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To What Extent Does Wealth Maximization Benefit Farmed Animals? A Law and Economics Approach to a Ban on Gestation Crates in Pig Production

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COMMENT

TO WHAT EXTENT DOES WEALTH MAXIMIZATION BENEFIT FARMED ANIMALS? A LAW AND ECONOMICS APPROACH TO A BAN ON GESTATION CRATES IN PIG PRODUCTION

By
Geoffrey C. Evans*

A law and economics approach in the current animals-as-property realm could be the most efficient way to gain protections for the billions of farmed animals that need them now. The wealth maximization theory allows for this because it recognizes human valuation of nonhuman interests. However, evidence shows that a market failure exists because of the discord between public will and animal industry practices. Where human valuation of nonhuman interests is underrepresented in the market and, therefore, a market fix is needed through legislation, animal advocates should evaluate the legislation's economic impacts. In the case of a ban on gestation crates, as may be the case elsewhere, legislation may actually prove to be economically efficient, and thus gain the support of those who would not otherwise back such legislation. Even when the economic impact is negative, several arguments still weigh in favor of doing a detailed economic analysis. The more immediate positive effects likely to result from this approach outweigh possible negative effects. The sheer magnitude of farmed animal suffering requires that animal advocates begin a direct, offensive approach to the economics of animal welfare measures today.

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I. INTRODUCTION

It is difficult to overstate the influence of the law and economics movement, which has embedded itself into nearly every major legal discipline in the United States.[1] This influence is likely due to the fact that "economic analysis might serve as the answer to the modern legal

[1] David D. Friedman, *Law's Order: What Economics Has to Do with the Law and Why It Matters* 112–70, 189–244 (Princeton U. Press 2000) (with chapters on many legal disciplines including: property, intellectual property, contract, tort, criminal, and antitrust); *Foundations of the Economic Approach to Law* 90–161 (Avery Wiener Katz ed., Oxford U. Press 1998) (looking at law and economics in the areas of property, tort, contract, and procedure); Richard A. Posner, *Values and Consequences: An Introduction to Economic Analysis of Law* 2 (John M. Olin Law & Economics Working Paper No. 53, 2d Series, Mar. 1998) (available at http://www.law.uchicago.edu/Lawecon/WkngPprs_51-75/53.Posner.Values.pdf) (mentioning the law and economics movement's influence in antitrust, environmental regulation, tort damages, securities, property, and other legal areas, and stating that "[e]conomic analysis of law is generally considered the most significant development in legal thought in the United States since legal realism . . . .").

scholar's prayer for an objectively defensible critical standard."[2] Despite its extraordinary influence, the law and economics movement has seldom found its way into the animal law field.[3] This is true even

[2] Frank I. Michelman, *A Comment on* Some Uses and Abuses of Economics in Law, 46 U. Chi. L. Rev. 307, 307 (1979) (citing Arthur Leff, *Economic Analysis of Law: Some Realism about Nominalism*, 60 Va. L. Rev. 451 (1974)).

[3] To the best of the author's knowledge, only one article to date has attempted a rigorous and direct law and economics analysis in the animal law field. Christopher Green, Student Author, *The Future of Veterinary Malpractice Liability in the Care of Companion Animals*, 10 Animal L. 163 (2004). Other authors, however, have discussed economics in reference to animal law. For example, Gary Francione has taken issue with a wealth maximization approach to gaining protections for nonhuman animals. Gary L. Francione, *Animals, Property, and the Law* 4–5, 11 (Temple U. Press 1995). One author has discussed how a ban on subtherapeutic antibiotic regulation could possibly increase farmed animal welfare. Barbara O'Brien, Student Author, *Animal Welfare Reform and the Magic Bullet: The Use and Abuse of Subtherapeutic Doses of Antibiotics in Livestock*, 67 U. Colo. L. Rev. 407, 441–42 (1996). However, O'Brien's economic conclusions are fairly cursory: she only gives a few examples, with little support or analysis, for the argument that farm animal welfare concerns are put aside for incompatible profit motives. *Id.* at 408, 408 n. 9 (downers), 410 (debeaking chickens), 410 n. 13 (organic farming niche), 411–12, 422 (subtherapeutic antibiotics), 408–13, 422, 427, 439–42 (economic observations); Rebecca J. Huss, *Valuation in Veterinary Malpractice*, 35 Loy. U. Chi. L.J. 479, 487, 492–95, 504, 513–42, 548, 550–51 (2004). One article also discusses damages in veterinary malpractice suits and argues for a noneconomic damages cap. Huss, *supra* n. 3, at 487, 492–95, 504, 513–42, 548, 550–51.

Additionally, there is no shortage of articles discussing companion animal valuation. *See e.g.* Peter Barton & Frances Hill, *How Much Will You Receive in Damages from the Negligent or Intentional Killing of Your Pet Dog or Cat?* 34 N.Y. L. Sch. L. Rev. 411 (1989) (discussing different methods of valuing damages for the intentional or negligent killing of a companion animal); Elaine T. Byszewski, Student Author, *Valuing Companion Animals in Wrongful Death Cases: A Survey of Current Court and Legislative Action and a Suggestion for Valuing Pecuniary Loss of Companionship*, 9 Animal L. 215, 234 (2003) (arguing for a loss of investment theory of companion animal valuation); Geordie Duckler, *The Economic Value of Companion Animals: A Legal and Anthropological Argument for Special Valuation*, 8 Animal L. 199, 200 (2002) (arguing for companion animal and zoo animal valuation that is "logically and legally consistent with the way we have historically interacted with such objects as our special personal property"); Rebecca J. Huss, *Valuing Man's and Woman's Best Friend: The Moral and Legal Status of Companion Animals*, 86 Marq. L. Rev. 47, 52 (2002) (arguing for more consistent companion animal valuation that accords "with the reality of the relationship between companion animals and their human caretakers"); Lisa Kirk, Student Author, *Recognizing Man's Best Friend: An Evaluation of Damages Awarded When a Companion Pet Is Wrongfully Killed*, 25 Whittier L. Rev. 115 (2003) (discussing various trends in companion animal damage valuation); Margit Livingston, *The Calculus of Animal Valuation: Crafting a Viable Remedy*, 82 Neb. L. Rev. 783, 785 (2004) (arguing for greater than fair market value, including loss of companionship and emotional distress damages, for companion animals); Elizabeth Paek, *Fido Seeks Full Membership in the Family: Dismantling the Property Classification of Companion Animals by Statute*, 25 U. Haw. L. Rev. 481, 483 (2003) (arguing for statutory companion animal valuation that will "progressively dismantle the property classification of companion animals"); Debra Squires-Lee, *In Defense of Floyd: Appropriately Valuing Companion Animals in Tort*, 70 N.Y.U. L. Rev. 1059, 1062 (1995) (arguing for emotional distress damages "resulting from the tortious death of a companion animal").

though animal law is a necessarily broad area of law.[4]

Even where law and economics has found its way into animal law, it has only addressed farmed animal welfare tangentially.[5] This is especially interesting considering that "[i]n the United States, *more than 10 billion nonhuman animals are annually slaughtered just for food*."[6] Such a large food animal industry may not be a problem for some. For many others, however, industry practices, including "intensive confinement housing," are objectionable.[7] Numerous painful—some would say cruel—modern industry practices are well documented.[8] Farmed animals in particular have very little protection in the United States.[9] In addition, two major problems exist with the protections that farmed animals supposedly do have. Most states' anticruelty statutes exempt "'accepted,' 'common,' 'customary,' or 'normal' farming practices. . . . [and] exclude poultry, which represent an estimated 95% of the . . . farm animals slaughtered annually."[10]

Given such widespread painful practices and sparse protections, it seems natural for animal advocates to seek a better way to protect

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The author is unaware of any article specifically addressing law and economics with respect to farmed animals. However, a short legal encyclopedia article addresses livestock valuation. 4 Am. Jur. 2d *Animals* § 162 (2004).

[4] *Animal Law: Cases and Materials* xvii (Sonia S. Waisman, Bruce A. Wagman & Pamela D. Frasch eds., 2d ed., Carolina Academic Press 2002) ("Animal law is, in its simplest (and broadest) sense, statutory and decisional law in which the nature—legal, social, or biological—of nonhuman animals is an important factor."). This animal law case book has chapters on nearly all major areas of law. *Id.* at 73 (property), 99 (torts), 227 (constitutional law), 399 (criminal law), 655 (contracts), 709 (wills and trusts).

[5] *See supra* n. 3 (discussing many animal valuation articles, including one on livestock valuation, but none that provide a rigorous and direct approach of law and economics to farmed animals); O'Brien, *supra* n. 3, at 408–13, 422, 427, 439–42 (concluding that a ban on subtherapeutic antibiotics for farmed animals would have the effect of improving farmed animal welfare, but neglecting a rigorous economic analysis and leaving unclear exactly what welfare improvements would result).

[6] Steven M. Wise, *Animal Rights, One Step at a Time*, in *Animal Rights: Current Debates and New Directions* 19, 19–20 (Cass R. Sunstein & Martha C. Nussbaum eds., Oxford U. Press 2004) (emphasis added).

[7] David J. Wolfson, *Beyond the Law: Agribusiness and the Systemic Abuse of Animals Raised for Food or Food Production* 7 (Farm Sanctuary, Inc. 1999).

[8] *See* Jonathan R. Lovvorn, *Animal Law in Action: The Law, Public Perception, and the Limits of Animal Rights Theory as a Basis for Legal Reform*, 12 Animal L. 133, 142–43 (2006) (discussing the current maltreatment of farmed animals, including pigs, calves, and chickens); O'Brien, *supra* n. 3, at 414–22 (for details on the various methods of treatment of pigs, cows, and chickens in the industrial farm setting); Farm Sanctuary, *FactoryFarming.com: The Truth Hurts*, http://www.factoryfarming.com (accessed Nov. 12, 2006) (for links to common practices in the various animal industries).

[9] Wolfson, *supra* n. 7, at 10.

[10] *Id.* ("Specifically, [as of 1999] 30 states have enacted laws that create a legal realm whereby certain acts, no matter how cruel, are outside the reach of anticruelty statutes as long as the acts are deemed 'accepted,' 'common,' 'customary,' or 'normal' farming practices. These statutes have given the farming community the power to define cruelty to animals in their care. Similarly, certain states' anticruelty statutes also exclude poultry, which represent an estimated 95% of the . . . farm animals slaughtered annually.")

nonhuman animals from pain and exploitation as soon as possible. Some advocates see such protection through the implementation of animal rights.[11] Steven Wise believes that "[u]ntil, and unless, a nonhuman animal attains legal personhood, she will not count."[12] Another animal rights advocate, Gary Francione, takes the different approach that ridding nonhuman animals of their property status is the best way to achieve protections for them.[13]

However, the ever increasing, incomprehensibly large number of animals subjected to painful animal food industry practices suggests the full rights approach is not working—at least not fast enough—in providing protections for farmed animals.[14] At least ten billion animals each year cannot afford to wait for a future promise of legal personhood or the abolishment of property status.[15] Animal advocates should focus at least part of their efforts on concepts other than full animal rights in the sense that Wise and Francione advocate.[16] There may be a faster way to provide for nonhuman animal protections in the present system in which animals are classified as property.[17]

Providing full personhood to nonhuman animals is not the only way to understand animal rights. Perhaps it is better to "understand 'rights' to be legal protection against harm[;] then many animals already do have rights, and the idea of animal rights is not terribly controversial."[18] Under this view of rights, using principles of the law and economics movement might provide a better way to increase protection for nonhuman animal interests.

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[11] Wise, *supra* n. 6, at 25, 27; Francione, *supra* n. 3, at 4.

[12] Wise, *supra* n. 6, at 25.

[13] Petra Renée Wicklund, *Abrogating Property Status in the Fight for Animal Rights*, 107 Yale L.J. 569, 570 (1997) (citing Gary L. Francione, *Rain without Thunder: The Ideology of the Animal Rights Movement* 177 (Temple U. Press 1996)).

[14] *See* Lovvorn, *supra* n. 8, 139–49 (arguing against "legal-system-changing theories" such as rights based approaches); Richard A. Posner, *Animal Rights: Legal, Philosophical, and Pragmatic Perspectives*, in *Animal Rights: Current Debates and New Directions* 51, 74 (Cass R. Sunstein & Martha C. Nussbaum eds., Oxford U. Press 2004) (referring to "aggressive implementations of animal rights thinking" as "unlikely"); Wise, *supra* n. 6, at 19 ("10 billion nonhuman animals annually slaughtered . . . for food" as of 2004); Wolfson, *supra* n. 7, at 10 (eight billion as of 1999).

[15] *See* Lovvorn, *supra* n. 8, at 139–49 (arguing with a similar sense of urgency for immediate, practical goals rather than the "impractical theories" of legal "'personhood' or otherwise eliminating the property status of animals" and stating, "But as we pine away for a court-imposed silver-bullet for animals, or a paradigm shift in a legal system that has classified animals as property for centuries, billions of animals are enduring suffering that we have the power, and the societal support, to prevent today.").

[16] Lovvorn, *supra* n. 8, at 143–49; Wise, *supra* n. 6, at 27, 28; Gary L. Francione, *Rain without Thunder: The Ideology of the Animal Rights Movement* 177, 177 (Temple U. Press 1996).

[17] Francione, *supra* n. 3, at 4; *see* Lovvorn, *supra* n. 8, at 139–49 (arguing for more immediate, practical advancements).

[18] Cass R. Sunstein, *Introduction: What Are Animal Rights?* in *Animal Rights: Current Debates and New Directions* 3, 5 (Cass R. Sunstein & Martha C. Nussbaum eds., Oxford U. Press 2004).

Richard A. Posner, a leader of the law and economics movement,[19] has written about animal rights, most recently in an anthology of essays on the subject.[20] However, he has not extensively applied the law and economics approach to animal legal issues[21] or performed a detailed explication of how his wealth maximization theory of justice applies to animals.[22] Posner notes that animals are not "conventional rights bearers," in that they are not "voters [or] economic actors."[23] However, Posner acknowledges that animal protection can come at the hands of human decisions if animals are property.[24]

In a society hesitant to assign full rights to nonhuman animals, human representation of nonhuman animal interests is the most efficient way to protect those interests.[25] Although at least one prominent advocate, Francione, is an outspoken critic of the law and economics approach,[26] the evidence presented here shows that there is a strong possibility that it is the best way to protect animal interests *now*. Francione asserts, "[r]eform does not work because it seeks to force

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[19] Jeanne L. Schroeder, *Rationality in Law and Economics Scholarship*, 79 Or. L. Rev. 147, 147 (2000).

[20] Posner, *supra* n. 14, at 51. Posner's essay "is an amalgam with many changes" of his earlier works on the subject. *Id.* at 74. He is responding, mainly, to two of the most prominent animal rights advocates. *Id.* at 51. Posner disagrees with Wise's premising rights on cognitive ability. *Id.* at 56. In addition, Posner cuts holes in Singer's utilitarian arguments for vegetarianism. *Id.* at 60, 64–70.

[21] Posner does mention, though in little detail, some costs and benefits of his humancentric approach to animal rights. Posner, *supra* n. 14, at 70–72. He acknowledges that a full analysis "would require attention to" a wide variety of costs and benefits, including noneconomic concerns. *Id.* at 70.

[22] Posner does, however, give some clues in explaining the underpinnings of his theory. Richard A. Posner, *The Economics of Justice* 33, 48–49, 53, 76, 83 (Harvard U. Press 1981).

[23] Posner, *supra* n. 14, at 57–58. Note that this is in the sense that animals are disenfranchised in the human political system. *Id.* This does not necessarily mean that animals lack the capacity to make rational economic choices. In fact, rats have the capacity to make such choices. John H. Kagel et al., *Experimental Studies of Consumer Demand Behavior Using Laboratory Animals*, 13 Econ. Inquiry 22, 22 (Mar. 1975) ("The experiments show that laboratory animals will change consumption patterns in response to changes in the budget set, consuming more of the lower priced commodities and less of the higher priced commodities.").

[24] Posner, *supra* n. 14, at 59.

[25] *See* Posner, *supra* n. 14, at 74 ("No doubt the most aggressive implementations of animal rights thinking would benefit animals more than commodification and a more determined program of enforcing existing laws against cruelty to animals. But those implementations are unlikely, and so the modest alternatives are worth serious consideration.").

[26] Francione, *supra* n. 3, at 4–5, 11; Wicklund, *supra* n. 13, at 569–71; Animal Liberation NSW, *Debating Francione (and Loving it): The Hard-Hitting US Lawyer Talks to Claudette Vaughan*, http://www.animal-lib.org.au/more_interviews/francione/ (accessed Nov. 12, 2006) (first published in Vegan Voice) (Francione "maintain[s] that if animals are morally significant at all, then we must abolish the institution of animal property. We must stop creating and owning domestic animals or using wild animals as means to our ends. My [Francione's] view is that we should abolish animal slavery and not seek to reform an inherently immoral institution." In addition, he believes "welfarist reform does not work.").

owners to value their property differently and to incur costs in order to respect those animal interests."[27] However, to the extent that changes can be made through the legal system,[28] evidence shows that people are already providing for stringent protections for companion animals in this manner.[29] If humans begin to manifest a similar will to protect the interests of farmed animals, an economic approach to assigning values to those interests may be the best way to quantify the appropriate amount of protection for each animal or each situation.

However, if this approach is the best and is already possible, farmed animal welfare should reflect society's interest, if any, against animal cruelty. Strong evidence suggests that society has such an interest. For example, after explaining that there is little public support for more far-reaching animal protection reforms, Jonathan Lovvorn, Vice President of Animal Protection Litigation at The Humane Society of the United States, explains:

> More than two-thirds of Americans find it unacceptable that there are no federal laws that protect the welfare of animals on the farm. More than four-fifths believe there should be effective laws that protect farm animals against cruelty. And nearly three-quarters of Americans believe there ought to be federal inspections on farms to ensure humane treatment.[30]

Lovvorn goes on to list additional animal protections that have public support.[31] Despite this clear public support for significant animal protections, farmed animals exist in a system void of such welfare considerations.[32] Thus, the economic approach of using human interests in protecting nonhuman interests, here farmed animals, does not succeed by itself.

There are multiple possible causes of such failure. For example, there may be a failure in one aspect of the market,[33] or there may be a special interest lobby preventing passage of legislation designed to remedy the market failure.[34] Regardless of the cause, current practices fail to reflect societal interest.[35]

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[27] Animal Liberation NSW, *supra* n. 26.

[28] *See id.* (arguing that "[i]t is the activist, and not the lawyer as lawyer, who helps to change the paradigm").

[29] *Infra* pt. IV(B)(1)(a).

[30] Lovvorn, *supra* n. 8, at 137 (citations omitted).

[31] *Id.* at 137–38.

[32] *See supra* nn. 8–10 and accompanying text (detailing current abhorrent industrial farm practices and the lack of protections for the farmed animals subjected to them).

[33] Robert Cooter & Thomas Ulen, *Law and Economics* 40–43 (3d ed., Addison Wesley Longman, Inc. 2000) (explaining "the four sources of market failure": monopoly, externalities, public goods, and information asymmetries) (emphasis omitted).

[34] For a public choice justification for the failure of protections, see *infra* pt. IV(B)(2)(a).

[35] Lovvorn, *supra* n. 8, at 142–43, 148 (discussing "the gap between public opinion and public policy" for farmed animals); Wolfson, *supra* n. 7, at 10 (showing clear public support for farmed animal protection measures but an institutional void of such protections).

Because the market alone has failed to provide protections, animal advocates should look to legislate such protections and, in doing so, should not shy away from making economic arguments. As will be shown here, an aspect of economics aside from the valuation issue, economic efficiency, can provide further support for the legislative arguments. Economic efficiency does not stand in contradiction to all farmed animal welfare.[36] Animal advocates should not assume that economics calls for wholesale stripping of welfare measures.

Such an argument for farmed animal welfare legislation and corresponding economic analysis is particularly apt today. In 2002, Florida citizens voted to ban gestation crates in pig production.[37] The vote was "the first time . . . a cruel farming practice has been banned in the United States."[38] Additionally, the Florida ban is being used as a springboard for similar measures in other states.[39] An Arizona ballot measure recently outlawed gestation crates and veal crates.[40] Lovvorn explains the significance: "[S]ixty to seventy percent of the six million hogs kept for breeding in the U.S. spend a majority of their lives confined in gestation crates. If you eliminate just this one practice, you are reducing the unimaginable suffering of nearly four million animals, every day, every year."[41] Banning gestation crates in the entire industry would be a huge advancement for animal advocates and society as a whole.

At this stage of working for advancements in farmed animal interests, it is important to reflect on which strategies will be most effective. In banning gestation crates, and likely with many other animal protection measures, animal advocates should be explicit in making the economic argument for protection. As is the case with a gestation crate ban,[42] the economic arguments may weigh in favor of the farmed animals' well-being. Indeed, the economic arguments are subtle and

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[36] For the explicit example in the following analysis of gestation crates, see *infra* pt. VI, which stands in contrast to the cursory economic conclusions in O'Brien, *supra* n. 3, at 408–13, 422, 427, 439–42.

[37] Florida Const. art. X, § 21; Farm Sanctuary News, *Florida Passes First U.S. Law against Cruel Farming System: Sets Nationwide Precedent by Banning "Gestation Crates,"* http://www.farmsanctuary.org/media/pr_fl.htm (Nov. 5, 2002).

[38] Farm Sanctuary News, *supra* n. 37. Since the Florida ban passed, at least one other farmed animal protection measure has passed: California outlawed *foie gras* production in 2004, but the law does not take effect until 2012. Cal. Health & Safety Code Ann. § 25981 (LEXIS 2006); Humane Socy. U.S., *California Decides to Permanently Pull Foie Gras Off the Menu*, http://www.hsus.org/farm/news/ournews/california_bans_foie_gras.html (Oct. 8, 2004).

[39] Jerry Perkins, *The Confinement Question*, Des Moines Register (Nov. 17, 2002) (available at http://www.desmoinesregister.com/business/stories/c4789013/19728513.html); Humane Socy. U.S., *Election '06: Animals Win in Arizona and Michigan*, http://www.hsus.org/legislation_laws/ballot_initiatives/election_06_animals_win_.html (Nov. 7, 2006) [hereinafter *Election '06*].

[40] *Election '06*, *supra* n. 39.

[41] Lovvorn, *supra* n. 8, at 142–43 (citations omitted).

[42] *Infra* pt. VI.

should not be generalized.[43] Similar analysis of welfare provisions other than the ban on gestation crates could yield similar results. Animal advocates should build on these conclusions and use them to buttress claims for protections, either to the farmers themselves or to the state or federal legislature.

To understand whether this approach will work to advance the protections of nonhuman animals, and farmed animals in particular, it is important to first evaluate whether, on a theoretical level, valuing human interests can achieve such protections. Accordingly, part II of this article discusses the basic principles of Posner's wealth maximization theory. Part III discusses the extent to which humans can provide for nonhuman animal protection through economic evaluation. Part IV changes course from the theoretical to the practical and discusses the attempts of animal advocates to influence the market and the need for legislation where the economic system fails to reflect human valuation of nonhuman interests. Part V discusses the first of what may become many animal welfare measures for farmed animals: the Florida ban on gestation crate usage in pig production. Part VI examines the economic aspects of this ban, including the efficiency of alternative housing methods and the elasticity of demand of the pork market. Part VII draws the conclusion that the economic arguments for animal welfare protections might weigh in favor of those protections, and that it is essential that animal advocates make strong economic arguments to gain protections as quickly as possible for the billions of farmed animals that need help each year.[44]

II. THE BASICS OF THE WEALTH MAXIMIZATION THEORY OF JUSTICE

To understand the wealth maximization theory of justice, it is necessary to look to basic economics and to the basics of the theory itself, including insight into what the theory does not entail. Such an analysis is essential to understanding the extent to which the theory might serve nonhuman animal interests.

A. Basic Economics

To better understand how a society can aim to maximize wealth, one must first understand basic microeconomics. Microeconomics is "defined as the study of how scarce resources are allocated among competing ends," and "concerns decision-making by small groups . . . [including] governmental agencies."[45] Within this world "[e]conomists usually assume that each economic actor maximizes something" and

[43] This argument is exemplified by the following analysis of gestation crates, *infra* pt. VI, which stands in contrast to the cursory economic conclusions in O'Brien, *supra* n. 3, at 408–13, 422, 427, 439–42.

[44] *See supra* nn. 14–15 and accompanying text (discussing the urgent need for practical reform).

[45] Cooter & Ulen, *supra* n. 33, at 10.

that "models assuming maximizing behavior work because most people are rational, and rationality requires maximization."[46] Thus, "[a] rational consumer should choose the best alternative that the constraints allow."[47] Posner shares this broad view of the power of the rational actor:

> Although the traditional subject of economics is indeed the behavior of individuals and organizations in markets, a moment's reflection on the economist's basic analytical tool for studying markets will suggest the possibility of using economics more broadly. That tool is the assumption that people are rational maximizers of their satisfactions.[48]

This rational action leads to equilibrium, which is economically desirable.[49] In addition, it leads to economically efficient transactions that allow for wealth maximization.[50] On a societal level, the goal seems to be to reach a competitive market in which "social wealth is maximized"[51] and to avoid "the four sources of market failure."[52]

B. What Wealth Maximization Is and What It Is Not

Important to understanding how the wealth maximization theory of justice does or does not account for nonhuman animal interests is understanding the basis of the theory—what wealth maximization is and what it is not. The basic theory of wealth maximization is "that a society which aims at maximizing wealth . . . will produce an ethically attractive combination of happiness, of rights (to liberty and property), and of sharing with the less fortunate members of society."[53] For Pos-

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[46] *Id.* at 10–11.

[47] *Id.* at 11.

[48] Posner, *supra* n. 22, at 1.

[49] Cooter & Ulen, *supra* n. 33, at 11, 40.

[50] *See* Friedman, *supra* n. 1, at 19–21 (describing Marshall's approach to defining economic efficiency and assuming the people in the example are rational actors since Friedman begins the example by describing "the rational response" to someone attempting a transaction).

[51] *See* Mark Seidenfeld, *Microeconomic Predicates to Law and Economics* 41 (Anderson Publg. Co. 1996) (explaining that "social wealth is maximized . . . . in a perfectly competitive market" and that a competitive market is more efficient than a monopoly); *see also* Cooter & Ulen, *supra* n. 33, at 40 (describing welfare economics and explaining "that general equilibrium has characteristics that economists describe as socially optimal—that is, the general equilibrium is both productively and allocatively efficient").

[52] Cooter & Ulen, *supra* n. 33, at 40–43 (explaining monopoly, externalities, public goods, and information asymmetry) (emphasis omitted).

[53] Richard A. Posner, *The Ethical and Political Basis of the Efficiency Norm in Common Law Adjudication*, 8 Hofstra L. Rev. 487, 487 (1980) (footnote omitted). Posner looks at wealth maximization especially in reference to the common law. Posner, *supra* n. 22, at 4–5 ("The hypothesis is not that the judges can or do duplicate the results of competitive markets, but that within the limits set by the costs of administering the legal system (costs that must be taken into account in any effort to promote efficiency through legal rules), common law adjudication brings the economic system closer to the results that would be produced by effective competition—a free market operating without significant externality, monopoly, or information problems."); Michelman, *supra* n. 2, at 313 ("[Posner] can be understood as insisting on confining the politically unac-

ner, the theory is far reaching: "[w]ealth maximization provides a foundation not only for a theory of rights and of remedies but for the concept of law itself."[54]

Beyond the basics of microeconomics, perhaps the best way to understand wealth maximization as a theory of justice is to look at what it is *not* by distinguishing it from two other theories: utilitarianism and rights theories. Posner asserts that, while a principle problem in utilitarianism is "that it seems to invite gross invasions of individual liberty," a rights philosophy with "uncompromising insistence on individual liberty or autonomy regardless of the consequences for the happiness or utility of the people of the society seems equally misplaced and unacceptable."[55] For Posner, wealth maximization solves the major problems he sees with these two justice theories:

> The ethics of wealth maximization can be viewed as a blend of these rival philosophical traditions. Wealth is positively correlated, although imperfectly so, with utility, but the pursuit of wealth, based as it is on the model of the voluntary market transaction, involves greater respect for individual choice than in classical utilitarianism.[56]

It follows that "wealth maximization is not just a proxy for utility maximization in the sense of classical utilitarianism . . . ."[57] However, it is not entirely clear that this is purely, normatively positive.

One of Posner's principle objections to utilitarianism is its subjectivity, because of the lack of a tool both for measuring happiness and for determining where to draw the line as to which species deserve protections.[58] But the subjectivity inherent in the utilitarianism al-

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countable judiciary to furtherance of the set of *socially uncontested* values—a set of which the value of maximizing wealth (other things equal) is evidently thought to be a member, indeed the only known member.") (emphasis in original).

[54] Posner, *supra* n. 22, at 74.

[55] *Id.* at 65.

[56] *Id.* at 66.

[57] *Id.* at 62–63. Posner explains:

> Value and happiness are . . . related: a person would not buy something unless having it would give him more happiness . . . than the alternative goods or services (including leisure) that he must give up to have it. But while value necessarily implies utility, utility does not necessarily imply value. The individual who would like very much to have some good but is unwilling or unable to pay anything for it—perhaps because he is destitute—does not value the good in the sense in which I am using the term "value."

Id. at 60–61. Value is integrally related to wealth. *Id.* at 60.

[58] Posner, *supra* n. 22, at 33, 53, 54 ("Another problem [with utilitarianism] is the lack of a method for calculating the effect of a decision or policy on the total happiness of the relevant population.") (footnote omitted). Along the same lines, Posner asserts:

> [B]ecause there is no common currency in which to compare happiness, sharing, and protection of rights, it is unclear how to make the necessary trade-offs among these things in the design of a social system. Wealth maximization makes the trade-offs automatically. If there is a better approach, it is not obvious and Dworkin has not described it.

Id. at 112.

lowed Jeremy Bentham to argue for animal anticruelty laws.[59] "Benthamites play the game of deriving public policy from the greatest-happiness principle without rules, and the set of public policies he proposed resembles nothing so much as his personal preferences (he was notoriously fond of animals, especially cats)."[60] Thus, one great benefit of wealth maximization for Posner is "that ordinarily the satisfactions of nonhuman beings are not included in the concept of social welfare."[61] In his objection to utilitarianism's overbreadth, Posner states:

> Since utility in its broad sense is something possessed by many animals, the theory seems to require including sheep and pigs in the population whose happiness is to be maximized . . . . But there is something amiss in a philosophical system that cannot distinguish between people and sheep. In utilitarian morality, a driver who swerved to avoid two sheep and deliberately killed a child could not be considered a bad man, because his action may have increased the amount of happiness in the world.[62]

However, Posner's example is not a necessary result of utilitarianism. The problem is not that utilitarianism must include animals in its happiness calculus, but that whether they are included is entirely subjective.[63] Thus, it may not be normatively bad that animal interests are included.

Nonetheless, Posner's further explanation of wealth maximization as a normative theory may be cause for ethical unease in some: "the wealth of society is the aggregate satisfaction of those preferences (the only ones that have ethical weight in a system of wealth maximization) that are backed up by money, that is, that are registered in a market."[64] The major objection to such a system is that those parts of society that cannot express their interests monetarily, including nonhuman animals, are entirely ignored.[65] Stated in another, more sweeping way:

> [T]he wealth maximization standard for choice of law is (at least in its immediate applications) apparently biased in favor of the wealthy, is oblivious to questions of distributive justice, and in general disregards all human valuations or motivations that are not responsive to considerations of price, or cost, in a sense of being approximately measurable by methods available to economic science.[66]

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[59] *Id.* at 33 (footnotes omitted).

[60] *Id.* at 33–34.

[61] *Id.* at 49.

[62] *Id.* at 53.

[63] *See supra* n. 58 and accompanying text (explaining the relationship between happiness, value and utility).

[64] Posner, *supra* n. 22, at 61.

[65] *See id.* at 61 (using the example of an "individual who would like very much to have some good but is unwilling or unable to pay anything for it—perhaps because he is destitute . . .").

[66] Michelman, *supra* n. 2, at 311.

Posner acknowledges this objection.[67] Despite this, he asserts "it would be a mistake to criticize the wealth-maximization principle as indifferent to distributive considerations; rather, it resolves them automatically."[68] Posner's heavy reliance on the theory in this sense may be misplaced. His hypothesis would only seem to hold true if society's valuation is accurately reflected in the market, *i.e.* if the market works.[69] Further, this does not necessarily solve questions of distributive justice at the outset. Despite these objections, Posner's approach may be warranted simply due to the difficulty of "us[ing] general legal rules to redistribute wealth, [and the fact] that 'pro-rich' or 'pro-poor' laws usually are neither."[70] Thus, Posner's approach may be the best one: "the specific distribution of *wealth* is a mere by-product of the distribution of *rights* that is itself derived from the wealth-maximization principle. A just distribution of wealth need not be posited."[71]

One final note on the distribution of rights is necessary here, especially concerning the subject of nonhuman animals. The legal system does not recognize the rights of nonhuman animals as it could: "[a] perfect legal system with perfectly wise judges would presumably enforce legal rights that varied from person to person (and animal to animal), tracking the variation in the features that gave rise to those rights."[72] However, assigning rights to nonhuman animals is difficult to understand economically. Assigning property rights is recommended from an economic standpoint where transaction costs are low.[73] In the case of nonhuman animals, it is difficult to comprehend whether transaction costs would be low or high, since the transaction of rights in this case would go from human to nonhuman animals. Because humans are the rational actors recognized in the economic system,[74] it is impossible for a transaction to take place in the current market, let alone to know whether such a transaction would result in high costs. Therefore, it is difficult to imagine an initial distribution where animals are not defined as property, as Francione would urge.[75]

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[67] Posner, *supra* n. 21, at 76 ("Another implication of the wealth-maximization approach . . . is that people who lack sufficient earning power to support even a minimum decent standard of living are entitled to no say in the allocation of resources unless they are part of the utility function of someone who has wealth."). Thus, "the economic approach is less hospitable than the utilitarian to redistribution." *Id.* at 80.

[68] *Id.* at 81.

[69] *See supra* pt. II(A) (describing the economic ideal of perfectly competitive markets and individual transactions that maximize wealth).

[70] Friedman, *supra* n. 1, at 23.

[71] Posner, *supra* n. 22, at 81 (emphasis in original).

[72] Friedman, *supra* n. 1, at 43. This would lead to the results urged by Wise. *Id.*; Wise, *supra* n. 6, at 27.

[73] Friedman, *supra* n. 1, at 39 (describing the Coase Theorem); Posner, *supra* n. 22, at 70 ("The economist recommends the creation of [absolute] rights—to ideas, land, or labor, for example—when the costs of voluntary transactions are low . . . . But when transaction costs are prohibitive, the recognition of absolute rights is inefficient.").

[74] *Supra* nn. 46–47 and accompanying text.

[75] Animal Liberation NSW, *supra* n. 26.

Posner acknowledges such an objection: "[t]o make property rights, although absolute, contingent on transaction costs and subservient or instrumental to the goal of wealth maximization is to give rights less status than many 'rights theorists' claim for them."[76] Lacking any better suggestion, Posner's response to critics may be a better path, even if nonhuman animals are to remain property: "[i]n fact the principle ordains the creation of a system of personal and property rights that ideally would extend to *all* valued things that are scarce—not only real and personal property but the human body and even ideas."[77]

This may not be the complete answer to shortfalls in the wealth maximization theory. Where other approaches were deficient, Posner sought a solution in the efficiency theory.[78] However, Posner does not acknowledge that where the efficiency theory falls short, one should seek solutions in other theories. The answer is likely more complex than Posner would have his readers believe.[79] Where his wealth maximization theory falls short of society's normative wants, perhaps seeking influence from other theories will enhance a system of social justice.[80] What this would look like is beyond the scope of this paper.

III. HUMAN INTERESTS DO REPRESENT ANIMAL INTERESTS

Under the wealth maximization approach, although it seems that nonhuman animals are powerless, this is not necessarily the case. In fact, human representation of nonhuman animal interests can provide, and is already providing, for protections otherwise not recognized or required by law. The fact that human interests are recognized in this economic approach[81] empowers humans who value nonhuman animal interests to provide for those protections. This is even the case where human-valued animal interests outweigh human interests, as Posner illustrates:

> Let there be 100,000 sheep worth in the aggregate more than any money value that can reasonably be ascribed to a child: is the driver therefore a good man when he decides to sacrifice the child? The economic answer is yes—and it is the answer given all the time in our (and every other) society. Dangerous activities are regularly permitted on the basis of a judgment that the costs of avoiding the danger exceed the costs to the victims.[82]

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[76] Posner, *supra* n. 22, at 70–71.

[77] *Id.* at 69 (emphasis is original).

[78] *Supra* nn. 53–55 and accompanying text.

[79] *See* Guido Calabresi & Philip Bobbitt, *Tragic Choices* 18, 24 (W.W. Norton & Co. 1978) (Although tragic choices are inevitable, efficiency is not the only value used to "avert[ ] tragic results.").

[80] *See id.* (discussing Calabresi's interest in looking to values beyond efficiency alone).

[81] Cooter & Ulen, *supra* n. 33, at 10–11. Posner, *supra* n. 22, at 1.

[82] Posner, *supra* n. 22, at 83.

Thus, the economics approach would work for Posner by providing nonhuman animal protection tangential to human valuation of those interests in a practical, measurable way.[83]

Posner approaches the subject of animal rights in just this way. "The philosophical discourse on animal rights is inherently inconclusive because there is no metric that enables utilitarianism . . . and other possible philosophical groundings of animal rights to be commensurated and conflicts among them to be resolved."[84] Because Posner pushes philosophy aside,[85] economic calculus is perhaps what is needed to give animals the protections that they deserve, judged by society as a whole, as opposed to unsupported personal biases.[86] This economic calculus is needed to support Posner's "humancentric approach" to animal rights.[87] Such an approach is even amenable to an animal rights theorist like Wise: "[f]or the present, I accept that the law measures nonhuman animals with a human yardstick."[88] It follows from this approach, perhaps surprisingly, that Posner agrees with Peter Singer "that some costs should be incurred to reduce the suffering of animals raised for food or other human purposes or subjected to medical or other testing and experimentation."[89]

For animal advocates, the worrisome part in basing nonhuman animal protection on human interest is that the market may fail. Furthermore, even if the market accurately protects animal interests in

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[83] *Id.* at 33, 53, 54, 112; *see supra* n. 58 and accompanying text (discussing Posner's objection to the subjectivity of utilitarian calculus).

[84] Posner, *supra* n. 14, at 63.

[85] *Id.* at 63, 68–69. Posner buttresses his argument by a historical look at changes in "moral norms" and stating, "Philosophy follows moral change; it does not cause it, or even lead to it." *Id.* at 68.

[86] *Id.* at 66, 70. Posner's "deep revulsion" to killing one human in exchange for the lives of 101 chimpanzees may not necessarily reflect societal revulsion, and Posner offers no data to support it. *Id.* This lack of support is similar to Posner's earlier refusal to defend the position that "any normal person" would choose to cause more harm to a dog to avoid the lesser pain of a dog bite to an infant "even though to do so would minimize the sum of pain in the world." *Id.* at 64; *see also* Posner, *supra* n. 14, at 67 (revisiting these arguments and stating that "[i]t is because *we* are humans that we put humans first") (emphasis is original).

[87] *Id.* at 66. Posner seems to acknowledge this: "If enough people come to feel the sufferings of these animals as their own, public opinion and consumer preference will induce the business firms and other organizations that inflict such suffering to change their methods." *Id.* Posner's humancentric approach might make him a speciesist according to Wise. Wise, *supra* n. 6, at 26 ("[S]peciesism is . . . 'discrimination against . . . animal species by human beings, based on an assumption of mankind's superiority.'") (quoting *XVI Oxford English Dictionary* 157 (J.A. Simpson & E.S.C. Weiner ed., 2d ed., Oxford U. Press 1989). However, this is unclear since Posner nowhere assumes human superiority outright, but rather draws from an instinct to protect one's own species. Posner, *supra* n. 14, at 67. Even if one asserts that Posner is a speciesist, his humancentric approach is not unfeeling but based on "people's empathic concern with suffering animals . . . ." *Id.* at 70.

[88] Wise, *supra* n. 6, at 40.

[89] Posner, *supra* n. 14, at 63. This is not due to "the compulsion of philosophical argument," however. *Id.* at 64.

the way outlined above, "[m]oral intuitions can change."[90] Thus, while using human valuation of animal interests *could* provide for greater protection, it is not a necessary result.

IV. THE NEED FOR LEGISLATION

Assuming that there is a societal interest in protecting the interests of nonhumans, the market must function properly for valuation of those interests to take effect by way of animal protection measures. Unfortunately, it is overwhelmingly clear that the market is not providing the farmed animal welfare protections in which the public has demonstrated a clear interest.[91]

A. *Possible Reasons for the Schism between Public Will and Current Farmed Animal Cruelty Practices: Market Failure*

In the face of a market failing to adequately represent human valuation of nonhuman interests, it is interesting, although perhaps not particularly useful, to seek an understanding of where the failure is coming from. Thus, the following is not so much a rigorous analysis, but rather a list of possible market failings. There are "four sources of market failure," two of which may contribute to the failure of the market to fairly represent human valuation of animal interests.[92]

One possible market failure, monopoly, comes in a variety of forms.[93] Perhaps the most suspect form of monopoly is in the output

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[90] *Id.* at 65.

[91] *See supra* nn. 30–32, 35 and accompanying text (detailing public support for and a simultaneous lack of protection).

[92] Cooter & Ulen, *supra* n. 33, at 40–43 (emphasis omitted). One form of market failure, externalities, exist where the costs or "benefits of an exchange . . . spill over onto other parties than those explicitly engaged in the exchange." *Id.* at 40. There are likely rampant externalities in modern industrial animal farming. Jim Mason & Peter Singer, *Animal Factories: What Agribusiness is Doing to the Family Farm, the Environment and Your Health* 119–33 (Harmony Bks. 1990) (from a chapter entitled "Hidden Costs of Running the Factory: Who's Paying Them?" which details various external costs to industrial animal production). Despite the fact that they exist, this likely is not the market failure at issue here simply because the nature of externalities is on its face unrelated to implementing market valuation on the part of the consumer. The other source of market failure not at issue here, public goods, does not apply because the animal products do not fit the definition of public goods. Cooter & Ulen, *supra* n. 33, at 42.

> A public good is a commodity with two very closely related characteristics:
> 1. *nonrivalrous consumption*: consumption of a public good by one person does not leave less for any other consumer, and
> 2. *nonexcludability*: the costs of excluding nonpaying beneficiaries who consume the good are so high that no private profit-maximizing firm is willing to supply the good.

Id. (emphasis is original). Although the situation at hand does not fit market failure through the existence of public goods, it should be noted that the federal government subsidizes the animal production industry in several ways. Mason & Singer, *supra* n. 92, at 129–33.

[93] Cooter & Ulen, *supra* n. 33, at 40.

market.[94] Output market monopoly is suspect because, although there may not be a single producer in the large factory farm setting, "[i]n every type of animal production, the smaller farms have been losing their share of total production to the larger farms."[95] If larger farms control the animal production industry such that it is like a monopoly, and thus the market is not "perfectly competitive,"[96] adequate human valuation of animal interests may be skewed.

The second, and perhaps more likely suspect, is information asymmetry: "an imbalance of information between parties to an exchange, one so severe that the exchange is impeded."[97] It is likely that the vast majority of the public is ignorant as to the source of their food, imagining the small family farms of old rather than the industrial animal production systems of today.[98] A false image of animal food production has been further perpetuated by the industrial animal industry.[99] If consumers do feel that animal welfare in the animal industry should be improved,[100] they must be informed. In this way, information asymmetry between the animal industry and the consumer prevents consumers from exercising their market power to increase animal welfare.

B. Remedying Poor Market Representation of Human Valuation

Regardless of the reason, however, where the market fails to function properly, society should seek a remedy. Policy solutions to market

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[94] *Id.*

[95] Mason & Singer, *supra* n. 92, at 139 (citation omitted).

[96] Cooter & Ulen, *supra* n. 33, at 40.

[97] *Id.* at 43.

[98] *See* Mason & Singer, *supra* n. 92, at xiii (stating in the introduction that "[the author] was amazed how little the public knew about these drastic changes in the production of their food" when discussing the difference between modern industrial animal farming and the bucolic stereotype); Shennie Patel, *Making the Change, One Conservative at a Time: A Review of* Dominion: The Power of Man, the Suffering of Animals, and the Call to Mercy *by Matthew Scully*, 9 Animal L. 299, 308 (2003) ("[w]hat is more important, is seeing how these creatures lived their lives before they were killed . . . . People have this false sense of security that before death, these animals had some sort of life.") (quoting interview with Matthew Scully, Spec. Asst. to the Pres. of the U.S. & White House Senior Speech Writer (Jan. 28, 2003)); Sunstein, *supra* n. 18, at 8 (Sunstein claims, "[p]artly the controversy [over animal rights] may arise because of sheer ignorance, on the part of most people, about what actually happens to animals, in, for example, farming and scientific experimentation; probably greater regulation would be actively sought if current practices were widely known.").

[99] *See* Donna Mo, Student Author, *Unhappy Cows and Unfair Competition: Using Unfair Competition Laws to Fight Farm Animal Abuse*, 52 UCLA L. Rev. 1313, 1321–22 (2005). Mo discusses two false advertising lawsuits against players in the animal industry. *Id.* One suit was against the California Milk Advisory Board for their "Happy Cows" campaign, which falsely depicted dairy cows as having a pleasant, bucolic existence. *Id.* The second was against Kentucky Fried Chicken for "disseminat[ing] false information," such as "falsely state[ing] on its web site that it had a strict animal welfare policy and that all of its birds were treated humanely and suffered no pain." *Id.* at 1322 (citation omitted).

[100] *See* Lovvorn, *supra* n. 8, at 137 (discussing public support for farmed animal welfare).

failures exist,[101] and animal advocates have already achieved success in judicial and legislative realms.[102]

1. In the Courts

Where human valuation of nonhuman interests fails to be represented in the general market setting, humans have gone to the courts to further pursue their interests. Posner acknowledges that human representation of animal interests can succeed in courts, even if such representation would be less successful for nonhuman animals than a more direct allocation of rights.[103] In a society where assigning nonhuman animals rights more directly has yet to prove successful,[104] and where general market representation of human valuation of nonhuman animal value fails, human representation of animal interests via lawsuits may be the most effective remedy. The good news for animal advocates is that this approach already seems to be working, at least for companion animals.[105]

a. Companion Animals

A recent article by Lisa Kirk evaluates the status of varying judicial recognition of companion animal valuation where a companion animal is wrongfully killed.[106] Kirk makes a strong argument that companion animals "make our lives more productive" and that traditional market valuation of companion animals is insufficient to fully compensate the owners.[107] Unfortunately, "[g]enerally, the measure of damages for the intentional or negligent killing of a companion animal is the market value of the animal."[108] However, Kirk lists many positive trends and possibilities for nonhuman animal advocates. In some jurisdictions, where a dog is found not to have market value, courts look to its actual value to the owner.[109] Furthermore, at least one court "allow[s] recovery for the sentimental value of the pet to the owner . . . irrespective of whether the pet has any special qualities or training, which might enhance its market value."[110] Similarly, at least one court has allowed for "loss of companionship [to] be considered when esti-

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101 Cooter & Ulen, *supra* n. 33, at 40, 42–43 (offering policy solutions to the different sources of market failures).

102 *See* Lovvorn, *supra* n. 8, at 144-47 (discussing recent efforts for federal and state animal welfare legislation, as well as efforts in the courts).

103 Posner, *supra* n. 14, at 72–74.

104 *Supra* n. 14 and accompanying text.

105 *See supra* n. 3 (listing the many articles on companion animal valuation).

106 Kirk, *supra* n. 3, at 119–36.

107 *Id.* at 116, 137–38 (footnote omitted).

108 *Id.* at 119 (citing 4 Am. Jur. 2d *Animals* § 162 (1992)). The current version of this American Jurisprudence section concurs. 4 Am. Jur. 2d *Animals* § 162 (2004).

109 Kirk, *supra* n. 3, at 119 (citing *Wilcox v. Butt's Drug Stores, Inc.*, 35 P.2d 978, 979 (N.M. 1934)).

110 *Id.* at 121 (citing *La Porte v. Associated Independents, Inc.*, 163 So. 2d. 267, 269 (Fla. 1964)).

mating the [pet's] actual value."[111] Kirk also shows that "[a]lthough most courts do not recognize a cause of action for emotional distress due to the loss of a companion animal, courts in some states have begun to reverse this trend."[112] While it is possible to get punitive damages for the wrongful killing of a companion animal, "[c]ourts have yet to allow a cause of action for the pain and suffering of an animal."[113]

Unlike the relatively progressive situation for the wrongful killing of a companion animal, companion animal owners have had a more difficult time receiving similar protections against veterinary malpractice.[114] Christopher Green argues convincingly that, from an economic standpoint, the improper compensation is inefficient, and that legislative improvements are available.[115]

Despite the refusal of some courts to properly recognize the human value of animal interests, the progression of the valuation debate with regard to companion animals should give animal advocates hope that wealth maximization can lead to tangible improvements for nonhuman animals. Even where the courts are not in step, Green shows that strong economic arguments are already present for increasing the protections of nonhuman animals.[116] Thus far, however, these improvements have been limited to companion animals.[117]

b. Farmed Animals

Like companion animal advocates, farmed animal advocates may seek a judicial remedy where their interests are not accurately reflected by the market. While there has been some recent courtroom success,[118] standing doctrine provides a major hurdle.[119] Additionally,

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111 *Id.* at 122–23 (citing *Brousseau v. Rosenthal*, 443 N.Y.S.2d 285, 286 (N.Y. Civ. Ct. 1980)).

112 Kirk, *supra* n. 3, at 124.

113 *Id.* at 124–25.

114 Green, *supra* n. 3, at 163.

115 *Id.*

116 *See generally* Green, *supra* n. 3 (for a detailed economic analysis of companion animals and veterinary malpractice).

117 *See supra* n. 3 (detailing many companion animal valuation articles and the dearth of articles on farmed animal valuation); 4 Am. Jur. 2d *Animals* § 162 (2004) (outlining basic measures for livestock damages but typically being limited to market value).

118 Lovvorn, *supra* n. 8, at 145–46.

119 *See* Elizabeth L. Decoux, *In the Valley of the Dry Bones: Reuniting the Word "Standing" with Its Meaning in Animal Cases*, 29 Wm. & Mary Envtl. L. & Poly. Rev. 681, 684, 749 (2005) (explaining that "case law regarding the standing of animals is little more than a jumble of inconsistent decisions wholly lacking in rationale"); Cass R. Sunstein, *Standing for Animals (with Notes on Animal Rights)*, 47 UCLA L. Rev. 1333, 1336, 1342–59, 1366–67 (2000) (explaining standing doctrine in relation to animal protection; stating that "[a]nimals lack standing as such, simply because no relevant statute confers a cause of action on animals;" arguing that federal and state "[a]nimal welfare statutes should be amended to grant a private cause of action against those who violate them, so as to allow private claimants, either human beings or animals, to supplement currently weak agency enforcement efforts;" and concluding that while Con-

damages for "loss, injury, or destruction of livestock" are limited to market value.[120] Moreover, there is an entirely different dynamic for farmed animal suits than for companion animal suits.

As juxtaposed with pet owners suing for damages for harm to their property, the harsh animal industry practices[121] make it more likely that animal advocates and animal advocacy organizations will bring litigation against the farmed animal owners for harm done to the farmers' property.[122] Such a dynamic makes it highly unlikely that farmed animal protections will improve due to an increase in damage valuation. This will likely be the case even if a public information campaign is successful in informing the public of industrial farm practices and the public demands greater valuation as a result.[123]

However, the different dynamic in terms of farmed animals does not mean that economic arguments for farmed animal protections fall away. Even though the dynamic seems to prevent protections as a result of damage valuation in the courts, animal advocates can and should make economic arguments to make sure that human valuation of nonhuman animal interests is recognized elsewhere. As already stated, animal advocates have achieved recent, significant success in the courts.[124] Moreover, animal advocates could have similar or greater success in the legislature.

2. *In the Legislature*

While it is less likely that animal advocates can create similar valuation successes in the judicial realm for farmed animals as those for companion animals, legislation is an alternative, and perhaps superior, solution for remedying the schism between the human valuation of animal interests and the market's recognition of those values. Animal advocates have already achieved legislative success.[125] Making the economic argument for future legislative protections can only

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gress has the power to grant standing in this context in several ways and it has not done so, there are limited ways to gain standing under the Administrative Procedure Act).

120 4 Am. Jur. 2d *Animals* § 162.

121 *See* Farm Sanctuary, *supra* n. 8, at http://www.factoryfarming.com (for links to common practices in the various animal industries).

122 *See e.g.* Farm Sanctuary Campaigns, *Cruelty Investigations & Actions*, http://www.farmsanctuary.org/adopt/index_cruelty.htm (accessed Nov. 12, 2006) (asserting the intention to ensure prosecution of farmers for animal cruelty); Humane Socy. U.S., *Moark Must Pay $100,000 and Overhaul Its Spent Hen Procedures to Settle Animal Cruelty Charges*, http://hsus.org/farm/news/ournews/Moark_settles_case.html (Oct. 25, 2005) (explaining that Humane Society lawyers worked to get a local prosecutor to bring animal cruelty charges against the farmers).

123 *See* Sunstein, *supra* n. 18, at 8 (Sunstein claims, "Partly the controversy [over animal rights] may arise because of sheer ignorance, on the part of most people, about what actually happens to animals, in, for example, farming and scientific experimentation; probably greater regulation would be actively sought if current practices were widely known.").

124 Lovvorn, *supra* n. 8, at 145–46.

125 *Id.* at 144–45.

enhance the possibility of adding such protections. However, it is important to recognize that interest groups who oppose such legislative protections will likely pose a significant hurdle to animal advocates.

a. Hurdles in Implementing Legislation: Public Choice and Interest Groups

When attempting to find a legislative fix for animal welfare on the industrial farm, animal advocates, although likely part of an interest group themselves, should recognize the distinct possibility that the public choice theory is likely to come into play, especially in the form of interest group pressure from opponents. In the legal realm, public choice can be defined "as the economic study of nonmarket decision making, or simply the application of economics to political science . . . ."[126] While the extent of public choice theory should not be overstated, "no theory of government can ignore the powerful forces of individual self-interest and the critical role of institutional design."[127]

One particularly apt aspect of public choice concerns the influence of interest groups:

> Public choice models often treat the legislative process as a microeconomic system in which "actual political choices are determined by the efforts of individuals and groups to further their own interests," efforts that have been labeled "rent-seeking." Thus, "[t]he basic assumption is that taxes, subsidies, regulations, and other political instruments are used to raise the welfare of more influential pressure groups."[128]

To the extent that this theory may prove true for large, animal industry interests in the government, regulation may prove a significant barrier to getting farmed animal welfare legislation past the opposition. There is strong evidence that animal industry groups have been very successful thus far in satisfying their interests. For example, the federal government has funded several programs over the past one hundred years designed to eradicate animal disease, and groups such as the National Pork Producers' Council have proposed yet another program to eradicate "[p]seudorabies in pigs."[129] In addition, the dairy lobby has been very persistent and successful.[130]

Whether or not a direct response to industry lobbying, "government tax policy has subsidized the factory approach to animal farming . . . ."[131] Furthermore, the federal government subsidizes the industry by financially supporting "[t]he bulk of agricultural re-

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126 Daniel A. Farber & Philip P. Frickey, *Law and Public Choice: A Critical Introduction* 7 (U. Chi. Press 1991) (quoting Dennis C. Mueller, *Public Choice II: A Revised Edition of Public Choice* 1 (Cambridge U. Press 1989)).

127 *Id.* at 11.

128 *Id.* at 14–15 (footnotes omitted).

129 Mason & Singer, *supra* n. 92, at 127–28.

130 *Id.* at 130.

131 *Id.*

search."[132] It seems safe to assume that industry advocates work to protect or enhance such federal support. Thus, if animal advocates seek to pass farmed animal welfare legislation that is adverse to industrial farming interests, these advocates will likely face severe opposition. However, some legislation may not be entirely neutral or adverse to all animal market players. In such cases, animal advocates have the best chance at gaining public support for farmed animal welfare legislation.

V. GESTATION CRATE BANS IN FLORIDA AND ELSEWHERE

A timely case study provides an excellent practical example of these theories in practice. Gestation crates are two-by-seven foot metal crates where sows are housed during gestation.[133] The crates prevent sows from turning around during the nearly four month gestation period.[134] Between "60-70% of sows [in the United States] are housed in [individual crates] throughout gestation."[135] Animal activists assert that these "crates are among the cruelest confinement techniques used on farms – both in terms of the intensity of confinement and the duration of confinement."[136] However, at least one pig industry representative claims that the crates are actually better for the welfare of the pregnant sows.[137]

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[132] *Id.* at 131.

[133] Perkins, *supra* n. 39; BanCruelFarms.org, *Frequently Asked Questions*, http://www.bancruelfarms.org/faq.htm (accessed Nov. 12, 2006); *see* O'Brien *supra* n. 3, at 418–21 (for more details on how pigs are treated on a modern factory farm); Humane Socy. U.S., *Gestation Crates*, http://www.hsus.org/farm/multimedia/gallery/pigs/gestation_crates.html (accessed Nov. 12, 2006) [hereinafter *Gestation Crate Photos*].

[134] Perkins, *supra* n. 39; BanCruelFarms.org, *supra* n. 133; *see* O'Brien *supra* n. 3, at 418–21 (for more details on how pigs are treated on a modern factory farm); *Gestation Crate Photos*, *supra* n. 133.

[135] E.A. Pajor, *Group Housing of Sows in Small Pens: Advantages, Disadvantages, and Recent Research*, in Proceedings: Symposium on Swine Housing and Well-being, Purdue U. 37, 37 (Des Moines, Iowa, June 5, 2002) (citation omitted) (available at http://www.ces.purdue.edu/pork/sowhousing/swine_02.pdf). This is in agreement with an article asserting, "[a]lmost two-thirds of the nearly 6 million female breeding swine in the United States are housed in confinement buildings that use gestation stalls . . . ." Perkins, *supra* n. 39.

[136] BanCruelFarms.org, *supra* n. 133; *see also* Farm Sanctuary, *Gestation Crates*, http://www.freefarmanimals.org/gc_intro.htm (accessed Nov. 12, 2006) (for negative welfare implications of gestation crates); Humane Socy. U.S., *The Dirty Six: The Worst Practices in Agribusiness*, http://www.hsus.org/farm_animals/factory_farms/the_dirty_six.html (accessed Nov. 12, 2006) (listing gestation crates among the six worst industrial animal farming practices in terms of animal welfare).

[137] Perkins, *supra* n. 39 ("'Based on my experience, I prefer to have my sows indoors,' said Chinn, chairwoman of the National Pork Board's animal welfare committee. 'We feel we can control the climate, keep the environment cleaner and tend to their needs better.'"); Joe Vansickle, *Florida Outlaws Gestation Stalls*, http://nationalhogfarmer.com/news/farming_florida_outlaws_gestation/index.html (Nov. 7, 2002) (quoting Chinn: "individually housing sows greatly enhances their welfare").

Notwithstanding the outcome of the animal welfare debate, Florida citizens voted in 2002 to ban gestation crates in pig production.[138] The Florida gestation crate ban could result in an enormous positive impact for the welfare of nonhuman animals, the significance of which is difficult to overstate. Additionally, the Florida ban is being used as a springboard for similar measures in other states.[139] If implemented nationwide, the end of gestation crate use would bring tangible, significant relief by "reducing the unimaginable suffering of nearly four million animals, every day, every year."[140] Given this new precedent for farmed animal welfare and the tremendous number of animals at stake,[141] society must recognize this as an important stage in the animal rights epoch.

Despite the ban's potential national effect, its impact on the ground in Florida is likely to be minimal. The Florida gestation crate ban does not go into effect until 2008.[142] By the effective date, likely no Florida farmers will still be using the crates.[143] Thus, the effects of the ban will primarily be felt, if at all, in other states and in farmed animal protection campaigns.[144]

As stated earlier, efforts seeking protective measures for pregnant pigs exist in other states. A Maryland bill which would have established a "minimum size of confinement crates for pregnant pigs" failed in March 2005.[145] In Arizona, gestation crates and veal crates were recently banned.[146] In light of this growing trend of attempts to provide for farmed animal protections legislatively, it is important to reflect on what will be most effective.

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138 Florida Const. art. X, § 21 (2006); Farm Sanctuary News, *supra* n. 37.

139 Humane Socy. U.S., *Md. S.B. 470 Minimum Confinement Size for Pigs During Pregnancy*, http://www.hsus.org/legislation_laws/state_legislation/maryland/md_sb_470_pregnant_pigs.html (website no longer available) (on file with *Animal L.*) [hereinafter *Minimum Confinement Size*]; *Election '06*, *supra* n. 39 (noting that the ban does not go into effect until Dec. 31, 2012); Perkins, *supra* n. 39.

140 Lovvorn, *supra* n. 8, at 142–43.

141 Perkins, *supra* n. 39 ("Almost two-thirds of the nearly 6 million female breeding swine in the United States are housed in confinement buildings that use gestation stalls . . . ."); Wise, *supra* n. 6, at 19 ("In the United States, more than 10 billion nonhuman animals are annually slaughtered just for food.").

142 Florida Const. art. X, § 21.

143 *See* Jerry W. Jackson, *Florida's Pig Amendment Puts Pressure on Farmers – In Other States; Stalls Scarcely Used Here, But the Ban Builds National Momentum*, Orlando Sentinel Trib. C1 (Nov. 9, 2002) ("Only two Florida hog farms used the stalls that confine pregnant sows. But one has already shut down and . . . the last farmer to use the crates, is phasing out his business . . . .").

144 *See id.* at C1 ("Industry experts said . . . that pressure is building on farmers to change the way they handle farm animals of all types . . . ."); Perkins, *supra* n. 39 ("The success in Florida has producers elsewhere alarmed.").

145 *Minimum Confinement Size*, supra n. 139; Md. Sen. 470, Gen. Assembly, 2005 Reg. Sess. (Feb. 4. 2005) available at http://www.mlis.state.md.us/2005rs/fnotes/bil_0000/sb0470.pdf. (accessed Nov. 12, 2006).

146 *Election '06*, *supra* n. 39.

VI. ANOTHER ASPECT OF THE ECONOMIC ARGUMENT: THE ECONOMIC IMPACTS OF BANNING GESTATION CRATES

Gestation crate use in the pig industry is an example of the underrepresented human valuation of farmed animal interests.[147] Thus, where the market fails to protect pigs' interests, animal advocates should seek an alternative remedy. While animal advocates could and should use the courtroom for such protections, the standing hurdle may prove too much for this to be an efficient use of time.[148] If this proves true, animal advocates may find a more effective solution through popular support in the legislature.

Although society's support for animal protection legislation reflects a willingness to pay for such protection, another aspect of economics, economic efficiency, lends even more support to using legislative remedies. In other words, where human valuation of nonhuman interests is underrepresented in the market and, therefore, a market fix is needed, animal advocates should evaluate the economic impact of proposed legislation. This may provide incentive to traditionally unaccommodating politicians or citizens to support animal welfare protection measures, even when those resisting such legislation may specifically object to the laws because they object to the concept of animal welfare in general.

The Florida legislative campaign to ban gestation crates did not fully utilize economic arguments in favor of the ban and only made terse arguments.[149] This should not have been the case. Although Florida passed the ban without detailed economic arguments, such arguments could have strengthened the campaign. The following analysis of the economic impact of a ban on gestation crates shows that where a legislative fix is needed to fairly represent the human valuation of nonhuman interests in the marketplace, arguments in support of such legislation should not shy away from evaluating its economic impacts. Here, as may be the case elsewhere, legislation may actually prove to be economically efficient, and thus gain the support of those who would not otherwise back such legislation. Even when the economic impact is negative, as may be the case for other welfare protection measures, a fair evaluation of the impact may show that society's valuation of animal interests reflects a willingness to pay for the added protection.

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147 *See supra* nn. 8–10, 30–32, 35 and accompanying text (not distinguishing pigs from either the popular support for farmed animal protection or the lack of legislative answers to such support).

148 *See* Decoux, *supra* n. 119, at 684, 749 (explaining that "case law regarding the standing of animals is little more than a jumble of inconsistent decisions wholly lacking in rationale"); Sunstein, *supra* n. 119, at 1336, 1359 (explaining that "[a]nimals lack standing as such, simply because no relevant statute confers a cause of action on animals").

149 BanCruelFarms.org, *supra* n. 133 (arguing that the economic impact would be minimal because of the small number of effected farms and that the target is large farms as opposed to small ones).

A. *Alternative Housing*

Although one study provides specific costs for various aspects of one alternative to gestation crate housing,[150] there is no comprehensive study that details the economic effects of outlawing confinement systems and replacing them with some alternative. However, various studies outlined below suggest alternatives that are at least competitive with, if not economically preferable to, the gestation crate systems.[151]

Because there is no comprehensive analysis of the economic impact of alternatives, most studies focus on sow performance under the different systems. One study analyzed various other studies and "found that in 15 studies reviewed, [eight] showed better reproduction in group-housed pigs, whereas only [four] showed better reproduction with individual housing."[152] An Italian study found confinement systems to be slightly superior to the group housing alternative.[153] This was even the case with "[a]n important parameter which is indicative of the productive state of the whole pig farm . . . the number of pigs weaned per sow per year."[154] Another study found "no statistically significant differences in" production performance.[155] One study had similar results between the two systems it tested.[156] However, it is unclear that the systems in this study were substantially different, aside from the type of flooring.[157] Another recent study "indicate[s] that gestating sows can be housed in deep-bedded hoop barns equipped with individual feeding stalls and achieve results comparable or superior to gestating sows housed in individual crated gestation systems."[158] While one animal science meeting "[n]oted that the major challenge of group housing gestating sows is inter-sow aggression," results showed that the "[o]verall farrowing rate was not different" be-

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150 Jay D. Harmon et al., *Hoop Barns for Gestating Swine*, 44 Agric. Engrs. Dig. 1, 17–18 (Sept. 2004).

151 *See* Perkins, *supra* n. 39 (citing Mark Honeyman, an animal science professor, the article says, "Research has shown that the economic returns from raising hogs in hoop-houses, open-ended buildings with a waterproof cover, are similar to confinement buildings . . . .").

152 J.L. Barnett et al., *A Review of the Welfare Issues for Sows and Piglets in Relation to Housing*, 52 Austr. J. Agric. Res. 1, 6 (2001) (citation omitted).

153 M. Barbari, *Analysis of Reproductive Performances of Sows in Relation to Housing Systems*, in *Swine Housing*, Proc. First Int. Conf. 188, 191–92, 194 (Des Moines, Iowa, Oct. 9–11, 2000).

154 *Id.* at 193–94.

155 D.C. England & D.T. Spurr, *Litter Size of Swine Confined During Gestation*, Or. Agr. Exp. St. Tech. Paper 2506, 220, 222 (Or. St. U.) (on file with *Animal L.*).

156 J.R. Morris et al., *The Effect of the Hurnik-Morris (HM) System on Sow Reproduction, Attrition, and Longevity*, 76 J. Animal Sci. 2759, 2761 (1998).

157 *Id.* at 2760.

158 P.J. Lammers & M.S. Honeyman, *Sow and Litter Performance for Individual Crate and Group Hoop Barn Gestation Housing Systems: Progress Report III*, 2006 Iowa State U. Animal Indus. Rpt. (2006) (available at http://www.ans.iastate.edu/report/air/2006pdf/R2171.pdf).

tween systems.[159] Finally, a Denmark study found that, although there were problems with offspring deaths in the alternative system, the system resulted in healthier and heavier offspring.[160] In addition, "the extra square metre or so per pen to allow the sow to follow natural traits for farrowing appears to be balanced in cost by the lack of investment in a crate."[161]

The financial outlay also seems to be an advantage of the hoop barn alternative: "[t]he versatility, production flexibility, and low capital costs may result in reduced financial risk."[162] Thus, even if the production performance in alternatives is not at or above that of gestation crates, low initial costs for the farmer may make the alternatives economically viable. Therefore, although the economic data relate mainly to production performance, and those results are mixed, there is at least a strong possibility that alternatives to gestation crates are economically competitive.

Aside from looking purely at the production performance in the different systems, actual farmed animal welfare is another factor in the economic evaluation. If group housing is, in fact, better for the welfare of sows, it may be in the economic interest of the farmer to use this housing method, because studies "have linked reproductive performance . . . with welfare."[163]

Thus, although the data is far from clear, several strong arguments could be made that alternative housing systems are equal to, or even more economically beneficial than, confinement systems.

B. Product Elasticity and Substitution

Even if data at some point conclusively shows that alternative methods are economically inferior to confinement systems, a gestation crate ban would not necessarily have a detrimental effect in the pig industry. "Elasticity of demand measures the response of the quantity of a good to changes in its price."[164] Where the elasticity of demand is less than one, it is inelastic.[165] Where the elasticity of demand is greater than one, it is elastic.[166] "The more substitutes for the good, the greater the elasticity of demand; the fewer the substitutes, the lower the elasticity."[167] The price elasticity of demand for pork is

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159 Tim Lundeen, *Sow Housing System May Not Influence Animal Performance*, Feedstuffs 9 (July 28, 2003).

160 Norman Dunn, *Positive Aspects of No-Crate Farrowing*, 21 No. 7 Pig Progress 20, 20 (2005).

161 *Id.*

162 Harmon et al., *supra* n. 150, at 18.

163 Barnett et al., *supra* n. 152, at 3.

164 Cooter & Ulen, *supra* n. 33, at 25.

165 *Id.*

166 *Id.*

167 *Id.*

–0.35.[168] Therefore, there would be a relatively low change in the quantity of pork purchased due to a change in price.[169] This indicates that if a ban on gestation crates resulted in higher prices for pig farmers and these higher prices were in turn transferred to the consumer, it should have a minimal effect on the farmer, because consumption would not decrease.

C. *What If There Are Negative Economic Effects from Banning Gestation Crates?*

Even if, despite the caveats and information outlined above, banning gestation crates actually does result in increased costs to farmers, it does not necessarily mean that the legislation will or should fail. First, pig producers may look at increasing animal welfare standards as an opportunity for an economic boon through marketing.[170] This accords with the idea that economics may be waning as the "major determinant of management decisions related to pig state-of-being."[171] Such trends may minimize any negative economic effects of farmed animal welfare measures. Second, and more importantly, the fact that society supports additional farmed animal welfare protection measures, at least in a general sense,[172] shows that society might be willing to pay for the additional cost that comes with such protections. Third, an economic analysis by animal advocates might uncover holes in the economic analysis of opponents of the measure. Fourth, while there may be a negative economic impact on some parts of the market, others in the animal industry might benefit. For example, while welfare protection measures might hurt large industrial farms, the measures might benefit other farms that focus on "niche" markets, such as organic farms.[173] Thus, the possibility that certain, or even overall, economic impacts of a farmed animal welfare measure might be negative should not discourage animal advocates from doing a detailed economic analysis and using it to their advantage.

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[168] B. Wade Brorsen et al., *Economic Impacts of Banning Subtherapeutic Use of Antibiotics in Swine Production*, 34 No. 3 J. Agric. Applied Econs. 489, 497 tbl. 4 (Dec. 2002).

[169] *See generally* Cooter & Ulen, *supra* n. 33, at 25 (explaining elasticity of demand and how it functions).

[170] W. Ray Stricklin, *Ethical Considerations of Pork Production*, in *Proceedings: Symposium on Swine Housing and Well-being, Purdue U.* 7, 7 (Des Moines, Iowa, June 5, 2002) ("[I]t is proposed that the establishment of pork production practices that are viewed as ethically defensible is not only the right thing to do but is also a pragmatic action to be taken as a marketing tool.").

[171] Dr. Stanley E. Curtis, *Introduction: An A and Five E's: Training Stockpeople to Be Maximizers of Pig State-of-Being*, in *Proceedings: Symposium on Swine Housing and Well-being, Purdue U.* 3, 4 (Des Moines, Iowa, June 5, 2002).

[172] *See supra* n. 30–31, 35 and accompanying text (showing public support for protections).

[173] *See* O'Brien, *supra* n. 3, at 410 n. 13 (explaining that farmers can take advantage of "niche" markets); Mo, *supra* n. 99, at 1324–26 (giving examples of companies in these markets and explaining their greater costs).

D. The Negative Effects of Arguing Economic Efficiency: Competitive Injury and Standing

In addition to the worrisome effects of an economic approach to animal welfare, such as society's changing moral standards or the proper functioning of the market,[174] one other cautionary note deserves brief study. In some cases, animal advocates may attempt to allege standing by way of competitor injury.[175] In such cases, if the economic impact of implementing animal protection practices is not negative, those plaintiffs will have more difficulty getting into court.[176] However, the legislative fix by way of economic arguments is preferable to ad hoc and possibly difficult judicial enforcement. Plaintiffs bringing cases under competitive standing theories should nonetheless remain aware of this possible side effect of successful economic efficiency arguments to implementing animal protection measures.

VII. CONCLUSION

A law and economics approach in the current animals-as-property realm could be the best way to provide for tangible advancements in the protection of nonhuman animals.[177] The wealth maximization theory of justice, providing for recognition of the human valuation of nonhuman interests, allows for this to be the case.[178] Where the market fails to adequately reflect human valuation of nonhuman animal interests,[179] animal advocates should seek solutions. Advancements have already progressed judicially for companion animals.[180] Although a different dynamic than that involving companion animals may require a legislative approach for farmed animals, this approach holds similar promise for the advancement of farmed animal protections.[181]

In addition to the general application of economics to animal law, an economic efficiency analysis can serve the interests of animal advocates well. Indeed, an economic analysis of the recent ban on gestation crates in Florida suggests that strong economic arguments can serve to

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174 *Supra* n. 14 and accompanying text.

175 *See* Mo, *supra* n. 99, at 1324 (explaining how a plaintiff under California's unfair competition law would need to show "financial . . . damage"); Sunstein, *supra* n. 119, at 1335, 1343, 1346–47, 1356–58, 1360, 1362 (explaining competitive standing doctrine in relation to animal protection).

176 *See* Mo, *supra* n. 99, at 1324 (explaining that under California's unfair competition law "animal advocacy groups can be plaintiffs only if they have suffered financial or property damage as a result of the cruelty against the farm animals."); Sunstein, *supra* n. 119, at 1346, 1356–57 (explaining competitive standing as a result of taking away competitive advantage, *i.e.* as a result of competitive harm).

177 *Supra* pt. I.

178 *Supra* pts. II–III.

179 See *supra* nn. 8–10, 30–32, 35 and accompanying text (discussing popular support for farmed animal protection and a lack of legislative answers for such support).

180 *Supra* pt. IV(B)(1)(a).

181 *Supra* pt. IV(B)(2).

provide valuable protections to farmed animals.[182] The sheer magnitude of farmed animals subjected to painful practices[183] requires that animal advocates begin a direct, offensive approach to the economics of animal welfare measures today.[184]

[182] *Supra* pt. VI.

[183] *See supra* nn. 6, 8–10 and accompanying text (explaining the number of animals at stake, the harsh practices of industrial animal agriculture, and the lack of legislative protection).

[184] *See supra* nn. 14–15 and accompanying text (discussing the urgent need for practical reform).