Cost-Benefit Analysis of Entitlement Problems: A Critique

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INTRODUCTION

This article addresses what I will call liberal law and economics. I mean by that term the body of literature and taught tradition that proposes and elaborates cost-benefit analysis as a way for a policy maker to decide what private law rules to recommend to judges, legislators or administrators who have power to set those rules. Schol-

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^{1.} I mean to address only a part of the law and economics literature. There seem, at present, to be three approaches to law and economics: (1) That of Richard Posner, which repudiates the Paretian tradition of efficiency analysis. See R. POSNER, ECONOMIC ANALYSIS OF LAW (2d ed. 1977); Posner, The Ethical and Political Basis of the Efficiency Norm in Common Law Adjudication, 8 HOFSTRA L. REV. 487 (1980). For criticism, see Dworkin, Is Wealth a Value?, 9 J. LEGAL STUD. 323 (1980); Kennedy & Michelman, Are Property and Contract Efficient?, 8 HOF-STRA L. REV. 711 (1980). (2) That of such scholars as Polinsky, Shavell, Diamond, and Brown, who are relentlessly Paretian but use highly abstract, mathematical models far from the legal institutional context. See, e.g., Brown, Toward an Economic Theory of Liability, 2 J. LEGAL STUD. 323 (1973); Diamond & Mirlees, On the Assignment of Liability: The Uniform Case, 6 Bell J. Econ. 487 (1975); Polinsky, Controlling Externalities and Protecting Entitlements: Property Right, Liability Rule, and Tax-Subsidy Approaches, 8 J. LEGAL STUD. 1 (1979). (3) That of the "liberal" law and economics school that I criticize in this article. See, e.g., R. STEWART & J. KRIER, ENVIRONMENTAL LAW AND POLICY (2d ed. 1978); Ackerman, Regulating Slum Housing Markets, 80 YALE L.J. 1093 (1971); Calabresi & Hirschoff, Toward a Test for Strict Liability in Torts, 81 YALE L.J. 1055 (1972); Calabresi & Melamed, Property Rules, Liability Rules and Inalienability: One View of the Cathedral, 85 HARV. L. REV. 1089 (1972) [hereinafter cited as Cathedral]; Ellickson, Suburban Growth Controls: An Economic and Legal Analysis, 86 YALE L.J. 385 (1977); Freeman, Give and Take: Distributing Local Environmental Control Through Land-Use Regulation, 60 MINN. L. REV. 883 (1976); Heller, The Importance of Normative Decision-Making: The Limitations of Legal Economics as a Basis for a Liberal Jurisprudence—As Illustrated by the Regulation of Vacation Home Development, 1976 WIS. L. REV. 385; Heymann, The Problem of Coordination: Bargaining and Rules, 86 HARV. L. REV. 797 (1973); Markovits, The Distributive Impact, Allocative Efficiency, and Overall Desirability of Ideal Housing Codes: Some Theoretical Clarifications, 89 HARV. L. REV. 1815 (1976); Markovits, The Causes and Policy Significance of Pareto Resource Misallocation: A Checklist for Micro-Economic Policy Analysis, 28 STAN. L. REV. 1 (1975); Michelman, Pollution as a Tort: A Non-Accidental Perspective on Calabresi's Costs, 80 YALE L. J. 647 (1971); Michelman, Property, Utility, and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law, 80 HARV. L. REV. 1165 (1967). Mario Rizzo's impressive article, The Mirage of Efficiency, 8 HOF-STRA L. REV. 641 (1980), came to hand too late to incorporate its insights into the text of this article. I have mentioned it in the footnotes where it is directly relevant to my thesis.

ars in this movement propose that the policy maker should add up the gains and the losses to all parties affected by the choice to fix an entitlement in a particular way. They then argue that it makes sense (is "efficient," or is "potentially Pareto superior") to fix the rule in the way that will generate the largest possible net excess of gains over losses. Liberal law and economics scholars tend to agree that there are other reasons than efficiency, as measured by the cost-benefit analysis, for choosing one entitlement over another; they tend to summarize these as "distributional" considerations.³

What makes the efficiency or cost-benefit analysis attractive and interesting is that it appears to involve only one rather uncontroversial (or at least apolitical) value judgment: If a change in the legal regime helps those who gain by it more than it hurts those who lose, it is a good idea to put it into effect. This maxim seems equally relevant whether we are inventing a rule for a previously unknown situation (satellites) or reviewing the rules in force to see if it is desirable to change them. Insomuch as the goal of efficiency has been a factor in past choices to set rules one way or another, it will also be helpful in understanding the rationale of the rules in force.4 The technique of liberal cost-benefit analysis thus applies to the whole rule system. Its proponents put it forward as a criterion by which we could set all the rules, while conceding that there are other criteria, such as distributional equity, that might lead us to disregard the dictates of efficiency in particular cases or guide our choice when there is more than one possible efficient solution.⁵

I want to argue in this article that the program of generating a complete system of private law rules by application of the criterion of efficiency is incoherent. The concept of efficiency is indeterminate—it cannot yield an answer—if we try to apply it to the whole system of private law rules. If we wish to use economic analysis to generate a determinate ideal private law regime, we have to make a series of value judgments that are more controversial, because more overtly political, than that involved in saying that we should make changes whose benefits to the gainers exceed the costs to the losers. Insomuch

^{2.} See, e.g., R. STEWART & J. KRIER, supra note 1, at 99-104; Cathedral, supra note 1, at 1093-94.

^{3.} See, e.g., R. STEWART & J. KRIER, supra note 1, at 168-73; Cathedral, supra note 1, at 1098-105.

^{4.} See, e.g., Priest, The Common Law Process and the Selection of Efficient Rules, 6 J. LEGAL STUD. 65 (1977); Rubin, Why is the Common Law Efficient?, 6 J. LEGAL STUD. 51 (1977).

^{5.} See note 3 supra; note 12 infra.

as liberal scholars think their policy recommendations are based only on efficiency, they are mistaken.

Part I describes the standard procedures of liberals doing costbenefit analyses of entitlements. Part II describes the developments in the concept of an "externality" that have permitted the liberals to make efficiency an argument for interventions they once had to justify by direct appeal to political value judgments. Part III explores the offer-asking problem, which arises whenever the analyst sets out to value the impacts on people of one or another setting of an entitlement. I argue that there is no "neutral" or "correct" way to solve this problem, that the liberal procedure with respect to it has been inconsistent, and that recognition of the value judgments involved in selecting a solution would deprive the efficiency calculus of some of its bogus air of objectivity. Part IV takes up a series of difficulties that remain even if we find a way to deal with the offer-asking problem. These arise from the fact that the aggregation of a series of partial equilibrium solutions to entitlement problems, each reached under appropriately restrictive ceteris paribus assumptions, will not yield a valid general equilibrium solution to the problem of setting all the rules of the system.

I. STANDARD PROCEDURE IN COST-BENEFIT ANALYSIS

A. Conventional Cost-Benefit Analysis

The original rationale for cost-benefit analysis was simply that the government should, before undertaking an expensive public project like a missile system, interstate highway network, or dam, try to figure out who will gain and who will lose from the project and by how much. If it looks as though the benefits to the winners are a lot more than the costs to those whose interests are hurt by the project, then it should proceed.⁶

Numerous problems arise in trying to value various kinds of costs and benefits. The normal procedure is to try to imagine how affected parties would value them, generally assuming that they do so under their existing budget constraints. The analyst thus usually accepts the existing distribution of income as a powerful factor in the valuation process. But there is no *logical* reason to avoid valuation based upon some hypothetical budget constraints. Nor is it illogical to consider the project's potential effect on income distribution and evalu-

^{6.} See generally R. McKean, Efficiency in Government Through Systems Analysis (1958); E. Mishan, Economics for Social Decisions (1973).

ate the project based on preferences for greater or lesser equality.⁷

Cost-benefit analysis is intended to provide a technique for deciding when market failure has prevented private entrepreneurs from providing a good or service for which people would gladly pay if its price were not exaggerated by transaction costs, freeloader problems, and the like. The analysis generates a picture of what would have happened had these factors not inhibited entrepreneurs. If consumers are willing to pay enough above the cost of the project to outweigh the cost to those who value it negatively, then market forces undistorted by these factors would have brought it into existence, and the government can justify stepping in to repair the market failure.⁸

B. Extending Cost-Benefit Analysis to the Fixing of Entitlements

Government decisions about what private law rules to enforce are not obviously analogous to decisions about building dams or highway systems. But the premise of liberal law and economics is that they nonetheless have enough in common so that one can sensibly apply the same decision techniques to each. The choice of a private law rule, say about the liability or non-liability of ranchers to farmers for damage done by straying cattle, is like the decision to build a dam in that it will affect a large number of people. There are farmers and ranchers as groups, but there are also all those who buy from or sell to those groups. Indeed, the whole pattern of distribution and allocation of resources will be affected by every decision about a private law rule. It is perfectly sensible to try to figure out how all the people would value, given their budget constraints, all these changes, and then to add up the pluses and minuses and see which rule—liability or no liability—produces the best result.

It is possible to understand this procedure as analogous to the conventional kind of cost-benefit analysis in that it is an attempt to deal with a form of market failure. To begin with, a private entrepreneur cannot go into the business of providing an enforced rule of liability or no liability for the farmer and the rancher. The reason for this is that the state will not permit the use of force by the entrepreneur. But even if we were to imagine such a private industry, it seems likely that transaction costs, including both problems of large numbers with small stakes and freeloader problems, would prevent

^{7.} See, e.g., E. MISHAN, supra note 6, at 21-24.

^{8.} Id. at 11-13.

the entrepreneur from getting an accurate reading from the market of all the costs and benefits generated by his activity. The liberal law and economics cost-benefit analysis of entitlements would then be necessary in order to decide whether the failure of the private sector to provide enforcement of any rule at all was something that should be remedied by government action.⁹

As in the case of the dam, the decision to fix a rule one way or another will have distributive effects. It is perfectly permissible, within the liberal conception, for the analyst to "balance" these against the benefits generated by a proposed entitlement. And the analyst can also attempt to correct the impact of income inequality on budget constraints and thus on valuation of cost and benefit. But, as before, there is nothing in the procedure that requires him to do this.

C. Cost-Benefit Analysis of Entitlements and Efficiency

While there is no logical obstacle to including these things in a cost-benefit analysis of the fixing of entitlements, the liberal analysts I am talking about don't do it that way. They use the analysis as a way to generate a judgment of efficiency, or, more precisely, of potential Pareto superiority. They include in the calculus the valuations of all the affected parties, with the goal of determining whether moving from one rule to another rule would modify the allocation of resources in such a way that the gains to the gainers from the change would be greater than the losses to the losers. Sometimes (although not always)10 they express this idea in terms of "compensation." If, in the absence of transaction costs, it would have been possible for the farmers and all those who buy from and sell to the farmers to compensate the ranchers for all losses accruing by the change from a rule of no liability to a rule of liability for crop damage, then the change is "efficient," in the sense of moving us to a position potentially Pareto superior to that we started from.11

It is usual for the liberal analyst to assume that he or she is addressing a judge, who has the power to set rules about things like liability or no liability of ranchers to farmers but no power to order farmers to make payments to ranchers if it turns out to be potentially Pareto preferable to impose liability. The liberal analyst then has to

^{9.} See R. STEWART & J. KRIER, supra note 1, at 107-16.

^{10.} See text accompanying notes 68-74 infra.

^{11.} See, e.g., R. STEWART & J. KRIER, supra note 1, at 99-104; Cathedral, supra note 1, at 1093-94.

deal with the question of whether the "distributive" effects of making the change amplify, neutralize, or counterbalance the "efficiency gains." As I will be using the term, liberal cost-benefit analysis refers only to the first part of this operation: that in which we generate the efficient or potentially Pareto superior alternative.

It is an accepted part of the theory that the cost-benefit analysis may not yield a determinate result. There may be more than one efficient solution (in the sense of Pareto optimal, rather than merely potentially superior), or the situation may be such that two solutions are mutually Pareto superior (the Scitovsky paradox).¹³ In such cases it is not only permissible, but actually necessary to call in nonefficiency considerations to resolve the "deadlock."

D. Cost-Benefit Analysis and the Coase Theorem

The Coase Theorem¹⁴ states that if there are no transaction costs (with transaction costs very broadly defined), there will be an efficient allocation of resources no matter how entitlements are set. In other words, in the no transaction cost case, all efficiency analyses of entitlements will be indeterminate because all settings generate Pareto optimal allocations. *What* the allocation is will be different for different entitlement patterns because of wealth effects.¹⁵

It is implicit in the Coase Theorem that if there are transaction costs, it is possible for an entitlement to be set inefficiently—i.e., it is possible for the setting of an entitlement to generate an allocation that is potentially Pareto inferior to the allocation that would have occurred had the entitlement been set differently. Within the liberal paradigm, the notion of efficiency tells us nothing about how to set entitlements so long as there are no transaction costs, since in that situation all entitlement patterns generate Pareto optimal outcomes. But once there are transaction costs on the scene, the situation is quite different, and "the goal of economic efficiency starts to prefer one allocation of entitlements over another." ¹⁶

For example, suppose we have a rule that ranchers are not liable

^{12.} See, e.g., Calabresi & Hirschoff, supra note 1, at 1077-82; Cathedral, supra note 1, at 1110, 1114-15.

^{13.} See, e.g., E. MISHAN, supra note 6, at 16; Cathedral, supra note 1, at 1094 n.10, 1121.

^{14.} Coase, The Problem of Social Cost, 3 J. LAW & ECON. 1 (1960). See generally Calabresi, Transaction Costs, Resource Allocation and Liability Rules—A Comment, 11 J. LAW & ECON. 67 (1968); Nutter, The Coase Theorem on Social Cost: A Footnote, 11 J. LAW & ECON. 503 (1968).

^{15.} Wealth effects are changes in demand caused by income shifts that follow changes in entitlement. See text accompanying notes 88-102 infra.

^{16.} Cathedral, supra note 1, at 1096.

for crop damage. Suppose that if there were no transaction costs, farmers would pay ranchers to take measures that would eliminate crop damage altogether. But because of transaction costs, farmers find it would be more expensive to do the bribery than just to accept the crop loss. In this case, if we change the entitlement and make ranchers liable, and there are no costs of bringing suit for damage, the ranchers will be induced to take the measures to eliminate crop losses without there being any negotiation with the farmers. There will be an efficient allocation of resources, in the sense that the allocation that occurs under the new rule of rancher liability is potentially Pareto superior to that generated by the old rule of no liability, operating under transaction costs.¹⁷

Even assuming that changes in wealth resulting from changing the liability rule have negligible effects on the allocation of resources, they may be considered undesirable from the "equity" perspective. In that case, the liberal cost-benefit analyst has the options already mentioned: He can go ahead, or scrap the change to avoid the bad distributional results. In some cases, he might also be able to arrange some kind of compensation, as in the "purchased injunctions" that have recently begun to appear in some nuisance cases. As always, efficiency is only one of the considerations that are relevant in liberal analysis of entitlement setting.

II. THE NEW EXTERNALITIES ANALYSIS

A. Historical Background 20

In the initial formulations of the New Welfare Economics, it was said to be a condition of the efficiency of perfectly competitive markets that all factors are private property and that there are no externalities.²¹ The definition of an externality was imprecise in several ways. The classic example of the phenomenon was pollution damage from a factory. In the early 1960s, as an undergraduate majoring in

^{17.} See generally Demsetz, When Does the Rule of Liability Matter?, 1 J. LEGAL STUD. 13 (1972); D. Kennedy & M. Kelman, The Interpretation of Political Dreams: The Search for Efficient Tort Rules (Jan. 1981) (unpublished manuscript draft on file with Stanford Law Review).

^{18.} See notes 3, 12 supra.

^{19.} See Cathedral, supra note 1, at 1115-21.

^{20.} The view of law and economics as liberal politics put forward in this section emerged in conversations with my colleague, Morton Horwitz. See Horwitz, Law and Economics: Science or Politics?, 8 HOFSTRA L. REV. 905 (1980).

^{21.} See, e.g., W. Baumol, Welfare Economics and the Theory of the State 64-76 (2d ed. 1965).

economics, I heard the same basic analysis of the pollution problem in three different courses. It began with the notion of "social cost," which meant the actual resource cost of producing a commodity. It was clear to everyone that the smoke damage was a cost of the commodity produced by the factory. It was also obvious that factories didn't have to take this cost into account in setting their prices. It followed that from the point of view of social cost, the polluting factory's product would be underpriced vis-a-vis commodities that didn't pollute, and would consequently be "overproduced."²²

The remedy presented by my teachers was clear, at least in theory: The government should impose a system of fines and bounties on industry in order to make sure that both the external costs and the external benefits of production were "internalized" by the firms that generated them.²³ From a student's point of view, this was obviously a left-wing proposal. It was a source of no little satisfaction that it appeared to be dictated by economic science at its purest.

But however appealing, the fines and bounties system seemed obviously impracticable. The lawyers had already come up with something much more politically feasible, for the reason that they avoided one of the ambiguities in the economic theory. The ambiguity concerned the reason why the factory didn't have to pay for smoke damage. In economics class, this was just a given. In law school, it was explained by the absence of any *legal right* of the injured property owner to recover.

Once the absence of a right of recovery was identified as the problem, a distinctly liberal program of law reform based on economic theory became a possibility. The rules of tort law govern myriad forms of interaction between manufacturers and other social groups. In many cases, the manufacturers can perfectly legally do things that injure the interests of these other groups. If efficiency requires that the social costs of production be internalized to the firms generating them, then tort law should be reformed to impose liability wherever manufacturing activity now injures with impunity. Since the rule of tort damages is compensation, the result would be precisely what theory required: The firm would have to pay exactly the amount that the economist would have imposed as a fine. But whereas a fine would go to the state, the damage payment would redistribute in-

^{22.} See A. PIGOU, THE ECONOMICS OF WELFARE 172-203 (4th ed. 1932). For a detailed discussion of Pigou's position, see Coase, supra note 14, at 28-44.

^{23.} See A. PIGOU, supra note 22, at 192-96.

come in the egalitarian direction the general liberal program suggested was appropriate.

The argument was developed for non-contractual relationships in which a manufacturing process injures a bystander, as in the pollution case,²⁴ and the Progressives applied it in the semi-contractual case of industrial accidents.²⁵ But it applied equally well to injuries to consumers of the manufactured products themselves. The rules of tort law permitted the consumer to recover only where the manufacturer had been negligent; where "the accident was no one's fault," the loss lay where it fell. But if efficiency required that the manufacturer internalize the social costs of his activity, one could argue that his price should include a premium sufficient to build up a fund to cover all the injuries the product caused, whether or not he had done something careless somewhere along the way.²⁶ Thus efficiency became the mainstay of the liberal reformist argument for products liability.

There are two things to note about this initial revival of law and economics in the form of strict liability. First, the proponents paid very little attention to distributional issues as they affected questions of what rules were efficient. They noted distributional impacts, if at all, only to approve or disapprove of them on grounds of equity. Second, they took it for granted that the question "what is a cost of what" was an easy one not meriting elaborate discussion. This fuzziness made the theory vulnerable. Eventually, Ronald Coase put an end to the liberal honeymoon with efficiency,²⁷ and, as recent readers of his famous article will recognize, he did so for reasons that were frankly political as well as intellectual.²⁸ His basic tactic was to bring to the surface, without fully developing, the ambiguities in the conventional economist's formulation of the problem of externalities that had been carried over into the legal case for strict liability.

He began by exposing the naivete or superficiality of the definition of an externality in both the legal and the economic literature. This naivete consisted in believing that the question of imputation, of "what is a cost of what," could be settled by implicit reference to the

^{24.} See generally A. PIGOU, supra note 22.

^{25.} See, e.g., Smith, Sequel to Workmen's Compensation Acts, 27 HARV. L. REV. 235 (1913).

^{26.} See, e.g., Escola v. Coca Cola Bottling Co., 24 Cal. 2d 453, 461, 150 P.2d 436, 440 (1944) (Traynor, J., concurring). A further advantage was that a change in legal rights could be implemented on a case by case basis by liberal judges, whereas a system of fines and bounties would have required legislative action in the unfavorable political climate of the 1950's.

^{27.} See Coase, supra note 14.

^{28.} See id. at 17-18, 42-44.

question "what causes what."²⁹ The smoke damage was a cost of manufacturing rather than of residential housing near factories because the smoke hit the houses rather than vice versa. If the factory was not legally liable for the damage, or if the legal right to compensation could not be enforced, then there was a failure of the system to bring private into line with social cost, i.e., an externality. To show that this made no sense economically, it was not necessary to discredit the meaningfulness of the idea of causation. It may be that in almost all cases everyone will agree on the proper answer to the question "who caused the damage."³⁰ But it was only a remnant of natural law thinking to believe that settling the cause issue would also tell us which of the two activities ought to be discouraged by being made to absorb the loss.³¹

The language of externalities had suggested that if the factory was not liable, it enjoyed a "subsidy" which would lead to overproduction. But once we see the damage as a "joint cost" of the coexistence of two activities, we lose any basis for deciding who is being subsidized. As long as both activities are "but for" causes in the sense that each must be present for the loss to occur, then the allocation of the "social" as opposed to the private cost to one or the other is arbitrary.

But Coase's goal was to vindicate the new welfare economics rather than to undermine it. He had a solution to the problem he had raised. So long as the legal system allocated the joint cost to one activity or the other, and so long as there were no transaction costs and perfect competition, free bargaining between the parties would lead them to maximize the joint profits of the two activities. Since the placement of liability for the loss within a joint enterprise had no necessary effect on the pricing of either commodity, the question of what joint output would maximize profit could proceed as though the joint cost were an overhead item. There would be a single optimum solution. And this single solution would reflect the proper "social" allocation of the joint cost between the two commodities.³²

The impact of this analysis on the law and economics movement was profound, but it seems also to have been quite different from what Coase intended. He appears to have been mainly concerned

^{29.} Id. at 2, 27-28.

^{30.} See Epstein, A Theory of Strict Liability, 2 J. LEGAL STUD. 151, 160-89 (1973). For example, here, if the residential housing preceded the building of the factory, we may all agree that the smoke hits the house rather than vice versa.

^{31.} See Coase, supra note 14, at 2.

^{32.} See id. at 2-8.

with the leftist implications of the theory of fines and subsidies to bring private into line with social costs. And he appeared to have demonstrated two things. First, in the absence of transaction costs, the whole externalities analysis was superfluous. There would be an efficient allocation regardless of how the legal system chose to solve the problem of imputation. It followed that reformers could not use the goal of efficiency to support any particular program of private law rules. If the reformers liked the distributive implications of increasing business liability, then they would have to argue on distributive—i.e., political—grounds, eschewing any claims that economic science was on their side.³³

But Coase also offered an analysis of what to do about transaction costs, and it was equally bleak for the liberals. He pointed out that where the bargaining process is blocked, it *might* be feasible for the state to intervene to make the actual allocation correspond to the one that bargaining would have produced.³⁴ But he emphasized that this would have to be done on a case-by-case basis, with the state agencies obliged to carry out factual investigations of mind-boggling complexity, followed by a series of regulatory measures that would be both hard to enforce and valid only for a particular, brief constellation of economic forces. The conclusion seemed to follow that state interference was unnecessary without transaction costs, and technically impracticable with them.³⁵

The historical irony of the Coase Theorem has been that it turned out to be the fountain of exactly the kind of elaborate law and economics theorizing it purported to show was impractical. The reason for this is that it was taken up not by the liberal economists interested in fines and subsidies, but by liberal and conservative *lawyers* interested in solving the crisis of legitimacy of the judicial process. Coase seems to have been unaware of the existence of this group. He addressed himself to Pigou, to English nuisance law, and to public law measures to deal with externalities. He never mentioned the strict liability movement, Traynor's *Escola* concurrence, or the tort meditations of Holmes, Cardozo, Learned Hand, W.O. Douglas, Fleming James, or Prosser. Yet it was to the intellectual heirs of those writers that his theorem had greatest appeal: It suggested a radical revision of the liberal lawyer orthodoxy about cost internalization, and cre-

^{33.} Id. at 18, 41-42.

^{34.} Id. at 17-18.

^{35.} Id. at 18, 41-42.

^{36.} See note 26 supra.

ated a new set of opportunities, both for those who wanted to extend the liberal victories within private law and for those who wanted to cut them back or eliminate them.

B. Externalities Run Wild

Recall that externalities were originally understood as costs or benefits caused by an activity, but not reflected in its price. We have already discussed the false sense of security about "what is a cost of what" that went along with use of the word "cause." Coase forced us to redefine an externality as a cost, associated with an activity, which is not reflected in the activity's price because transaction costs prevent those on whom the loss falls from making a contract with whoever might prevent it.³⁷ This redefinition had implications that we have yet to explore. To begin with, so long as we think of them in terms of causation, the universe of externalities is implicitly limited by our conventional intuitions about physical impacts. Cost means no more than disutility. But of the various disutilities associated with an activity, lawyers and economists tended to focus exclusively on those following in a physical chain reaction from some initial "act." The Coase Theorem made it possible to change this pattern.

The liberal lawyer-economists, in particular, began to identify as externalities disutilities of a kind quite unfamiliar in earlier treatments of efficiency. The basic technique was to locate harms not dependent on physical contact, but rather on an adverse psychological reaction to a state of affairs. If very large numbers of people have such a reaction to an event, and the reaction is a mild one in each case, transaction costs will prevent bribing behavior. The way is then open to an argument for state intervention designed to replicate the hypothetical outcome of costless bargaining.

Environmental issues are particularly apt for this kind of reasoning:

[A] considerable portion of the benefits from pristine environments consists of the "long distance" ideological satisfaction afforded non-residents concerned with the preservation of extraordinary environments such as the Grand Canyon or the Alaska wilderness.³⁸ Market values for undeveloped properties may not fully reflect the willingness to pay of those who seek contact with natural conditions valued both as a source of emotional health and a unique aesthetic experience An important element of the demand for preser-

^{37.} See Heller, supra note 1, at 396-97.

^{38.} Stewart, The Development of Administrative and Quasi-Constitutional Law in Judicial Review of Environmental Decisionmaking: Lessons from the Clean Air Act, 62 IOWA L. REV. 713, 747 (1977).

vation, nowhere reflected in market prices, may derive less from its instrumental utility than from its symbolic meaning.³⁹

The Marshalls may be hurt by the expectation that, while the present generation might withstand present pollution levels with no serious health dangers, future generations may well face a despoiled, hazardous environmental condition which they are powerless to reverse.⁴⁰

Arguments of this kind can be made to go the other way. Suppose a factory that would have to close down if its owners were forced to compensate nearby homeowners for pollution damage—

But suppose there is fear about . . . costs in human demoralization, wasted plant, community disintegration, or social unrest which will not accrue at all unless . . . liability is shifted to the enterprise. It will then be at least possible that, while the value of the enterprise's products and services will by itself be too low to cover the pollution cost being shifted onto it (with the designed result that the enterprise will cease), the total of this value plus the secondary costs which it is feared cessation would cause exceeds the benefits of pollution abatement.⁴¹

The outcome would be "at least for the short term, socially sub-optimal." 42

Once one sets out down this road, all kinds of new opportunities for externality analysis present themselves:

[S]ome members of future generations may desire the husbanding of stocks. Regardless of the resource use preferred at those times, it is possible that they would be willing to pay the cost of reimbursing public authorities for prior payments made to prevent prior development.⁴³

The final [externality] is that payable by all consumers unsure about whether they will ever demand preservation services which will be forever precluded by development. Even where there is no present intent to use the asset, risk averse individuals may be willing to buy an option to preserve.⁴⁴

From the aesthetic externalities of environmentalism, it is a short step to other kinds of moral impact. For example, "it is generally thought that in-kind plans are chosen over cash-payment plans not to benefit the direct recipients but to please the donors. Thus, some members of society may gain greater donative utility if their tax

^{39.} Heller, supra note 1, at 405.

^{40.} Cathedral, supra note 1, at 1124.

^{41.} Michelman, Pollution as a Tort: A Non-Accidental Perspective on Calabresi's Costs, 80 YALE L.J. 647, 682 (1971).

^{42.} Id.

^{43.} Heller, supra note 1, at 406.

^{44.} Id. at 407.

funds reach low-income recipients in specified forms rather than in the less restrictive form of cash."⁴⁵ Or suppose we want to explain constitutional entitlements to "buy and read whatever books I choose, or to sell my house to whomever I choose, regardless of whether my doing so makes my neighbor unhappy." There's nothing to it, given externality analysis: "[T]he injury suffered by my neighbors results from a moralism shared by them but not so widespread as to make more efficient their being given an entitlement to prevent my transaction."⁴⁶

The liberal penchant for the first amendment leads to a low estimate of externalities in this context, but the analysis could easily be turned around, say in response to Posner's remark that "[t]he tendency of government to use queueing rather than pricing to ration access to the courts and to other government services is [a] puzzle, since pricing is a cheaper method of rationing."⁴⁷ We might use this definition of an externality: "Gains in exchange must be reduced by the value of moral outrage persons feel at paying for what they believe ought to be theirs by right."⁴⁸

In all these examples except the last, it seems fairly clear that the author is valuing the externality according to what the victim would offer to have it eliminated. The trick lies in summing it all up: "A widely shared environmental ethic, even if only made up of a small willingness to pay per individual, could, in the aggregate, exceed" the asking price of the development interests.⁴⁹

If we accept the highly abstract definition suggested by the Coase Theorem, then all of these psychic effects are unquestionably externalities. And if we can plausibly assert that it would be expensive, and would involve freeloader problems, for thirty million television viewers horrified by pictures of a disaster to pay mine owners five cents apiece to improve mine safety, then it is arguable that the level of mine safety is inefficient. If you are a liberal, and believe that there is a lot of good as well as a lot of bad in human nature, it is possible to construct, on this model, an efficiency argument for every one of the state interventions the conservatives claim are paradigmatically inefficient.

^{45.} Komesar, Return to Slumville, 82 YALE L.J. 1175, 1176 (1973).

^{46.} Cathedral, supra note 1, at 1112 n.43.

^{47.} Posner, The Economic Approach to Law, 53 Tex. L. Rev. 757, 765 (1975).

^{48.} Heller, supra note 1, at 448 n.164.

^{49.} Id. at 408.

III. THE OFFER-ASKING PROBLEM

This part is divided into four sections. The first introduces the offer-asking problem. The second shows that liberal analysts sometimes use offer and sometimes asking prices in performing cost-benefit calculations about entitlement setting. The third argues that the conventional definitions of efficiency are not helpful in deciding which procedure to use. The fourth describes a number of alternative consistent approaches to the problem and argues that each depends on value judgments going well beyond the apparently minimal preference for potentially Pareto superior changes in legal rules.

A. The Offer-Asking Problem Defined

The offer-asking problem arises because as a matter of fact some people some of the time will give a very different answer to the question, "How much will you pay to prevent X from happening?" than they will give to the question, "How much are you asking in exchange for allowing us to do X?" 50

The most obvious reason why this might be the case is that the actor in question is richer if she has an entitlement to prevent the harm than if she has no entitlement. Where this is the case, it would be possible to eliminate the differential by greatly increasing the actor's wealth. For example, a person might own a house she was unwilling to sell for less than \$50,000, but for which she could only offer \$25,000. If we increased her wealth substantially, we might find her offering price increasing more rapidly than her asking price, until the two were equal. But it is important that there are other reasons for the divergence, and these might well persist at any imaginable level of wealth.

In his article on the Coase Theorem, Kelman observes that people generally have greater concern for and attachment to things as they are than to things as they could be; that a fall in income matters more to most people than a rise in income; that they refuse to ignore "sunk costs" in things they already have; that they prefer a known quantity they own to an unknown quantity they don't own, and more generally, that people are disinclined to disrupt an equilibrium

^{50.} See, e.g., E. MISHAN, WELFARE ECONOMICS: FIVE INTRODUCTORY ESSAYS 68-72 (1964); Baker, Counting Preferences in Collective Choice Situations, 25 U.C.L.A. L. REV. 381 (1978); Baker, The Ideology of the Economic Analysis of Law, 5 PHILOSOPHY & PUB. AFF. 1 (1975); Heller, supra note 1, at 439-50; Hicks, The Rehabilitation of Consumers' Surplus, 8 REV. ECON. STUD. 108 (1940); Kelman, Consumption Theory, Production Theory, and Ideology in the Coase Theorem, 52 S. CAL. L. REV. 669, 678-95 (1979).

state.51

One can add to his list what might be called the "no duty to act" paradox. If you are suffering, through no action of mine, some terrible pain, I recognize a limited moral duty to help you out. I will pay something to discharge that moral duty. Now suppose that you will not suffer unless I do something. The "something" might be trivial, like eating a candy bar. Or it might be something like transferring to a buyer the right to inflict serious suffering on you. The point is that if I conceptualize what happens to you as "caused by my action" I will, as a matter of empirically demonstrable fact, feel much worse about your suffering than if I conceptualize it as something that I might have, but did not, intervene to prevent.⁵²

This amounts to saying that people typically experience a "duty to abstain from acts that cause suffering" that is much more intense than the "duty to act affirmatively to prevent suffering." If this is the case, we may get substantial offer-asking differences with respect to rights to hurt others. I can discharge my moral duty to affirmatively assist you by offering \$5 to save you from disaster; but I would be acting immorally if I accepted an offer of \$1000 for a pre-existing entitlement of mine that you not be subjected to that same disaster.

This calculus will be complicated by problems like this one: Suppose the injury A wants to inflict on B, and which C can prevent by exercising an entitlement, is an injury C feels B "ought" to have to suffer. C may then be willing to relinquish the entitlement for much less than C would if C felt C was the only thing standing between B and altogether unjustifiable violence.⁵³

It is important to see that we may want to pose the offer-asking problem—asking, first, what C would offer to prevent a particular action, and then what C would ask in exchange for a hypothetical

^{51.} Kelman, supra note 50, at 678-95.

^{52.} See, e.g., W. PROSSER, HANDBOOK OF THE LAW OF TORTS § 56, at 339 (4th ed. 1971) ("The highly individualistic philosophy of the older common law had no great difficulty in working out restraints upon the commission of affirmative acts of harm, but shrank from converting the courts into an agency for forcing men to help one another."); Ames, Law and Morals, 22 HARV. L. REV. 97, 111-13 (1908); Bohlen, The Moral Duty to Aid Others as a Basis of Tort Liability, 56 U. PA. L. REV. 217 (1908); Hale, Prima Facie Torts, Combination and Non-Feasance, 46 COLUM. L. REV. 196, 214 (1946). See generally THE GOOD SAMARITAN AND THE LAW (J. Ratcliffe ed. 1966).

^{53.} Then there is the problem of the moralist who has lost confidence in the potency of the misfeasance-nonfeasance distinction, and believes that in theory the cases are indistinguishable. Will that person's offer and asking prices converge? That depends on the person's reponse to the disintegration of theoretical rationales for what are, after all, almost ineradicable moral intuitions of people raised within our culture.

right to prevent that same action—even though we are not trying to decide whether or not C should have a right to prevent the action. The question might be whether A should have an entitlement to act in a way that will cause B suffering, or whether B should have a right that that form of suffering not be inflicted on him. We might be trying to decide this issue taking into account all the effects on C and other people of A's doing or not doing this painful thing to B. After we've added up all the valuations of all the tender observers, we'll decide whether, on balance, it is Pareto preferable to let B be hurt, or Pareto preferable to give B a right not to be hurt.

Even supposing that we decide to value C's feelings of horror at B's suffering at C's asking price, hypothetically inquiring what price C would demand to sell a right to B's security, we may decide that the Pareto preferable outcome is that A is entitled to hurt B. Moreover, even if we use C's asking price, and it turns out to be Pareto preferable that B have an entitlement not to be hurt, it does not follow that C should have an entitlement to the same effect.

In other words, we may decide that the Pareto preferable outcome is a right of security in B, which B could exercise or fail to exercise. If B waived it, and suffered the injury, or if A simply violated B's right, C might have no legal right of redress against A, even though we had previously decided that C's asking price was the relevant datum in valuing the external effects of the infliction of the injury. The question of whether or not C should have a legal entitlement with respect to A's behavior toward B is an independent legal issue, which can be resolved one way or another, according to its own cost-benefit analysis, regardless of how we resolve the cost-benefit analysis of B's entitlement or exposure. For example, while we might think that C's asking price is relevant in deciding whether or not husbands are entitled to beat their wives, we might also decide that it would be disastrous to give strangers rights of action for wife beating.

B. Examples of the Offer-Asking Problem

The use of asking prices to value externalities from the setting of entitlements seems first to have occurred in Frank Michelman's classic article on just compensation law.⁵⁴ Suppose that a government program will generate benefits that would allow the gainers easily to

^{54.} Michelman, Property, Utility, and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law, 80 HARV. L. REV. 1165 (1967).

compensate those whose property must be injured or appropriated to bring the program to fruition. Suppose also that there are substantial "settlement" costs involved in compensating the losers, not limited to the actual money payments they would receive. Finally, suppose that there are "demoralization" costs associated with uncompensated losses, consisting both in "disutilities which accrue to losers and their sympathizers specifically from the realization that no compensation is offered" and in some loss of output flowing from the demoralization.

In this situation, the following calculation seems plausible. Suppose that settlement costs over and above actual compensation are high—so high that they would eat up all the gains of the winners if the winners had to pay them. Suppose that demoralization costs are much lower than these same net winner gains, because few will be aware that there has been a "capricious redistribution," and the victims didn't produce much anyway. It is then desirable, from a "utilitarian" standpoint that is difficult to distinguish from that of efficiency, to undertake the program without making compensation, and incur the associated demoralization.⁵⁵

The striking thing about this analysis, for our limited purposes, is that demoralization costs are computed at the victim's asking price. We compute the dollar value to *sympathizers* (of the person whose property was taken) of the psychic anguish involved in witnessing the dread event. If the cost of buying out these sympathizers is very high, then the felicific calculus requires that compensation be paid to the actual victim. Thus his entitlement depends on the intensity of external effects on third parties, who are treated as though they had an entitlement to be free of this particular kind of vicarious suffering.

The author of this analysis was not long in extending it, this time replacing utilitarianism with Paretian efficiency. "Indications are that large numbers of people are specially sensitive to and disturbed by suspected but undetermined environmental hazards. Insofar as this is so, it would seem that the uneasy condition of suspicion accompanied by uncertainty should itself be counted a primary cost of pollution." The proposed solution to the problem of economizing this psychic cost is to give any citizen the right to enjoin a polluting substance that has not been subjected to a judicial process designed to "abate" mental suffering by providing full information. The process would also provide funds for the "relocation and compensation of

^{55.} See id. at 1214-18.

^{56.} Michelman, supra note 41, at 684.

families and enterprises disturbed by measures" to control pollution,⁵⁷ apparently without regard to entitlements, or the lack thereof, under the existing law of nuisance.

The procedure of identifying new externalities and then inflating their value by treating them as violations of hypothetical entitlements is carried to its logical, if absurd, conclusion by Calabresi and Melamed.⁵⁸ They begin by acknowledging that interference with freedom of contract is prima facie inefficient, and then show that these allocative losses may be outweighed by reduction in external effects of a given type of contract.⁵⁹ For example, "[i]f Taney is allowed to sell himself into slavery, or to take undue risks of becoming penniless, or to sell a kidney, Marshall may be harmed, simply because Marshall is a sensitive man who is made unhappy"⁶⁰ by Taney's misfortunes.

Were it not for transaction costs, Marshall "could pay" ⁶¹ Taney not to get himself in trouble. Marshall's offering price might or might not exceed Taney's asking price. Given transaction costs, according to Calabresi and Melamed, it would be rational for a government interested in efficiency to impose liability on the slave buyer to compensate third parties for their suffering. Since this is no more practicable than a voluntary exchange, they endorse compulsory state measures against slavery, etc., where "we value the external harm of a moralism enough to prohibit its sale." ⁶²

There are few, if any, limits to this kind of thing. The same authors suggest that the impracticability of a cost internalizing liability rule might justify making it illegal to sell land to a polluter, where it would "hurt the . . . gentleman farmers to see . . . a smoke-choked city dweller sell his entitlement to be free of pollution." 63

In an article on housing codes and the poor, Ackerman distinguishes "fairness" from "efficiency" reasons for all-out enforcement. His external benefits from enforcement are all conventional—they involve chains of physical causation leading to rat bites and the like.⁶⁴ But in his discussion of "fairness," he appeals to our concern for the welfare of poor children (this is perhaps the most hallowed of

^{57.} Id. at 685.

^{58.} Cathedral, supra note 1, at 1111.

^{59.} Id.

^{60.} Id. at 1112.

^{61.} Id.

^{62.} Id.

^{63.} Id. at 1124.

^{64.} Ackerman, supra note 1, at 1177-81.

liberal justifications for tinkering with the market outcomes generated by existing systems of entitlement).

[T]hat one set of parents desires housing improvements more than another does not necessarily indicate that their children's interests or desires have a similar relationship. Indeed, given the children's lack of access to economic power, it does not appear inappropriate for the state to intervene on their behalf to assure that certain of their "basic needs" are fulfilled in a minimally decent fashion before parents have the right to spend money upon activities which may not benefit their progeny in any significant way. 65

The hypothetical reversal of entitlements can miraculously convert this argument from a value judgment into a datum of economic science. Why shouldn't we factor into the efficiency calculus, as a "cost" of freedom of contract, "the number of dollars [the children] would be willing to accept instead of the [proposed] improvement in their housing quality if they were capable of making decisions that would maximize their long-run interests and if they could obligate themselves to repay loans that would be costlessly executed?" Of course, the children have neither a property right in freedom from these injuries, nor enough income to buy exemption from them. And enforcing the code amounts to a tautologically inefficient interference with the parents' freedom of contract. Markovits can nonetheless justify the interference on efficiency grounds, without reference to distribution, through the form of argument we have just been considering:

Fourth, if housing code enforcement increases the welfare of poor children, and if heads of poor families place a lower weight on welfare gains to their children than on welfare gains to themselves, the allocative value of code-induced improvements in housing quality will exceed their dollar value to the tenant by the amount of undervalued intrafamily benefits generated. Fifth, to the extent that those members of society who approve of the distributive impact of housing code enforcement value this impact more than its opponents disvalue it, its allocative efficiency will be increased by the net equivalent dollar gain it generates for such "non-involved" parties. ⁶⁷

^{65.} Id. at 1158-59.

^{66.} Markovits, The Distributive Impact, Allocative Efficiency, and Overall Desirability of Ideal Housing Codes: Some Theoretical Clarifications, 89 HARV. L. REV. 1815, 1829 n.32 (1976).

^{67.} Id. at 1832-33. Stewart, looking for a rationale for federal court decisions he views as requiring environmental diversity at the expense of state governmental development programs, concludes that "unfortunately... resource allocation arguments do not justify" the decisions. Stewart, supra note 38, at 746. One reason for this conclusion is that he cannot bring himself to hypothetically reverse the doctrine of sovereign immunity and entitle all lovers of the environment to their asking price for developments eliminating diversity. Id. at

Suppose that the distribution of income, consumer preferences, and technology generate a dialysis machine industry that produces four machines a year, all of which are sold to hospitals that serve the rich. If there is perfect competition, and there are no transaction costs, it appears to be tautologically true that this situation is efficient. Certainly no one can be made better off without making someone else worse off. But if the liberal argument is right, it is tautologically true only given a prior decision that no one has a hypothetical right to a dialysis machine. That decision authorized the manufacturers to disregard the actual suffering of many poor patients in favor of the actual money of a few rich ones. What the Calabresi, Michelman, Markovits approach does is simply to disregard such implicit decisions built into the existing legal structure. It allows the liberal analyst to factor into the efficiency calculus disutilities of people who quite clearly have neither the property right nor the income necessary to give those disutilities a "social" weight.

C. Does the Concept of Efficiency Solve the Offer-Asking Problem?

At this point, the reader is likely to feel that what I have done, at best, is to identify some mistakes in the work of Michelman, Calabresi, and Markovits. Or perhaps the mistakes are in the work of writers, like Ackerman, who fail to fix the proper values on the externalities they deal with. What I want to argue here is that there is no consensus among economists about how to perform the valuation of externalities from the setting of entitlements, and that the liberal lawyer-economists have no consistent practice even in the definition of the problem, let alone in its solution in particular cases. In other words, it is not true that the correct answer to the question of how to value is implicit in the very concept of efficiency. It follows that none of the authors referred to is incorrect—they are all correct, though inexplicit about the value judgments they have hidden in the supposedly apolitical efficiency calculus.

748-49 & n.172. Having abandoned this idea, he makes a plea for a "quasi-constitutional right to environmental diversity." This right didn't need protection in the past, but as a result of industrialization and other factors, we now "face the prospect of a substantial impoverishment of our collective capacity for experiential diversity." Id. at 750-51. Stewart thinks that this concern for "reflective self development" is somehow "profoundly at odds with the economist's (admittedly useful) stereotype of man as the rational maximizer of exogenously determined desires." Id. at 751 n.180. But it should be obvious that modern liberal externalities analysis would have allowed him to incorporate his new entitlement into the efficiency calculus without the slightest difficulty, thereby swamping the benefits of homogeneous development.

So long as we define efficiency in terms of the net excess of social benefit over social cost, it seems obvious that the offer-asking ambiguity is built into the concept, rather than resolved by it. Whether the "real" social cost of substandard housing is reflected in what poor children could offer or in what they would ask for an entitlement to better housing seems obviously "up to the analyst." But there is a way of formulating the efficiency notion that has a good deal of currency among *lawyers* doing liberal cost-benefit analysis, and that seems to give off signals about how to do valuation. This is the well worn idea that a change (here the switching of an entitlement or the choice of one setting over another in a situation of uncertainty) is Pareto superior to an alternative if the winners could bribe the losers to accept it.

This formulation of efficiency seems at first blush to require that we value the impacts of an entitlement setting on third parties by asking what they would offer to change it—i.e., by asking how large a bribe they would offer. Heller, for example, sees the implications of the winner/loser bribery definition as follows:

In the presence of property rights, a purely consensual or efficient change would be possible only when the compensating variation [asking price] of those seeking change would exceed the equivalent variation of the surplus [offering price] of the resource owners [affected].⁶⁸

From this he concludes that the offer-asking problem can only arise in cases of "new forms of conflictual interaction," that is, where it is not possible to make the choice between offer and asking prices simply by reference to the pre-existing "assignment of legal entitlement in the resources being managed."

Before we decide that this settles the matter, it is worth noting that Markovits, another member of the same school, offers a diametrically opposed interpretation of the winner-loser dichotomy. Using the same criterion that Heller does, he proceeds to "measure the winners' gains from any policy by the number of dollars they would be willing to accept in lieu of the change in question . . . Similarly, the losers' losses should be measured according to the number of dollars they would be willing to give up to prevent the change from being adopted"⁷¹

^{68.} Heller, supra note 1, at 442.

^{69.} Id. at 439; see id. at 439-59.

^{70.} Id. at 396.

^{71.} Markovits, The Causes and Policy Significance of Pareto Resource Misallocation: A Checklist for Micro-Economic Policy Analysis, 28 STAN. L. REV. 1, 2 n.4 (1975).

To make matters even more complicated, Heller himself declares that: "The marginal value to society of a product that causes spillover damage is not the price consumers will pay for the marginal unit. From that amount must be subtracted the compensatory payment equal to social cost which restores the pre-production welfare level of all victims." It thus appears that even if we agree that "winners" must compensate "losers," there will be room to argue about who is in what category. Heller here treats every production decision of any kind as a "change." Since these decisions are taken by the millions every minute, he appears to be arguing that the status quo is a situation of no production at all. His position then becomes hard to distinguish from that of Markovits.

This confusion stems from the failure to distinguish between a welfare position and an entitlement. Entitlements are valuable because they secure welfare positions, but not every welfare position is thus secured. The compensation requirement nonetheless states that the gainers must compensate all the welfare losses of the losers. In other words, the compensation criterion, as commonly used by costbenefit analysts, itself involves the hypothetical reversal of entitlements. Scitovsky, for example, is quite aware that such a practice contradicts the very legal principles that define a capitalist economic system:

In the free-enterprise economy . . . we cannot take it for granted that changes in economic policy will be accompanied by a state-imposed redistribution of income offsetting any loss of equity which may be caused by such changes. This is so . . . because there is a presumption in such an economy against the state's interfering, except in a general way, with the income distribution brought about by the market mechanism. A change in a country's foreign-trade policy, or any other economic change, usually benefits some people and harms others; but it seldom happens in our economy that those harmed are compensated for their loss. 73

^{72.} Heller, supra note 1, at 397 n.28.

^{73.} T. SCITOVSKY, WELFARE AND COMPETITION 61-62 (1951).

Suppose the analyst is trying to decide whether it is desirable to undertake a project one of whose side effects will be to raise some prices and lower others. Keep in mind that it is a premise of capitalism that within the private sector no one has a right to buy any particular good, and that a fortiori no one has a right to buy a good at a particular price. Mishan can nonetheless assert: "The formal requirement of a potential Pareto improvement, and therefore a cost-benefit criterion, is simple. Let us define a compensating variation, CV, as a sum of money which, if received or paid after the economic change in question, would make the individual no better or worse off than before the change. If, for example, the price of a loaf of bread falls by 10 cents, the CV is the maximum sum a man would pay in order to be allowed to buy bread at this lower price. *Per contra*, if the loaf rises by 10 cents the CV is the minimum sum the man must receive if he is to continue to feel as well off as he was before the rise in

Not only does the cost-benefit analyst feel free to reverse entitlements at will, the choice made is at least superficially arbitrary. Neither Heller nor Markovits is "right." It all depends on whether continuation of the status quo is a "policy" that needs to be justified as Pareto optimal. The "winners" from change are the "losers" from no change. Nothing in the logic of the efficiency concept compels us to go one way or the other. Indeed, there is nothing that requires us to treat all winners and all losers in the same way. We could, perfectly consistently with the formal definition of efficiency, make a choice in each case as to whether the particular person's offer or asking price was the relevant one. And we could also choose to compare offering prices of all parties affected by change, or even compare everyone's asking prices.⁷⁴

D. Possible Solutions to the Offer-Asking Problem

If there is no correct answer to the question how to value external effects of entitlement settings—no answer that is implicit in the very notion of efficiency—then the analyst will have to make a choice. Indeed, liberal analysts doing cost-benefit assessments of entitlement settings always do make choices, whether or not they are aware that they are doing so. Here, I briefly review the four most likely possibilities, mentioning some advantages and some drawbacks of each, from the point of view of a person concerned with setting up a "neutral" procedure that can be identified with the "scientific" and "apolitical" character of economic reasoning.

1. The analyst makes up her own mind.

A possible response that seems obviously unacceptable from the perspective of liberal cost-benefit analysis is for the analyst herself

price [T]he CV's of the gainers (the largest sums they are able to pay) which is a positive sum, may be added algebraically to the CV's of the losers (the smallest sum they will accept) which is a negative sum. If the resulting algebraic sum is positive, gainers can more than compensate losers, and the change will realize a potential Pareto improvement." E. MISHAN, subra note 6, at 14.

If the cost-benefit analyst were honoring the existing scheme of legal entitlements, he would value the externality suffered by those paying higher prices according to their offering rather than their asking price. This would amount to "auctioning off" the decision to alter prices, with the highest shadow bidder getting the outcome he desires. Instead the analyst behaves as though the legal system enforced a generalized entitlement to the maintenance of all existing welfare positions.

^{74.} Cf. Baker, The Ideology of the Economic Analysis of Law, 5 PHILOSOPHY & PUB. AFF. 1, 13-22 (1975) (valuing consumer goods at offer rather than asking price favors wealthier consumers).

simply to decide whether offer or asking prices are relevant in valuing the externality. The issue is whether I can get my hat back after you take it away from me by force; whether I can sell myself into slavery to you; whether I can make a valid contract to go into an unsafe mine assuming all the risks; whether my neighbor can stop me from burning leaves; etc. Each of these entitlement setting decisions will have an impact on all kinds of third parties. The analyst would simply ask herself, "Should we assess the impact of Duncan's contract of enslavement on Mark by asking how much Mark would pay to prevent Duncan from doing it, or should we ask how much Mark would ask in order to give up a hypothetical entitlement that Duncan not enslave himself?" According to how she felt it should come out, that is, according to her idea of the politics or ethics of the situation, she would then set the valuation.

The reason why this seems so obviously implausible as a procedure is that it would make it perfectly obvious that the efficiency or cost-benefit calculus is simply a language for carrying on political or ethical discussion, rather than a way of discovering facts about the external world⁷⁵ that can *then* be politically or ethically assessed (or "balanced" against things like distributional equity). It is, I believe, nonetheless the only coherent procedure, as discussion of the alternatives should show.

2. "Winners bribe losers," taken seriously.

A second real possibility is to try to rehabilitate the traditional welfare economist's formula, according to which the winners bribe the losers. In the last section, I made the point that the mere invocation of this idea will not solve offer-asking problems. Yet the idea nonetheless indicates a direction. As I suggested in passing, there are two problems to deal with. The first I will call the problem of the economist's bias and the second the problem of the base line.

The economist's bias. Suppose that there is a longstanding rule in effect that contiguous neighbors have a right to enjoin the burning of leaves by a landowner, but no one else has a right to object. In a case involving this rule the defendant manages to produce a cost-benefit study showing that, if there were no transaction costs and no legal obstacles, there would be a global bargain in which all the local land-

^{75.} The treatment of efficiency analysis as concerned with the objective properties of the world (in contrast to the "subjective" equity analysis) is an aspect of what Karl Marx called "the fetishism of commodities," i.e., the belief that economic properties determine the realtions between people. See K. MARX, 1 CAPITAL 163-77 (Fowkes trans. 1976).

owners mutually relinquished their right to enjoin leaf burning, leaving a situation in which every landowner was privileged to engage in that activity. Now further suppose that the plaintiff, defending the existing rule, puts in evidence about the impact on apartment dwellers. This evidence shows that if the apartment dwellers knew of the long-term pollution consequences to them of changing the rule, and were entitled to enforce the rule, they would ask a large sum of money in exchange for releasing their right. This sum is so great that the landowners would be unwilling to pay it in exchange for the right to burn. On the other hand, the apartment dwellers would be unwilling to offer enough to dissuade the landowners from mutually releasing their injunctive rights.

In this situation, it seems that the landowners are the gainers from the proposed change, and the apartment dwellers are the losers. The formula seems to require that we value the impact on the apartment dwellers at their asking price, hypothetically reversing the rule denying them a right of action for nuisance from the burning. Now suppose that all over the country there are "environmentalists" who would offer almost nothing to prevent leaf burning in our hypothetical town, but who would demand very large sums to forfeit a right to prevent that same leaf burning. It seems still clear that they are "losers" by the landowners' gaining a legal privilege to burn, and that we must value the loss at their asking price.

Now imagine that the original legal rule was in the other direction—permitting rather than enjoining landowners from burning leaves. In this case, it is the plaintiff who is arguing for a change in the rule, to the effect that he as a neighboring landowner should be able to get an injunction. His cost-benefit data still shows that among the landowners all but him prefer to be able to burn, so that they would mutually release their rights to enjoin (if they had any) in the absence of transaction costs. But under these circumstances the plaintiff can only add in, on the side of prohibition, what the apartment owners would offer to be free of the nuisance, along with what the environmentalists would offer to guarantee clean air at a distance. And these much smaller sums might not tip the balance in favor of the rule of injunctions for the neighbors. This amounts to saying that the economists' winners-losers formula creates a powerful bias in favor of the existing rules in force.

Now, there is nothing wrong, a priori, about such a bias. But it does need to be justified. For example, one might argue that it is only "fair" to give a heavy weight to the losses from a change in

entitlement, and a lower weight to the gains, and then explicate the claim of fairness by referring to "reliance," or "expectations," or the greater psychic magnitude of a \$10 loss by comparison with a \$10 gain. On the other side, one could argue either that the bias should be reversed, or that there should be decisions case by case as to how to value gains and losses. One might believe, for example, that some rules (e.g., the rule protecting private property in the means of production) are fundamentally wrong, that there could be no reasonable reliance on their continuing in effect, and that welfare positions based on those rules represent unjust enrichment.

The point of all of this for our purposes is this: If we give the winners-losers formula a definite meaning, as I did in the discussion of the leaf burning rule, it at the same time takes on a definite political-ethical slant. Adopting one of these definite meanings in the context of some particular rule amounts to choosing a bias. The winners-losers formula, in other words, involves a good deal more than the judgment that if a change helps the winners more than it hurts the losers, it is a good thing. The internal indeterminacy of that abstract cost-benefit formulation leaves all issues of valuation open. The winners-losers formula then resolves them, without giving any explanation of why it chose to resolve them in favor of some people and against other people.

It may appear that we can say something more than the above: namely, that the winners-losers formula consistently resolves the ambiguity in favor of the rules in force and against innovation. But this is not really the case, given the second basic difficulty with the formula, that of choosing a base line.

The base line problem makes the winners-losers formula indeterminate. Even supposing that we were willing to accept the bias inherent in the winners-losers formula, whatever that bias might be, it would still be inadequate as a way of dealing with the offer-asking problem. The reason for this is that a whole new area of bias—of value-laden choice—is introduced when we pick one of the possible base lines for defining what is and what is not a "change." For example, in the discussion above we spoke of a "well-established rule" that leaf burning was enjoinable by neighbors. Refusing to enforce such a rule, so that landowners could burn at will, was then described as a change. But a different characterization of the facts can make it look as though the "change" is the enforcement of the prior practice.

We imagine the landowner getting up in the morning and begin-

ning to burn his leaves. His neighbor goes instantly to court for an injunction under the existing rule that burning is a nuisance. The landowner will argue, with perfect fidelity to the words of the winners-losers formula, that the neighbor is "invoking state aid," "attempting to get the state to intervene" to change the existing situation of merrily burning leaves. The question, according to the landowner, is whether or not the gains from state intervention to enforce the pre-existing rule exceed the losses—i.e., whether those who gain from enforcement of the rule could bribe the losers (him) to accept the change.

If the court accepts this characterization, the analyst must value the apartment dwellers' and the environmentalists' objections to leaf burning according to what they would pay to eliminate it, rather than according to what they would ask to give up a hypothetical right to prevent it.

There is a further wrinkle to the "no intervention" base line. Suppose that it is decided, using cost-benefit analysis, that the landowner can burn leaves, in spite of the long established rule to the contrary, because the winners from enforcement could not bribe the losers to desist. But now suppose that a neighbor comes onto the leaf burner's land with a garden hose to practice self help. The landowner goes instantly to court to get an injunction, appealing to the "long established" rule against trespass. His neighbor now invokes the notion of a change. The state ought not to intervene to stop the flow of the hose onto the fire unless he who gains by this change (the landowner) could bribe the losers (the neighbors, the apartment dwellers, and the environmentalists) to give up a hypothetical right to douse. In other words, while the first interpretation of the winners-losers formula was biased in favor of the rules in force, the second is biased against any state intervention at all, or in favor of the state of nature.76

^{76.} Even this is not the end of it, since, as the liberals like to say, "everything is relative," and "no man steps into the same river twice." Suppose that I establish a "pattern of evolution of common law rules toward the more and more complete protection of welfare positions, and the concomitant contraction of areas of damnum absque injuria." This pattern emerges when we study occasions when judges decide cases of first impression and also when they review pre-existing common law rules. Trends of this sort are discussed in, e.g., G. GILMORE, THE DEATH OF CONTRACT (1974); and R. KEETON, VENTURING TO DO JUSTICE (1969). Now suppose that the rule allowing landowners to burn leaves at will is an old and established rule, or merely a long established custom never brought to the test of adjudication. Can the victims of leaf burning argue that it would be a "change" for the courts to reaffirm the old rule or custom? If so, we should value the loss to neighbors, apartment dwellers, and environmentalists at what they would ask to give up a hypothetical right that the rule be

3. "No transaction costs," taken seriously.

While liberal lawyer-economists pay at least lip service to the winners-losers formula, I think their actual practice is better described as trying to replicate the hypothetical outcome of costless bargaining based on existing entitlements and factor shares. While I have no quantitative data, my impression is that most of the time they proceed as though a person who has no legal right to prevent A from doing X to B must have her suffering from this event assessed at her offering price when the question is B's entitlement against A. In other words, they link the two issues I asserted earlier⁷⁷ as logically independent: They treat the issue of C's legal right or no-right to have B safe from A as though it determined the question of whether we should use C's offer or asking price in determining the distinct question of B's legal right against A.

It is important to understand how different this is from the economists' winners-losers approach. There, if we use the "law in force" as the base line, and the question is whether we should change B's right to be safe from A to a right of A to hurt B, we will value at asking prices the reactions of third parties offended by the spectacle of A's violence. Even though these people have no legal right to prevent A from hurting B, and could not collect damages if A hurt B, we will treat them as though they had a hypothetical entitlement when adding up the costs and benefits of changing the rule that protects B.

Of course, if the issue were whether or not to create a right in B against A's violence, we would value at their asking prices the losses to sadists who enjoyed the spectacle of A's violence. In other words, the winners-losers approach will routinely involve the hypothetical reversal of entitlements in the valuation process. What defines the "no transaction costs, taken seriously" approach is that it always uses the law in force as the base line, and that it never reverses entitlements, hypothetically or otherwise. We try to imagine how the process of bargaining over resource use would have come out, if there had been no transaction costs, assuming that everyone exercised their rights under existing law. Then we modify the existing set of entitlements to replicate that result, keeping an eye out for any adverse distributional consequences.

Under this approach, it will often be the case that we will make a

changed in accordance with the reformist practice. The winners-losers formula would then import a bias in favor of a long established practice of change.

^{77.} See text accompanying notes 53-54 supra.

change in an entitlement in spite of the fact that the winners could not possibly bribe the losers to accept it. For example, if it is proposed to change from prohibition to permission of leaf burning, and only neighbors had a cause of action under the old rule, then we value losses to apartment dwellers and environmentalists at offering price, where under the winners-losers approach (with law in force as base line) we use asking prices. It may be that landowners could never have paid those asking prices, but that the benefits to them easily exceed what the third parties would offer.⁷⁸

In the "no transaction costs, taken seriously" formula, we will still sometimes use asking prices in assessing the costs of change. Suppose, for example, that there is a right to burn leaves. Were it not for transaction costs, those adversely affected would band together and offer all the leaf burners a sum large enough to induce them not to burn. Since the change is a potential Pareto improvement, the analyst will recommend that the law be changed to abolish the landowners' right to burn. If, on the other hand, those affected would not have offered enough to buy out the owners' rights, the change will not be recommended. (Abstracting, in each case, from distributional considerations.)

The measure of the difference between the winners-losers approach and "no transaction costs, taken seriously" is the area of damnum absque injuria under existing law, which is considerable. People are not responsible for injuries they have inflicted through but-for causation without proximate causation; people are not liable for deliberately inflicted injury in the absence of an "act"; there is no legal protection at all, or very limited protection, for numerous interests, such as emotional tranquility, sense of dignity, etc. There is a large area of injury to economic position immunized by the privilege of competition. There are no easements of light, air or prospect under American law, and so forth. Each one of these rules establishes that, in a particular situation of bargaining, one person will be a buyer and another a seller, rather than vice versa. Because there is no duty

^{78.} Or suppose that there is a privilege of leaf burning, and the issue is whether the state should "intervene" to enforce the landowners' right against trespassers dousing fires with garden hoses. The landowners—winners from the change involved in state intervention if we use the no state action base line—might not be able to bribe the apartment owners and environmentalists, valuing their interest in the continued flow of water at their asking prices. But in the "no transaction costs, taken seriously" approach, the question would be whether apartment dwellers and environmentalists would, absent transaction costs, bribe owners to waive their right to prevent trespass by neighbors with garden hoses. If yes, then the state would abolish the owners' right; if no, the status quo would continue.

to act, you must buy me into action—but I must buy the right to act in a way that would be a negligent invasion of your interests. I must buy you into inaction if your act causes my harm nonproximately—you must buy your right to harm me if the harm is proximate.

The "no transaction costs, taken seriously" approach treats these legal definitions of rights as settling the issue of how to value costs. Suppose that increasing the level of warranty protection of new car buyers will reduce the number of accidents in which cars injure pedestrians, but that for reasons of privity, proximate cause, or no duty to act, car manufacturers are not liable to pedestrians for injuries caused by breach of their warranties to buyers. In deciding how to value the benefits to pedestrians of increasing or decreasing compulsory warranty protection, the "no transaction costs, taken seriously" approach must value the injuries avoided according to what pedestrians would pay to avoid them. The winners-losers (existing law base line) approach would do the same for *increases* in protection, but would use pedestrian asking prices if the issue were *reducing* protection, even though pedestrians still had no cause of action for breach.

I have already argued at some length that there is no logical connection between the issue of C's legal entitlement to stop A from doing X to B and the issue of how to value C's vicarious pain when we are deciding the issue of B's entitlement against A.⁷⁹ In other words, there is no logical necessity that we choose the "no transaction costs, taken seriously" approach over some version of winners-losers. But it may seem almost too obvious to argue about that "no transaction costs, taken seriously" is practically superior, since winners-losers constantly engages in the hypothetical reversal of entitlements. By refusing to hypothetically reverse, and by sticking to the base line of existing law, the "no transaction costs, taken seriously" approach may appear to be both more certain and more democratic than any of the alternatives, since the judge or other rule setter does not reserve to himself the power to disregard previous determinations about who can do what to whom. Under "no transaction costs, taken seriously" the decision maker would appear to have completely excluded distributive or legislative considerations from his task, since all he does is ask what would have been the outcome of costless bargaining under existing rights, and then try to bring about that same result in the presence of transaction costs.

^{79.} See text accompanying notes 53-54 supra.

In fact, the "no transaction costs, taken seriously" approach is a good deal less "neutral" than it at first appears. To begin with, there may be good reasons for treating the issue of C's entitlement differently from the issue of how to value C's vicarious pain in deciding B's entitlement. For example, it may seem altogether impractical to multiply the number of people with a right of action to prevent something from happening when in the great majority of cases there is a single obvious right holder who will have an interest in preventing the conduct and so protecting all the third parties. It may seem obvious that we shouldn't give third parties a cause of action against husbands for wife beating, because of the threat of "disrupting the family." Yet we may nonetheless feel that the third parties are entitled not to have to live in a society where wife beating occurs, and so choose to value their outrage at their asking prices when the question is whether the wife should have a cause of action.

Once we recognize that there might be good reasons for using C's asking price in deciding B's entitlement without entitling C himself, it is clear that there is a set of necessary choices to be made here as elsewhere. The "no transaction costs, taken seriously" approach simply denies that these reasons can ever be valid. Unless we are to regard the denial as arbitrary—an implicit value judgment made without any basis at all—we need to find some reasons for it. The liberal writers have almost nothing to say on the matter, since they generally assume either that "no transaction costs, taken seriously" is simply implicit in the idea of efficiency or that it is a direct implication of some version of the winners-losers formula. One of the few writers to take up the question of the exact definition of compensation criteria is Heller, who says:

[B]oth equitable principles and an economic need for investment would suggest that [legal] expectations be the basis for locating the right to alternative measures of economic surplus. A theory of reliance would argue that any windfall gains and losses associated with the original legal grant would have long been capitalized into prices and that no present claim to an equitable reversal of certain rights would deserve recognition. 80

Heller is about to argue that in the environmental area, "it is difficult to discern a pattern of legal entitlements upon which a compelling claim of justified reliance can be constructed,"⁸¹ and from this he will conclude that cost-benefit analysis is indeterminate be-

^{80.} Heller, supra note 1, at 451.

^{81.} *Id.*

cause there is no base line for the case he is considering.⁸² But it seems a bit much simply to ignore the position that both the existing definition of entitlements and the existing distribution of factors are so radically unjust that no one has any "equitable" claim to their continuation. In a utopian order, as in the present one, the definitions of entitlements would have as much influence on wealth as the distribution of factors, as the liberals are well aware,⁸³ and would be no less subject to rearrangement in the interests of justice. It is only from a position within the liberal reformist consensus that one can assert that "no present claim to an equitable reversal of certain rights . . . deserve[s] recognition." As for the "economic need for investment," as a rationale for the existing order, it seems unnecessary to repeat the refuting arguments advanced at the turn of the century.⁸⁵

It is possible that there are other reasons for choosing "no transaction costs, taken seriously," or for choosing a winners-losers formula with the existing legal order as a base line, than that the analyst likes the status quo or wants to be persuasive with those who like the status quo. Indeed, it is possible that a sound judgment about the possible role of economics in our modern bureaucratic corporate-welfare state would lead one to conclude that economists ought to adopt solutions to the offer-asking problem that will skew the efficiency calculus as far as possible toward maintaining the existing order of things. But the practice seems to me like political value judging behind the neutral screen of the efficiency concept.

4. The current practice of liberal cost-benefit analysis.

As I said at the beginning of the discussion of "no transaction costs, taken seriously," it seems to me that the current liberal practice is a blend of that approach with a winners-losers approach, which in turn fluctuates between a "no state action" and an "existing legal order" base line. Given this range of possibilities, it is rare that a liberal analyst lacks a handy externality to justify a particular liberal measure. But as far as I can see there really is little rhyme or reason in the liberal practice, if we refuse to regard ad hoc legitimation of the liberal reform program as qualifying as coherence.

If the liberal analysts were to be explicit about exactly what compensation criterion they were using and why, it seems to me that they

^{82.} Id. at 456-57.

^{83.} See Cathedral, supra note 1, at 1098-101.

^{84.} Id. at 451.

^{85.} See generally Kennedy & Michelman, supra note 1.

would have to abandon some of their scientific tone. If we were aware at each stage of the choice between the offer and asking valuations of externalities, we could better assess the value and weight we want to give to the analyst's conclusion that a given measure is or is not efficient. And it would be clearer than it now is that the notion of a "tradeoff" between the "hard" datum of efficiency and the inherently subjective, "political" datum of equity is apologetic nonsense.

A not uncommon response to the analysis just presented is to agree "in principle," but protest that it will rarely have much significance "in practice." By this it is meant that the possibility of a difference between offer and asking prices (and the consequent problem of picking a compensation criterion) is real, but the actual differences are likely to be small. This point of view mystifies me. It seems fairly obvious, without gathering any data, that on a large number of crucial issues of legal entitlement the offer-asking choice will cleanly determine the outcome. Take the issue of the manufacture of napalm by Dow Chemical during the war in Vietnam. The private manufacturing sector could never possibly have bought out the antiwar opposition to that allocation of resources—indeed it is doubtful that it could have bought out one single serious antiwar activist, although there would have been the problem for the entitlement holder of deciding whether it might not be a good thing to take the money and use it for all kinds of activities that might in the long run do more for the victims of United States aggression than stopping napalm manufacture.

Or take the issue of nuclear power, today. It seems obvious that the no-right of the general public to halt construction as a nuisance, which means that only offering prices are relevant, leads to a different no-transaction-cost bargain than would a system in which the nuclear power industry had to buy out the opposition. The same is true of the issues of industrial safety and slum housing. In these cases, it seems to me quite plausible that "third parties" with paternalist or other ideological motives would demand more than workers and employers, or tenants and landlords, were willing pay for the right to enter into "substandard" contracts. Even on an issue as apparently trivial as the playing of canned music on buses, justices of the U.S. Supreme Court have professed such passion as to be incapable of judicial objectivity. So Surely they would not have sold cheap

^{86.} See Public Utils. Comm'n v. Pollak, 343 U.S. 451, 466-67 (1952) (separate opinion of Frankfurter, J.).

an entitlement to silence.

It is not a good answer to say that these are exceptional cases because they involve political or ideological issues, or because the effects depend on the existence of extremists or minorities, or because they depend on "nonmarket behavior" (i.e., holding out for a ridiculously high price or refusing to sell the entitlement at all). All of these objections misconceive either the nature of an entitlement or the nature of the neoclassical economic paradigm, or both. The whole point of an entitlement, in the law and economics tradition we are discussing, is that it means one can indulge one's "private," "subjective" valuation of the resources covered. The actual allocation of resources in our society is powerfully influenced at every turn by the exercise of such "eccentric" preferences. Consumer sovereignty is precisely the system in which people who have the necessary market power to prevent the production of napalm are allowed to make that preference felt in the marketplace.

Furthermore, there is nothing even slightly irrational about the placing of a very high price on one's right to prevent some outcome one considers immoral, or politically evil, or unchristian, or reactionary, or communist, or incompatible with the teaching of the Unification Church, or violative of the Native American ethic of respect for the land. From the point of view of the neoclassical economic paradigm, all of these are easily incorporated into the tautologically broad schema of "preferences." Economic science proposes no criteria according to which the economist would choose "average" or "normal" asking prices for entitlements, and such a procedure would be incompatible with the economist's basic claims about the objective character of his enterprise.⁸⁷

If all this is true, it seems to me that the only meaning of the claim that offer-asking problems are of no significance "in practice" is that the liberal cost-benefit analyst will simply ignore them. He or she thereby incorporates the usual centrist bias into the apparently objective procedure of toting up valuations and guarantees that the results will be acceptable to the boss.

^{87.} See generally L. Robbins, An Essay on the Nature and Significance of Economic Science (1932).

IV. THE GENERAL INDETERMINACY OF THE COST-BENEFIT ANALYSIS OF ENTITLEMENTS, WITH SPECIAL REFERENCE TO THE PROBLEM OF PARTIAL AND GENERAL EQUILIBRIUM

While the offer-asking issue has great interest and (I think) considerable practical importance in itself, it is also an instance of a larger problem with the cost-benefit analysis of entitlements. I will call this the problem of "general indeterminacy" and devote this final part of the article to exploring it. The first section of this part introduces the notion of general indeterminacy and reviews earlier treatments. The second proposes four specific elaborations of the notion.

A. The Notion of General Indeterminacy

The basic notion of general indeterminacy is an obvious one and should not be controversial, although it seems to have received surprisingly little overt attention in the law and economics literature. The applications to particular entitlement issues have been developed in greater detail, and present some knotty analytic problems.

1. The general notion of general indeterminacy.

It is a commonplace that there will be different allocations of resources in the same economy according to how income is distributed.⁸⁸ In an egalitarian society, there is likely to be less demand both for yachts and for bread, and more demand for intermediate consumer goods, than in a society composed of the same people, with the same resources, but with income distributed in an extremely unequal way. These changes in allocation of resources are sometimes said to be the product of "wealth effects," although, as we shall see, the term is somewhat misleading. In the example, it is easy to see that the redistribution of income will affect allocation by changing the pattern of consumer demand, which will in turn induce producers to produce a new product mix.

The relativity of the allocation of resources to the distribution of income is important for the issue of entitlement setting because every choice about an entitlement affects the wealth and income of the parties involved. This, too, is a commonplace. Farmers are richer if

^{88.} See, e.g., P. SAMUELSON, ECONOMICS 19-24, 43-47 (10th ed. 1976).

^{89.} Posner, Utilitarianism, Economics and Legal Theory, 8 J. LEGAL STUD. 103, 108-09 (1979).

they are entitled to enjoin trespassing cattle. Lovers of silence are richer if it is illegal to ring churchbells without the consent of all affected parties. And so on indefinitely, to such an extent that Calabresi and Melamed can claim that:

[T]he placement of entitlements has a fundamental effect on a society's distribution of wealth. It is not enough, if a society wishes absolute equality, to start everyone off with the same amount of money. A financially egalitarian society which gives individuals the right to make noise immediately makes the would-be noise-maker richer than the silence loving hermit.⁹⁰

If it is true that the setting of entitlements is a component in the distribution of wealth and hence of income, then it must follow that the setting of entitlements is a determining factor in the allocation of resources. Changing entitlements shifts wealth and income from one person to another, and should operate through the mechanism of consumer demand to influence choices about what to produce. This is the absolutely minimalist statement of the general indeterminacy theorem: Because entitlements are a component of wealth, entitlement setting may influence the allocation of resources through "wealth effects" (i.e., by modifying the composition of demand).

While this minimalist statement is correct, it is cast in a way that has led the liberal analysts to underestimate its importance. There has been a tendency to focus on the wealth effects generated by the very entitlement under consideration, rather than on the general phenomenon of the relativity of allocation to the total system of entitlements.

2. Wealth effects of the settings of different kinds of entitlements.

It may be helpful to make a rough division among the different entitlements that may be relevant to any given cost-benefit analysis.

Three different categories of entitlements. First, there is the entitlement the analyst is manipulating to achieve a potentially Pareto superior allocation of resources—the actual object of the analysis. In the example we have been using, this is the right, vis a vis neighbors, of the landowner to burn leaves. The question with respect to this entitlement is, "What setting is potentially Pareto superior to the alternatives?" or "How can we set it so as to replicate the outcome of costless bargaining?" or "Could the winners from changing the setting com-

^{90.} Cathedral, supra note 1, at 1098-99.

pensate the losers and still come out ahead themselves?" I will call this the "entitlement in question."

A second set of entitlements relevant to the analysis of wealth effects are those of all parties affected by the resolution of the landowner-neighbor conflict. In the earlier discussion, we spoke of the issue of C's entitlement with respect to A's violence against B. We used apartment dwellers and long-distance environmentalists as examples. Their entitlements were important in a cost-benefit analysis of the entitlement in question if we adopted a "no transaction costs, taken seriously" approach, since in that case the existence or nonexistence of C's entitlement with respect to A's violence against B determined whether we took C's offer or asking price into account in deciding the issue of entitlement as between A and B. But such entitlements are also relevant to the discussion of wealth effects, since, in a world without transaction costs, their setting will influence what A will actually do to B. If the C's (apartment dwellers and environmentalists) are entitled that A not hurt B, then A will have to buy them out before proceeding, and A may not be able to afford to do so. If the C's are not entitled, they might or might not offer A enough to induce him to desist. We will call these third party entitlements.91

Finally, there are entitlements that are "in the background" of the decisions about the entitlement in question and about third party entitlements. If the issue is leaf burning, there are entitlements with respect to riparian rights, the enforcement of contracts, easements of light and air, the tort of negligent infliction of emotional harm, and so forth. In other words, the issue with respect to the entitlement in question is always decided in an explicit or implicit context of other entitlements that are in force. I will call this the "entitlement background."

Wealth effects of the setting of the entitlement in question. By far the greater part of the attention that has been paid the issue of indeterminacy has focused on the question of changes in the allocation of resources brought about by the setting of the entitlement in question. This has occurred, so far as I know, in two contexts. First, it has become a commonplace in discussion of the Coase Theorem that, even given no transaction costs, the setting of an entitlement can af-

^{91.} See generally Bebchuk, The Pursuit of a Bigger Pie: Can Everyone Expect a Bigger Slice?, 8 HOFSTRA L. REV. 671 (1980).

fect the allocation of resources "through wealth effects." This means the following: Suppose the issue is whether rancher or farmer is liable for damage caused by straying cattle. If the farmer is liable, he is impoverished; likewise the rancher. If the farmer eats mainly meat and the rancher mainly bread, then the pattern of demand for their very own products depends on the distributional impact, as between the two of them, of the entitlement in question. If ranchers are liable, farmers are enriched and demand for meat increases, thereby switching resources out of farming into ranching.

Although this example is a commonplace, it is an oddly restricted instance of wealth effects. Note that it concerns (i) only changes in demand brought about by the enrichment or impoverishment (ii) of the two parties (or classes) immediately concerned with the entitlement in question and (iii) that the impact of wealth changes is only on the consumption of the two activities involved in the lawsuit. The reason for this restriction of focus is probably that the analysis was concerned only with the question whether the allocation of resources would be the same, absent transaction costs, no matter how we set entitlements. This limited example is enough to refute that notion.⁹³

The argument for the variability of allocation according to the setting of the entitlement in question (i.e., the discussion of the Coase Theorem) is relevant for our purposes because it reveals a potential indeterminacy in the efficiency analysis of the entitlement in question itself. In other words, if the allocative effects brought about by the setting of the entitlement in question are great enough, they may throw into question the setting itself. This possibility is explored in a second body of writing,⁹⁴ concerned with situations where the setting of the entitlement in question presupposed as a basis for analysis turns out to determine the outcome of the analysis. This is an in-

^{92.} See, e.g., Cathedral, supra note 1, at 1095-96; Demsetz, supra note 17, at 15 n.3. See generally Mishan, Pareto Optimality and the Law, 19 OXFORD ECON. PAPERS 255 (1967).

^{93.} Even within the context of the Coase Theorem, one can take the analysis of the entitlement in question beyond the conventional notion of a wealth effect operating through the demand side. For example, it has been argued that the setting of the entitlement in question may change final users' preferences with respect to the underlying resources even in cases where the impact of the entitlement setting on wealth seems to be marginal. One reason for this may be that people simply feel differently about "parting with" things they already own than they do about "going into the market" to acquire the exact same object. The owned object may be part of a "closed set" which a buyer will have to pay to open or disturb; going into the market has costs which are reflected in reduced offer prices. (This effect only operates on consumers, since it is part of the definition of an intermediate good that producers are indifferent to all its aspects except its price and cost.) See Kelman, supra note 50, at 685.

^{94.} See notes 95-96 infra.

stance of the precise kind of indeterminacy that interests us here, and it occurs under the following circumstances.

Suppose that the setting of the entitlement confers a genuinely massive benefit on one party and a genuinely massive loss on the other. The common example is an entitlement rule whose setting determines ownership of the last glass of water in the desert. If the question is put in terms of replicating the outcome of costless bargaining, then we imagine that whoever starts out owning the glass of water will own it at the end of the bargaining process, because the other person cannot possibly have enough wealth to buy it. Put in other terms, the winner from changing the rule (the person who does not now own the glass of water) cannot possibly bribe the loser (the current owner) to accept the change.⁹⁵

While the glass-of-water-in-the-desert case is fanciful, there are more realistic situations in which it appears that wealth effects may be great enough so that the initial setting of the entitlement in question determines the outcome. For example, it may be that if polluters are entitled to pollute, the neighboring landowners could not possibly buy them out, whereas if they are entitled to clean air, they would demand far more than the factory could pay for a release. Since the wealth effect generated by the initial setting of the entitlement in question tends to make that setting appear to be the efficient one at the conclusion of the analysis, it is sometimes described as introducing a bias in favor of the status quo (or as "Panglossian," since it suggests that all settings are always efficient in this most efficient of all possible worlds). 96

The existence of wealth effects from the initial setting of the entitlement in question can be conceded without irreparable damage to the plausibility of the cost-benefit analysis of entitlements. To begin with, it is not logically necessary to set the entitlement in favor of one party or the other before proceeding to determine the parties' valuations of outcomes. In the glass-of-water case, for example, one could neutralize the impact of the wealth effect by presuming that there was no rule of entitlement in existence, so that it was legally uncertain who would end up with the glass of water. One could then imagine the existence of a third party decisionmaker auctioning off the two possible settings of the entitlement rule, deciding in favor of the highest bidder but not demanding any actual payment. Or, for that matter, one could imagine, first, that one rule was in force, and deter-

^{95.} See Baker, supra note 74, at 13-16; Heller, supra note 1, at 441-46.

^{96.} See Mishan, Pangloss on Pollution, 73 SWEDISH J. ECON. 113 (1971).

mine what the party benefiting would ask in exchange for the water, and then imagine that the other rule was in force, and determine the other party's asking price. One could then set the rule in favor of the party who would have the highest asking price after the assignment.

A second defense of the conventional procedure is that cases in which the setting of the entitlement in question will have a substantial impact through wealth effects are exceptional.⁹⁷ Most entitlement setting issues involve relatively marginal impacts on the wealth of the parties. Where this is the case, the choice to begin with one setting or another is unlikely to influence the parties' valuations of the possible allocations of resources enough to alter the conclusion as to which setting of the entitlement is Pareto superior to the alternatives. I will discuss this line of argument in the section on cumulative wealth effects, below.

Wealth effects of the setting of third party entitlements. In the last section of the article, I discussed the impact of third party valuations on the setting of entitlements using cost-benefit analysis. The results of that discussion are relevant here as follows. First, I argued that it will often make a large difference to the cost-benefit analysis whether we assess third party effects at the offer or asking prices of those parties.⁹⁸ This is an instance of the argument from general indeterminacy.⁹⁹

My general point was that the impacts of different actual or hypothetical settings of the entitlements of third parties were likely to be great ¹⁰⁰—far greater as a general matter than the impacts that we would intuitively suppose for wealth effects of the entitlement in question on the parties directly involved. Whether we attribute these impacts to wealth, to morality, to ideology, or to the eccentricity of a few fanatics, they introduce a large dose of indeterminacy into the cost-benefit analysis, and that indeterminacy has hitherto been more or less ignored.

Wealth effects of the entitlement background. The effect of the entitlement background on the setting of entitlements through cost-benefit

^{97.} See Posner, supra note 89, at 108-09.

^{98.} See text accompanying notes 77-79 supra.

^{99.} It is not, however, an argument restricted to wealth effects. For example, I argued that there is an empirically demonstrable (though undemonstrated) difference in offer and asking prices for entitlements to the welfare of others based on the intuitive moral distinction between (on the one hand) affirmatively hurting someone by one's action and (on the other) refraining from coming to someone's assistance when someone else is hurting him. See text accompanying notes 51-53 supra.

^{100.} See text accompanying note 52 supra.

analysis has been paid even less attention than the offer-asking problem with respect to third parties. There are two basic points about wealth effects of this kind. First, if we can manipulate the whole entitlement background, we can bring about changes in wealth so great that they should allow us to completely dominate the cost-benefit analysis of any given entitlement. For example, suppose the issue is liability of landowners for pollution through leaf burning. If we set every entitlement we can so as to maximize the wealth of landowners, we will almost certainly increase both their offer and their asking price for the privilege of burning leaves. If, at the same time, we go about systematically impoverishing apartment dwellers and long range environmentalists, we will reduce their offer and asking prices. If we take this far enough, we should be able to guarantee that, wherever the entitlement in question is initially fixed and however we set the third party entitlements, the creation of a landowner right to burn will appear Pareto superior to the alternatives.

What this means is that the question "what is the efficient rule" in a given situation depends on the setting of all the entitlements in the entitlement background. There will (virtually always) be some entitlement background constellation that generates wealth effects so massive as to render any particular legal resolution of a particular situation inefficient. Manipulating any particular rule so as to eliminate the results of transaction costs (or so as to bring about potentially Pareto superior outcomes according to a winners-losers formula) is an intelligible procedure only so long as we make some set of assumptions about the entitlement background.¹⁰¹

The second point is that the adoption of any particular entitlement background amounts to choosing a bias in favor of some classes of wealth holders and against others. For example, it has recently been pointed out that if the entitlement background, combined with other social practices, generates an unequal distribution of wealth, the inequality will be reflected in the likelihood that the offering and asking prices of the rich will exceed those of the poor whenever these two groups are differentially affected by the choice of entitlement setting.¹⁰²

This problem of bias is only one of a number of issues that arise as soon as one recognizes that there is absolutely no way to do cost-

^{101.} See Kennedy, Form and Substance in Private Law Adjudication, 89 HARV. L. REV. 1685, 1763-64 (1976).

^{102.} See Bebchuck, supra note 91, at 677-84 (unequal wealth distribution generated reflected in higher offer and asking prices of the rich).

benefit analysis of entitlements without an entitlement background against which to value the effects of one or another setting of the "entitlement in question." The next section of this part takes up some of these issues.

B. The Indeterminacy of Cost-Benefit Analysis Even Assuming an Entitlement Background

This part takes up three sources of indeterminacy in the cost-benefit analysis of entitlements that remain even if we make the value judgments necessary to establish a base line against which to value allocative changes. I will present these difficulties in ascending order of importance and controversy:

The first is that any attempt to actually put into effect the program of the analyst by manipulating entitlements to replicate the outcome of costless bargaining will require a very high level of intrusion into the affairs of the citizenry, unless the analysis is rendered hopelessly subjective by including the loss of autonomy in the calculation itself. The second is that a global effort to discover a whole system of efficient rules is only intelligible if we make some adjustment of factor shares of actors to offset the massive cumulative wealth effects of shifting entitlements. The third is that even if we take care of all the above problems we will have to make a final, major value judgment never alluded to by the liberals, because the outcome of costless bargaining under any initial set of entitlements the benchmark we are trying to achieve by manipulating the rulesis theoretically (not to speak of practically) indeterminate. The liberal practice of selective relaxation of transaction costs gives an illusion of determinacy, and introduces a highly manipulable source of bias into liberal assertions about efficiency.

1. The problem of totalitarianism.

Let us suppose that we have brought our values into play to choose an entitlement background and an offer-asking schema to resolve the problem of valuing third party effects, and that we have a way of knowing what rules are in force at this moment.¹⁰³ The first

^{103.} With very few exceptions—Bebchuck is the only one I know of, see id.—liberal costbenefit analysts seem to assume that they should do each treatment of an "entitlement in question" on the assumption that the existing legal regime defines the entitlement background. When the goal is formulated in terms of replicating the outcome of costless bargaining, it is usually implicit that the bargaining is to go on with everyone enjoying the benefits of the existing set of entitlements. When the formulation is in terms of changes the winners could bribe the losers to accept, it seems to be implicit that the losers remain the beneficiaries

problem is that if we imagine a planning body actually putting the liberal program of efficient entitlements into effect, it appears that it will have to proceed by injunction at least a great deal, if not all of the time. The planning body, let us say, is operating under "no transaction costs, taken seriously." Its goal is to find out what would happen under the existing set of entitlements if there were no transaction costs. Once it has made this determination it will proceed to manipulate the existing entitlements so that the same allocation of resources occurs in reality that would have occurred had there been no transaction costs (leaving the problem of wealth effects and multiple optima for discussion in sections 2 and 3 below).

It is difficult to understand how such a system would work unless the planning board were to proceed by injunction. That is, it would

of the existing system of entitlements except that they lose the benefit of the "entitlement in question." When the issue is the valuation of third party effects of the kind discussed at length in part III above, it seems also to be the case that the solutions of the offer-asking problem require us to identify and then make use of the regime of rules now in force. For example, if we are to use the "no transaction costs, taken seriously" approach to deciding how to value impacts on C of an A/B interaction, we have to know in each case whether C has an entitlement with respect to that interaction. If we use a winners-losers formula with an existing law base line, we have to know whether a proposed entitlement setting is or is not a "change" in the existing law.

The economist will ask the lawyer "what the law is" with respect to a particular externality. If the lawyer says, "this is a case of first impression," or "there is no law," the economist cannot proceed. But some legal philosophers (if not lawyers) will give this answer every time they are asked the question, while others will insist there is always a "right answer" to it. Compare R. DWORKIN, TAKING RIGHTS SERIOUSLY 278-90 (1977) with Dewey, Logical Method and Law, 10 CORNELL L.Q. 17 (1924). The economist will quickly learn the legal art of generating the ambiguity that will allow her to make her own decision about whether or not an entitlement has been set and, if so, who has it. It is ironic that she will be able to begin with "negligent infliction of emotional harm." This is a "new tort." The courts are currently struggling with such questions as whether one has a "right" to be free from the damage caused by witnessing automobile accidents. Compare Dillon v. Legg, 68 Cal. 2d 728, 441 P.2d 912, 69 Cal. Rptr. 72 (1968), with Tobin v. Grossman, 24 N.Y.2d 609, 249 N.E.2d 419, 301 N.Y.S.2d 554 (1969). From there the economist should move to environmental law, where the lawyer-economists have already reached the conclusion that everything in the efficiency calculation depends on the location of nonexistent entitlements. See, e.g., Heller, supra note 1, at 439-51; Stewart, Paradoxes of Liberty, Integrity and Fraternity: The Collective Nature of Environmental Quality and Judicial Review of Administrative Action, 7 ENVT'L L. 463 (1977).

If she takes seriously her program of valuing such externalities as does the legal order, the economist will find herself straightaway embroiled in debates that are only quantitatively different from those about the choice of an ethical theory of responsibility. There is nonetheless a great advantage to conducting the debate in the context of "what the law is," rather than "what it ought to be." The first can be treated as an interstitial dispute, while the second threatens the policy-analytic stance of keeping the problem small. The lawyer-economist who sticks to the status quo can acknowledge an indeterminacy, and the necessity of choice. She can then make her mildly redistributive argument about entitlement without putting everything up for grabs.

determine a particular, efficient pattern of production, and then order everyone to carry it out. The board could then make the redistributive payments that seemed appropriate without messing up the efficient allocation. Of course, such a solution goes beyond the level of coercion imposed by industrial nations engaged in total war for survival and would make existing socialist economies look positively laissez-faire.

The more liberal alternative of fines and bounties will work in some exceptional cases. For example, suppose we determine that, if bargaining were costless, pollution victims would bribe a factory not a nuisance under existing law—to install scrubbers. Because of a peculiar set of conditions of wealth, supply and demand, the increased money cost and increased amenity of housing under the new regime would cause no one to move either into or out of the area. Moreover, it turns out that the costless bargain would set the bribe payment to exactly offset the cost of pollution abatement to the factory, which would consequently continue to produce the same quantity as before abatement. Under these circumstances, we could achieve the "efficient" outcome, if transaction costs prevented the victims from bribing the factory, without enjoining both parties. A victim could be allowed to secure an injunction requiring the installation of the scrubbers, on condition that all the residents chip in to pay their cost. The outcome would mirror both the allocational and the distributive result of costless bargaining, without the need to control either residential land use or the level of factory output. 104

The trouble is that it is infinitely more likely that costless bargaining would lead to a complex adjustment of all aspects of both activities. There would be changes both in the level of output and in the density of housing, along with some combination of abatement measures and resident investment, say, in air conditioners. Since the factory is not a nuisance under existing law, all the money in this deal flows from the residents to its owners. When we try to replicate the deal under transaction costs, we will have to make sure an injunction against the factory covers all the terms that would have been in the contract. The only reason that we don't have to enjoin the homeowners to perform their part is that nothing they do changes the factory's cost picture. But if we imagine a cottage industry going on in those bungalows, producing something that even very indirectly competes with the factory's product, then the factory will demand

^{104.} See Cathedral, supra note 1, at 1115-24.

that the homeowners be enjoined as well. 105

Ironically, the liberal law and economics program seems to lead to a program of intervention even more elaborate than the fines and bounties that Coase regarded as hopelessly impractical. The kicker is that when we have set up the whole system of injunctions and damages covering every aspect of life, we will have to redo it every time a crop fails, oil is discovered, or consumer preferences change. Conservatives tend to doubt the sincerity of the liberal commitment to "our system." If we are to interpret liberal law and economics as I have just described it, the doubts are well founded.

But there is nothing inevitable about this interpretation, given the type of externalities analysis I have developed in this article. The liberal analyst who can justify the prohibition of contracts of enslavement on the basis of their deplorable external effects on bystanders can surely produce some external effects of turning all entitlements into injunctions. Indeed, he might argue that the use of injunctions, as opposed to fines and bounties or even plain private law rights and duties, will have ill effects on all liberal-minded citizens. And since the totally efficient rule system would be a change, we must ask, at least under a winners-losers approach, how much the citizenry would ask as the price for giving up the sense of autonomy that comes from living in a regime of rights rather than government directives. These asking prices might swamp the "efficiency gains" from moving to precise directives, and lead—who knows?—all the way back to the good old common law regime of today.

There is nothing particularly difficult, in theory, about making this calculation. But it seems to me to reduce the efficiency calculus of entitlements to something very like mush. One would hardly need the device of weighing distributional effects against the value of efficiency if one could manipulate the nebulous externality of "offensive government intervention" to generate surpluses for one rule by comparison with another. Yet there is nothing in the structure of costbenefit analysis that precludes this manoeuvre. Since these are real costs and real benefits of the actual rules in force, as judges constantly recognize when they offer policy justifications for their law-making activity, it would seem that the analyst *ought* to include them, whatever their impact on the apparent precision of his procedure.

^{105.} See generally Coase, supra note 14, at 42; D. Kennedy & M. Kelman, supra note 17.

2. The problem of cumulative wealth effects. 106

Suppose that we know what rules are in force, and that we have no difficulties with "totalitarianism" (or with the valuation of objections to it, if we decide to go that way). It may now appear that we are in a position to determine *the* efficient set of rules of entitlement, given three things: (a) a particular pattern of transaction costs, (b) a particular initial set of definitions of entitlements, each of which affects everyone's wealth, and (c) an initial distribution of factor endowments.

For example, if our efficiency criterion is the outcome of costless bargaining under existing entitlements, we can figure out, for any particular situation, how the parties would have allocated resources if there had been no transaction costs. We can then modify the entitlements involved to induce them to that same allocation in spite of the existing costs. If we repeat this operation over and over again, it appears that we should be able to come up with the set of rules that represents efficiency given the initial conditions.

In making any one of these cost-benefit analyses of entitlement setting, it makes perfect sense to assume that changes in wealth brought about by entitlement change will have no effect or only a negligible effect on the allocation of resources. In other words, for the given situation, we figure out what the allocative result would have been without transaction costs, and then we manipulate entitlements to bring that result about, assuming that the outcome we arrive at does not need to be adjusted to take into account that our entitlement manipulation has enriched some at the expense of others.

We now have modified one entitlement in the interests of replicating the efficient allocation, and in doing so we have changed the distribution of wealth. But since that change has had no effect or a negligible effect on the allocation of resources, we can go ahead to our next entitlement issue and try to fix it correctly, asking either about the outcome of costless bargaining under the initial set of entitlements and factor distribution, or under the slightly different new set. We should come up with the same result in either case. We then modify entitlements once again to replicate costless bargaining, again assuming no or negligible wealth effects.

The reason we can assume that wealth effects will have negligible impacts on allocation in the cases we use in typical cost-benefit analysis of entitlements is that we seem to be redistributing small quanti-

^{106.} See Rizzo, supra note 1, at 648-51.

ties of wealth between people of essentially similar tastes, without modifying the overall distribution of income. So long as these conditions (i.e., small quantities, similarity of tastes and no change in the overall pattern of income distribution) are met, it appears that we are just shifting purchasing power around. The pattern of demand for goods should remain unchanged. In other words, it seems plausible that there is a single, determinate basket of goods which are the goods this society will want to consume, given the overall pattern of tastes and the overall distribution of income. The issue in the costbenefit analysis of entitlements is to make this basket as big as possible.

Given this vision, it also seems feasible and sensible to keep the issue of deciding on the efficient set of entitlements distinct from the issue of equity in distribution. If there is a single basket of goods that we are trying to make as large as possible, and if the composition of the basket will be essentially the same regardless of redistribution of income among the people who consume it, then it makes sense to figure out the rules that will maximize the size of the basket, and then go about whatever adjustments in relative size of slices (of the basket) we deem appropriate. 107

Aside from the issue of bias as a result of inequality built into the entitlement background, there are two ways in which this approach seems flawed. There is the problem of cumulative wealth effects—that is of massive changes in the distribution of purchasing power that result from dozens or hundreds of small changes in entitlements all with the same distributional bias. Second, there is the problem of "key" entitlements rules, rules whose modification would have immediate wealth effects on allocation because the modification would shift income from class to class, thereby changing both the purchasing power associated with different tastes and also the pattern of overall distribution.

There is no logical necessity that distributional changes brought about by shifting entitlements to replicate costless bargaining should cumulate in one direction or another. But it is nonetheless an interesting possibility. Suppose that the farmer and the rancher are initially roughly equal in income. As they expand their operations, they reach the point of interfering uses. Under the initial set of entitlements, the farmer would have to bribe the rancher to reduce his herd, and would do so, given costless bargaining. Because of transac-

^{107.} See, e.g., G. CALABRESI, THE COSTS OF ACCIDENTS 24-33 (1970).

^{108.} See Bebchuck, supra note 91, at 677-84; text accompanying note 102 supra.

tion costs, however, he does nothing, suffering the crop damage until the liberal cost-benefit analyst comes along. The farmer then sues for nuisance, asking that the entitlement be switched to one of rancher liability, on the ground that this will induce the parties to replicate the outcome of costless bargaining.

When the court decides for the farmer, he will get his herd reduction without having to pay for it. Because he is richer, he may demand considerably more when the issue of a right of way to drive cattle to market comes up. Suppose that under existing law, the rancher would have to bribe the farmer to secure passage, and that under costless bargaining before the nuisance lawsuit he would have done so. After the loss to the rancher and the gain to the farmer from the nuisance lawsuit, the rancher could no longer bribe the farmer. As a result, the rancher loses his suit for judicial declaration that he has a right of way. The farmer is thereby saved from having to grant passage for nothing. In the next confrontation he will be even stronger than he was after the nuisance suit, and the rancher will be weaker than he would have been if he had secured a free right of way at the farmer's expense by reversing the entitlement.

Now suppose a third confrontation in which the issue is whether the ranchhouse should be condemned as an aesthetic nuisance. Before the first two lawsuits, the existing law would have required the farmer to bribe the rancher to take down his house, and the farmer would not have offered enough to buy the rancher out. But after the two lawsuits the farmer is so much richer that if bargaining were costless he would meet the rancher's now much reduced asking price. The farmer therefore goes to court and gets a decree abating the ranchhouse without paying a cent, thus replicating the allocative outcome under costless bargaining. The farmer is somewhat better off as a result, but the rancher is *much* worse off, and goes out of business. 109

If the first lawsuit had been about the rancher's right of way to drive his cattle to market, the second lawsuit about crop damage might have come out differently, and the rancher might have ended up getting the farmhouse condemned rather than vice versa. In other words, the point about cumulation is that it makes the set of rules of entitlement we end up with contingent. Where we end up depends on the particular sequence in which issues are considered.

^{109.} See Bebchuk, supra note 91, at 677-84, 701-02; Dworkin, supra note 1, at 192.

The final set of entitlements is not *the* efficient set, but one of many possible sets each of whose efficiency is open to question.

The efficiency of a set of entitlements arrived at by this procedure is suspect because rules that were efficient for the distribution of wealth prevailing in the early stages may be inefficient in the later stages. If we proceed to modify entitlements to replicate the outcomes of costless bargaining, letting the distributive consequences fall where they may (or modifying them ad hoc to correspond to some set of ethical preferences), then we are likely eventually to bring about wealth changes large enough to call in question everything we have done before.

Suppose, for example, that in the rancher-farmer case the first issue was the rancher's right of way across the farmer's land, and that the court replicated costless bargaining by giving the rancher the passage, but for free. Then suppose that the crop damage and aesthetic nuisance cases nonetheless came out for the farmer, and the rancher was seriously impoverished. If we were now to reopen the right of way case, it is possible that the outcome of costless bargaining would no longer be the sale of a right of passage, and, in consequence, the rancher would not get a free right of way from the court. The entitlement set efficiently under the initial distribution is inefficient under the new one.

This problem becomes particularly serious when we take into account the possibility of massive wealth effects from the change of a small number of key entitlements. For example, suppose we are using the Markovits compensation criterion, under which a change from the legal base line is desirable unless the losers can bribe the winners not to agree to it. Suppose the issue is private property in the means of production versus a radically more egalitarian system. It is quite possible that the rich could not offer the poor enough to buy out their hypothetical entitlement to the welfare positions they would achieve under the new regime. The courts would then expropriate the owners of the means of production. Under the new distribution of wealth, it seems likely that the whole pattern of production and consumption would be radically different from what it is under our version of capitalism. And it also seems likely that the efficiency criterion would then require us to change dozens or hundreds of relatively minor subrules of the systems of property and contract that had been appropriate under the old regime.

The problem of wealth effects may be an insuperable practical obstacle to liberal cost-benefit analysis, but in theory there are (at

least) two ways we could deal with it. The first of these would be to correct every single rule in the system every time we did a new analysis. In other words, we would make the tiny and also the major readjustments required by wealth effects as we went along. True, when we reached the end of our canvas of all the rules in the system, we would have a distribution of welfare totally different from the one we started with, but we would have a set of rules fully adjusted to that new distribution. The drawback of this procedure, aside from its apparent arbitrariness, is that it would be obvious that "the efficient rules" were a function of distributional choice, rather than a "hard" datum that could be "balanced" against equity.

The alternative is to preserve the initial distribution of welfare through the whole process of adjusting the rules to take account of transaction costs. One way to understand this is to imagine the decisionmaker transferring units of factor endowments each time he changes an entitlement, so that all the parties affected actually end up better off in fact than they would have been with the old entitlements, the old factor endowments, and the ill effects of transaction costs. The decisionmaker would move only from Pareto inferior to Pareto superior positions, abandoning the notion that superiority need be only potential.

While such a procedure is imaginable, it is important to understand how far it is from our conventional lawyer's image of the judicial process. We must imagine a decisionmaker who has it in his power to: First, locate all entitlements under existing law. Second, figure out the outcome of costless bargaining under these entitlements combined with the existing distribution of factor endowments. Third, figure out the set of manipulations of existing entitlements that will replicate the hypothetical result of costless bargaining. Fourth, redistribute units of factor endowment so that the distribution of welfare under the new allocation leaves everyone better off in fact than they would have been had the state simply administered the initial set of entitlements. To make matters even more complicated, operations three (changing entitlements) and four (redistributing factor endowment) will have to be done simultaneously. The reason for this is that the distribution of factors will have an impact on allocation that will foul up the program of manipulating entitlements unless the decisionmaker takes it into account in advance.

It is tempting to respond to all of this simply by restricting the claims of liberal cost-benefit analysis of entitlements. Even if we cannot use the approach to generate a complete set of efficient entitlement rules, we ought still to be able to generate particular judgments of efficiency. A policymaker who has limited power and limited ambitions will find it interesting and perhaps important that he can achieve a local move to a potentially Pareto superior position by manipulating entitlements, even if generalizing that procedure would make no sense for a more powerful and ambitious actor. And nothing I have said seems to cast any doubt on the limited procedure. So long as we specify some entitlement background and some solution to the third party offer-asking problem—be it "no transaction costs, taken seriously," or winners-losers with one base line or another—we can go through the routine of assessing what people would ask and offer, and come up with a proposal for setting the entitlement, assuming that the impact of this one decision on the rest of the system will be so small we need not take it into account. But . . .

4. The problem of multiple optima. 110

This brings me to a final problem, which will exist even if we have successfully chosen an entitlement background, a third party offer-asking procedure, and an efficiency criterion, determined the rules in force, identified everyone's preferences with respect to more or less government control, and figured out a procedure for the perpetual correction of the wealth effects of entitlement settings. We can best approach it by adverting once again to the characteristic liberal externalities generated by people's reactions to other people's entitlements. Take the case of the external effects on TV viewers of miners' rights to assume the risk of dangerous mine conditions. A typical liberal analysis would show that if millions of TV viewers would be willing to offer one dollar as their valuation of the ill effect on them of the mine owners' agreement with the miners, then it might be efficient to prohibit that contract.

This approach appears to honor the viewers' budget constraints, since it asks what they would offer given their existing income and alternative uses of their income. But unless we assume away all transaction costs, this valuation will be seriously distorted. It seems likely that what viewers will offer if there are no costs of transacting on this issue depends on whether or not they can transact costlessly about Cambodian refugee relief. If we are really to honor the budget constraints of third parties, we have to imagine a general negotiation in which everyone is able to offer (or be asked) with respect to every-

^{110.} See Rizzo, supra note 1, at 652-53.

thing in the world that concerns them. In other words, in order to determine what the offers or demands of the victims of externalities will be, we have to imagine a general equilibrium no transaction costs solution, rather than a series of partial equilibrium solutions.

Remember that the goal of imagining this no transaction costs general equilibrium is to decide what allocation of resources we will try to replicate (in a world with transaction costs) by manipulating entitlements and simultaneously redistributing factor endowments. In other words, we need a determinate solution that will serve us as a benchmark as we set about putting our "efficient rules" in force. But as soon as we begin to take seriously the idea of such a general equilibrium solution, a number of problems appear. To begin with, if there are really no transaction costs, we cannot have perfect competition or, indeed, any competition at all.

Competition generates benefits for consumers, by comparison with, say, a monopoly, under which a single producer can restrict output and raise prices. If there are really no transaction costs, freely contracting producers will realize this and band together into a single giant producers' monopoly. But if there are really no transaction costs, consumers will do the same thing. In the ensuing negotiation, we might begin by imagining consumers bribing the producers' monopoly to increase output to the level that would have occurred under perfect competition, since that output is Pareto superior to that which obtains when the producers dictate prices and quantities. But the consumers' union will quickly learn that it need not accept unilateral monopoly pricing under bilateral monopoly conditions. There will be a general negotiation between the organizations over how much consumers should have to pay for the competitive output, with the final price indeterminate.¹¹¹

^{111.} It may help in understanding the argument to this point to think of it in terms of the Coase Theorem, which asserts that in the absence of transaction costs we will get the same allocation of resources regardless of the initial assignment of entitlements. A competitive regime is one in which there is no entitlement to be free of "competitive nuisances." By contrast, in the 18th century, there were a number of common law doctrines that made one competitor legally responsible to another for all harm done by competition. They gave the owner of certain kinds of property the right to compensation for the loss of revenue (caused by lower price or volume or both) generated by the establishment of a rival enterprise. See, e.g., 3 W. BLACKSTONE, COMMENTARIES *219. Modern patent laws perform exactly the same function, as do the contracts by which the seller of a business agrees not to compete with the buyer within a specified area for a specified time.

Where liability rules of this kind are in force, the new entrant, who causes a fall in price and a loss in sales to all existing enterprises, must pay for the damage. Of course, the new seller who drives down the price gains for himself only a fraction of what his competitors have lost. The rest goes to consumers. Because of this, the loss the new entrant causes the estab-

If the analysis could stop here, there would be no problem for liberal law and economics. What that discipline requires is simply that, given a set of entitlements, costless bargaining should generate a

lished firms is called a "pecuniary externality." There is no joint cost to be accounted for, in the sense of a contribution of factors to the production of a commodity. There is "merely" a pecuniary transfer of wealth from one economic factor to another. Nonetheless, all pecuniary externalities are governed by entitlements, since each is either allowed to "lie where it falls" (rule of no liability) or "shifted" to another activity which is said to have "caused" it (rule of liability).

The Coase Theorem asserts that, in the absence of transaction costs and wealth effect, there will be the same efficient allocation of resources whether or not there is a doctrine of competitive nuisance, as long as there is perfect competition. This seems absurd on its face, since if there is such a doctrine there cannot be any competition at all: There will be only one firm in each industry. Most of the benefits from competitive injury go to consumers, in the form of lower prices and greater quantity, rather than to the new entrant, who reaps at best an oligopolist's profit and at worst only his entrepreneurial opportunity cost. Since the profit of the new entrant cannot possibly be greater than the profits lost by the former monopolist, it follows that no new entrant can afford to pay the damages arising from the liability rule. There will be no new entrants anywhere.

But before we conclude that something is wrong with the Coase Theorem, we need to know what will happen if the costs of competitive injury fall on the former monopolist rather than on the new entrant, that is, what would happen under existing law if there were no transaction costs. Note that the losses caused by entry are greater than what the new entrant gains. Since there are no transaction costs, such an irrational situation cannot persist. The new entrant and the former monopolist will merge into a new monopoly, raise prices to their former level, and each joint owner will be better off than he would have been in the bad old days of competition. Of course, the success of the new entrant will tempt others to follow. But the assumption of no transaction costs is a powerful one, and allows us to incorporate an infinite number of entrants into the monopoly, with no other result than the dilution of profits among a larger and larger number of joint owners.

It now appears that the Coase Theorem is correct, at least in asserting that there will be the same allocative outcome regardless of the liability rules governing competitive externalities. If there is liability for injuries of this kind there will be no competition because there will be no new entrants. The monopoly will produce a profit maximizing output. If we change to no liability, there will still be no competition because all new entrants will be merged into the monopoly, which will produce exactly the same profit maximizing output as before.

At this point in the fantasy, we must abandon the unrealistic concept of "an industry." All products are to one degree or another substitutes for all others. It follows that "industries" compete with one another, both for customers and for factors of production, generating pecuniary externalities at a furious rate. If there are no transaction costs, it will be apparent that the various monopolists could eliminate these conflicts, along with the uncapturable benefits they generate for customers, by carrying the merger movement to its logical conclusion: a single organization of all producers. This organization can reap all conceivable monopoly profits, both in commodity and in factor markets.

But not for long. As everyone knows, monopolies that do not practice perfect price discrimination are inefficient because they restrict supply in order to keep prices up. Their pricing activity imposes a welfare loss on consumers as a group. This is more than a "pecuniary" externality, since the welfare loss is greater than the excess of monopoly over competitive profits. Since there are no transaction costs, such a situation is unstable. As the Coase Theorem indicates, consumers will organize to bribe the monopolist to increase his output to the level that maximizes consumer surplus.

determinate allocation of resources. As long as this is the case, the lawyer-economist can take this allocation for his reference point in dealing with a world full of transaction costs. Unfortunately, the notion of a determinate, perfectly competitive, output with an indeterminate price is no more than an intermediate stage in the analysis. Consumers are also factor owners. Entrepreneurs are both factor owners and consumers. The "big negotiation" cannot possibly decide on an allocation first and on its pricing second, since the pricing decisions, combined with the entitlement system, define the distribution of wealth. This in turn will influence the supply of factors and the composition of demand.

In short, the "big negotiation" occurs in a full general equilibrium context, so long as we assume that there really are no transaction costs. The parties (all holders of entitlements) must decide both the issue of allocation and that of distribution "simultaneously." Each is no more than an element in the total package, and changing any element would cause the negotiators to change all the others as well. The problem is that the total package is theoretically indeterminate. True, the definition of entitlements and the initial distribution of factors *limit* the possible outcomes. But we no longer have the institution of perfect competition to narrow it to a single point. 112

The liberal analyst, therefore, *could* generate a determinate, no transaction costs, perfectly competitive allocation of resources. And he *could* then specify that allocation as the goal to be achieved by manipulating entitlements in a world with transaction costs. But the choice of that particular allocation makes no sense except as the product of some value judgment unrelated to efficiency. In so much as law and economics scholars purport to base their prescriptions for efficient rules only on the assumption of given entitlements, factor endowments,

^{112.} See J. HENDERSON & R. QUANDT, MICROECONOMIC THEORY 199-229 (3d ed. 1980); J. HIRSHLEIFER, PRICE THEORY AND APPLICATIONS 388-408 (2d ed. 1980); E. MALINVAUD, LECTURES ON MICROECONOMIC THEORY 144-62. The existence of private producers' antitrust entitlements would not require us to modify this analysis. As the Coase Theorem teaches, producers would still reach the (for them) optimal outcome of a single giant monopoly. The entitlements would merely change the distribution of the gains among the merging units. The criminal prohibition of mergers, on the other hand, would prevent agglomeration, and if the state also criminally prohibited consumers from coalescing, the economy would reach the perfectly competitive outcome even in the absence of transaction costs. This would amount to a governmental choice to impose one of all the possible efficient outcomes that might occur in a no transaction costs world. The state might justify such a choice by reference to the fairness or aesthetic appeal of the perfectly competitive outcome, or to some other criterion of social welfare. But the choice would have nothing to do with efficiency, since there would be a multiplicity of other equally efficient outcomes that might have been chosen instead. Further, neither the initial choice of an entitlement background, nor the choice of a distribution of factors, nor the two combined, could be said to have dictated the choice of the particular outcome associated with perfect competition. A given combination of entitlements and factor endowments generates a set of efficient outcomes, rather than a single efficient outcome, so long as there are no transaction costs.

Rather than everyone being a price taker, irrationally competing away his own profits or consumer surplus in the delusive pursuit of a larger share, no one is a price taker. Since bargaining is costless, all imaginable coalitions are also technically feasible, and there is no danger of a failure to agree as a result of miscalculation. No negotiator will end up worse off than if he took his entitlements and retired alone into the forest. But everything a negotiator gets above that minimum depends on the terms of the total social contract. The possible outcomes are infinitely various. All the economist can say is that the result depends on the "relative bargaining skills of the parties."

The main elements of this analysis have been familiar to welfare economists at least since 1952. 113 But it is not particularly puzzling that the liberal policy analysts have ignored them. True, they talk about the allocative outcome in the absence of transaction costs as "like the physicist's assumption of no friction, or Say's law in macroeconomics . . . a useful starting point." 114 Yet when they begin, from their peculiar institutional perspective, to look at some particular question, they never assume away more than a few of the costs of bargaining, and they almost always assume all prices set by perfect competition. Just as they treat some but not all entitlements as subject to reversal at will, so they assume away only those transaction costs that seem immediately relevant.

This procedure will yield theoretically determinate results in particular cases, as we have seen again and again already. Without transaction costs, we say, the pollution victims would bribe the factory owner to install scrubbers; the pedestrians would bribe the auto makers to install bumpers; and so forth. In each case, we eliminate those costs of bargaining that prevent a particular victim or class of victims from bribing a particular "cost avoider" or class of cost avoiders. It is only when one asks about the price of cars when there are no costs of bargaining among manufacturers, or about the price of the polluting factory's output when consumers can combine as easily as pollution victims, that the whole enterprise begins to seem fishy. Without transaction costs, the general equilibrium allocative

and no transaction costs, but smuggle in an arbitrary preference for perfectly competitive outcomes, their procedure is incoherent.

^{113.} See, e.g., W. BAUMOL, supra note 21. Baumol refers to the contradiction observed by J.M. Clark and Chamberlin between perfect rationality and perfect competition. Id. at 109 n.1 (discussing E. CHAMBERLIN, THE THEORY OF MONOPOLISTIC COMPETITION 4, 49 (1933)).

^{114.} Cathedral, supra note 1, at 1096.

outcome is theoretically indeterminate, even given defined entitlements and factor shares. Can one nonetheless validly combine a series of determinate partial equilibrium solutions into a total picture of *the* efficient allocation?

Not likely. Each determinate partial equilibrium is controlled by the arbitrary choice of which bargaining costs to retain and which to assume away. Transaction costs inhibit the exercise of bargaining skills. When it is not worth it to make a deal, there is no place for such capacities as guile, timing, or coolness in using the large residuum of violence that is permissible under any existing entitlement system. Paradoxically, perfect competition provides a model of a world in which transaction costs have reached such an extreme level that no one ever bargains with anyone about anything, and social power has lost all human embodiment. The real world is an amalgam: sometimes we are price takers; sometimes the Napoleonic individual dares to be great; very occasionally we determine our fate both consciously and collectively.

By controlling the dose of transaction costs in the efficient world he sets up as his goal, the liberal analyst also controls the balance between freedom and necessity in that world. He liberates the pollution victims just enough so they can bargain with the polluter about pollution, and takes the outcome as a norm. But, having allowed this moment of social self-determination, he quickly reintroduces transaction costs, preventing the victims from using their new-found organizational capacities to bargain, let's say, with the utility that serves both them and the polluter, reduce residential-industrial price discrimination, change everyone's relative wealth, and transform the terms of the original deal.

The point about this procedure is that it is arbitrary. It provides yet another medium for the introduction of political preferences through what seem merely necessary "practical" assumptions of any analysis. And, once again, the policy analyst's institutional perspective provides the most plausible explanation for his logical incoherence. The focus on particular problems legitimates arbitrary assumptions and masks their political content. It also prevents the analyst from seeing that the extension of the assumption of costless bargaining leads to the conclusion that the allocation of resources is theoretically indeterminate, so that efficiency cannot provide a hard guideline or goal for the lawmaker. As with the externalities argument, the apologetic political content is obvious. The liberal program requires a measure of freedom, but not too much. The

plasticity of social reality is a premise—without it there is no place for reformism. But limits on plasticity must be retained as well without them there is no rational defense of the status quo.

Conclusion

If the analysis of this article is correct, is there any role at all for the notion of efficiency in law and economics? I believe that the answer is that the concept has a limited heuristic usefulness. In the prior discussion, I have shown that the outcome of costless bargaining, with set factor shares and set definitions of entitlements, is indeterminate. This means that there will be many efficient outcomes that are consistent with any given set of assumptions about factor shares and entitlements. Once it is explicit that he is concerned with a set of outcomes rather than with the single efficient outcome of costless bargaining, the economist can retreat once again into his technician's role.

The "political" decisionmaker makes two initial choices: one about the distribution of factor shares, and a second about the initial definitions of entitlements. The economist then presents him a choice among the outcomes that are possible under costless bargaining on those assumptions. Each possible outcome consists of an allocation of resources and an associated distribution of welfare. The political decisionmaker now makes a third intervention: He applies his social welfare function to decide among them. The economist then applies himself to the task of bringing this outcome to pass in the actual world of transaction costs. He manipulates entitlements and redistributes units of factors until the allocation of resources and the distribution of welfare correspond exactly to those chosen by his boss. At the end of the long day's work, he can claim that the total rule system in place is the efficient one, given the three "noneconomic" prior decisions made politically.

All of this bears a striking resemblance to the pre-Coase formulation of pure welfare economics by, say, Graaff or Bator. The attempt to use transaction costs to increase the normative bite of economics having failed, we are back with the more modest claims of 20 years ago. The critics of the 1950s pointed out that the earlier formulation was utterly fanciful, at least viewed institutionally. 116

^{115.} See J. DE V. GRAAFF, THEORETICAL WELFARE ECONOMICS (1967); Bator, The Simple Analytics of Welfare Maximization, 47 Am. ECON. REV. 22 (1957).

^{116.} See generally W. BAUMOL, supra note 21, at 204-07; I. LITTLE, A CRITIQUE OF WELFARE ECONOMICS (2d ed. 1957).

The addition of a more careful treatment of externalities and entitlements makes it, if anything, even more absurd as a proposal for actual implementation.

It is nonetheless unlikely that the enthusiasm for efficiency will abate, given its enormous apologetic usefulness. In this discussion, I have touched on only one of those apologetic uses—that of generating an apparently "scientific" justification for liberal reformist proposals. In this phase, the primary function of efficiency has been to drive the right crazy by using their weapons against them. 117 But efficiency serves not only as a justification but also as a restraint on reformist enthusiasm. The concept will now appear as a way to drive the left crazy by showing that its naive hopes of reconciling social justice with material plenty are inconsistent with elementary economic laws. This change of function is brought about through the assertion of a "conflict" or "tension" between efficiency and equity, but that is the subject of another paper.

^{117.} See text accompanying notes 58-67 supra.