparison of benefits and costs. Wetlands protection regulations, for example, are intended to enhance state and national natural resources. Resource economists, working with scientists, have been estimating the value of the many services provided by wetlands to society for decades.¹³⁶ The values of specific enhancement to services are measurable for comparison with plaintiff's burdens.

Scientists and economists do not question whether a policy to enhance and protect wetlands provides valuable services to society. The

135. Miceli & Segerson, *supra* note 125, at 773. While these authors discuss concepts by which to evaluate either efficiency or inefficiency in their rules, measurement and implementation would be difficult. Their conclusion about payment, ultimately, is a value judgment.

136. Interestingly, the Alaska Supreme Court noted the "ecological and economic value that wetlands provide in protecting water quality, regulating local hydrology, preventing flooding, and preventing erosion." *R & Y*, 34 P.3d at 298 (citing Paul Sarahan, *Wetland Protection Post Lucas: Implications of the Public Trust Doctrine on Takings Analysis*, 13 VA. ENVTL. L.J. 537, 538-39 (1994)).

relevant judicial question is, if the enhancement is significant with much increase in the values, then why have so many state and federal government agencies been unwilling to compensate the few landowners whose property, purchased before the passage of the Wetlands Protection Act with sharply crystallized expectations about planned uses and expected profitability, is sharply reduced in value. Under the Coase Theorem, which is widely understood, it is clear that if the benefits to society of taking the property are large and the property right is the landowner's, compensation is paid to achieve the public goal.¹³⁷ Neither Coase nor efficiency criteria, whether Pareto or Kaldor-Hicks, explain the draconian efforts pursued by state and federal agencies to avoid payment.¹³⁸

A 2004 article about *Tahoe-Sierra* argues that "*Tahoe-Sierra* . . . shifted [the Court] to a new economic efficiency model underlying takings decisions."¹³⁹ Ms. Ann Oshiro argues:

Economic efficiency is an underlying issue in the *Tahoe-Sierra* decision. Ignoring all the complex constitutional issues, the basic issue before the Court in *Tahoe-Sierra* was who should pay for the benefits of preserving Lake Tahoe—society at large or the individuals who owned property around the lake? . . . [B]y supporting the *Penn Central* balancing test, the *Tahoe-Sierra* Court indicated that it was moving towards a Kaldor-Hicks efficiency model. Under *Penn Central* balancing, a number of factors are weighed. . . . By considering these factors, the Court determines whether the harm to the individual landowner is outweighed by the benefit to society. Thus, this approach is comparable to a Kaldor-Hicks efficiency model. Instead of automatically compensating a landowner for her harm, the Court essentially evaluates the regulation to ensure that the harm does not outweigh the overall benefit.¹⁴⁰

137. Ronald Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960). This perhaps simplifies the Coase Theorem; if the conditions of the Coase theorem apply, one might suppose that the parties could settle the dispute on their own without any intervention.

138. Even if social benefits exceed private losses, agencies tend to choose to fight rather than pay, adopting sometimes disingenuous arguments made by government counsel to avoid payment. *Whitney Benefits* provides one example. After abundant testimony by competent experts on coal reserves, strip mining technology, coal markets, and prices, the government sought to argue that cattle grazing and farming on the surface of the coal deposit was an adequate beneficial use of the property. The court's decision included a reprimand directed toward the defense counsel: "Defendant's contention is completely off the mark." See *Whitney Benefits, Inc. v. United States*, 18 Cl. Ct. 394, 405 (1989) (discussion of the testimony); *Whitney Benefits v. United States*, 31 Fed. Cl. 116 (1994) (final decision for plaintiff).

139. Ann Oshiro, *Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency: A Significant Ripple in Takings Jurisprudence*, 41 HOUS. L. REV. 167, 170 (2004).

140. *Id.* at 196, 198–99. We find little or no evidence in case decisions to support this opinion. Case decisions that cite back to land use regulations, such as zoning, used to prevent, for example, a mining operation or a factory from being built within a residential neighborhood, see, e.g., *Euclid v. Ambler Realty Co.*, 272 U.S. 365, 385–389 (1926), do not apply equally well to protection of environmental resources, such as wetlands. A citation to a zoning case does not automatically prove that protection of natural resources distributes equal burden among landowners. Wetlands are not ubiquitous. Evidence must examine and provide a factual basis to understand reciprocal benefits at stake.

To subscribe to Ms. Oshiro's position, one must conclude that Kaldor-Hicks efficiency is a rationale for not paying because the theory does not require payment. If the *Tahoe-Sierra* decision represents an economic paradigm shift, then one wonders how the Court rationalized nonpayment in the days when Pareto efficiency governed the Court's thought process. Compensation being an equity issue, the Kaldor-Hicks criteria is actually silent on whether compensation is due. In fact, neither efficiency theory provides support for nonpayment of compensation. Michael Berger, attorney for the Tahoe landowners, claimed that the case was never about efficiency considerations of protecting Lake Tahoe, but who should pay for the protection.¹⁴¹ Ms. Oshiro's argument about shifting efficiency models does not provide economic support for the Supreme Court or other courts' decisions that support nonpayment of compensation. Efficiency criteria show that compensation is the theoretically preferred outcome when benefits exceed costs. Broader measurement of societal benefits reinforces this. Politics and government budgets appear to have some influence on payment in the real world.¹⁴²

C. *Oswald's Average Reciprocity Rules Can Be Formulated as Compensation Rules*

From her review of cases through 1997, Professor Oswald postulated two legal theories of average reciprocity of advantage that can be evaluated as two compensation rules:

- In its narrow form, "a land use regulation that results in *benefits to regulated landowners* roughly equal to the burdens imposed on

141. Michael M. Berger, *Tahoe-Sierra: Much Ado About—What?*, 25 U. HAW. L. REV. 295, 320 (2003) ("[T]he Court put the cost of saving Lake Tahoe in the wrong place. . . . Those who [get] the benefit should also shoulder the burden."). Mr. Berger is correct; theoretically, efficiency only shows that nonpayment leads to inefficient outcomes.

142. Justin W. Stemple, *Take It or Leave It: The Supreme Court's Regulatory Takings Jurisprudence After Tahoe-Sierra*, 28 WM. & MARY ENVTL. L. & POL'Y REV. 163, 185–86 (2003) ("If the parcel as a whole doctrine were abandoned or modified to regard the relevant parcel as the regulated parcel, the cost of wetland and other property regulations would be prohibitive, and accordingly the decline of wetlands would accelerate. Even if the value of wetlands were set at a mere one hundred dollars per acre, regulating wetlands would cost the United States over twenty-seven billion dollars in takings claims. Finding funding for such high costs would be nearly impossible both financially and politically. *Tahoe-Sierra's* clear upholding of the parcel as a whole doctrine has undeniable importance for a continuing future of wetlands regulation, and a different outcome in *Tahoe-Sierra* would have collapsed the federal wetlands regulatory scheme as it now exists."). At least economic measurement tools are consistent with this position; i.e., state and federal governments cannot afford to pay.

them [does] not violate the United States Constitution” and does not require compensation.¹⁴³ In the more rigorous language of an economist, if the change in regulation imposes not only a burden but a *direct compensating benefit* to the property owner, no compensable taking has occurred.

- In the social reciprocity form of the average reciprocity of advantage rule, “if a land use regulation results in *benefits to society* as a whole roughly equal to the burdens imposed upon the regulated landowners, no taking has occurred.”¹⁴⁴ Reciprocity is achieved because the regulated land owner as a member of society is benefited in a way equal to every other member of society.¹⁴⁵ No compensable taking has occurred.

When the second rule is compared with the first rule, it becomes clear that the second rule is nothing more than the efficiency standard, with an *ad hoc* nonpayment hook; i.e., nothing in the benefits to society clause justifies nonpayment on economic efficiency grounds. Professor Oswald’s summary of Justice Brennan’s logic from *Penn Central* and *Keystone* into the second rule reveals that it equates the efficiency criteria with a rationale for noncompensation. Neither economic theory nor logical thought allows this conclusion.

The state is assumed to maximize social welfare as a matter of policy. The economic literature is clear that the state’s nonpayment for taken property leads to inefficient underinvestment, which would not achieve maximum social welfare. Equity of payment is distinct from efficiency of policy. No economic proof would support the conclusion that reciprocity is met when the plaintiff’s share of benefits created by the regulation equals everyone else’s share. Only if the benefits to the property owner could be measurably shown to offset the burdens could the economist support nonpayment based on economic theory.

Differences in the time value of money might set economists apart from jurists in terms of the time period over which to measure the offsetting benefit stream. Those who subscribe to the broad social view of reciprocity might consider the stream of benefits that flow from belonging to a community as adequate to offset instant losses caused by the regulatory imposition. Those who subscribe to *Florida Rock IV*’s “direct compensating benefits” might insist on strict and timely proportionality

143. Oswald, *supra* note 3, at 1489 (emphasis added).

144. *Id.* (emphasis added).

145. *Id.* at 1512.

in the directly affected benefit stream.¹⁴⁶ Evaluation of the narrow form of the rule entails measurement of the costs of the land use imposition to the landowner along with any directly offsetting benefits.

D. *Social ARA Could Be Viewed as a Screening Requirement to Assure Economic Efficiency of Permit Denial*

Two obvious economic decision rules conform both to the goals of efficiency and fairness and could apply to either narrow or social reciprocity.

- If the regulatory proscription at issue confers beneficial services to the community with less measurable benefit than the cost to affected private property owners, do not enforce the regulation; i.e., enforcement would lead to an inefficient use of society's scarce resources.
- If the proposed regulation confers beneficial services to the community with more measurable benefit than the cost to targeted private property owners, enact the regulation and compensate the owners for their losses.

In either rule, empirical demonstrations are required. The 104th Congress considered legislation to reform takings law by replacing the fact-finding and balancing requirements of the *Penn Central* test with a "bright line" standard.¹⁴⁷ The co-author wrote an article at the time, suggesting that reform consistent with the benefit-cost standard required of federal agencies under Executive Order No. 12,630¹⁴⁸ would be a better approach than an arbitrary reduction threshold.¹⁴⁹ Benefit measurement techniques described in that article apply very well to either of Oswald's rules—keeping in mind that both rules deal only with efficiency.

Government could hardly continue if compensation was a "bright line" requirement. The critical fairness question in takings cases remains

146. For further discussion of time horizon of benefit streams, see Hanoch Dagan, *Takings and Distributive Justice*, 85 VA. L. REV. 741 (1999). Keep in mind that past losses and the future stream of benefits must be discounted to some benchmark date, say date of taking in a permanent taking or end of taking in a temporary taking or trial date, for convenience of expressing damages in current dollars payable to the claimant. A discount rate must be applied. Economists might argue about whether a low societal discount rate applies or a discount rate matched to the plaintiff's opportunity cost of capital.

147. S. 605, 104th Cong. (1995); H.R. 925, 104th Cong. (1995).

148. Exec. Order No. 12,630, 53 Fed. Reg. 8859 (Mar. 15, 1988).

149. William W. Wade, *Economic Considerations of Regulatory Takings Reform: Judicial Precedent and Administrative Law v. Legislative Intent*, 26 ENVTL. L. REP. 650, 676 (1995). Beneficial values for protecting air, land, and water resources are without doubt significant and important.

whether specific regulations impose such large costs on an individual or group that they clearly suffer a net loss that goes beyond what one should be willing to accept as part of living in a civilized society. And this remains a judicial or political question.

1. SOCIAL AVERAGE RECIPROCITY OF
ADVANTAGE PROVIDES NO ECONOMIC
SUPPORT FOR NONPAYMENT

Articles and opinions cited in this article espousing the social version of reciprocity err in believing that benefits to society of the regulatory action are a sufficient basis to deny payment to those who shoulder the burden. In fact, economic theory shows that the opposite is true. The more broadly benefits might be measured, the more impetus to compensate the impacted few. Economic theory provides no support for nonpayment for taken property if the benefits of denying the permit exceed the costs, unless the complainant's share of those benefits demonstrably exceeds her costs. The economic efficiency of prohibiting development is not a theoretical basis for nonpayment for the taken property. Thus, the social version of average reciprocity of advantage has no economic content that supports nonpayment of the complainant for a change in regulations that erodes economic viability of her property. This conclusion undermines support for a predictable *Penn Central* analysis based on "the generality versus the particularity of the government action."¹⁵⁰ Economic efficiency is not a basis for nonpayment, whether benefits are measured in some broad general manner or narrowly as directly applicable to the plaintiff.

The narrow version of average reciprocity is more tractable: if the direct compensating benefits to the claimant do overcome his demonstrated losses, then society, meaning the relevant state or federal agency, should not be obligated to pay and spread the cost over the community by taxation. This conclusion is consistent with the analysis and conclusion reached in the Alaska Supreme Court *R & Y* decision.

The social form of average reciprocity of advantage conforms with economic theory if viewed as entailing an evidentiary showing that the

150. Echeverria, *supra* note 91, at 39. Professor Echeverria's latest opinion on "generality" still misses the point that potential reciprocal benefits of regulation must be concrete and shown to directly offset the costs of regulation to forestall payment.

A fourth definition of character focuses on whether the regulation creates an "average reciprocity of advantage." The concept is based on the idea that a regulation that applies broadly across a community, even if it may restrict an owner's use of his property, is likely to benefit the owner by restricting others' use of their properties.

John D. Echeverria, *Making Sense of Penn Central*, 23 UCLA J. ENVTL. L. & POL'Y 171, 171–210 (2005). Generality is not a theory that supports nonpayment.

regulatory action that brought the complaint is, first of all, efficient; i.e., that the benefits to the local region from prohibiting development exceed the costs (including burden to the complainant). Evaluation of this evidentiary showing could be viewed as a hurdle to be met by the defendant to establish a necessary condition that the action is beneficial to the local region; i.e., that, in the instant case, benefits to society of prohibiting the development exceed costs to both the complainant and the community of foregoing the project. The defendant could introduce evidence of existence and size of positive externalities that enhance the claimant's remaining uses of the property to support nonpayment of compensation. The claimant, of course, could rebut. Viewing social reciprocity in this manner would enable judicial evaluations to adhere to the benefit-cost standards required by other governmental agencies and substitute rigorous analysis for whimsical judgment.¹⁵¹

2. SOCIAL RECIPROCITY AS A SCREENING TOOL HAS HIGH TRANSACTION COSTS

Several measurement problems must be overcome before social reciprocity can be an effective screening tool to establish the economic efficiency of prohibiting development:

The real issue boils down to transactions costs. . . . Requiring a cost-benefit analysis (CBA) for major policy decisions makes a lot of sense. . . . But calling for a further CBA for each dispute related to the policy creates huge transactions costs. So even if such detailed CBAs could [guarantee] economic efficiency, the costs associated with such an effort would be prohibitively large.¹⁵²

Implementation problems aside, the idea reveals one fatal deficiency of the original *Penn Central* decision: lack of proof that enforcement of the policy to preclude building in the air space over the terminal was even an efficient policy—regardless of considerations of who should pay for the policy. Penn Central's office building would have provided extensive benefits to the public in terms of employment, income, and tax revenues, plus profits to the shareholders. If the foreclosed new office building were worth less to Penn Central and society than the benefits to

151. This also could be referred to as "The Economists' Full-Employment Act." If, indeed, the use of the social version of reciprocity is mechanically not well suited to become a screening tool, then perhaps its overall usefulness is limited. Nonetheless, benefits and burdens need to be evaluated more rigorously to improve judicial practice in takings law.

152. E-mail from Brian Roach to William W. Wade (July 11, 2006) (on file with author) ("It's simply not the court's purview to make decisions based on economic efficiency. . . . So you're arguing for a complete redefinition of the role of the courts—or even that the courts be eliminated and all policy decisions be made and enforced by a group of economists constantly cranking out [cost-benefit analyses]."). Thanks to Brian Roach for netting out the problem succinctly.

society of preserving the air space above Grand Central Terminal, then the regulatory decision can be said to be efficient. If so, the benefits of preserving the historic Penn Central landmark might have been shown to be so substantial and indivisible that “justice and fairness” required the preservation costs to be borne by the taxpayers of New York—just as Justice Rehnquist stated in his dissenting opinion.

Had the *Penn Central* decision required analysis of average reciprocity of advantage in terms of the broader social version of the phrase espoused by Echeverria and Schwartz following Justice Brennan, then economic efficiency criteria might have shown that the costs of not doing the project overshadowed the benefits of not permitting the project. The record of the case leaves unknown whether society and the City of New York would have been better off with or without the UGP office building and resulting corporate bankruptcy. The decision considered no economic evaluation and decision criteria related to the size of society’s loss versus magnitude of society’s gain.

E. *Conclusions: Economic Theory Confirms
That Social Reciprocity Does Not Support a Rule
for Nonpayment of Compensation*

Reciprocity is not some vague notion that over the long run, things even out. All businesses and individuals are dependent on benefits brought about by society at large:

The baker relies on roads that permit his suppliers and his customers to reach his shop, . . . on regulation of utility rates that enable him to operate his baking ovens [at a reasonable cost], and on government food regulations that assure him and his customers of wholesome ingredients. . . .¹⁵³

Property values have risen steadily since Europeans claimed the land from the Native Americans and roads were built that brought new residents and facilitated commerce. Property benefits from being located in this great social experiment called the United States, premised on individual efforts. People are taxed to pay for the benefits they receive from civilization. Great harm can befall individual groups who are broadly singled out to bear the cost of living in a civilized society: over the long term, things certainly did not even out for the Native Americans, who were dispossessed from their land.

Economics does not support the conclusion that benefits of living in society offset specific losses directed to select property owners.

153. Kanner, *supra* note 10, at 754. The entire paragraph leverages Kanner’s cited words.

Regulatory change that denies use of the property, heretofore enhanced by civilization, requires first a showing that enforcement is economically efficient, and second a determination about equitable compensation. Economists can determine benefits and burdens, calculate an appropriate amount of compensation, and show under what conditions economic efficiency supports payment; but they can do no better than *Armstrong's* "justice and fairness" in determining that payment should be made.

The social view of average reciprocity invokes broad beneficial values to the entire community, which would entail large transaction costs to demonstrate the efficiency criterion, but still provides no theoretical support for nonpayment if the decision is shown to be efficient. The required economic evaluations to support the social version of average reciprocity entail transaction costs possibly too large to implement. Economic evaluations to support the narrow view of reciprocal benefits are more tractable and demonstrated in the following section dealing with the 2004 *Palazzolo* remand trial in Wakefield County, Rhode Island.

V. Economists Testified on Opposing Views of ARA in the *Palazzolo* Remand Trial

An economist can interpret average reciprocity under takings law in terms of benefits and costs, or, in the language of takings law, benefits and burdens. Clearly, the petitioner's burdens are at issue, or no lawsuit would exist. But whose benefits to estimate? Following *Florida Rock IV*, the economist would evaluate reciprocity as "direct compensating benefits" of the regulation to the petitioner's remaining uses of the property. Following Justice Brennan's application of Justice Brandeis' remark as "a burden borne to secure 'the advantage of living and doing business in a civilized community,'"¹⁵⁴ the economist might evaluate reciprocity by measuring general welfare enhancement to society caused by the restriction.

The key difference between existing judicial evaluations and economic evaluations is *measurement* of benefits and costs at stake in the case as the starting point. Who should pay first requires insight into the relative size of the stakes. At least order of magnitude benefit estimates of permit denial are needed for comparison with petitioner's estimated losses to assure that benefits exceed burdens and that enforcement of the government action motivating the complaint is an efficient government policy and not simply a redistribution of petitioner's wealth.

154. *Andrus v. Allard*, 444 U.S. 51, 67 (1979) (quoting *Pennsylvania Coal v. Mahon*, 260 U.S. 393, 422 (1922) (Brandeis, J., dissenting)).

A. *Direct Compensating Reciprocal Benefits of the Salt Marsh to Palazzolo*

In contrast to the cases cited so far, economic evidence of reciprocity was introduced in the *Palazzolo* remand trial at Wakefield County, Rhode Island, during testimony in June 2004.¹⁵⁵ Mr. Palazzolo's eighteen-acre property is located on the south side of Winnapaug Pond in Westerly, Rhode Island, a popular vacation and seaside destination second only to Newport, Rhode Island. The pond sits on the north side of Atlantic Avenue, which parallels the beach from the commercial Misquamicut Beach area of Westerly through residential and vacation properties along the Atlantic Ocean. The north, east, and west sides of the pond have been developed for decades. The south side of the pond consists of 146 acres of salt water marsh, including Mr. Palazzolo's property. The pond itself is a 446-acre shallow tidal pond open to the Atlantic Ocean through a breach in the beach, over which a bridge for Atlantic Avenue is built. Mr. Palazzolo initially acquired an interest the property on December 1, 1959, and completed acquisition a decade later.¹⁵⁶

The factual basis for the claim is summarized in the United States Supreme Court decision:

[I]n 1971, Rhode Island enacted legislations creating the [Coastal Resources Management] Council, an agency charged with protecting the State's coastal properties. Regulations promulgated by the Council designated salt marshes like those on Palazzolo's property as protected "coastal wetlands" . . . on which development is limited to a great extent. . . . [A] new application, submitted to the Council in 1985, [proposed filling eleven of the property's eighteen wetland acres] to build a private beach club. [The Council rejected this application.] . . . Petitioner filed an inverse condemnation action in Rhode Island Superior Court, asserting that the State's wetlands regulations . . . had taken the property without compensation in violation of the Fifth and Fourteenth Amendments. The suit alleged the Council's action deprived him of "all economically beneficial use" of his property, resulting in a total taking requiring compensation under *Lucas v. South Carolina Coastal Council*. [Palazzolo] sought \$3,150,000 in damages, a figure derived from an appraiser's estimate as to the value of a 74-lot residential subdivision [on the property].¹⁵⁷

The alleged taking occurred February 18, 1986,¹⁵⁸ establishing the benchmark for economic analysis.

The case came back to the Rhode Island Superior Court when the United States Supreme Court rejected Palazzolo's claim that he was deprived of all economically beneficial use, because the record included

155. *Palazzolo v. State*, No. WM 88-0297, 2005 WL 1645974, at *1 (R.I. Super. Ct. July 5, 2005).

156. David Cole, *Analytical Chronology of Palazzolo v. Rhode Island*, 30 B.C. ENVTL. AFF. L. REV. 171, 174 (2002).

157. *Palazzolo*, 533 U.S. 606, 614-16 (2001) (citations omitted).

158. *Palazzolo v. State*, 746 A.2d 707, 711 (R.I. 2000).

“undisputed evidence that [the property] had \$200,000 in development value remaining on an upland parcel of the property.”¹⁵⁹ Like so much false lore in takings cases, the so-called upland parcel was not “upland” beyond the fact that it was a few inches higher than the rest of the property; the state did not permit development on the upland parcel at the time of the initial court decision, and Mr. Palazzolo later received a permit to build only because his counsel pressed the issue at the remand trial; and most relevant, the upland parcel was never valued at \$200,000.¹⁶⁰ The property was not even eighteen acres. Furthermore, Palazzolo never intended to develop seventy-four residential properties, although the Town of Westerly approved a plan for the property laying out seventy-four parcels as the Shore Gardens Subdivision on July 8, 1959, before Palazzolo purchased any interest in the property.¹⁶¹

The lower court found that the remaining “economically beneficial” use of the Palazzolo property was one residential lot, valued at \$61,000 (in 1986 dollars) by the state’s appraiser, Mr. Thomas Andolfo. This lot was surrounded by approximately seventeen acres of protected open space, which Mr. Andolfo valued at \$7,000 per acre for their scenic contribution to the residential lot. Mr. Andolfo testified that,

I would assign a \$100,000 value to that particular lot minus . . . the cost of [road upgrade and] engineering [of \$39,000]. And then I would also assign to the site a value for excess land area in the sense that . . . instead of having one house . . . on . . . an acre of land, we have one house . . . on a parcel, which is essentially twenty acres in size. [sic: seventeen not twenty] . . . I would . . . provide a contributory value of the excess land in addition to the implied value of the single family house lot. And what I did was I looked at essentially nineteen acres of excess land at \$7,000 per acre, which translates into \$133,000, and I added to that the . . . value of that one site. . . . And that amounted to \$61,000. So when we add the two up, I have a total value of \$194,000 . . . as of February 18, 1986.¹⁶²

This value was subsequently rounded up to \$200,000 in the Rhode Island Superior Court decision and mislabeled as the value of the single parcel.¹⁶³

Preserving the surrounding scenic acreage can be seen as a positive externality, a reciprocal benefit to Mr. Palazzolo of the prohibited development.¹⁶⁴ Co-author Wade testified at trial, “[T]akings cases ask implicitly are there reciprocal benefits[,] which I understand as a benefit of

159. *Palazzolo*, 533 U.S. at 616.

160. *Palazzolo*, 2005 WL 1645974, at *11.

161. Cole, *supra* note 156, at 172.

162. Transcript of Record at 682–83, *Palazzolo v. Coastal Res. Mgmt. Council*, No. 88–0297, (R.I. Super. Ct. Oct. 24, 1997).

163. *Palazzolo*, 746 A.2d at 715.

164. Transcript of Record at 21, *Palazzolo v. State*, No. WM-88–0297 (R.I. Super. Ct. July 5, 2005).

positive externality. Would there be a positive externality related to permit denial that benefits the plaintiff in specific and concrete ways?”¹⁶⁵ Immediately following came this exchange:

Q: [A]s an economist[,] how would you utilize the phrase [“direct compensating benefits accruing to the property[,”] which is phraseology used in the *Florida Rock* cases?

A: That’s a more concrete notion of the way economists think about offsetting externalities than the term of art of the law of average reciprocity of advantage. Direct concrete benefits are something you . . . dea[] with from time to time in various projects; are there benefits of this public policy? In this particular case[,] are there specific benefits, specific and concrete benefits of the regulation that directly offset the losses? Are there positive externalities of the regulation that benefit Mr. Palazzolo?¹⁶⁶

Testimony adduced at trial revealed that the surrounding acreage depended on the court’s decision about the amount of private acreage above the mean high water line (MHW). DiPrete Engineering Associates created three scenarios in relation to the MHW, labeled Concept I, II, and III.¹⁶⁷ The three scenarios contained 10.3, 15.9, and 17.0 acres, respectively, which settled the question of the size of the entire parcel, 17 acres. These three plans consisted of 17, 35, and 50 buildable lots, if permitted, depending on the location of MHW demarcation.¹⁶⁸ For the single upland parcel, DiPrete estimated the parcel itself at 0.7 acres and that 1.2 acres were required for the connecting road to Atlantic Avenue. Consequently, 8.4, 14.0, and 15.1 acres remained as unbuildable salt marsh to be maintained as an implicit habitat buffer by Mr. Palazzolo. This salt marsh habitat could be considered as providing an amenity value to Palazzolo’s single buildable lot, a reciprocal benefit valued at \$7,000 per acre according to Mr. Andolfo.¹⁶⁹

The table on page 360 shows how much reciprocal benefit value was added to the value of the single buildable parcel, \$61,000, by the wetlands protection regulation. The amenity values of the surrounding 8.4 to 15.1 acres provided direct offsetting benefits of \$58,800, \$98,000, or \$105,700 depending on the MHW.¹⁷⁰

165. *Id.*

166. *Id.* at 21–22.

167. DiPRETE ENGINEERING ASSOCIATES, COST ANALYSIS: CONCEPT DEVELOPMENT PLAN ALTERNATIVE ANALYSIS, PROPERTY OF ANTHONY PALAZZOLO 8–10 (Apr. 2004).

168. See WILLIAM E. COYLE & ASSOCIATES, APPRAISAL REPORT FOR NEW ENGLAND LEGAL FOUNDATION, PROPERTY LOCATED AT PALAZZOLO SITE, WESTERLY, R.I., 4–6 (June 2004). Only a few inches governed the location of the MHW—and the outcome of the case.

169. Transcript of Record, *supra* note 162, at 682–83.

170. Transcript of Record, *supra* note 164, at 209–11.

Reciprocal Benefits of Palazzolo Salt Marsh (\$1986)

| Concept Plan | Parcel Value | Buffer Acreage | Amenity Value per Acre | Amenity Value of Buffer | Value of Entire Property |
|--------------|--------------|----------------|------------------------|-------------------------|--------------------------|
| I | \$61,000 | 8.4 | \$7,000 | \$58,800 | \$119,800 |
| II | \$61,000 | 14.0 | \$7,000 | \$98,000 | \$159,000 |
| III | \$61,000 | 15.1 | \$7,000 | \$105,700 | \$166,700 |

Trial testimony by Palazzolo's appraiser, Mr. William Coyle, revealed the net profit values of the three development concepts.¹⁷¹ The three concepts had respective values of \$1.25 million, \$1.95 million, and \$2.7 million (all in 1986 dollars).¹⁷² Testimony in the trial showed that Mr. Palazzolo suffered 90% to 94% diminution by comparing expected returns from the three development concepts to the values for the single parcel shown above.

If ARA were measured by comparing direct compensating benefits and burdens, it would not preclude the finding of a compensable taking. The loss vastly overshadows the potential gains of enhancing this remaining single lot with the surrounding acreage.¹⁷³ Mr. Palazzolo incurs the costs, while residents in the community and seasonal vacationers benefit from the protection of the pristine wetland acreage.¹⁷⁴

171. See WILLIAM E. COYLE & ASSOCIATES, *supra* note 168.

172. *Id.*

173. These facts are similar to *Florida Rock Indus. v. United States* (*Florida Rock V*), 45 Fed. Cl. 21, 37 (1999) ("[T]he surrounding community benefits from the wetland's filtering action, stabilizing effect, and provision of habitat for flora and fauna. [The property owner] benefits from being a member of a community which has the potential for a better environment. But there can be no question that [the property owner] has been singled out to bear a much heavier burden than [his] neighbors, without reciprocal advantages. [Other properties] . . . nearby . . . are among those who enjoy [the property owner's] beneficence without sharing [his] burden."). Therefore, Palazzolo's disproportionately heavy burden was not offset by reciprocity of advantage.

174. The 2005 decision against Palazzolo did not depend upon average reciprocity of advantage. The court undertook a *Penn Central* analysis, which provided the framework of its decision. It adopted the state's engineer's testimony rather than Mr. Palazzolo's about the buildability of the property, and adopted the state's argument about MHW. These decisions governed the *Penn Central* calculations. The court found "that almost 50% of Plaintiff's property is below mean high water [line]." *Palazzolo v. State*, No. WM 88-0297, 2005 WL 1645974, at *16 (R.I. Super. Ct. July 5, 2005). "[A]s a result . . . Plaintiff [has no right] to fill or develop that portion of the site which is below mean high water." *Id.* at *17. "The fatal flaw in the Plaintiff's profit estimate is principally due to the site preparation costs determined by Plaintiff's engineer. The Court finds [these] costs to be unreasonably low and unreliable." *Id.* at *10. "[R]egardless of any diminution of parcel size . . . due to the Public Trust Doctrine, site development

B. *Social Benefits of the Salt Marsh to the Community at Large*

Dr. James Opaluch, a resource economist from the University of Rhode Island, agreed with a broad view of reciprocal benefits, “to the extent that regulations might reduce the amount of pollution and emissions that could improve the quality of the pond and potentially raise the amenity value for the [properties] around the pond.”¹⁷⁵

[A]n additional amenity effect might be that if you have a small level of development around the pond, there would be a more natural environment. People generally tend to prefer to see a natural environment across the pond rather than seeing a bunch of houses. There could be an amenity effect associated with lower density of development around the pond.¹⁷⁶

Dr. Opaluch specifically attempted to rebut the co-author’s testimony in the following exchange:

- Q. Does Dr. Wade’s analysis deal with your concerns regarding amenity value? (directing the witness to the analysis shown above.)
- A. No, it does not. . . . [A]s I understand the approach used here, he looked at the values to the owner of the property for wetlands. . . . The amenity value would also include changes in quality of the amenity associated with other properties, neighboring properties around the pond. Those are ignored in [Dr. Wade’s] analysis.¹⁷⁷

True, although the co-author’s testimony was aimed at the narrow interpretation of the relevance of amenity values as “direct compensating benefits” per the Federal Circuit instruction.¹⁷⁸ Changes in the value of the neighbors’ existing properties do not matter under the *Florida Rock IV* test.

Dr. Opaluch, who performs a substantial amount of public policy resource valuation work, opined that amenity values for society might be created by retaining lower development density in the salt marsh or generalized benefit to water or air quality from lack of development.¹⁷⁹ Although not estimated by Dr. Opaluch, the benefits of preserving the salt marsh may be substantial in terms of public-policy value to society. There is no way to know, however, as the record is silent.¹⁸⁰

costs unique to the [property] would result in an economic loss to the Plaintiff if he were to build either of the . . . residential developments he has proposed. Thus, . . . the regulations . . . do not have an adverse economic impact.” *Id.* at *11. The Court also ruled that “clear and convincing evidence demonstrates that Palazzolo’s development would constitute a public nuisance.” *Id.* at *5.

175. Transcript of Record, *supra* note 164, at 181.

176. *Id.* at 202.

177. *Id.* at 192–93.

178. *Florida Rock Indus. v. United States (Florida Rock IV)*, 18 F.3d 1560, 1570–71 (D.C. Cir. 1994),

179. Transcript of Record, *supra* note 164, at 179–81.

180. The benefits of preserving Mr. Palazzolo’s salt marsh property for society would be an interesting study for Dr. Opaluch’s Rhode Island graduate students to undertake.

1. EVIDENCE OF SOCIAL BENEFITS IN COURT
CAN SHOW ONLY THAT THE REGULATION
IS AN ECONOMICALLY EFFICIENT OUTCOME

Lack of evidence of relative magnitude of benefits and burdens at bar is the obvious failing of virtually the entire legal record of average reciprocity of advantage. If relevant to a takings determination, some specific direct evidence of the scientific support for and magnitude of such amenity values at the salt marsh around Winnapaug would be required. On efficiency grounds, courts would determine (1) whether prohibiting the development increases society's welfare by preserving amenity values in a demonstrable way that might otherwise be lost and (2) that these amenity and other natural resource values overshadow the claimant's loss.¹⁸¹ If not, the prohibition may only redistribute part of the plaintiff's wealth to his neighbors, who had the good fortune to build their houses before the regulation came into existence, while the plaintiff suffers the loss alone. Remember, however, that measuring broader positive benefits of the regulation to society will not automatically trump the complainant's losses; efficiency does not support a non-payment rule.

Even if such values were measured with derivative benefit transfer methods, instead of based on original site work, some quantitative notion of the relative size of the amenity values at stake is needed in any public policy setting and could be required in a trial setting.¹⁸² The mere academic opinion that amenity value is a relevant concept and may apply to the salt marsh in question is insufficient; evidentiary proof should be required at trial. Mr. Palazzolo's attorney unsuccessfully objected to Dr. Opaluch's entire line of testimony as irrelevant: "[h]e has not done any specific studies of Westerly or of the effect of amenity and

181. Natural resources like the salt marsh provide ecosystem services to society and these services have value. The interested reader can learn more from National Academies Press, *Valuing Ecosystem Services: Toward Better Environmental Decision Making* (2004), http://books.nap.edu/openbook.php?record_id=11139&page=R1.

182. Benefit transfers are used by public agencies that desire information on environmental benefits of policy decisions affecting a "policy site" without the budget to pay for original research. Existing estimates of use and nonuse values at other "study sites" are transferred in to approximate the resource values at the "policy site." While protocols have been developed to reduce and understand the errors of benefit transfers, no study has yet been able to show under which conditions environmental value transfer is valid. For two recent examples of appropriate valuation methods, see Roy Brouwer, *Environmental Value Transfer: State of the Art and Future Prospects*, 32 *ECOLOGICAL ECON.* 137 (2000), available at http://www.csrees.usda.gov/nea/nre/in_focus/ere_if_environmental.html; and Randall S. Rosenberger & John B. Loomis, *Benefit Transfer of Outdoor Recreation Use Values: A Technical Document Supporting the Forest Service Strategic Plan*, U.S. Dep't of Agriculture, Forest Service, Rocky Mountain Research Station (2000), available at http://www.fs.fed.us/rm/pubs/rmrs_gtr72.html.

disamenity values on real estate prices in regulated wetlands.”¹⁸³ Apparently, the State of Rhode Island chose not to pay for the appropriate studies identified by Dr. Opaluch in his testimony.¹⁸⁴

2. THE PALAZZOLO TRIAL COURT DECISION ADOPTED
A NARROW VIEW OF AVERAGE RECIPROCITY
OF ADVANTAGE

The trial court’s 2005 Palazzolo decision adopted the narrow view of average reciprocity:

Common sense as well as the evidence adduced at trial necessarily leads to the conclusion that Plaintiff would benefit from an “average reciprocity of advantage” as a result of limited development of the parcel in question. The value of the undeveloped salt marsh figures into the value Plaintiff should realize from the sale of the single house lot. Thus, at least in a small way, Plaintiff benefits directly from the regulations which form the target of his complaint.¹⁸⁵

As the outcome of the trial hinged on other factual issues,¹⁸⁶ this conclusion reflects the entire value of the property to the plaintiff in Judge Gale’s mind.

C. *Measurement Issues of Values at Stake*
Focus Attention on Penn Central Test’s
Empirical Underpinnings

In recent years economists have identified two sources of measurement problems related to evaluating “before” and “after” appraisal values of a property at issue in a takings case. Dr. Opaluch and the co-author discussed these issues during testimony in the trial.

Professor Ford Runge pointed out in 1999 that existing “regulatory restrictions can enhance property values by protecting amenities and services that are fundamental to property value. . . .”¹⁸⁷ According to Dr. Runge, appraisals of comparable values embed two effects that cause an upward bias in the plaintiff’s “before” property value:

- Scarcity effect—the existing restriction on wetlands development restricts the supply of properties such as Palazzolo’s, making

183. Transcript of Record, *supra* note 164, at 171.

184. *Id.* at 221–22 (“Q. How much would it cost to do a study showing the effect of water quality on property values in the Winnapaug Pond area? A. I would say hedonic analysis of property values could be done in the range of [\$]5 to [\$]20,000.”).

185. Palazzolo v. State, No. WM 88–0297, 2005 WL 1645974, at *11 (R.I. Super. Ct. July 5, 2005).

186. Discussed *supra* note 174.

187. C. Ford Runge, *The Congressional Budget Office’s “Regulatory Takings and Proposal for Change”*: *One-Sided and Uninformed*, 7 ENVTL. L. & PRAC. 5, 10 (1999), available at http://www.law.georgetown.edu/gelpi/current_research/documents/RT_Pubs_Policy_CBO.pdf.

Palazzolo's property higher in value than it would be if the restriction were eliminated.

- Amenity effect—comparable appraisal values embed the existing protected amenities of open salt marsh that Palazzolo's development would reduce, thereby inflating the "before" value.

Timothy D. Searchinger, the senior attorney for Environmental Defense, argues that appraisal values reflect the value of the instant property as if it alone "were not subject to restrictions," whereas the correct valuation stance should be "how much the property should be worth if the restrictions did not exist and did not apply to anyone."¹⁸⁸ Instead of "before" and "after" values, the analyst or appraiser should provide values "with" and "without" the regulation. While Ford and Searchinger are conceptually correct, myriad other factors govern the supply of and demand for property, which act together to establish property values. Scarcity and amenity effects do not automatically undermine appraisal values.

1. THEORETICAL ECONOMIC OPINIONS REQUIRE EMPIRICAL SUPPORT

Valuation is by definition empirical. Scarcity or amenity effects have to be evaluated in context with other empirical determinants of "with" and "without" values before concluding that appraisers' values are of no use to the court. Amenity value is but one of a number of factors that affect the demand for property and therefore influence its price. Any property would have many indicators of amenity or disamenity important to buyers—number of bathrooms, view shed, etc. One person's amenity may be another's disamenity. Some people may want to live on the Winnapaug Pond salt marsh; others may avoid it due to bugs or odors. The scarcity effect may or may not be significant depending on how much of a supply limitation is imposed by the regulation at issue. In a trial setting, empirical evidence is required. The supply of property would have to be shown to be significantly limited in the instant facts to prove that scarcity due to constraints on the property has inflated appraisal comparable values.

Amenities and scarcity are only two of the determinants of property value brought before a court; they may be relatively insignificant in their effects on property value. The evidence must parse these effects

188. *Id.* at 6 (quoting Timothy D. Searchinger, Some Key Questions Raised by the Recent Focus in Takings Cases on "Reduction in Value," presented at Georgetown University CLE Conference on Regulatory Takings, San Francisco, Cal. (Sept. 1998)).

to their appropriate locations within supply and demand functions and measure them to understand their empirical relationship to comparable appraisal values. Both shortage and amenity effects were addressed in the *Palazzo* remand trial. Dr. Opaluch testified that the effect of amenity values is measured in the demand function,¹⁸⁹ but admitted:

I haven't done a specific study so I couldn't [comment] about the number[s] . . . , but . . . [i]f the wetlands regulations were not in place, [there] would potentially be much more development in the area that could have a large impact on water quality. If it did, it would reduce the values of the property in the area.¹⁹⁰

Dr. Opaluch testified that scarcity value affects the supply function: “[B]y restricting development you would have fewer lots for sale. That could potentially increase a scarcity value basically [by] shifting supply.”¹⁹¹

Dr. Opaluch limited his testimony to correctly assigning the amenity effect to be an argument in the demand for property and the scarcity effect to be an argument in the supply of property. While tautologically true, his claims were backed by no evidence and were a bad factual choice for the period of Westerly, Rhode Island, real estate at issue in the *Palazzo* remand trial, the period leading up to permit denial in 1986. The post-Vietnam War run-up in housing and equity market values swamped any notion of sorting out amenity or scarcity effects or believing that they had any bearing on the values at stake in the case.

2. EMPIRICAL EVIDENCE SHOWS THAT OTHER ECONOMIC FORCES OVERWHELMED SCARCITY AND AMENITY VALUES AFFECTING PALAZZOLO PROPERTY

The co-author testified that “local real estate prices changed dramatically over the period that is under intense scrutiny during this trial.”¹⁹² The following chart, which was part of Plaintiff’s Exhibit #78 used at trial, shows that coastal Rhode Island housing prices at Westerly and the next village up the coast, Charlestown, increased 275 percent between 1982 and 1988, compared to 260 percent for the entire state.

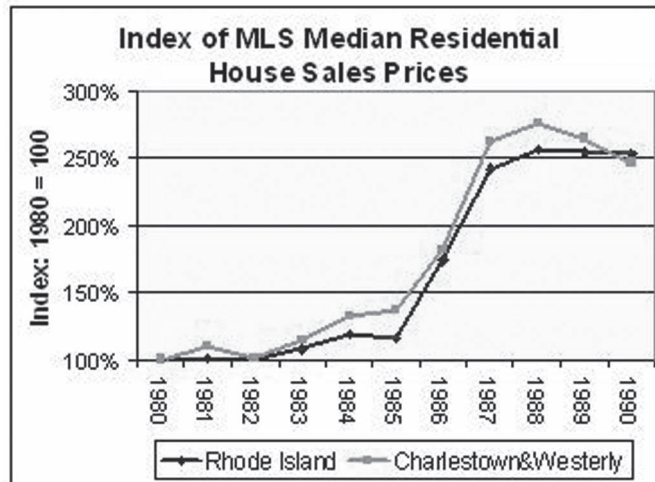
What would cause that run-up in housing prices? An upward shift in demand or a large reduction in supply are the only two choices. Supply was not suddenly reduced, so a demand shift is the sole explanation. The following chart, which was part of Exhibit #78 used at trial, shows that

189. Transcript of Record, *supra* note 164, at 181.

190. *Id.* at 187.

191. *Id.* at 203.

192. *Id.* at 33.



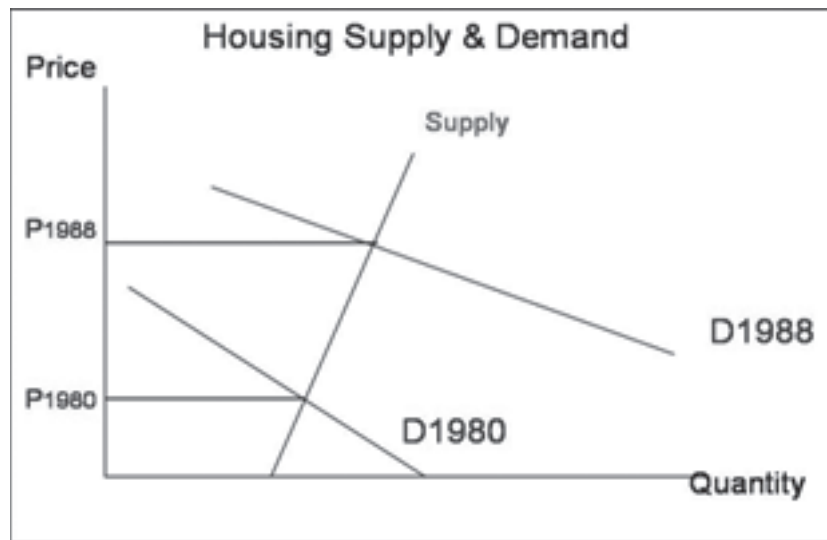
Source: Freddie Mac Rhode Island Price Indices

demand in 1980, which crosses the supply of housing curve at the point marked by P_{1980} , shifts up the supply curve to cross at a point marked by P_{1988} eight years later. That jump in the demand for property caused a huge increase in the price of Westerly housing. Mr. Palazzolo missed the opportunity to sell his properties into this hot real estate market.

Economic forces that caused the upward shift in the demand for housing included a sharp decline in interest rates, rising real income, and increasing wealth effects. By the mid-1980s pent-up housing demand was unleashed by the confluence of these three demand-side economic forces. Vietnam-induced interest and mortgage rates, which had stymied real estate markets in the late 1970s, dropped substantially by 1986. Mortgage rates dropped from historically high seventeen percent in 1980 to approximately ten percent by 1986. Substantial wealth effects stimulated demand for housing and second homes. The Dow Jones Industrial Average tripled between 1980 and 1987. Inflation-adjusted ("real") Rhode Island personal income rose thirty percent from 1980 to 1989.

To illustrate the evidence needed to confirm or deny demand side effects, consider the typical factors that comprise the demand for property. Let the following equation represent the aggregate demand function for residential housing in a market area, i , at time, t . Quantity demanded is a function of six listed variables.

$$Q_{it}^D = f(P_{it}, Y_{it}, W_{it}, I_{it}, Pop_{it}, X_{ik}, e_{it})$$



Where:

- Q_{it}^D = Demand for housing in area i at time t .
- P_{it} = Housing price.
- Y_{it} = Personal income.
- W_{it} = Wealth.
- I_{it} = Mortgage interest rate.
- Pop_{it} = Population in the market area.
- X_{ik} = Index of k amenities governing housing prices in area i .
- e_{it} = Random error.

Income, wealth, interest rates, and population act to shift and affect the shape of the demand curve as depicted in the figure. The k amenities are the various other factors that influence housing and property values in the market area.¹⁹³ Salt marsh amenities/disamenities would be but one

193. Co-author Wade testified at trial about selected amenities that could influence housing prices in the Misquamicut Beach area.

People [who] drive from Watch Hill to Weekapaug may have an amenity value of driving through the open marsh land. . . . They may have a preference for living next to open marshland. Some may have a disamenity preference to living next to open marshland because of the prevalence of bugs and mosquitoes and whatnot. It would be very hard to unravel these things. It would be empirical[,] called Hedonic analysis. They're tedious detailed analyses of the value of housing, but one could undertake it. It hasn't been done. There are no empirical estimates of amenity values in this area.

Transcript of Record, *supra* note 164, at 41.

of many considerations within this argument of the demand function. Demand₁₉₈₈ is drawn slightly flatter than Demand₁₉₈₀ to reflect factors that would have caused the demand to become more elastic. To show that amenity effects cause upward bias in comparable appraisals, the witness must control for the other elements shown above that may shift the demand curve.

The supply of housing at any specific point in time is reasonably limited, or inelastic. Through time, housing supply can shift out; if some scarcity effect limits the amount of buildable land, that shift could be slowed. No reasonable dampening of supply would explain the 275 percent increase in coastal Rhode Island property values during this period. The co-author testified:

there was such a huge change in demand during this period that any effect of the supply curve moving left or right would be very marginal, virtually unmeasurable, so while the scarcity effect is a reasonable notion to think about, empirically it would be virtually immeasurable [by comparison to the huge forces on the demand side]. . . . [T]o [opine] simply [that] there is a scarcity effect and the appraiser's comps are too high is not consistent with the empirical evidence.¹⁹⁴

D. Trial Testimony Emphasizes Need for Empirical Support for Expert Testimony

Whether the measurable benefits and burdens are construed narrowly, as related only to the claimant, or broadly, as related to the community, quantitative measurement is the first step to more clearly defining “average reciprocity of advantage.” It is not sufficient to opine that society has high values for wetlands, clean water, or clean air. Of course, that is true. The state must scientifically show that resource values at stake in the case are affected by the permit decision, and that those resources in their current use have higher value to the community than the proscribed competing uses. The protected resources also must specifically enhance the value of the owner’s remaining permissible uses of the property to offset the lost opportunity. The co-author’s testimony did not question whether or not protecting the salt marsh around Winnapaug Pond might be an economically efficient policy. Dr. Opaluch provided no evidence that it was. The co-author merely demonstrated with facts in the record that the benefits of preserving Mr. Palazzolo’s part of the salt marsh did not offset his direct losses.¹⁹⁵

194. *Id.* at 35.

195. Co-author Wade also testified to the economic elements of the *Penn Central* test, showing that based on the plaintiff’s engineer’s cost estimates denial of permit frustrated distinct investment-backed expectations. *See generally* Transcript of Record, Palazzolo v. State, No. WM-88-0297 (R.I. Super. Ct. July 5, 2005).

E. *Conclusions: Herculean Evidentiary Requirements and Lack of Support for Nonpayment Militate Against Social Reciprocity*

Economic practice shows that courts would be better served by relying upon quantitative evidence of beneficial values for resources at stake in the lawsuit to address the fundamental efficiency of permit denial. Legal hairsplitting and unsupported expert opinions are not sufficient. Merely claiming that scarcity and amenity effects are valid considerations does not mean that they govern the evaluation of benefits and burdens at stake in the lawsuit.

The social version of average reciprocity of advantage has no economic content that supports nonpayment of compensation, and its evidentiary requirements are Herculean.

The larger the benefits to society of the regulatory proscription, the greater the Fifth Amendment rationale for payment to the impacted few (assuming away harm prevention). Proponents who promote social reciprocity as the essential stick in the judicial wood pile to raise the bar on whether to pay for a regulatory taking may want to reconsider in view of the transaction costs. Judge Plager's (*Florida Rock IV*) narrow version of the concept ("direct compensation benefits") is consistent with economic benefit-cost analysis and can be used to evaluate the efficiency criterion.

The three twenty-first century decisions discussed in this article can be used to evaluate whether the doctrine of average reciprocity of advantage can be considered a "triumph of 'magic words' over economic reality," as Professor Kanner labeled it ten years ago.¹⁹⁶ The *R & Y* decision analyzes the facts in line with economic theory, thus conforming the law to good economic practice. Plaintiff's loss was insignificant and remaining uses of the property were enhanced by enhancements to the lake frontage that preserved the wetlands. The decision's narrow view of reciprocity found sufficient direct compensating benefit to rule against the plaintiff based on "economic reality."

Testimony in *Palazzolo* by defendant expert suggested that preserving Mr. Palazzolo's salt marsh benefited the neighbor's property, residents of nearby areas driving to and fro, and tourists to the area by preserving the ecosystem and scenic vistas. Testimony by the co-author suggested that Mr. Palazzolo's economic dreams were wiped out with little direct compensating benefit. He paid the price of preservation. While no

196. Kanner, *supra* note 6.

evidence was presented to estimate the beneficial values to society of preserving the open marshland, likely they are large, perhaps even larger than Mr. Palazzolo's direct loss—all the more reason to compensate him following economic efficiency principles and *Armstrong's* "fairness and justice" criterion (assuming away other reasons to rule against the plaintiff identified above). "Economic reality" confirms that proving the regulatory proscription to be an efficient use of society's resources provides no support for nonpayment.

In contrast to both *R & Y* and *Palazzolo*, the *K & K V* decision contains no factual discussion to consider whether the wetlands on the property provided services to society that enhanced the community. Instead, the appellate decision relies on "magic words" from *Walcek* that "the existence of the wetland regulations . . . indisputably serve an important public purpose—one which benefits plaintiffs as members of the public at large."¹⁹⁷ Then it misconstrues the *R & Y* analysis as shown in Part III.H to conclude that plaintiffs are not singled out to bear the burden because "wetland restrictions . . . benefit all landowners, including these landowners, by preserving the ecologically and economically valuable functions of wetlands."¹⁹⁸ The average reciprocity of advantage discussion of the decision is devoid of any evidence to reveal "economic reality." *K & K V* illustrates exactly the pitfall of "magic words" that trump "economic reality."

Social reciprocity has no economic content that supports a decision not to compensate the claimant. Decisions espousing social reciprocity are confounded by "magic words." Narrow reciprocity following *Florida Rock IV's* instruction—as illustrated by the *R & Y* analysis—is tractable and consistent with standard benefit-cost analysis—consistent with "economic reality."

197. *K & K Constr., Inc. v. Mich. Dep't of Env'tl. Quality (K & K V)*, 705 N.W. 365, 386 (Mich. App. 2005) (citing *Walcek v. United States*, 49 Fed. Cl. 248, 270 (2001)).

198. *Id.* (citing *R & Y, Inc. v. Mun. of Anchorage*, 34 P.3d 289, 300 (Alaska 2001)).