Legislation, Well-Being, and Public Choice

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INTRODUCTION

Economics is full of terms that convey one technical meaning to economists but a quite different meaning to laypeople.¹ "Welfare" is one of these. Laypeople think of welfare mainly in subjective terms: Whether A has more welfare than B depends on whether A has certain feelings that B lacks, or feelings of a certain magnitude, that we wish to characterize as welfare. But subjective feelings are neither observable nor quantifiable. As a result, the layperson's characterization of welfare is one that careful welfare economists are loath to make. Instead, economists-and those engaged in the economic analysis of law-have adopted more quantitative surrogates to assess social welfare. Particularly, economists have settled on revealed market preferences as the most robust measure of the social utility that public laws and programs produce. These means have in time overtaken the economists' original ends, so that for many of those engaged in economic analysis of law, social welfare comprises no more than can be assessed by economic criteria, particularly the Kaldor-Hicks measure of allocative efficiency.²

This essay hopes to help win welfare back from the economists. Not the term itself, which they now hold so tightly that we are unlikely to pry it loose, but the more comprehensive notion of what I will call social well-*being* that laypeople and legal policy makers³ attach to the word welfare, and for which the economist's market-based approach is only an inexact surrogate. In the process I hope to dispel some misperceptions regarding the relationship

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¹ See Donald N. McCloskey, *The Rhetoric of Law and Economics*, 86 Mich L Rev 752 (1988).

² For an example of the use of Kaldor-Hicks in assessing legal policies, see Richard A. Posner, *The Law and Economics Movement*, 77 Am Econ Rev Pap & Proc 1 (May 1987).

³ The term "legal policy maker" is used here to include all those who are in a position to make legal rules.

between legislative enactments and social well-being that the purely economic approach to assessing welfare has created.

Section I of this essay begins with a discussion of the Kaldor-Hicks efficiency criterion and its strengths, but focuses on the ways that it fails to capture significant aspects of social utility. Section II then examines the legislative process, emphasizing what I will term its "democratic bias"—the tendency to produce not the greatest amount of social wealth measured in dollars, but the greatest number of beneficiaries. In positing this democratic bias, I attempt to refute two accounts of legislative behavior that threaten to undermine any theory that legislation is ultimately democratic: Arrow's impossibility theorem and the more general critique of public choice theory.

This essay then turns to two additional aspects of the emerging Chicago School critique of the legislative process. One is the argument that the common law is better than the legislative process at achieving social utility. Section III argues that the common law is more welfare-enhancing only when viewed through the narrowing lens of welfare economics; once the full scope of social wellbeing is recognized, it becomes apparent that legislation likely achieves utilities that economic tools are unable to assess, but that are in fact a central concern of social policy. Section IV then contends that if the public choice influence on the legislature were reduced, legislation would not result in fewer pure wealth transfers, as the Chicago critics seem to believe, but *more*. The essay concludes by examining the ways in which traditional welfare economics remains a useful tool in the analysis of social policy.

I. Welfare and Well-Being

A. Revealed Preferences and Kaldor-Hicks Efficiency

Modern welfare economics measures social "welfare" by devices such as individuals' revealed preferences in a market. A "revealed preference" is an observed purchase or refusal to purchase, rather than information such as a questionnaire or survey that asks A or B how much they would enjoy having a particular good. If A buys a MacKnight silkscreen for \$1000 when B refuses, we know that A "values" the MacKnight by at least \$1000; that is, the MacKnight gives A welfare of at least \$1000. We also know that B values the MacKnight by less than \$1000, and that owning it would give B less than \$1000 of welfare. We then have a number 1990]

that can be added to other numbers or traded off against them in ways that purport to tell us something about total social welfare.⁴

The use of revealed preferences to measure welfare is founded on an efficiency criterion called Kaldor-Hicks efficiency. A legal policy is Kaldor-Hicks efficient if those who gain from the policy can fully compensate those who lose out of their gains. Kaldor-Hicks does not require that compensation actually be paid, but only that it *could* be paid and still leave the program's beneficiaries better off. Compensation is unnecessary because Kaldor-Hicks is not concerned with the distribution of wealth, but only with increases or decreases in total welfare.⁵ Indeed, requiring compensation would undermine the very purpose of legislative wealth transfer programs—to *transfer* wealth.

Kaldor-Hicks efficiency was designed as a substitute test for social utility-for identifying when a policy increases the sum total of welfare in society. When the test was developed in 1939,6 economists had concluded that interpersonal comparisons of utility are scientifically impossible. One can listen to A describe how much she enjoys the benefits of a publicly-financed job training program. One can also listen to B describe how much pain she feels at being taxed to pay for A's program. But there is no scientific way to compare A's pleasure with B's pain.⁷ By adopting Kaldor-Hicks efficiency, economists hoped to improve upon the traditional efficiency criterion of Pareto superiority, which was too restrictive for evaluating government programs. A policy change is Pareto superior if at least one person benefits from the change and no one is injured. Since virtually every government policy produces both gainers and losers, orthodox Paretianism offered much too narrow a criterion of efficiency for evaluating the welfare consequences of most policy changes.

⁴ Social welfare is not necessarily the same thing as the aggregate welfare of individuals. For example, people's perception of the amount of equality or inequality in society, which arises only from a comparison of welfare across individuals, may affect their welfare. See Amartya Sen, *Choice, Welfare and Measurement* 426-27 (MIT, 1982). See generally A. B. Atkinson, *The Economics of Inequality* (Clarendon, 2d ed 1983).

⁵ See Richard E. Just, Darrell L. Hueth, and Andrew Schmitz, *Applied Welfare Economics and Public Policy* 34 (Prentice-Hall, 1982).

⁶ See Nicholas Kaldor, Welfare Propositions of Economics and Interpersonal Comparisons of Utility, 49 Econ J 549 (1939); and J. R. Hicks, The Foundations of Welfare Economics, 49 Econ J 696 (1939).

⁷ See Lionel Charles Robbins, Baron, An Essay on the Nature and Significance of Economic Science 136-41 (NYU, 3d ed 1984) (Robbins's work was originally published in 1932); Herbert Hovenkamp, The First Great Law and Economics Movement, 42 Stan L Rev — (April 1990) (forthcoming).

Under the Kaldor-Hicks test, interpersonal comparisons of utility are believed to be unnecessary. If the value of A's job training program is great enough that A could compensate B for her lost tax money and still be better off, then the forced wealth transfer increases social welfare. Since after the compensation is made there are only gainers and no losers, one need not be concerned with whether A's pleasure in the job training program exceeds B's pain in having to pay for it.

Kaldor-Hicks efficiency's claim to precision has made it a powerful if somewhat controversial tool in welfare economics. Measuring subjective utility presents a major problem of scientific verification. If we simply listened to the wealthy person and the poor person describe how much each would enjoy an expensive good, we could not decide who enjoyed it more, for that would require an impermissible interpersonal comparison of utility. On the other hand, we can observe that in the market the wealthy person will enjoy the expensive good and the poor person will not, for only the wealthy person will purchase it at its market price. Now we can say with some meaning that the wealthy person "values" the good more than the poor person does. This particular element of Kaldor-Hicks efficiency-its claimed ability to measure value in terms of observed market choice-makes it a more acceptable welfare criterion to some economists than an unmeasurable concept such as utility.

Within the Chicago School of law and economics, Kaldor-Hicks is clearly the most important tool for assessing whether a legal policy increases or decreases social welfare.⁸ Judge Richard Posner even defends it as ethically superior to alternative measures.⁹ He and others have also used the Kaldor-Hicks criterion to argue that the common law is generally more efficient than legislation,¹⁰ finding that the unregulated market is more efficient than most statutory policies that allocate resources by means other than free-market transfers.

⁸ See, for example, Richard A. Posner, *The Economics of Justice* chs 3, 4 (Harvard, 1981).

۶ Id.

¹⁰ See, for example, Richard A. Posner, *Economic Analysis of Law* 495-99 (Little, Brown, 3d ed 1986); Posner, 77 Am Econ Rev Pap & Proc at 5 (cited in note 2); and George L. Priest, *The Common Law Process and the Selection of Efficient Rules*, 6 J Legal Stud 65 (1977). See also Jack Hirshleifer, *Evolutionary Models in Economics and Law*, 4 Res in L & Econ 1, 46-49 (1982). The relative efficiency of statutory and common law is discussed below in section III at notes 76-82.

Kaldor-Hicks efficiency has also had a powerful influence on American legislative policy making. For example, Kaldor-Hicks efficiency is the conceptual basis for cost-benefit analysis, a way of evaluating policy programs by comparing their dollar costs against the market value of the benefits they provide.¹¹ In the last twenty years, cost-benefit analysis has played an increasing role in government decisions about the proper scope of intervention into the market.¹²

B. Objective Measures of Welfare

Kaldor-Hicks efficiency is not the only approach to assessing social welfare. Welfare could also be measured by objective criteria, such as psychologists or sociologists might employ. For example, a policy maker might decide to rank certain goods and services in terms of perceived importance to human survival or comfort.¹³ John Rawls attempted to identify a class of "primary goods" in order to avoid the problem of interpersonal utility comparisons.¹⁴ In such orderings, food, healthy drinking water, housing, clothing, and medical care might rank high, while a MacKnight silkscreen would be ranked low or not at all. The policy maker might wish to ensure that highly ranked welfare items were supplied in some minimally sufficient amount to everyone, even if the market would not supply them. For example, the sovereign might place a tax on wealthy individual A in order to provide a food or housing subsidy to impoverished individual B. The tax might force A to forego his MacKnight silkscreen in order to provide B with adequate housing or food. Under an objective criterion for welfare this forced transaction might be seen to increase welfare even though A was willing to pay \$1000 for the MacKnight while B was not "willing" (because he did not have the money) to pay \$1000 for the housing or food that the subsidy brought to him. The so-called "poverty line"

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¹¹ See generally E. J. Mishan, Cost-Benefit Analysis (Praeger, 2d ed 1976); see also Duncan Kennedy, Cost-Benefit Analysis of Entitlement Problems: A Critique, 33 Stan L Rev 387 (1981).

¹² See, for example, Exec Order 12291, 3 CFR, 1981 Comp 127, 128 (Feb 17, 1981), requiring cost-benefit analyses of federal regulations. See also Christopher C. DeMuth and Douglas H. Ginsburg, *White House Review of Agency Rulemaking*, 99 Harv L Rev 1075 (1986).

¹³ For some of the conceptual problems, see Robert E. Goodin, *Reasons for Welfare: The Political Theory of the Welfare State* ch 2 (Princeton, 1988). For a relatively comprehensive account of such rankings, see Angus Campbell, Philip E. Converse, and Willard L. Rodgers, *The Quality of American Life: Perceptions, Evaluations, and Satisfactions* (Russell Sage Found, 1976). A now classic study is Abraham H. Maslow, *Motivation and Personality* (Harper & Row, 2d ed 1970).

¹⁴ See John Rawls, A Theory of Justice 90-95 (Harvard, 1971).

in the United States is identified by the use of such objective criteria.¹⁵ Importantly, under this objective theory "welfare" has a content that cannot be fully captured by willingness to pay, or revealed preference.

Classical political economists often measured welfare by objective indicators—deciding, for example, that certain necessities of life have more inherent "value" than luxuries.¹⁶ But positivist neoclassicism rejected all such objective criteria of value in favor of a theory that value means nothing more than an observed willingness to pay in the presence of scarcity.¹⁷ A forced transfer of wealth from A to B, as described above, would not be welfare-increasing under the neoclassical economist's revealed preference theory, since one could not show that B would have purchased the good or service she received at its market price.

C. Utility, Well-Being, and the Limits of Kaldor-Hicks

The most zealous advocates of economic analysis of law, such as Judge Posner, claim that economics has been far more successful than the other social sciences in developing a positive theory of legal rules.¹⁸ But this appearance of richness is really a kind of myopia.

To appreciate the limits of revealed preference in assessing social welfare, it is useful first to examine the term "welfare" itself. In economists' hands, "welfare" has taken on a meaning that it did not have before the widespread use of purely economic criteria to assess social utility. Further, the economic meaning of "welfare" fails to capture all that laypeople and policy makers associate with it. Rather, the economists' conception of welfare has come to be dominated by the surrogates they adopted to measure it. The surrogate can be a very poor measure of true subjective welfare. Welfare economics should really be called "allocative efficiency eco-

¹⁶ See Robert D. Plotnick and Felicity Skidmore, *Progress Against Poverty* 32 (Academic Press, 1975); and Atkinson, *The Economics of Inequality* at ch 3 (cited in note 4). See generally Angus Deaton and John Muellbauer, *Economics and Consumer Behavior* ch 8 (Cambridge, 1980). For a comprehensive history and analysis of such attempts, see Nicholas Barr, *The Economics of the Welfare State* (Stanford, 1987).

¹⁶ See Robert Cooter and Peter Rappoport, *Were the Ordinalists Wrong About Welfare Economics*?, 22 J Econ Lit 507 (1984). See also Hovenkamp, 42 Stan L Rev at — (cited in note 7).

¹⁷ See Joseph A. Schumpeter, On the Concept of Social Value, 23 Q J Econ 213 (1909): Paul A. Samuelson, Consumption Theory in Terms of Revealed Preferences, 15 Economica 243 (1948). See generally Joseph A. Schumpeter, History of Economic Analysis (Oxford, 1954).

¹⁸ Posner, Economic Analysis of Law at 24 (cited in note 10).

nomics"—but then, of course, the name would lose much of its rhetorical force. Economists as much as anyone else like to obtain the full value of their words.

Unfortunately, the rhetoric of "welfare" is so powerful that it is hard to speak of "welfare" in the economist's sense without thinking of "welfare" in the layperson's sense—how well off or happy people perceive themselves to be. I therefore use the term "well-being" to refer to some quantity, perhaps not even empirically measurable, related to how happy or satisfied people feel. "Welfare," on the other hand, refers to wealth measured in constant dollars. Well-being is not equivalent to wealth, and it seems clear that the legal policy maker is obliged to take account of people's well-being, not merely their welfare (wealth).

In attempting to increase well-being, or social utility, the legal policy maker should support social programs in which the amount of utility given to gainers exceeds the utility lost by losers. The problem with the Chicago School approach to welfare is that the economic concept of Kaldor-Hicks efficiency is not a principle for measuring social utility at all. Rather, it is a measure of the effects of a policy on society's *wealth*. Gains and losses, and thus the amount of potential compensation, are measured in a constant monetary unit, such as dollars. To be sure, this requirement serves an important function. Economics could no longer produce a determinate result if it inquired whether gainers from a program could compensate losers with a sufficient number of "utils"¹⁹ to make the losers equally well off. Such a rule would require interpersonal comparisons of utility. Utils simply cannot be accounted for as they are transferred from one person to another.

Suppose that I receive one util of pleasure from an apple and you receive three. If I give you the apple, the apple has been transferred and the market value of the apple has been transferred. If the apple is worth 25 cents, you are 25 cents richer and I am 25 cents poorer. The same transfer has also increased the number of utils in society from one to three, but there is no way an outside observer can measure and compare the number of utils I derive from the apple with the number that you do.

The Kaldor-Hicks requirement that the effect of transfers be measured in dollars is a concession to the demands of science. We

¹⁰ The term "util" here refers to an imaginary unit of welfare that is both cardinal and interpersonally comparable. To speak of utils in any sense other than the hypothetical would be conjectural, since cardinal utilities cannot generally be interpersonally compared in this fashion.

cannot quantify the total amount of something in society if we cannot even measure the individual units. If Kaldor-Hicks efficiency can be said to be an indicator of well-being at all, it is on the assumption that all dollars produce equal amounts of well-being. Well-being may be positively related to wealth, but wealth is almost certainly not the only variable that determines well-being. There is no empirical reason for thinking that a dollar is the same thing as a unit of subjective welfare. First, most people believe that money, just as everything else, is subject to declining marginal utility. Second, the utility of a dollar may not be the same even for people of the same wealth.²⁰

1. The declining marginal utility of money.

Most people believe that money is subject to declining marginal utility. That is, as a person's wealth increases, she derives less utility from each individual dollar.²¹ Thus, a policy that is Kaldor-Hicks efficient might not increase total utility; the beneficiaries might derive less utility from each dollar than the victims. For example, a costlessly enforced policy that benefits ten wealthy people by \$100 each, injures ten impoverished people by \$90, and affects no one else will be "efficient," or welfare-increasing, under the

²¹ See Gordon Tullock, *Economics of Income Redistribution* 21 (Kluwer-Nijhoff, 1983) ("almost everyone has agreed that above a very low point monetary income is subject to declining marginal returns"). But see Posner, *Economic Analysis of Law* at 436 (cited in note 10), noting that many people of great wealth also work very hard, and inferring that the marginal utility of dollars for some wealthy people is very high. Of course, a wealthy tycoon who earns \$1000 per hour may have a much lower marginal utility for a dollar but still be willing to work more hours than a laborer who earns \$8 per hour. The more appropriate question is whether each would put in the extra hour if both were paid the same \$8.

Judge Posner's position may be testable. As a general proposition, the purchase of insurance is reasonable only for people who are risk averse, and economic risk aversion is simply a function of declining marginal utility of money. For example, a person will use 100 marginal dollars to protect himself against a \$100,000 loss even though the expected value of the loss (\$100,000 multiplied by the probability of its occurring) is only \$60. Insurance normally costs more than the expected value of the insured loss because of administrative costs and, if the insurance market is not perfectly competitive, profits to the insurers. The purchase of such insurance is nonetheless reasonable because an actual \$100,000 loss will decrease wealth to a level such that the marginal utility of money is much larger than it is at the current wealth level. Thus the expected value of the lost *utility* is higher than the insurance premium. If Judge Posner is correct, we would expect that hard working wealthy people would not purchase insurance on their homes, automobiles, valuables, and the like.

²⁰ Dollars are objective units of *market*, not individual, value. A collection of dollars, or things that can be valued in terms of dollars, is "wealth," and wealth is an objective notion. In this sense the use of Kaldor-Hicks efficiency as a welfare criterion contains a vestige of classicism's objective standard of value. See generally Cooter and Rappoport, 22 J Econ Lit at 517-20 (cited in note 16); and Hovenkamp, 42 Stan L Rev at — (cited in note 7).

Kaldor-Hicks standard. But the impoverished people might individually derive twice as much utility from a dollar as the wealthy people, and so in truth the program decreases total utility.²²

A transfer that is Kaldor-Hicks efficient necessarily increases utility only if: (1) the marginal utility of money is constant for each individual; and (2) different individuals derive the same utility from a given increment of money. Proposition (1), we have seen, is probably wrong. Proposition (2) is strictly normative, for verifying or falsifying it would require interpersonal comparisons of utility. It would seem, though, that for people who have the same wealth, the utility of a dollar may not be the same. One person may derive more happiness from money than from anything else; another may prefer reading and rereading *Paradise Lost* in a public park, and care almost nothing for money.

2. Individuals' capacity for satisfaction.

A second important difference between utilitarianism, or the maximization of human well-being, and Kaldor-Hicks efficiency, or wealth maximization,²³ is that utilitarianism regards people as possessing equivalent capacities for satisfaction. This concept of "procedural equality"-or the state's duty to weigh each person's preferences equally—is central to nearly every form of utilitarianism.²⁴ To be sure, individuals obtain decreasing marginal utility from most goods, and the same mixture of goods creates different utility levels in different individuals. But the maximum amount of pleasure or satisfaction that one person can enjoy is prima facie presumed to be the same for everyone, regardless of wealth. A poor person and a wealthy person are presumed capable of experiencing the same amount of happiness at receiving a valuable gift, although only the wealthy person could purchase it at its fair market value. One might search out exceptions to this principle. For example, someone in an irreversible coma might require food, housing, and certain other elements of comfort, but derive absolutely no utility from investments of resources beyond those basic necessi-

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²² See William J. Baumol, *Economic Theory and Operations Analysis* 378-80 (Prentice-Hall, 2d ed 1965).

²³ The term "wealth maximization" comes from Posner, *The Economics of Justice* at 60-76 (cited in note 8). It is generally equivalent to Kaldor-Hicks efficiency.

²⁴ See Jonathan Riley, Liberal Utilitarianism: Social Choice Theory and J.S. Mill's Philosophy 297-300 (Cambridge, 1988). Specific arguments that utilitarian measures of wellbeing require equal treatment include Joseph Raz, The Morality of Freedom 237-44 (Clarendon, 1986); Ronald Dworkin, Is Wealth a Value?, 9 J Legal Stud 191 (1980); and Ronald Dworkin, Why Efficiency?, 8 Hofstra L Rev 563 (1980).

ties. We can never be sure. Whether or not this is so, such persons are clearly the exception rather than the rule.

When Kaldor-Hicks efficiency is taken as the measure of wellbeing, this equivalence of capacity is lost. Rigorously employed, Kaldor-Hicks efficiency treats people as if their wealth defines their capacity for satisfaction, and wealth varies greatly from one individual to another. Empirical data about people's *market-expressed* preferences will reflect the preferences of the wealthy more than those of the poor, because the wealthy spend more. They make more appearances on the market. To be sure, the wealthy may not consume more hamburger than the poor, but the relatively well off do consume more education, automobiles, housing, jewelry, clothing, and a host of other goods. Because the legal policy maker is obliged to consider people's well-being, not merely their welfare (wealth) in making policy choices, she must somehow consider effects on total well-being, rather than revealed preferences alone.

3. Producers' welfare and consumers' well-being.

Consumers' surplus is the difference between the price a consumer is willing to pay and the price he actually pays for a good or service. Producers' surplus is the difference between the minimum price a producer would have accepted, or the minimum price she must receive to stay in business, and the amount that she actually obtains. Some economists treat the welfare of consumers and producers as interchangeable. Economic surplus is said to be the sum of consumers' and producers' surplus, and economic surplus is often used as a measure of welfare. Within this model, consumers' surplus and producers' surplus can be traded off against each other. A transaction that yields a consumers' surplus of \$20 and a producers' surplus of \$30 is said to have the same welfare effects as a transaction that yields a consumers' surplus of \$5 and a producers' surplus of \$45. Both produce an economic surplus of \$50.²⁵

But the equation of producers' surplus and consumers' surplus for the purpose of analyzing well-being is ill-conceived. We can

²⁵ See, for example, Hal R. Varian, Intermediate Microeconomics 420-23 (Norton, 1987); and Donald N. McCloskey, The Applied Theory of Price 410-11 (Macmillan, 1982). Judge Posner notes that many economists use Kaldor-Hicks efficiency to evaluate the social cost of monopoly. Posner, The Economics of Justice at 91-93 (cited in note 8) Under Kaldor-Hicks, monopoly is inefficient because of the deadweight loss triangle; the reduction of consumers' surplus and increase in producers' surplus is deemed to be a wash. For criticism, see Edwin Mansfield, Microeconomics: Theory and Applications 294-95 (Norton, 5th ed 1985); William G. Shepherd, Public Policies Toward Business 39-44 (Irwin, 7th ed 1985)

presume that most commercial producers are in business for profit, whatever their utility curves for money. Regardless of whether their owners are already wealthy or poor, firms generally attempt to maximize their profits. For example, the producer who has a choice between two processes that yield exactly the same results should choose the one that costs less. Producer well-being and producers' surplus can thus be equated.

Consumer well-being is quite different and not so simple to measure. If the marginal utility of income declines and different people receive different levels of utility from a given amount of money, the maximization of consumer well-being will not in general follow from the maximization of consumers' surplus. Whatever the status in neoclassical economics of the hypothesis that business firms try to maximize profits,²⁶ the presumption that *consumers* maximize wealth is simply not true. Individuals have a hierarchy of values; wealth is only one. There are probably few individuals for whom wealth trumps all other values.²⁷

Producers' surplus probably tells us a great deal about producer well-being. Consumers' surplus, on the other hand, likely tells us little about consumer well-being. Most importantly, we cannot conclude that wealth transfers from consumers to producers, or vice-versa, have no impact on well-being, and we cannot conclude that practices increasing producers' surplus more than they decrease consumers' surplus necessarily increase social wellbeing.

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The neoclassical solution to the welfare problem also reduces the concept of equality to an abstract notion of equality of opportunity. The solution has two fundamental components. First, because preferences not exercised in the marketplace cannot be measured, only revealed preferences are considered in formulating policy. Second, giving greater weight to market choices is said to create proper incentives to induce people to acquire more wealth. From this follows the choice of the Kaldor-Hicks efficiency criterion to measure social welfare. Properly formulated government policy should emphasize non-interference in order to guarantee

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⁽discussing the negative effects on distribution of monopoly).

²⁶ See generally Lawrence A. Boland, On the Futility of Criticizing the Neoclassical Maximization Hypothesis, 71 Am Econ Rev 1031 (1981); and Bruce J. Caldwell, The Neoclassical Maximization Hypothesis: Comment, 73 Am Econ Rev 824 (1983).

²⁷ For the effect of this conclusion on legal policy making, see Herbert Hovenkamp, Marginal Utility and the Coase Theorem, 75 Cornell L Rev — (1990) (forthcoming).

that those who desire more wealth face no greater state-imposed constraints on their ability to earn it than those who are already wealthy.

This neoclassical theory of rights may make some sense in an environment of rapid economic growth and very high individual economic mobility. Classical political economy, developed in the eighteenth century,²⁸ was tailor-made for the modern world's entry into such an environment. But in a world in which economic growth is slower and individual economic mobility much more restricted, a lifetime is too short to give everyone equal access to the world's resources.

By relying solely on Kaldor-Hicks criteria and limiting its conception of welfare to revealed market preferences, Chicago School economic analysis of law has severely truncated the inquiry into optimal legal policy. The resulting product is relatively easy to observe and measure, but it often bears little relation to the wellbeing of society's members. The softer social sciences, like the classical political economists, have been willing to sacrifice certainty for a surrogate that more closely captures true well-being.

II. THE DEMOCRATIC BIAS

Legal policy is not dictated in the first instance by the market but rather by those who have authority to make and enforce the law. To be sure, the legal policy maker may decide that certain areas of law ought to be driven by market concepts, since markets are efficient. But the choice of a market model is itself a policy choice.

In a democracy, legal policy makers have an obligation to assess and choose policies and programs with the end of maximizing social utility. The preceding section has briefly explored the difference between enhancing individuals' welfare, or wealth, and achieving a broader conception of utility that I have dubbed "wellbeing."

The difficulty of determining social utility is greater than simply determining what utility means and is. Even when we have arrived at a satisfactory notion of utility, we will face considerable difficulty deriving an accurate reflection of total social utility from all the individual utility curves we have before us.

²⁸ Principally by Adam Smith, *The Wealth of Nations* (Random House, 1937) (originally published in 1776).

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A. Alternative Mechanisms for Identifying Social Well-Being

One can identify the following alternative mechanisms for identifying social well-being on the basis of individual preferences:

1. One person, one choice.

One person, one choice simply gives each voter a single selection on any issue subject to public decision making. The voting may be structured in various ways and by various agendas. For example, the voters might be asked to select one among several options—either four candidates for office, or four alternative initiatives, stated as propositions. If no option receives more than 50 percent of the votes, then majority rule requires a "run off" election among the two that receive the most votes, with the remaining options dropping out. This method tends to discriminate against pairs of contestants or issues that are perceived by the voters as very close to one another—a common occurrence that often undermines the public's apparent preference.

For example, suppose that candidate A is a conservative, B and C moderates, and D a liberal. Moderates constitute 48 percent of the electorate, but each among them regards B and C as close—one is almost as good as the other. In the polling, A and D get 26 percent each, while B and C get 24 percent each. All voters for A would prefer either B or C to D. All voters for D would prefer either B or C to A. In the runoff, the contest is between A and D. A may then win even though the voters for B, C and D, representing 74 percent of the total, would have preferred either B or C to A.

Alternatively, the voting may be structured by pairs, as proposed in 1785 by the Marquis de Condorcet.²⁹ Assume that an athletic club must decide whether to build a swimming pool, baseball diamond, or tennis court. The members may be asked to select between a swimming pool and a baseball diamond first. If a majority selects a swimming pool, then on the second ballot they will be asked to select between a swimming pool and a tennis court. If voting is pairwise in this fashion, the outcome may sometimes be "path dependent"; that is, the way the vote is structured will determine the outcome.³⁰

²⁹ See Duncan Black, The Theory of Committees and Elections 159-80 (Cambridge, 1958).

³⁰ See the discussion in text at notes 69-73. Other problems are discussed in Gordon Tullock, *Problems of Majority Voting*, 67 J Pol Econ 571 (1959); and Kenneth O. May, A

2. Ordinal ranking of preferences.

Ordinal ranking of preferences, sometimes known as the Borda count,³¹ permits each voter to express her preference among alternatives in a single ballot. The ranking is "ordinal" because, although the members rank their preferences, the ranking says nothing about the degree to which a voter may prefer one alternative over another. If there are three candidates, voters would identify their first choice with a "3," their second choice with a "2," and their third choice with a "1." The choice receiving the most points wins. Ordinal ranking reduces the likelihood of multiple ballots. Ties can be broken on the second ballot, even though all people vote consistently; that is, two preferences that are tied for first place when the third preference is present may no longer be tied when the third preference is removed.³²

Although the method of assigning weights to preferences in this fashion is said to be "ordinal," the *summing* of the numbers adds an element of false cardinality to the determination of choice. The implication in summing up the numbers is that someone who assigns "3" to the swimming pool and "2" to the tennis court prefers the swimming pool by 50 percent more. However, on the second ballot that person will give a "2" to the swimming pool and a "1" to the tennis court, suggesting that he prefers it twice as much. But no such preference strengths can be inferred. The person who loves tennis, is indifferent about swimming, and loathes baseball

 32 Suppose that in the athletic club example discussed above the five voters (V1 - V5) rank the three alternatives this way:

	V1	<u>V</u> 2	V 3	V4	V 5	Total
Swimming Pool	3	3	2	2	1	11
[.] Baseball diamond	1	2	3	3	2	11
Tennis court	2	1	1	1	3	8

Since the swimming pool and baseball diamond each received 11 preference points, while the tennis court received only 8, there will be a second ballot ranking the swimming pool and the baseball diamond. If the voters vote consistently, they will vote:

	V1	V2	V 3	V4	V5	Total
Swimming Pool	2	2	1	1	1	7
Baseball diamond	1	1	2	2	2	8

The baseball diamond wins, 8 to 7.

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Set of Independent Necessary and Sufficient Conditions for Simple Majority Decision, 20 Econometrica 680 (1952).

³¹ See Black, *The Theory of Committees and Elections* at 61-64, 156-59, 178-80 (cited in note 29).

will put the same ranking on her ballot as the person who is almost indifferent among the three, but prefers swimming slightly less than tennis and slightly more than baseball. In short, the system imposes false cardinality where none exists.

3. "Cardinal" ranking of preferences.

a. With equally distributed numbers of preference points. This method attempts to let voters both rank and weight their preferences, while still treating voters as equals by giving them the same number of total points. For example, each person might be given 100 voting points to be assigned at her will among the alternatives.

Such ranking systems can discriminate in favor of fringe candidates or issues, particularly where mainstream candidates or issues are perceived by voters as relatively close together. For example, suppose that four voters (V1 - V4) must pick a candidate from a slate of five. One candidate is an extremist, and has one fanatic follower. The other candidates are all relatively moderate, as are the remaining voters. The voting turns out like this:

	V1	V2	V3	V4	Total
Candidate A	100	0	0	0	100
Candidate B	0	50	20	25	95
Candidate C	0	20	45	5	70
Candidate D	0	5	25	50	80
Candidate E	0	25	10	20	55

Extremist candidate A wins because his one fanatic voter, V1, cast all his points for A. Although all four candidates B, C, D, and E were preferred by more voters, those preferences were divided among candidates who were perceived as more or less alike.

One might argue that utility is maximized in the above example. Although V1 was the only person who preferred Candidate A, his preference was very strong: 100 points. The preferences of V2, V3, and V4 for the other candidates were much weaker, ranging from 5 to 50 points. The problem with this argument is that the ranking system is cardinal only *intra*personally. The numbers still cannot be compared cardinally from one voter to another. For example, we can infer nothing from the fact that Voter 1 preferred Candidate A by 100 points over Candidate B but that Voter 2 preferred Candidate B by only 50 points over Candidate A. These

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numbers tell us nothing about the respective differences in preference between the two voters, but only that voter 2 perceived candidates B through E as competing with one another. The "amount" of difference in preference between A and B-if one can talk about an amount of something that cannot be measured-could be as great or greater for Voter 2 than it is for Voter 1.³³

b. Pure cardinal ranking. Pure cardinal ranking of preferences would require voters to rank their preferences on some scale that purported to measure the amount of satisfaction they received from the various alternatives. For example, voters might be asked to state how many "utils" of utility, or pleasure, they would derive from each of three options. The principle that subjective utilities cannot be cardinalized and compared across persons almost surely prevents such a system from working. Even if every voter acted in absolutely good faith, there is no way one voter could compare his perception of the size of one "util" with someone else's perception.

Kaldor-Hicks efficiency. 4.

Kaldor-Hicks efficiency would force the five voters to select the alternative that maximized net value, in terms of willingness to pay.³⁴ Although bilateral markets are best-suited to evaluate resource allocations under Kaldor-Hicks concepts, one can devise auction systems under which non-market institutions can make Kaldor-Hicks efficient allocations (or at least something close). For example, in the athletic club case described above, the five members might be asked to bid for their preferences in dollars. When the winning bid was determined, each bidder would have to pay the amount he bid for that particular alternative, and the resulting sum of money would be equally divided among the five members. Alternatively, each member might be assigned one vote or a number of preference points, but the votes or points could be traded on a market. People who wanted particular alternatives could try to buy the votes or points of others whose preferences were not so strong.

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³³ For example, Candidate A could be a member of the "Aryan Race for a White America," a party that includes V1 as a member, but which V2 - V4 find extremely distasteful. Unfortunately, the remaining candidates are all mainstream Republicans and Democrats.

³⁴ One of the earliest of such systems was proposed by Lindahl in 1919. Under his plan, the state would call out tax prices for certain public goods and services, and the voters would state how much they wished to purchase. See Erik Lindahl, Just Taxation-A Positive Solution, in Richard A. Musgrave and Allen T. Peacock, Classics in the Theory of Public Finance 168 (St. Martin's, 1967).

The principal objection to such schemes is that they do not treat people as equals, but rather give more weight to the preferences of those with more wealth. If declining marginal utility of money applies, the outcome will reflect the wishes of those with the most dollars, simply because they derive less utility from those dollars than do the others, *not* because they prefer, say, a swimming pool over a tennis court by a greater margin than others prefer the contrary. The result may be a very poor measure of wellbeing, particularly when people are acting in their capacity as consumers.

Which of these mechanisms best identifies the optimal "social choice," in some meaningful sense? Undoubtedly the most attention has been given to Kaldor-Hicks as a market-mimicking device, and to simple one person, one vote concepts. The one person, one vote method is used almost universally in American government and is, in many instances, constitutionally required.³⁵

* * *

Arrow's impossibility theorem, discussed below, addresses this concept. It seeks to show that individual statements of preference by simple votes among three or more alternatives cannot, under a set of relatively weak assumptions, yield a discrete determinative welfare function. Outcomes will be uncertain and often they will be path dependent; that is, the outcome will depend on the way in which the voting procedure is structured. In short, the basic principle of both American electoral politics and of representative democracy—that each person gets one vote—is not calculated to produce determinative social policies that reflect individual preference.

In fact, however, the level of indeterminacy is even higher than Arrow's theorem suggests.³⁶ The different voting mechanisms outlined above often yield different results on the same division of

³⁵ Reynolds v Sims, 377 US 533 (1964) (using the Equal Protection Clause to apply the one person, one vote principle to legislative apportionment). See John Hart Ely, *Democracy* and Distrust 116-25 (Harvard, 1980).

³⁶ Arrow's theorem itself understates the indeterminacy in democratic social choice rules. The theorem addresses only the conditions under which voting rules will yield a stable equilibrium, given its assumptions. But the equilibrium, even if found, may not be socially optimal. Suppose, for example, that three voters must choose between two options, A and B. Two voters prefer A and one prefers B. Under Arrow's theorem this distribution results in a stable equilibrium in which A is chosen. But A is socially optimal only if the strength of the two voters' preferences for A over B is greater than the strength of the third voter's preference for B over A. Because of its assumption that interpersonal utilities cannot be cardinally compared, Arrow's theorem cannot even address this issue. See the discussion of Arrow's theorem in text at notes 61-75.

issues, and we cannot say with any certainty that any one is best calculated to identify "social" well-being. Although the given examples are stylized and sometimes extreme, the problem is not. Plausible situations can be hypothesized, even for voting mechanisms based on Kaldor-Hicks efficiency, where the outcome conflicts with our intuitive notion of what the real public choice was. The ultimate social choice is a function of both (1) individual preference, and (2) the institutional rule that we have decided upon for aggregating individual preference into a social outcome.³⁷

The selection of one mechanism over another is purely normative, depending upon a number of assumptions such as: (1) whether each person's preferences are to be counted equally; (2) whether, for the sake of determinacy, we should trade off some other value, such as equality of representation; (3) whether the strength of measured preferences should depend on wealth, or willingness to pay; (4) whether preferences are to be ranked cardinally in some *other* way than by willingness to pay; (5) whether subjective pain or pleasure should be counted in the process; and (6) whether ordinal or even cardinal comparisons of interpersonal utilities are permitted.

Not only do different methods of counting individual preferences yield different results, but no social choice process is sophisticated enough to count every individual preference. Ballots tend to force voters to think only of the alternatives presented on the ballot, even though many other alternatives exist that may ultimately have to be weighed against those presented. Many preferences are not deemed widely enough supported to find their way onto a ballot. But in close contests a preference supported by only a small number can determine the outcome, if its presence affects the preference rankings of others. A perfect social choice system would have to permit voters to rank and weigh *all* their preferences on every issue. Clearly no system comes close.

Notwithstanding these ambiguities, legal policy makers must choose some method of aggregating individual preferences into social choices. In doing so they must recognize that market-expressed preferences create important incentives, but they must also treat

³⁷ For conflicting views of this problem, see Jules L. Coleman, Markets, Morals and the Law 295-99 (Cambridge, 1988); and William H. Riker, Liberalism Against Populism: A Confrontation Between the Theory of Democracy and the Theory of Social Choice 29-40 (W. H. Freeman, 1982).

people in some economically meaningful way as equals. The next section addresses one important alternative to market mechanisms such as Kaldor-Hicks efficiency: the one person, one vote concept.

B. The Measure of Well-Being in a Democratic System

One important difference between market-based allocations of resources and allocations resulting from the command of a democratic sovereign is that while markets take dollars (or some monetary equivalent) as their basic unit of measure, a perfectly functioning democracy takes *voters*. In a democratic system every person has one vote, regardless of wealth. As a result, while market-based policies tend to maximize *wealth*, policies created in a pure (non-representative) democracy tend to maximize the number of individual beneficiaries. This is "the democratic bias."

This discussion assumes that each person votes her own utility ("self-interest") and that votes themselves cannot be traded. The utility preferences reflected in votes may be both "internal" and "external": people have preferences respecting the amount of goods and services they wish for themselves, and they may also have preferences regarding what they want delivered to other people.³⁸ Further, a person's utility is not necessarily the same as his wealth. Individuals are not wealth maximizers when competing interests must be traded away, although most probably prefer more wealth to less if all other things are equal. Individual voters frequently support legislation even though the legislation will reduce their wealth. For example, political liberals with good incomes support minimum wage laws even though they are likely to feel the laws' effect only in price increases in the goods and services they purchase.

Perhaps a voter's support of laws that are not in his financial interest can be explained by a lack of voter education; voters support policies because they do not know the policies will cost them

³⁸ For this reason I will henceforth avoid using the ambiguous term "self-interest" to describe voter behavior, although this term is used in the literature on public choice. See Dwight R. Lee, Politics, Ideology, and the Power of Public Choice, 74 Va L Rev 191 (1988). Compare Daniel A. Farber and Philip P. Frickey, Integrating Public Choice and Public Law: A Reply to DeBow and Lee, 66 Tex L Rev 1013, 1016 (1988) (on whether ideology or "self-interest" determines voting). See also Geoffrey Brennan and James Buchanan, Voter Choice: Evaluating Political Alternatives, 28 Am Behav Scientist 185 (1984).

If self-interest refers to utility it is probably a tautology to say that people always vote their self-interest. But they may not always vote their self-interest if "self-interest" refers to wealth. People's utility curves are not generally the same as their wealth curves; for example, certain policies may increase a person's utility even though they decrease her wealth.

money. But often this explanation will not work. Nearly all people have values that compete with wealth in their hierarchy of desires. Further, the democratic bias favors legislation that maximizes the number of beneficiaries, rather than legislation that maximizes wealth. Imagine a society of one hundred people in which thirty are unskilled workers and the other seventy are well paid entrepreneurs or professionals. Suppose further that this society is a pure democracy-every person votes by secret ballot on every legislative proposal. The proposal at hand will increase the minimum wage substantially above the current level. All thirty unskilled workers vote for the proposal, and twenty-one of the seventy highly paid people vote for the proposal too, even though the minimum wage law will force higher wages or a higher price for the goods and services they purchase. These twenty-one vote for the minimum wage law because they believe that a society with such a law is more just than a society without one.

The minimum wage statute is clearly inefficient under traditional neoclassical criteria for allocative efficiency. Whenever a resource is priced at more than its marginal cost (the minimum amount necessary to keep the resource on the market), an inefficient combination of resources will be consumed. But what is the effect of the statute on social utility? The thirty unskilled workers who voted for the statute probably obtain positive utility: assuming they all keep their jobs, their incomes will rise by more than their cost of living. Even if some end up losing their jobs, ex ante the expected value of the statute to each unskilled worker is probably positive. The forty-nine people who vote against the statute stand to lose both wealth and utility. The twenty-one liberals who vote for it, however, stand to lose wealth but gain utility: in their hierarchy of values the knowledge that others are earning what they deem a minimum subsistence wage is more "valuable" than the dollars that such a policy will cost them.

Unfortunately, the utility effects of legislation cannot generally be measured by economic criteria, because that would require interpersonal utility comparisons. Even with this simple hypothetical vote in a tiny society, the utility effects—the subjective pleasure and harm—of the legislation are unknown. The individual utility gains of the fifty-one people who voted for the statute may be very small, while the individual utility losses of the forty-nine opponents quite large. In that case, the legislation would be utilityreducing. The important point, however, is that to say that the legislation is not wealth-maximizing, or allocatively efficient, is to say absolutely nothing about its utility effects. One might criticize the above model as inefficient because the twenty-one liberals who vote for the minimum wage statute are "free riding" on the forty-nine opponents of the statute. If the liberals wanted to make the thirty unskilled workers better off, they could simply make voluntary contributions out of their own pockets.³⁹ By voting for the minimum wage ordinance, however, the liberals can force *all seventy* of the wealthy people in this community to make contributions to the unskilled workers. Another related critique is that people often vote for programs they agree with ideologically because the "cost" of voting is infinitesimally small.⁴⁰ In a large society each person knows his vote has virtually no impact on the outcome of the election. Therefore he votes for programs he agrees with ideologically because the vote gives him satisfaction without significantly affecting the program's chance of passage.

But an equally plausible explanation for the passage of the legislation is that most liberal voters do not individually possess enough wealth to materially raise the standard of living of more than a handful of others. Further, each voter may feel that organized charities cannot make up for great inequality in income distribution. As a result the voter prefers legislatively-enforced wealth transfers.

Whether market-based allocations of resources (maximizing wealth) are better than democracy-based allocations (maximizing the number of beneficiaries), or vice-versa, is strictly a normative question. A protagonist of Chicago School law and economics, or of cost-benefit analysis, can certainly create scenarios in which maximizing wealth seems intuitively better. For example, suppose that a legislative policy makes 49 percent of the people better off by \$1000 apiece, but injures 51 percent of the people by \$1 each. The 51 percent will vote against the policy and defeat it, even though the policy, if adopted, would greatly enhance social wealth. In this case, maximizing wealth is probably "better" than maximizing the raw number of beneficiaries.

But the protagonist of democracy-based allocation can concoct equally plausible (or implausible) scenarios. Suppose that a society consists of one hundred people, each with \$10. A proposed policy will cost each person in this society \$9, but will give one person

³⁹ See Steven Kelman, Making Public Policy: A Hopeful View of American Government 255-59 (Basic, 1987); and Gordon Tullock, The Charity of the Uncharitable, 9 W Econ J 379, 386-89 (1971).

⁴⁰ See Lee, 74 Va L Rev at 193-95 (cited in note 38).

\$1,000. The policy thus impoverishes ninety-nine people, but as a result one person acquires wealth greater than the total loss to the other ninety-nine. Clearly, we can say that in some meaningful sense this society is not better off as a result of the policy, even though it is wealthier. Maximizing the number of beneficiaries (or, in this case, minimizing the number of victims) may be "better" than simply maximizing the amount of wealth without accounting for its distribution.

If votes could be freely traded, the democracy-based allocation might end up resembling the wealth-maximizing policy.⁴¹ The person who stands to gain \$1 from a policy would sell his vote for \$1.01; and the person who stands to lose \$1000 would be willing to pay a bribe to others of \$999.99. The Coase theorem⁴² predicts that the voters will bargain their way to an efficient solution. However, such transactions in electoral votes are not likely to occur in a pure democracy.⁴³ First of all, agreements to sell votes are either not enforceable or are positively illegal.⁴⁴ Second, if ballots are secret there is no easy way to verify that a person whose vote was "bought" really voted the way he promised. If I stood to gain \$1 from a policy, for \$1.01 I would "sell" my vote by promising to vote against the policy; I would then go ahead and vote for the policy anyway. The "buyer" of my vote would never be the wiser.

In a pure democracy in which votes could not be traded we would expect outcomes that maximize not the net utility or wealth gain, but rather the net number of gainers. The same should be true of referenda, in which the citizens approve or disapprove pro-

⁴¹ It would resemble, but might not be identical to, simple wealth maximization. The fact that each person has one vote on issues tends to level income. For example, assume a society consisting of A, with \$10, and B and C, with \$1 each. A policy is under consideration that would tax A \$6, cost \$2 to operate, and transfer \$2 each to B and C. A might pay B \$2.50 to vote against the policy, which would then fail by one vote. But as a result A would be \$2.50 poorer and B would be \$2.50 richer. This transfer would not occur in a pure market system.

⁴² R. H. Coase, The Problem of Social Cost, 3 J L & Econ 1, 8-15 (1960).

⁴³ In a pure democracy, such as that of classical Athens, each person receives a vote that she uses to make policy choices directly. In most modern democracies, individuals elect representatives to make policy choices on their behalf. This latter system, commonly termed republicanism, characterizes the American system of government from top to bottom.

⁴⁴ See, for example, Brown v Hartlage, 456 US 45, 54-55 (1982) (state has power to prohibit the buying of votes); United States v Carmichael, 685 F2d 903 (4th Cir 1982) (applying federal statute forbidding vote buying); and Nichols v Mudgett, 32 Vt 546 (1860) (refusing to recognize legality of agreement to vote for and support a candidate for town representative in exchange for cancellation of pre-existing debt). See also Commonwealth v Callaghan and Holloway, 2 Va Cas 460 (1825) (refusing to enforce agreement under which two justices of the peace agreed to vote for one another as commissioner and clerk).

posed legislation by secret ballot. Voters in a referendum may be amenable to advertising or the dissemination of misinformation, but they should not be amenable to "lobbying" unless they are neutral on the question or the lobbyist gives them something of equal or greater value in exchange. In a republican system, however, elected representatives can and do trade their votes to a certain degree, although the trades are in kind rather than for money. Laws against bribery generally prevent representatives from selling their votes for cash, but elected representatives often engage in "logrolling"; they agree to vote for one another's policies or projects, with the possible result that too many such policies or projects are approved.⁴⁵ They may also respond in noncontractual ways to political campaigns and lobbying activities. Ultimately, however, elected representatives must answer to the electorate, and the electorate is not in the same position to trade votes.

C. Public Choice Theory and the Impact of the Democratic Bias

The discussion so far has examined a pure democracy, where the electorate votes on policies directly. What is far less clear is the degree to which the "democratic bias" influences legislation in a republican form of government where the electorate votes on very few policy questions directly, but elects others, such as city council members, state legislators, governors, Congress and the President to develop policies. Before attributing to republicanism the same democratic bias identified in a pure democracy, we must consider the sizeable body of literature suggesting that various interest groups, rather than the electorate themselves, determine policy in a republican system.⁴⁶

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⁴⁵ On logrolling see Robert D. Tollison, *Public Choice and Legislation*, 74 Va L Rev 339, 354-55 (1988); James B. Kau and Paul H. Rubin, *Self-Interest, Ideology, and Logrolling in Congressional Voting*, 22 J L & Econ 365 (1979); Dennis C. Mueller, *Public Choice II* 82-87, 91-95 (Cambridge, 1989); Theodore J. Lowi, *The End of Liberalism: Ideology, Policy, and the Crisis of Public Authority* 146-56 (Norton, 1969); and James M. Buchanan and Gordon Tullock, *The Calculus of Consent* 265-81 (U Mich, 1962). For the theory that logrolling leads to excessive public expenditure, see Tullock, 67 J Pol Econ 571 (cited in note 30).

⁴⁶ See, for example, Kay Lehman Schlozman and John T. Tierney, Organized Interests and American Democracy (Harper & Row, 1986); Richard A. Posner, The Federal Courts: Crisis and Reform 286-93 (Harvard, 1985); Frank H. Easterbrook, Foreword: The Court and the Economic System, 98 Harv L Rev 4, 14-18, 42-58 (1984); Richard A. Epstein, Toward a Revitalization of the Contract Clause, 51 U Chi L Rev 703, 710-17 (1984); Gary S. Becker, A Theory of Competition Among Pressure Groups for Political Influence, 98 Q J Econ 371 (1983); and William M. Landes and Richard A. Posner, The Independent Judiciary in an Interest-Group Perspective, 18 J L & Econ 875 (1975). See also sources cited in notes 47-50.

Under what might be called the consensus democracy (public interest) theory of interest groups, various groups lobby for or against legislation. Money, influence, and argument flow more or less in proportion to the economic interests at stake, and the result is relatively efficient legislation. For example, if legislation benefits one group by 10X and injures another group by X, the beneficiaries will be willing to commit more resources than the victims and will tend to persuade the elected representatives to support the proposal. This theory of interest group politics dominated political science literature in the 1950s,⁴⁷ as well as some legal literature.⁴⁸ The theory was generally optimistic, in that something akin to the "public interest" eventually won out, despite the self-interest of most participants in the process.

Under the more recent⁴⁹ and pessimistic theory of "public choice," however, the correlation between interest group power and the wealth at stake is very weak.⁵⁰ Interest groups that are small, single-minded, and well-organized tend to convey their messages more clearly than large interest groups with diverse agendas. This produces a significant bias in the legislative process in favor of smaller, more efficient special interest groups. Legislation often favors the interests of a minority and may be quite contrary to the interests of the majority. This bias exists in a republican system of government but not in a pure democracy, where interest groups are unable to exert sufficient pressure on dispersed voters. Thus, public choice theory suggests that republican legislative systems produce socially useless or even harmful laws.⁵¹ In fact, some areas of

⁴⁷ See, for example, Robert A. Dahl, Who Governs? Democracy and Power in an American City (Yale, 1961); Robert A. Dahl, A Preface to Democratic Theory (U Chi, 1956); Earl Latham, The Group Basis of Politics (Cornell, 1952); and David B. Truman, The Governmental Process: Political Interests and Public Opinion (Alfred A. Knopf, 1951).

⁴⁸ Henry M. Hart, Jr. and Albert M. Sacks, *The Legal Process: Basic Problems in the Making and Application of Law* (Cambridge, 1958).

⁴⁹ "Public choice" actually dates back to the late nineteenth century. See Henry C. Adams, *The Relation of the State to Industrial Action*, 1 Publications, Am Econ Assn 471 (1887) (describing regulatory capture); and Arthur F. Bentley, *The Process of Government:* A Study of Social Pressures chs 10-15 (U Chi, 1908) (same). For more recent commentary, see Herbert Hovenkamp, *The Political Economy of Substantive Due Process*, 40 Stan L Rev 379 (1988) (describing early twentieth-century substantive due process as a mechanism for countering regulatory capture); and Herbert Hovenkamp, *Regulatory Conflict in the Gilded Age: Federalism and the Railroad Problem*, 97 Yale L J 1017 (1988) (on regulatory capture and the railroads in the late nineteenth century).

⁶⁰ On public choice generally, see Daniel A. Farber and Philip P. Frickey, *The Juris*prudence of Public Choice, 65 Tex L Rev 873 (1987); and Tullock, *Economics of Income Redistribution* chs 2, 3 (cited in note 21). See also Landes and Posner, 18 J L & Econ 875 (cited in note 46).

⁵¹ The earlier literature is summarized well in Richard A. Posner, Theories of Economic

federal constitutional law, such as due process, equal protection, and takings law, may be concerned with limiting the power of legislatures to grant favors to politically powerful interest groups.⁵² The victims of takings may not be the minority, as in classical welfare-liberal Takings Clause analysis,⁵³ but rather the majority who have been legislatively robbed by a well-organized minority.⁵⁴

One criticism of public choice theory is that few entry barriers seem to exist in the market for interest groups. In fact, the First Amendment protects their formation. If that is the case, we would expect to see more efficient interest groups organized on the side representing the largest amount of gross wealth. But large interest groups are seriously plagued by free rider problems—each member of a group knows that her own contribution will have a barely measurable impact on the group's activities, so she will be inclined to let others make the contributions.⁵⁵

Further, individual losses on the public interest side of a legislative debate may be very small, while the individual gains on the pork barrel side are large. For example, an ordinance setting a low limit on the number of taxicabs in a city will benefit existing taxicab companies, but this benefit likely will be exceeded by the aggregate injury to (a) potential new entrants into the taxicab mar-

⁵³ See, for example, Frank I. Michelman, Property, Utility, and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law, 80 Harv L Rev 1165 (1967).

Regulation, 5 Bell J Econ & Mgmt Sci 335 (1974); Gary S. Becker, Pressure Groups and Political Behavior, in Richard D. Coe and Charles K. Wilber, eds, Capitalism and Democracy: Schumpeter Revisited 120 (Notre Dame, 1985). See also Jerry L. Mashaw, The Economics of Politics and the Understanding of Public Law, 65 Chi Kent L Rev 123 (1989); Cass R. Sunstein, Interest Groups in American Public Law, 38 Stan L Rev 29 (1985); and Posner, Economic Analysis of Law at 496-499 (cited in note 10). See generally Mueller, Public Choice II (cited in note 45); and Buchanan and Tullock, The Calculus of Consent (cited in note 45).

⁵² See Sunstein, 38 Stan L Rev at 48-59 (cited in note 51).

⁵⁴ See, for example, Cass R. Sunstein, Naked Preferences and the Constitution, 84 Colum L Rev 1689, 1730-32 (1984); and Jonathan R. Macey, Promoting Public-Regarding Legislation Through Statutory Interpretation: An Interest Group Model, 86 Colum L Rev 223 (1986). See also Richard A. Epstein, Takings: Private Property and the Power of Eminent Domain (Harvard, 1985); Epstein, 51 U Chi L Rev 703 (cited in note 46); Jerry L. Mashaw, Constitutional Deregulation: Notes Toward a Public, Public Law, 54 Tulane L Rev 849 (1980). Alternatively, however, one could argue that the Constitution was designed to protect the bargains struck between legislatures and interest groups. See Bruce A. Ackerman, The Storrs Lectures: Discovering the Constitution, 93 Yale L J 1013, 1015 (1984); and Landes and Posner, 18 J L & Econ at 894 (cited in note 46).

⁵⁵ See Mancur Olson, The Rise and Decline of Nations 18 (Yale, 1982); and Peter H. Aranson, American Government: Strategy and Choice 79-82 (Winthrop, 1981). See generally Mancur Olson, The Logic of Collective Action (Schocken, 1965); John M. Hansen, The Political Economy of Group Membership, 79 Am Pol Sci Rev 79 (1985); and Oliver Kim and Mark Walker, The Free Rider Problem: Experimental Evidence, 43 Pub Choice 3 (1984).

ket, and (b) taxicab riders. The individual injuries, however, are small because they are spread over so many people, and the potential new entrants may not even exist. As a result, the existing taxicab companies will organize much more efficiently in favor of the limit than prospective entrants or consumers will organize against it.

The public choice account of legislative behavior has considerable theoretical force. But a good deal of empirical evidence disputes its claims, suggesting that ideology and voter preferences are in fact not overwhelmed by interest group pressures in the legislative process.⁵⁶ Enormous areas of legal policy making, such as the civil rights legislation of the 1960s and the deregulation movement of the 1980s, seem quite inconsistent with public choice theory. In both these cases representatives risked the wrath of powerful single interest groups in order to do what the public wanted or what they felt as a matter of ideology was the right thing to do.⁵⁷

The empirical literature on public choice persuasively undermines any broad view that congressional votes are "for sale" in the short-run to special interest groups. Rather, the literature suggests that legislators respond to three factors, in this order: (1) their desire for re-election by their constituents; (2) their personal political and economic beliefs; and (3) the short-run influence of special interest groups. The influence of special interests is strongest when the statutory provision at issue is narrow or merely technical, the legislator feels that her constituency will not care one way or the other, and the provision does not ultimately conflict with the legislator's own ideology.⁵⁸

⁵⁶ Most empirical studies reject the conclusion that interest groups trump ideology and voter preferences. See, for example, Judith Goldstein, *The Political Economy of Trade: Institutions of Protection*, 80 Am Pol Sci Rev 161 (1986); Keith T. Poole and R. Steven Daniels, *Ideology, Party, and Voting in the U.S. Congress, 1959-1980, 79 Am Pol Sci Rev 373* (1985); Joseph P. Kalt and Mark A. Zupan, *Capture and Ideology in the Economic Theory of Politics, 74 Am Econ Rev 279* (1984); W. P. Welch, *Campaign Contributions and Legislative Voting: Milk Money and Dairy Price Supports, 35 W Pol Q 478* (1982); Robert A. Bernstein and Stephen R. Horn, *Explaining House Voting on Energy Policy: Ideology and the Conditional Effects of Party and District Economic Interests, 34 W Pol Q 235* (1981); Robert A. Bernstein and William W. Anthony, *The ABM Issue in the Senate, 1968-1970: The Importance of Ideology, 68 Am Pol Sci Rev 1198* (1974); and Edward J. Mitchell, *The Basis of Congressional Energy Policy, 57 Tex L Rev 591* (1979). See generally Daniel A. Farber, *Democracy and Disgust: Reflections on Public Choice, 65 Chi Kent L Rev 161* (1989).

⁶⁷ See William N. Eskridge, Jr., Politics Without Romance: Implications of Public Choice Theory for Statutory Interpretation, 74 Va L Rev 275, 320-22 (1988).

⁵⁸ See Arthur T. Denzau and Michael C. Munger, *Legislators and Interest Groups: How Unorganized Interests Get Represented*, 80 Am Pol Sci Rev 89 (1986) (interest groups

Lobbying groups can organize in as large a market as they choose. For example, the cigarette manufacturing lobby has the same right to operate in Massachusetts as in North Carolina. If lobbying dominated legislative choices, we would expect the tobacco lobby to have as much success with a senator from Massachusetts as with a senator from North Carolina. Clearly it does not. In most areas of law, basic legislation is determined at least as much by electoral preference and representative ideology as by special interest lobbies.

Legislation, then, reflects a democratic bias: the legislator listens to voters, and the number of votes, not the number of dollars, controls. Small businesses get inefficient statutes like the Robinson-Patman Act⁵⁹ (which protect them from larger, low-cost competitors) not merely because they have better lobbyists, but because small businesses often represent more votes in the ballot box than the large firms.⁶⁰ This democratic bias is important even though it does not control all votes. It can be expected to influence outcomes even if lobbying or campaign contributions by special interests are important as well.

D. The General Irrelevance of Arrow's Paradox

In addition to the influence of special interest groups, a second frequently expressed source of doubt about the ability of the legislative process to find the public interest, or to maximize social well-being, is Arrow's impossibility theorem.⁶¹ The theorem applies equally to both Athenian, or "pure" democracy, and to republicanism. Arrow showed that under a given set of assumptions,⁶² taken

are more successful in winning a representative's vote when the representative's constituency does not care strongly about the outcome).

⁵⁹ Robinson-Patman Price Discrimination Act, codified at 15 USC § 13 (1982).

⁶⁰ Consumers pay higher prices under a regime of small firms, but consumer preferences are complex. Many consumers may prefer a regime of small businesses, even if prices are a little higher. One certainly cannot conclude that consumers consistently vote for efficient, big business.

^{e1} Kenneth J. Arrow, Social Choice and Individual Values (John Wiley & Sons, 2d ed 1963).

⁶² The assumptions are:

¹⁾ Unanimity, or weak Paretianism: if all voters prefer A to B, A will be chosen;

²⁾ Nondictatorship: no single individual can control the outcome or the decisions of other voters;

³⁾ Range of Alternatives: there must be at least three alternatives from which the voters may select freely; and within any given list of alternatives, all rankings are permissible.

⁴⁾ Independence of Irrelevant Alternatives: an individual's choice between two options must depend solely on a comparison of his own preferences for these options; and

to be inherent in democracy,⁶³ no unique social welfare function may flow predictably from majority voting. More precisely, Arrow's impossibility theorem concludes that one cannot derive a specific rule for ranking social welfare states based exclusively on voters' ordinally-ranked individual preferences among three or more alternatives.

The extent to which Arrow's theorem undermines the ability of legislatures or courts to determine the public interest is disputed. A growing consensus has formed that the conditions for Arrow's theorem must be strictly specified, and that the conditions are not necessarily satisfied in actual legislative bodies.⁶⁴ For example, if a majority of voters have the same ordinal ranking for the preferences at issue, that ranking will be a stable, equilibrium outcome, regardless of the path taken to it or the number of votes taken.⁶⁵ Indeterminacy thus exists mostly at the margins.⁶⁶

5) Transitivity: if the collective decision selects A over B and B over C, it must also select A over C.

⁶³ The assumption of independence of irrelevant variables, which specifies ordinalism, intuitively seems consistent with democracy; ordinalism treats people's preferences equally, rather than attempting to measure their relative strengths and weaknesses. On the other hand, the assumption of Paretianism, which strictly speaking makes it impossible to defend as economically efficient any policy to which at least one person objects, seems quite inconsistent with democracy.

⁶⁴ Some of this literature is surveyed in Farber and Frickey, 65 Tex L Rev at 901-06 (cited in note 50).

⁶⁵ Gerald H. Kramer, On a Class of Equilibrium Conditions for Majority Rule, 41 Econometrica 285 (1973); and James M. Buchanan, Individual Choice in Voting and the Market, 62 J Pol Econ 334 (1954).

Suppose that a deliberative body has five voters (V1 - V5) and must choose among three possibilities, X, Y, and Z. The voters' individual preferences are as follows:

	V1	V2	V 3	V4	V 5
Choice # 1	x	x	X	Y	Z
Choice # 2	Y	Y	Y	Z	x
Choice # 3	Z	Z	Z	x	Y

If the initial vote is among all three alternatives, X wins on the first ballot. If the initial vote is between X and Y, X wins; and in a second vote between X and Z, X wins. If the initial vote is between Y and Z, Y wins; but in a second vote between Y and X, X wins. In short, X always wins.

⁶⁶ This observation also suggests that Judge Easterbrook's argument using Arrow's theorem to predict inconsistencies in Supreme Court decisions overstates the case. Frank H. Easterbrook, Ways of Criticizing the Court, 95 Harv L Rev 802, 823-32 (1982). We would not ordinarily expect inconsistencies if there are majority opinions; we would expect a higher level of inconsistences when there are only plurality opinions. But this is pretty much

See Arrow, Social Choice and Individual Values ch 3 (cited in note 61); Mueller, Public Choice II at 384-400 (cited in note 45). Complete transitivity is in fact not a prerequisite. See Sen, Choice, Welfare and Measurement at 111, 164-66 (cited in note 4).

The doubts about the applicability of Arrow's paradox to the legislative process are well-known and I do not wish to replow turned ground. I add only an observation about the strict requirement of independence of irrelevant alternatives,⁶⁷ which is generally overlooked by Chicago School writers who use Arrow's theorem to argue that group voting can never yield a stable social welfare function.⁶⁸

The requirement of the independence of irrelevant alternatives means that the social welfare function must be expressed purely in terms of ordinal utilities that are not comparable across persons. Once interpersonal comparisons of utility are permitted, impossibility no longer obtains.⁶⁹

To borrow a simple example of Arrow's theorem from Farber and Frickey:

[A]ssume that three children—Alice, Bobby, and Cindy—have been pestering their parents for a pet. The parents agree that the children may vote to have a dog, a parrot, or a cat. Suppose each child's order of pet preferences is as follows: Alice—dog, parrot, cat; Bobby—parrot, cat, dog; Cindy—cat, dog, parrot. In this situation, if pairwise voting is required, then majority voting cannot pick a pet⁷⁰

⁶⁷ Assumption 4 in note 62.

^{es} See, for example, Easterbrook, 95 Harv L Rev at 814-31 (cited in note 66). See also Macey, 86 Colum L Rev at 257-60 (cited in note 54).

⁶⁹ See John Bonner, Introduction to the Theory of Social Choice 61 (Johns Hopkins, 1986); Amartya Sen, Social Choice and Justice: A Review Article, 23 J Econ Lit 1764, 1771-72 (1985). See generally Jon Elster and Aanund Hyland, eds, Foundations of Social Choice Theory (Cambridge, 1985). For Arrow's own explanation, see Kenneth J. Arrow, Current Developments in the Theory of Social Choice, 44 Social Res 607 (1977).

Likewise, Arrow's theorem requires that the participants consider only individual *utility* information. But in a legislative proceeding nonutility information—for example, questions about constitutionality—are often important. For example, suppose a state has twenty-four very poor legislative districts and five extremely wealthy ones. A proposal is made to take 90 percent of the property in the five wealthy districts and transfer it through various means to residents of the poor districts. The plan is patently unconstitutional, under both the Takings and Equal Protection Clauses. Arrow's theorem requires that the legislators totally disregard the constitutionality issue and vote only their individual preferences. See Sen, *Choice, Welfare and Measurement* chs 15, 16 (cited in note 4). See also Amartya K. Sen, *Collective Choice and Social Welfare* chs 7, 9 (Holden-Day, 1970).

⁷⁰ Farber and Frickey, 65 Tex L Rev at 902 (cited in note 50).

the conventional wisdom on Supreme Court decisions—certainly not a radical departure from it.

To the extent that, as Judge Easterbrook suggests, Arrow's theorem applies to the Supreme Court at all, it applies equally to common law and legislative decisions. Although the United States Supreme Court does not make a great many common law decisions anymore, state supreme courts and federal circuit courts do. Judge Easterbrook's constraints apply any time two or more judges must decide a case and the case permits three or more outcomes. Thus, under Judge Easterbrook's own critique, there should be as much indeterminacy about common law rules as there is about statutory construction.

As Farber and Frickey continue in a footnote,

A majority (Alice and Cindy) will vote for a dog rather than a parrot; a majority (Alice and Bobby) will vote for a parrot rather than a cat; and a majority (Bobby and Cindy) will vote for a cat rather than a dog.⁷¹

The result will be cyclical voting, and the outcome will be dictated largely by how the agenda is set. For example, if the parents (who hate parrots and know the children's preferences) suggest, "Let's choose first between a dog and a parrot," the parrot will lose. On the second vote the children will vote between a dog and a cat, and the cat will win. But if the parents behave less strategically, they may instruct the children to vote between a cat and dog first. The cat will win. On the second ballot they will choose between the cat and the parrot and the parrot will win. The person who sets the agenda can control the outcome.

In this case the legislative outcome ex ante is indeterminate: we cannot predict which pet will be purchased until we know the sequence in which the votes are taken. But this is so only because the preferences are ranked ordinally and are not compared across persons. But if the preferences were ranked *cardinally* and the cardinal rankings of different persons could be compared and quantified, the outcome would be determinate unless the three preferences were identical.

One important effect of ordinality is that the preferences are treated as if they are identical. For example, if one were to assign the arbitrary welfare values "3" to each child's first choice, "2" to each child's second choice, and "1" to each child's third choice, the outcome would *still* be indeterminate because the total welfare produced by each pet would be six, and the policy maker would be indifferent as to which pet is purchased. However, if the preferences were ranked cardinally and one pet produced more welfare than the other two, the indeterminacy would disappear, at least if the children (or their parents) selected the choice that provided the greatest total utility, as we would expect elected representatives to do.⁷²

⁷¹ Id at 902 n 172.

⁷² For example, suppose the following rankings by numbers that express constant units of cardinal utility comparable across the three children:

The possibility of cardinality arises in several ways in the legislative process, thereby frustrating this precondition for Arrow's theorem. First, ideology tends to create determinacy in cases requiring objective welfare judgments about matters on which there is consensus. Examples include the consensus that direct money transfers should be used to help the poor rather than the rich, that race discrimination makes society on balance worse off, and that the drug problem requires governmental attention.⁷³ On these issues indeterminacy of outcome should be the exception rather than the rule.

More importantly, strict ordinality is inconsistent with both Kaldor-Hicks efficiency and cost-benefit analysis, which produce *cardinal* comparisons of wealth effects. For example, Arrow's condition of independence of irrelevant alternatives requires that if Senator A has a weak preference for a statute, perhaps because it will enrich a few of his constituents by a few thousand dollars, he will totally ignore tens of millions of dollars in costs imposed by the statute on people outside his state. Both Kaldor-Hicks assessments of efficiency and cost-benefit analysis permit cardinal comparisons of alternatives among elected voters. The fact that the cardinal comparisons are of wealth rather than of utility is irrelevant to Arrow's theorem—any cardinal ordering can create an equilibrium, provided that it does not produce equal rankings of two or more choices.

	Cat	Dog	Parrot
Alice:	1	5	2
Bobby:	2	_1	3
Cindy:	4	3	0

Now all three children, if they are true utilitarians, will vote for a dog on the first ballot. If the first ballot was a choice between a cat and a parrot, they would vote for a dog on the second ballot. Even if the children were biased to prefer their self-interest, an equilibrium could result as long as they paid *some* attention to the value of the "community." For example, Bobby obtains two more units of satisfaction from a parrot than from a dog, but he knows that Cindy and Alice both get three more units from a dog than a parrot. Thus Bobby's two units must be traded against his siblings' six units. If he is swayed by this comparison (he may or may not be), he may vote in a way that will break the cycle. If any substantial number within a legislative body decide to vote some shared perception of the public interest, rather than individual interests, then there can be an equilibrium outcome.

⁷³ Another way of stating this is that common basic ideology may tend to make preferences "single-peaked," or capable of being ranked along a single line. For example, almost all of us agree that spending money on national defense is good, but we differ as to how much money should be spent. If preferences are single-peaked the median voter will define the equilibrium outcome. See Duncan Black, On the Rationale of Group Decision-Making, 56 J Pol Econ 23 (1948); and Mueller, Public Choice II at 64-66, 392-393 (cited in note 45).

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If such cardinal assessments play any role in determining a representative's vote, the strict requirement of independence of irrelevant alternatives has not been met. This is particularly true when members of Congress are guided by some shared perception of the national interest (as opposed to the interests of their own states or districts) or when state legislators have some perception of the interests of their state as a whole.⁷⁴ The condition may also fail when a legislative committee engages someone to do a costbenefit analysis of proposed legislation and the report concludes that the legislation is or is not beneficial. Indeterminacy is most likely to occur when there is no agreement as to what is best for society, as when cost-benefit analysis determines that gains and losses are more or less equal, or when each representative ignores such cardinal comparisons and votes only personal preferences. But certainly one cannot correctly speak of the "logical impossibility" of consistent decisions.75

III. THE EFFICIENCY OF STATUTES AND THE COMMON LAW

A. The Efficiency Implications of the Democratic Bias

Modern economic science, which operates under positivist constraints, requires some kind of surrogate for utility, such as revealed market preference. An economist might therefore be skeptical about theories that use utility rather than wealth to analyze voter behavior. But any model based on the premise that voter behavior can be explained by its impact on voter wealth ignores the fundamental fact that the electorate votes its subjective preferences, of which wealth is only one. It is not much of a critique of a legislative enactment to say that it fails to maximize wealth when those who voted for the legislation did not seek wealth maximization in the first place.

This observation is important for understanding a pervasive issue in the modern law and economics debate: the relative "efficiency" of the common law as opposed to legislation. We have seen that legislation exhibits a democratic bias in favor of treating people as voting equals, and thus of maximizing the *number* of beneficiaries rather than total wealth. This forms the basis for a critique of the Chicago School theory that the common law is generally

⁷⁴ Interestingly, it also suggests that the impact of Arrow's theorem should be less when representatives are elected at large rather than by districts, unless each representative in an at-large system is strictly responsive to particular interest groups.

⁷⁸ See Macey, 86 Colum L Rev at 257 (cited in note 54). These ideas are explored further in Herbert Hovenkamp, Arrow's Theorem: Ordinalism and Republican Government, 75 Iowa L Rev — (1990) (forthcoming).

more efficient than legislation,⁷⁶ and of the concomitant anti-legislative bias in Chicago School policy analysis.⁷⁷

The argument that the common law is more efficient than legislation generally begins with the *wealth* effects of the common law rather than its utility effects. Why this is so may not be immediately obvious since markets tend to maximize both wealth and utility,⁷⁸ and the argument for the common law's efficiency is based on the notion that the common law mimics the market more closely than does legislation. But the common law generally involves nonmarket transactions, and we measure the efficiency of such transactions by using wealth, or economic surplus, as a surrogate for utility.

The historical common law may have "mimicked the market" more often than legislation did, yet this did not necessarily make it utility-enhancing. The common law developed at a time when legal policy makers had neither accurate data nor the methodology necessary to examine the relationship between human welfare and state policy in any systematic fashion. These analytic tools emerged with the rise of the social sciences in the nineteenth and early twentieth centuries. In the absence of such information and theory, mimicking the market may very well have been the alternative that appeared most likely to increase welfare. The very concept of private law in the historical development of common-law rules was that the judge adjudicated the legal rights of the two parties before him without setting economic or social policy for all of society. As between two randomly chosen parties, and in the absence of statistical information about wealth distribution or the effects of poverty or lack of education, the rule that appeared to maximize well-being was also the rule that mimicked the market.

⁷⁸ See section VA.

⁷⁶ See, for example, Posner, Economic Analysis of Law at 495-96 (cited in note 10); see also Priest, 6 J Legal Stud at 81-82 (cited in note 10); Richard R. Nelson and Sidney G. Winter, An Evolutionary Theory of Economic Change (Belknap, 1982); William M. Landes and Richard A. Posner, Adjudication as a Private Good, 8 J Legal Stud 235 (1979); John C. Goodman, An Economic Theory of the Evolution of the Common Law, 7 J Legal Stud 393 (1978); Paul H. Rubin, Business Firms and the Common Law: The Evolution of Efficient Rules chs 1, 2 (Praeger, 1983); R. Peter Terrebonne, A Strictly Evolutionary Model of Common Law, 10 J Legal Stud 397 (1981); and Paul H. Rubin, Why is the Common Law Efficient?, 6 J Legal Stud 51 (1977).

⁷⁷ The anti-legislative bias is also supported by the Chicago School version of public choice theory. For examples of the bias, see Easterbrook, 98 Harv L Rev at 45-58 (cited in note 46); Frank H. Easterbrook, *Statutes' Domains*, 50 U Chi L Rev 533 (1983); and Richard A. Posner, *Economics, Politics, and the Reading of Statutes and the Constitution*, 49 U Chi L Rev 263 (1982).

As we have seen, the best argument for using wealth maximization, or Kaldor-Hicks efficiency, to evaluate the common and statutory law is the impossibility of measuring utility directly.⁷⁹ But that is a poor reason to use wealth maximization as a criterion for evaluating democracy-based (statutory) allocations. Regardless of whether the external observer can measure utility, members of the electorate actually *vote* their utility, not their wealth.⁸⁰ Thus, to say that the common law is more efficient than legislation because it better maximizes wealth is irrelevant because wealth itself is merely a surrogate for utility—which legislation reflects more directly.

A good deal of law and economics literature has been devoted to the question whether legislation is "efficient," or whether it is more efficient than common law rules. Efficiency, once again, is a term with high rhetorical content. Practically everyone agrees that efficiency is something we would like to have more of—even though most would agree that the proposition "efficiency is a good thing" is normative, or unscientific. Efficiency, or at least "allocative efficiency," is often used to mean the same thing as "welfare" in the literature of welfare economics.

Under this set of rules a statute that costlessly transferred a sum of money from the 1000 richest people in society to the 1000 poorest people, with no measurable effect on any other person or production process, could not be proclaimed "efficient." It is "welfare-neutral." If enforcement of such a statute imposed *any* costs on society—such as the cost in tax dollars of operating an enforcement agency—then the statute must be proclaimed inefficient.⁸¹

But this whole line of reasoning depends on a critical assumption: namely, that the dollars taken away from the richest people deprive them of the same amount of "welfare" that is then given to the 1000 poorest people. That may be so of welfare, since we have yielded that term to the economists, but it is not necessarily so of "well-being." Might a legal policy maker assume that a given sum of money in the hands of poor individuals will produce more "well-

 $^{^{79}}$ See text at notes 6-8 and Posner, The Economics of Justice at 51-59 (cited in note 8).

⁸⁰ To put this another way, the science of welfare measurement may require a surrogate (wealth) in order to account for the observer's inability to measure the real thing (subjective well-being). But using the surrogate as a basis for criticizing the real thing is a different matter. For example, the educator may devise a test in order to predict law school performance; but he would not be justified in later criticizing law school curricula because students did better or worse than the test predicted. The test is a surrogate for student performance; student performance is not a surrogate for the test score.

⁸¹ Tullock, Economics of Income Redistribution at 20-21 (cited in note 21).

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being" than that same sum in the hands of wealthy individuals, regardless of "welfare" consequences?

Of course she might. Legal policy makers make such judgments all the time. They do so not by looking at market prices, observed willingness to pay, or other criteria based on revealed "preference."⁸² Rather, legislators look at unemployment figures, literacy rates, divorce rates, housing quality, arrest rates, and other *objective* criteria that we associate with well-being. Legislation that has zero or even negative efficiency consequences might have very positive consequences for well-being, as objectively measured by such surrogates.

Of course the quality of housing is not a true measure of subjective well-being, since not all people derive the same amount of utility from a given amount of good housing. Hidden in such comparisons of objective criteria is a scientifically impermissible interpersonal comparison of utilities; this undermines any attempt to compare the amount of subjective well-being created by forcibly transferring money from wealthy A to poor B in order that B can have better housing. But even conceding that the objectively measured quality of housing is only a surrogate for subjective well-being, this kind of surrogate is no more objectionable on scientific grounds than the economist's use of surrogates such as revealed preference, which have become all but conventional within welfare economics. Nothing requires the legal policy maker to accept one set of surrogates over the other.

One result of a substitution of surrogates is that the legal policy science of studying the relationship between wealth distribution and well-being is quite distinct from the science of welfare economics. In both welfare economics and this new policy science, the use of surrogates permits the science to be "formal"; that is, mathematics and quantitative comparisons can be used to make policy choices. Although the subjective well-being of others cannot be observed, and certainly cannot be quantified across persons, the surrogate—such as willingness to pay in the case of welfare economics or housing quality in the case of the legal policy science—can be.

^{e2} Preference, incidentally, is another rhetorically loaded word: built into the economists' use of it is the premise that people "prefer" only that which they are willing to pay for.

B. The Presumed Inefficiency of Political Markets

The positive theory of public choice seeks to explain how political markets function, and generally concludes that they work poorly. As a normative study, public choice can support an argument that political markets work so poorly that they require regulation by some outside agency, such as the courts. When legislators are not doing their job the courts should intervene, often by restoring the unregulated economic market.⁸³

The premise of such an argument is that the market will do it better. That premise is driven in turn by an assumption that participants in political markets, just as the participants in economic markets, universally seek to maximize their *economic* well-being. Thus, wealth maximization analysis can serve as a basis for criticizing political markets as well as economic markets. Little thought in the public choice critique of legislation is given to alternative hypotheses—for example, that the consumers in political markets seek to maximize their total set of utilities, of which wealth is only a part.

Public choice theory in the 1980s was much like industrial organization theory in the 1950s. Earlier industrial organization theory was skeptical about unexplained practices. During the 1960s and 1970s, the Chicago School's revolution in the theory of markets, firms, and business competition rejected the notion that ambiguous business practices were presumptively anticompetitive. Much of the Chicago School's industrial organization approach consisted of finding alternative, competitive explanations for such practices.⁸⁴ Thus, any practice that has no obvious explanation is presumed efficient, even if one can come up with some alternative anticompetitive explanations. The rationale seems to be that if we wait around long enough, the correct, procompetitive explanation is likely to emerge.

Within the economic theory of public choice, no such tradition of hospitality exists. Political markets are never presumed efficient, although such a presumption may very well be warranted. For example, no one has shown that democratic societies have lower ad-

⁸³ See, for example, Easterbrook, 98 Harv L Rev 4 (cited in note 46); and Macey, 86 Colum L Rev 223 (cited in note 54).

⁸⁴ See, for example, John S. McGee, Predatory Price Cutting: The Standard Oil (N.J.) Case, 1 J L & Econ 137 (1958); Ward S. Bowman, Jr., Tying Arrangements and the Leverage Problem, 67 Yale L J 19 (1957). The history of this transformation is traced in Richard A. Posner, The Chicago School of Antitrust Analysis, 127 U Pa L Rev 925, 925-33 (1979).

justed standards of living than non-democratic societies.⁸⁵ In public choice theory ambiguous practices are assumed to be harmful rather than benign. Hypotheses supplying anticompetitive explanations are accepted very quickly, and little effort is made to seek out alternative, efficiency-driven explanations. Much of the public choice literature is filled with anecdotal evidence of great legislative failures, such as the Smoot-Hawley Tariff.³⁶ But such failures are no different, and probably no more frequent, than the economic market's Edsels, or the thousands of patents issued annually on unmarketable products. One thing Chicago School economics has taught us is that anecdotal evidence of bad decisions by firms or even entire markets does not establish that the market is working badly enough to warrant regulatory correction. Markets and the firms in them make many mistakes, but over the long run they produce efficient results.

Much of the writing in the economics of public choice is driven by the assumptions that failure in economic markets is rare while failure in political markets is common. The public choice literature is filled with colorful theories about why things should go wrong. One example is the theory that people may vote ideological preferences rather than economic choices because voting is cheap.⁸⁷ One individual's vote is unlikely to have any impact on the outcome; so the voter can express an ideological view—for example, that higher taxes to take care of the poor are a good thing—while knowing that the vote will have no real impact on her taxes.⁸⁸

Many of these theories fare poorly when subjected to rigorous attempts at verification.⁸⁹ The "cheap vote" theory described above has not been tested, so far as I know. But it could be, and testing would probably disprove the theory. If the theory is correct,

⁸⁵ The argument in Olson, *The Rise and Decline of Nations* (cited in note 55) is not comparative in this fashion; it argues that societies tend to decline over time.

⁸⁶ See Eskridge, 74 Va L Rev at 292 (cited in note 57), discussing this statute and others.

⁸⁷ See, for example, Lee, 74 Va L Rev 191 (cited in note 38).

⁸⁸ Another example is the theory that logrolling yields excessive public expenditure. See, for example, Tullock, 67 J Pol Econ 571 (cited in note 30). The theory assumes that legislators make many deals to vote *for* one another's pet projects, but that they do not make many deals to vote against the proposals of third parties. If the legislative body is concerned about the total budget, it is the *avoidable* projects that they will seek to cut first. If a project injures more representatives' constituencies than it benefits, we would expect a bigger cartel lining up *against* the project than in favor of it.

⁸⁹ See Mark Kelman, On Democracy-Bashing: A Skeptical Look at the Theoretical and "Empirical" Practice of the Public Choice Movement, 74 Va L Rev 199, 217-23 (1988); Daniel A. Farber and Philip P. Frickey, Legislative Intent and Public Choice, 74 Va L Rev 423, 429-30 (1988); and Farber and Frickey, 65 Tex L Rev 873 (cited in note 50).

voter turnout should be lower in close elections than it is when one candidate or issue is forty points ahead of the other. In the close election, voting becomes more "expensive" because the risk that a single vote, or small group of votes, will determine the outcome becomes much higher. People who really wanted to engage in costfree expression of ideological preferences would be most likely to do so when the polls are so lopsided that it is clear that their vote will have no impact on the outcome. An equally plausible theory is that when people act as voters they say what they mean, just as they do when they act as consumers. Utility-maximizing voters may indeed vote for higher taxes to care for the poor, if that is the kind of world they wish to live in.

A unified approach to economic and political markets should prompt scholars to look hard for efficiency explanations for practices that they do not understand in political markets, just as they look—very hard and often very patiently—for efficiency explanations for similar practices in economic markets.

There is no obvious reason for thinking that political markets work more poorly than economic markets; in fact, there are many reasons for thinking that they should work better.⁹⁰ First, the principal thing traded on political markets is policy and information. and the costs of distributing these are very low. Second, the policy making part of political markets-legislatures and executives-is quite small, and those engaged in making trades in these markets can find each other quite easily. Third, information about political choices and about candidates' records is readily available to voters and their interest groups, and one can vote at low cost. Fourth, contrary to a common public choice assumption, there is no reason for assuming that people act intelligently in their self-interest when they purchase, but ignorantly or irrationally when they vote. Fifth, although legislators may act principally in their self -interest, that assumption is no different than the assumption of neoclassical theory that business firms are profit-maximizers, interested in their own profits rather than the welfare of consumers or competitors. Finally, political failure (substantial divergence between private gain and social gain) has never been shown to be more widespread in political markets than market failure (substantial divergence between private gain and social gain) in economic markets.

⁹⁰ For some of the arguments, see Donald Wittman, Why Democracies Produce Efficient Results, 97 J Pol Econ 1395 (1989).

In order to view economic markets and political markets consistently, one would have to look at elected policy makers as "firms," each of which operates in his self-interest. Voters and organized interest groups are consumers of what these firms have to offer, and are likewise self-interested. The fact that a senator's or representative's principal long-run goal is re-election, or a position of more power or prestige within the institution, should prima facie be viewed similarly to the fact that each firm in an economic market is entirely self-interested. The premise of self-interested actors in economic markets (profit-maximizers) is essential to the neoclassical argument that markets work efficiently.

This premise is often presented as presumptive evidence of inefficiency and failure in political markets.⁹¹ For example, the discovery that a very large percentage of elected officials are successful in obtaining reelection-i.e., that incumbents enjoy advantages over challengers—is used as evidence of the failure of political markets.⁹² No neoclassicist would make similar arguments from the fact that successful incumbent business firms sustain themselves, or that the failure rate for new entrants is dramatically higher than for established firms, or that in many industries the same firms have been the leaders for more than a half century.93 Even in markets where entry barriers are extremely low, we do not see more than a small percentage of old firms being displaced by new ones each year. Displacement occurs, but it is the exception rather than the rule. Even when the only advantage of incumbency is a downward sloping learning curve, we expect incumbents to have an advantage, in both economic markets and political markets. Just as economic markets reward firms for maximizing the welfare of their customers, political markets tend to reward representatives with re-election for maximizing the welfare of their voters.

In economic markets, we presume that consumers know what is best for them. Information is efficiently distributed and people can easily obtain what they need. The fact that consumers do not

⁹¹ See, for example, Jonathan R. Macey, Transaction Costs and the Normative Elements of the Public Choice Mode: An Application to Constitutional Theory, 74 Va L Rev 471, 476-77 (1988); Fred S. McChesney, Rent Extraction and Rent Creation in the Economic Theory of Regulation, 16 J Legal Stud 101 (1987); Gary S. Becker, 98 Q J Econ 371 (cited in note 46); and Roland N. McKean, The Unseen Hand in Government, 55 Am Econ Rev 496 (1965).

⁹² See, for example, W. Mark Crain, On the Structure and Stability of Political Markets, 85 J Pol Econ 829 (1977). See also Tollison, 74 Va L Rev at 362-63 (cited in note 45).

⁹³ See Alfred D. Chandler, Jr., Scale and Scope: Dynamics of Industrial Capitalism (Harvard, 1990) (forthcoming).

spend many hours obtaining information about potatoes or toasters tells us that these markets are quite competitive, product differences are rather small, and that more extensive information about one brand's possible superiority is not worth the cost of obtaining it.⁹⁴ If a consumer purchases three Chryslers in a row, that is merely a sign that the consumer has found what she likes; her expectations have been satisfied. When we do not see widespread consumer revolts or defections in economic markets, we presume that the markets are working well. In fact, "working well" means that consumers are satisfied. Frequent changes in product design, or the rise and fall of branded products, are attributed to changes in consumer preference.

In political markets, on the other hand, we presume that information is badly distributed and that the participants have insufficient incentives to obtain it.⁹⁵ The fact that they vote the same old representatives into office means that there is something wrong with the system that gives incumbents an advantage. The reason voters do not devote more resources to obtaining information about political alternatives is that they are misinformed, and really do not know what is best for them. The reason there is relatively little organized voter revolt means, not that the system is working well, but that the costs of organizing are very high in relation to the value of the results. Frequent changes in legislative design are attributed, not to changes in voter preference, but rather to chaotic conditions that randomize the results and produce only a haphazard relationship between voter desire and legislative outcome.

Consider Mancur Olson's famous discussion of the free rider problem in interest groups.⁹⁶ Olson argued that small interest groups will be more effective than large ones, because each member of the large group knows that her own contribution will have only a small effect on the group's total effort. Why don't we apply

⁹⁴ See George J. Stigler, The Economics of Information, 69 J Pol Econ 213 (1961).

⁹⁵ See, for example, Kenneth A. Shepsle and Barry R. Weingast, *Political Preferences* for the Pork Barrel: A Generalization, 25 Am J Pol Sci 96 (1981); and Morris P. Fiorina and Roger G. Noll, Voters, Bureaucrats and Legislators: A Rational Choice Perspective on the Growth of Bureaucracy, 9 J Pub Econ 239 (1978). Note that a much higher proportion of the information about an incumbent candidate's voting record is readily available than is information about a business firm's activities or economic performance. Consumers may know less about the companies they invest in than about their elected representatives. See Ronald Wintrobe, The Market for Corporate Control and the Market for Political Control, 3 J L, Econ & Org 435 (1987).

⁹⁶ Olson, *The Logic of Collective Action* (cited in note 55). The theory is summarized in Posner, *Economic Analysis of Law* at 497-98 (cited in note 10). See also Kim and Walker, 43 Pub Choice 3 (cited in note 55); and Hansen, 79 Am Pol Sci Rev 79 (cited in note 55).

the same theory to industrial organization? Employees and middle managers in very large corporations ought to shirk more than those in small firms, for the single individual in a large firm has much less impact on the firm's profitability.

We do not apply such theories because we simply trust that the firm will develop its own internal mechanisms for disciplining shirkers. Competition controls this result: firms that don't minimize costs will lose in the struggle. That might be true, but why does it not apply to interest groups as well? Under this theory, interest groups that successfully satisfy their constituents' wishes will be supported, while the failures will not. Constituents ordinarily will invest resources through dues payments or other contributions until their investment matches the value of the legislation that the particular interest group obtains. Ineffectual interest groups will lose these fees and eventually die, and more efficient groups will replace them.

A much more plausible accounting of interest group size is that the free rider problem may be exacerbated by large size, but that there is no strong evidence that groups cannot counterbalance this. Furthermore, there are compensating scale and scope efficiencies that tend to offset free rider problems. For example, the large group may save by communicating the same information many times. Some very large organizations, such as the American Association of Retired Persons (AARP), have diverse agendas and represent a highly diverse constituency, but are extremely successful in achieving their legislative goals.

We also postulate different theories for the existence of entry barriers in economic as opposed to political markets. The old school of industrial organization regarded entry barriers as an important source of market failure.⁹⁷ More recent theory suggests that the case for entry barriers has been greatly overstated, and that if there are profits to be earned, most of the things characterized as entry barriers will be overcome.⁹⁸ But in the public choice literature entry barriers continue to be treated the way they were in the 1950s. For example, the cost of organizing interest groups, which might be higher for some groups than others, is regarded as a debilitating imperfection in the political market.⁹⁹

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⁹⁷ See, for example, Joe S. Bain, Barriers to New Competition (Harvard, 1956).

⁹⁸ See George Stigler, The Organization of Industry ch 6 (R.D. Brown, 1968); and Robert H. Bork, The Antitrust Paradox: A Policy at War With Itself ch 16 (Basic, 1978).

⁹⁹ See, for example, Robert E. McCormick and Robert D. Tollison, Politicians, Legislation and the Economy: An Inquiry Into the Interest-Group Theory of Government 24-25

Competitive market models almost always assume that consumers have low cost access to reliable product information. Political models often assume extreme voter lack of reliable information, and high information costs.¹⁰⁰ For example, Gary Becker's conclusion that voter preferences "can be manipulated and created through information and misinformation provided by interested pressure groups"¹⁰¹ sounds suspiciously like the theory of product advertising that prevailed in 1950s and 1960s industrial organization theory.¹⁰² Under that theory consumers were regarded as constantly vulnerable to misleading advertising, so advertising itself began to be regarded as an anticompetitive practice. Chicago School economic theory absolutely rejected and substantially undermined the older view with its arguments that advertising is virtually always competitive.¹⁰³

It is at least as plausible to assume that voters select interest groups to provide them with information as it is to assume that interest groups capture voters with misleading information.¹⁰⁴ The more likely account is not that the National Rifle Association (NRA), the National Organization for Women (NOW), and other organizations corrupt voters with false and misleading information. Rather, gun owners join the NRA, politically concerned liberals join NOW, and these organizations obtain information for the benefit of their members. Product advertising and reporting by thirdparty groups such as the Consumers' Union generally provide consumers in economic markets with low cost information. By analogy, the candidates themselves and service organizations such as Common Cause, the NRA, and NOW provide political information to voters. This includes information about a candidate's performance and her particular stance on issues. Indeed, for almost every voter preference today there is probably an interest group willing to provide low cost information about the choices that will effectuate it.

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⁽Martinus Nijhoff, 1981).

¹⁰⁰ See, for example, Macey, 86 Colum L Rev 223 (cited in note 54); and Michael T. Hayes, Lobbyists and Legislators: A Theory of Political Markets 69-70 (Rutgers, 1981).

¹⁰¹ Becker, 98 Q J Econ at 392 (cited in note 46).

¹⁰² See, for example, Bain, Barriers to New Competition (cited in note 97). See also William S. Comanor and Thomas A. Wilson, Advertising and Market Power (Harvard, 1974).

¹⁰³ See, for example, Lester G. Telser, Advertising and Competition, 72 J Pol Econ 537 (1964); Yale Brozen, Entry Barriers: Advertising and Product Differentiation, in Harvey J. Goldschmid, H. Michael Mann, and J. Fred Weston, eds. Industrial Concentration: The New Learning 115 (Little, Brown, 1974); and Stigler, 69 J Pol Econ 213 (cited in note 94). See also Phillip Nelson, The Economic Consequences of Advertising, 48 J Bus 213 (1975).

¹⁰⁴ Wittman, 97 J Pol Econ at 1400 n 11 (cited in note 90).

Once again, there is no obvious reason for thinking that reliable political information is more difficult for voters to obtain than reliable product information is for consumers to obtain. Voters are free to participate in almost any interest group they choose. Voters who lack the interest are free not to. Such voters presumably are satisfied with the current state of affairs. Interest groups themselves should be looked at as market facilitators; their purpose is to communicate the desires of a defined group of voters to those drafting legislation. Just as consumer choice is taken at face value in modern neoclassical economics, so too voter sovereignty should presumptively be taken at face value in the study of political markets.

Finally, rent-seeking-the great villain in public choice-occupies no such similar position in neoclassical market economics. Evervone agrees that rent-seeking is a universal phenomenon.¹⁰⁵ Consumers like to maximize their surpluses. Business firms seek every opportunity to increase their revenues above their costs. Research and development, product differentiation, brand-name advertising, exclusive contracts, joint ventures, and many other practices are examples of rent-seeking in economic markets. But the attitude toward rent-seeking in economic markets is very different from that in political markets. In the former, rent-seeking is prima facie desirable, and the market tends to correct the relatively few instances of rent-seeking that are inefficient. In the public choice literature, however, rent-seeking is an instant pejorative. Why doesn't the public choice literature assume that self-interested actors produce products or offers to purchase designed to maximize their own welfare: that others come in with alternatives: and that the resulting give-and-take generally results in optimal outcomes?

The theory of rent-seeking in the public choice literature is a little like Chamberlin's description of product differentiation in his now classic *Theory of Monopolistic Competition*.¹⁰⁶ Chamberlin assumed that, for business firms, product differentiation was a zero-sum game; one variant of a differentiated product was as good as another. Rent-seeking firms would continually revise products in order to collect new constituencies of easily manipulated customers. In the process, they expended all their rents in the differentiation process itself and the brand-name advertising of the

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¹⁰⁵ See generally James M. Buchanan, Robert D. Tollison, and Gordon Tullock, eds, Toward a Theory of the Rent-Seeking Society (Texas A&M, 1980).

¹⁰⁸ Edward Chamberlin, The Theory of Monopolistic Competition (Harvard, 1933).

products. The result was that the array of products was much greater than customers wanted, costs were much higher, and no one, not even the business firms themselves, was better off. Product differentiation itself became an endless process, as each firm continually strived to distinguish itself from its rivals and thus perpetuate its downward-sloping demand curve.

The Chicago School laid Chamberlin's theory to rest with the observation that product differentiation is presumptively *not* a zero-sum game. Differentiation is profitable only when customers want it, and consumer choices are manifold and complex.¹⁰⁷ So too the market for legislation is complex. But it is a competitive market, and it is presumptively as efficient as any other form of competition.

IV. THE IMPACT OF INTEREST GROUP PRESSURE ON LEGISLATIVE WEALTH TRANSFERS

Public choice theory suggests that small, well-organized interest groups work more efficiently than larger, more diversified groups. Through highly effective lobbying these small groups purchase the legislation they want, often at the expense of the rest of society. The Chicago School of law and economics has its own peculiar spin on public choice that is more normative than the public choice theory developed in the 1960s and 1970s by such people as Buchanan and Tullock. Traditional public choice scholarship (the "Virginia School")¹⁰⁸ has generally confined itself to developing theories that explain various phenomena in the legislative process, such as logrolling or the functioning of interest groups.¹⁰⁹

The Chicago School, on the other hand, has been more concerned with developing public choice arguments to explain why legislation is less allocatively efficient than the common law,¹¹⁰ and to guide judges in the interpretation of statutes so as to minimize the effects of public choice.¹¹¹ The premise of this last venture

¹⁰⁷ For example, Brozen, Entry Barriers (cited in note 103).

¹⁰⁸ On the differences between Chicago and Virginia public choice theories, see generally Michael E. DeBow and Dwight R. Lee, Understanding (and Misunderstanding) Public Choice: A Response to Farber and Frickey, 66 Tex L Rev 993 (1988).

¹⁰⁹ See, for example, sources cited in notes 45, 47.

¹¹⁰ See, for example, Posner, *Economic Analysis of Law* at 495-99 (cited in note 10). See also Macey, 74 Va L Rev 471 (cited in note 91). See generally McCormick and Tollison, *Politicians, Legislation, and the Economy* (cited in note 99).

¹¹¹ See, for example, Epstein, 51 U Chi L Rev 703 (cited in note 46); and Easterbrook, 50 U Chi L Rev 533 (cited in note 77). See also Posner, 49 U Chi L Rev 263 (cited in note

seems to be that "perfect" democracy, one in which public choice constraints do not operate, would be more efficient than real life democracy—either because there would be less legislation or because the legislation itself would be more efficient, in the sense that it would merely correct market failures.¹¹²

Not only would legislation in a "perfect" democracy not be Kaldor-Hicks efficient, but legislation passed free of public choice biases would probably transfer more wealth from the rich to the poor than legislation now does. The real bias created by public choice favors not the poor, but rather the well-to-do and entrepreneurial classes. Virtually the entire literature on rent-seeking and legislative process bears this out.

Legislation is sometimes said to be inefficient, in that it causes more injury to its victims (measured in dollars) than it creates value for its beneficiaries (also measured in dollars). Critics have even suggested that public choice is the cause of this inefficiency, some going so far as to say that the presence of inefficient legislation warrants the presumption of public choice.¹¹³ But the use of public choice theory to explain legislation's inefficiency disregards the democratic process's inherent tendency to yield allocatively inefficient legislation, even in the absence of vote trading and lobbying.

There are two reasons the democratic process can produce inefficient legislation such as wealth transfers. One is simply that people vote their utility and not their wealth, and voters may derive sufficient utility from a program to compensate for any wealth loss. In addition, in a perfect democracy, legislation that we characterize as inefficient results directly from the fact that people vote their individual preferences. Sometimes each voter favoring a proposal will obtain a small individual gain if the proposal passes, while each voter opposing a proposal will incur a large individual loss. If gainers outnumber losers the measure will be approved, even though it is inefficient under Kaldor-Hicks criteria.

Imagine, for example, a society with four voters and total wealth of \$400, where A has \$250 and B, C, and D have \$50 each. A proposed wealth transfer program will transfer \$25 from A to each of B, C, and D. The program will cost \$20 to operate, and operating costs will be paid through a taxation scheme—thus A

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¹¹² See Posner, 49 U Chi L Rev 263 (cited in note 77).

¹¹³ See, for example, Richard A. Posner, *Taxation by Regulation*, 2 Bell J Econ & Mgmt Sci 3 (1971). See also Posner, 5 Bell J Econ & Mgmt Sci at 350-52 (cited in note 51).

will be taxed a total of \$95. After the transfer scheme has been effected, A will have \$155 and B, C, and D will have \$75 each. Total social wealth will be \$380.

The legislation is inefficient by the wealth-maximization standard because it reduces total social wealth by \$20. Nevertheless, it will likely be approved in any referendum in which A, B, C, and D each have one vote and votes cannot be traded.¹¹⁴ A will vote against the measure, while B, C, and D will support it. If we want the democratic system to maximize wealth we must give A a number of votes equal to the number of dollars he stands to lose, and B, C, and D a number of votes equal to the dollars they each stand to gain. In that case A would cast 95 no votes and B, C, and D would collectively cast 75 yes votes; the measure would fail.

Note that in a democratic system the above legislative program will be approved even if the marginal utility of income is constant and all four individuals have identical utility functions. The results may be even more robust if B, C, and D, who are poor, have a higher utility for the transferred dollars than wealthy A does. In short, the democratic process will produce the wealth transfer even without public choice bias, and this conclusion does not depend on any increase in total utility.

Public choice theory, a theory about why the democratic process works imperfectly, may be quite useful for explaining why legislation often benefits relatively small groups, such as taxicab drivers¹¹⁵ or insurance companies, at the expense of relatively large ones. Such legislation is almost certainly inefficient. But the public choice analysis does not provide a *general* explanation for why legislation is inefficient under Kaldor-Hicks criteria. Perfect, pure democracy is calculated to yield inefficient legislation as well.

Among the effects of one person, one vote is that the legislative process is more biased than market-based processes in favor of the relatively poor because the democratic process counts people rather than dollars.¹¹⁶ But an interesting and important conclusion of public choice theory is that government wealth transfer programs tend to benefit upper middle class and upper class participants in the political process.¹¹⁷ The well-to-do, as a general rule,

¹¹⁴ Even if votes can be traded, some wealth transfer will occur. A must bribe at least one person to vote against the statute.

¹¹⁵ For the taxicab example, see text at notes 55-56.

¹¹⁶ See Tullock, *Economics of Income Redistribution* at 24-25 (cited in note 21). See generally, Buchanan and Tullock, *The Calculus of Consent* (cited in note 45).

¹¹⁷ This is an important thesis of Tullock, *Economics of Income Redistribution* (cited in note 21).

are better represented by lobbying organizations than are the poor. As a result, most "pork barrel" legislation benefits the relatively well-to-do rather than the poor. Such legislation particularly benefits entrepreneurial classes, since much of it takes the form of business subsidies.¹¹⁸ In addition, redistribution programs such as Social Security and Medicare, whose beneficiaries are the elderly as a group, probably provide much greater net benefits to the middle and upper middle class elderly than to the poor.¹¹⁹

Public choice theory might also explain anti-democratic legislative action or inaction that is *efficient* by Kaldor-Hicks or wealth maximization standards. Another important conclusion of the public choice literature is that organized special interest lobbying activities are more successful at *preventing* proposed legislation than at promoting special interest legislation.¹²⁰ The democratic bias suggests that in a perfect democracy, one untainted by public choice, a good number of Kaldor-Hicks *inefficient* wealth transfers would occur. But these legislative transfers fail to pass because they are blocked by well-organized special interest groups. One effect of public choice is that votes by elected representatives tend to go "where the money goes," however imperfectly, rather than where the wishes of the voters would place them.

Thus, perfect democracy would likely result in *more* income transfer from relatively rich to relatively poor than our currently imperfect democracy produces. In short, although the Chicago School relies heavily on public choice theory to critique the legislative process, there is no reason to think that a perfect democracy—one in which public choice does not affect outcomes—would "mimic the market."

The implications of the above analysis are significant. When we consider whether legislation is efficient we must distinguish two possibilities:

1) Legislation may be inefficient because any time people's votes (rather than their dollars) count equally, the wealth-maximizing solution may not emerge; and

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¹¹⁸ I use subsidy here in the broad sense to include (1) outright cash payments (such as the farm subsidy programs); (2) the creation of monopoly rights; (3) price regulation, which generally guarantees firms positive returns; (4) licensing restrictions; (5) regulations that favor one group of firms over another, such as those where compliance is subject to scale economies; (6) special tax treatment that can amount to cash payments; and (7) import tariffs or quotas.

¹¹⁹ See Tullock, Economics of Income Redistribution at 111-56 (cited in note 21).

¹²⁰ See, for example, Schlozman and Tierney, Organized Interests and American Democracy at 314-15, 395-98 (cited in note 46).

2) Legislation may be inefficient because small, well-organized interest groups have succeeded in undermining the legislative process for their own ends.

Under what conditions can we distinguish (1) from (2)? Clearly, we cannot infer that legislation falls into the second category merely from the fact that the legislation is "inefficient" under Kaldor-Hicks criteria. Legislation that is inefficient because of people's individual utility preferences might easily have the same "look" as legislation that is a product of interest group pressures. Public choice theory can explain inefficient legislation only if (1) the legislation was allocatively inefficient; and (2) the number of electorate losers exceeds the number of electorate winners.

Thus, public choice is a theory about imperfections in republican democratic systems. It is *not* a theory about why democracy does not mimic the market. A perfect democracy, from which every taint of public choice was removed, would very likely mimic the market even less than democracy under public choice.

V. CONCLUSION: THE POLICY VALUE OF WELFARE ECONOMICS

The above critique is not meant to suggest that welfare economics has no value to the legal policy maker. On the contrary, welfare economics is valuable for at least three reasons. First, markets are still the most unambiguously utility-maximizing form of resource allocation. Second, economics can predict the monetary costs of forced wealth transfers. Third, economics can help the legal policy maker identify the actual gainers and losers from forced wealth transfers.

A. Markets as Utility Maximizers

When Jane purchases a sandwich from Paul for \$2.00 we know that (1) Jane obtains more utility from the sandwich than from the \$2.00; and (2) Paul obtains less utility from the sandwich than from the \$2.00. Thus the transaction increases the utility of both. This conclusion requires no information about the respective utility curves of Jane and Paul for either money or sandwiches. Jane may be so wealthy and care about money so little that she would not stoop to pick up two dropped dollars. Or she may value money by much more than Paul, either because she has much less money and money is subject to decreasing marginal utility, or because she simply has a different utility curve for money. Nevertheless, she unambiguously values the sandwich more than Paul does. Paul may value the sandwich less than Jane does because Paul has a lower marginal utility curve for sandwiches. Or perhaps he is a fanatic about sandwiches, which explains why he entered the business. But now he has a great many sandwiches to sell, and his marginal utility for a sandwich is limited by its exchangeable value. Paul may also simply not care very much about money.

Whichever combination of these propositions is true, the occurrence of the transaction tells us unambiguously that Jane obtains more utility from the sandwich than from its price. It also tells us that Paul obtains less utility from the price than from the sandwich. The same thing can be said of the parties' wealth, as measured by their consumers' and producers' surplus. The transaction increases both utility and wealth.

Like the proposition that markets increase wealth, the proposition that markets increase utility has been known for a century. For neoclassical welfare economics, however, the stated proposition is that in most situations *only* markets can empirically be shown to increase utility; the welfare consequences of non-market transfers are generally unknowable. This essay has argued that the consequences of involuntary wealth transfers for well-being are not necessarily the same as the consequences for welfare, as economically defined. But even if we settle on suitable objective surrogates for well-being, measuring the consequences of a particular involuntary exchange requires careful collection and analysis of data. Voluntary market exchanges, on the other hand, are conceptually utility-maximizing. We know this without using surrogates, and without collecting large amounts of data.

Thus, the legal policy maker should generally prefer markets to involuntary wealth transfers. But the preference should not be as strong as the literature of neoclassical welfare economics suggests. In particular, state regulatory intervention is appropriate not merely in cases of market failure, but also when markets are functioning efficiently but well-being can nonetheless be increased through involuntary transactions. These might be characterized as cases of "utility failure."

When might utility failure occur? Although voluntary market transactions presumptively increase utility, it does not follow that non-market, or forced, transfers cannot increase utility as well, even where there is no market failure. For example, assume that A obtains ten utils of pleasure out of a dollar and eleven utils out of product X; B gets one util of pleasure out of a dollar and six utils from X. In that case B will not sell product X unless the price is at least six dollars. But those dollars will cost A sixty utils and, since he obtains only eleven utils out of X, he will refuse to buy. X will not be reassigned to the person for whom it produces the most utils. More concretely, wealthy C may purchase his fifth winter coat even though he scarcely needs it simply because he likes coats and has plenty of dollars, which give him little satisfaction. Impoverished D may be unable to purchase her first winter coat even though her utility for it is very high. Her dollars are very valuable to her, and she allocates them first to housing and food, and then to clothing. Well-being would be increased by a legislative transfer of the price of the coat from C to D.

Utility and wealth, quite simply, are not the same thing, particularly when the well-being at issue is that of consumers rather than producers.¹²¹ For example, the Coase theorem applies quite well to conflicts between groups of producers where the question is how profits will be allocated among them, but the theorem does not fare so well when the traditional logic of monetary profit maximization does not apply.¹²²

Suppose that two people must spend an extended period of time in a small lobby in which smoking is permitted.¹²³ A smokes; B does not smoke and finds the odor and fumes of cigarettes offensive. Since A has the right to smoke, will the Coase theorem yield the efficient outcome? In this case the relevant question involves not the relative positions of two profit-maximizing producers, as was the case in Coase's famous hypothetical about a farmer and a cattle-raiser,¹²⁴ but rather the relative positions of two *utility*-maximizing consumers. The existing wealth of the two parties in Coase's original formulation was irrelevant, because marginal profitability was the issue. The rancher's choice between adding one cow to his herd, which will produce profits of \$50, or accepting a \$60 payment from a neighboring farmer, who will be injured by that amount or more from the cow's destructive grazing, will be the same whether the farmer is a pauper or a billionaire. Accepting the payment is more profitable.

In the smokers' example, unlike Coase's example, the *historical* wealth of A and B, rather than merely the marginal gain or loss, may determine the outcome, even though that outcome is allocatively inefficient. For example, suppose that A gets three utils of pleasure from smoking a cigarette, but that the same cigarette

¹²¹ See text at notes 25-27.

¹²² See generally Herbert Hovenkamp, 75 Cornell L Rev at — (cited in note 27).

¹²³ The illustration is adapted from Coleman, *Markets, Morals and the Law* at 72-73 (cited in note 37), where it is used to make a different point.

¹²⁴ Coase, 3 J L & Econ at 2-8 (cited in note 42).

deprives B of four utils of pleasure. In addition, however, A is wealthy and B is poor; as a result, the well-being created by a marginal dollar in A is one util, while a marginal dollar is worth two utils to B. In this case A will agree with B to stop smoking only if B pays A three or more dollars. B will not pay three dollars, however, for they represent six utils to B, and A's smoking of a cigarette costs B only four. A will smoke even though smoking imposes a net loss of one util on the two people in the lobby.

The solution that maximizes well-being in the smoking illustration may be for the management to place a "no smoking" sign in the lobby, even though the market would not yield nonsmoking as a result. In this case the preferability of the no smoking sign does not depend on the existence of transaction costs (for example, the market may be a bilateral monopoly) or some other market failure. The market may be functioning perfectly. Rather, the no smoking sign is justified because the Kaldor-Hicks efficient solution fails to maximize utility.

This observation is relevant in a wide range of circumstances. It may support interfering with the market system using subsidies or other involuntary wealth transfers even though the market appears to be maximizing wealth. The question is how far to push the point, because utility, unlike wealth, is not generally measurable or quantifiable. Clearly, the state cannot force every exchange that increases subjective utility, whether or not the exchange increases wealth.

But the state can and does intervene in extreme cases, when legislators make *objective* judgments that the utility for limited amounts of certain goods and services is high for people who have even less than those limited amounts. Thus, the state can conclude that food, housing subsidies, public education, good health, and transportation increase well-being, even if there is no market failure in those markets. These are cases that demonstrate "utility failure."

In the case of the no smoking sign, the state might also decide that the preferences of the smoker and the nonsmoker should be counted equally—not because it can be shown that they receive equal amounts of utility and disutility from smoking, but because the democratic system treats individuals as equals. Such a conclusion is no less scientific than the conclusion that the marginal utility of a dollar is the same for everyone, particularly in this case, where there is no established market for the preference. If the lobby is occupied by more nonsmokers than smokers, a no smoking sign would increase well-being, thus measured; nonsmoking would be the outcome if the occupants of the lobby were permitted to vote on the issue.

B. The Money Costs of Wealth Transfers

Welfare economics can also provide information about the money costs of wealth transfers, and in particular about the effect of redistribution on producer incentives. This is an important function of cost-benefit analysis. Many of the problems that inhere in determining the well-being of people acting as consumers can be assumed away when we analyze their behavior as producers. The principal value people obtain from production is profits, in the form of money. Regardless of whether their utility curves for money are high or low or whether they already have a little money or a great deal, people acting as producers are better off if they have more money.¹²⁵

On the producer side, then, welfare and well-being probably converge. Producer well-being presumably increases when producers' surplus, or profit, increases. This happens when the producer builds the most efficient plants and operates them efficiently, buys the most efficient mixture of inputs, and distributes its product or service as efficiently as possible.

Likewise, the traditional neoclassical analysis of the social cost of market imperfections such as monopoly is not undermined by our inclusion of consumer well-being in the calculus of legal policy. In one respect, a person concerned about well-being might conclude that the true social cost of monopoly-a cost calculated to include well-being-is higher than neoclassical economics contends. If a monopolist's customers generally have less wealth than a monopolist's owners, the effect of monopoly that neoclassicism denominates a mere wealth "transfer" may not be a mere transfer of well-being at all. The effect may be to transfer dollars from people who value them highly to people who place a lower value on them, and the true social cost of monopoly should be reckoned as higher than it is under neoclassical economics. Of course, if the owners of the monopoly are poorer than those who purchase from it, the dollar transfer caused by monopoly may actually increase well-being. One is inclined to think that a monopolist's owners are wealthier than its customers, but this is certainly not always the case. For example, a monopoly manufacturer of expensive jewelry

¹²⁵ In other words, we assume that the marginal utility curve for money slopes downward, but not that it becomes vertical.

may be owned by several middle class stockholders, or by institutional investors (such as pension plans) who represent the middle class. The customers of this monopoly may be quite wealthy.

This analysis of monopoly might tell us, for example, that the legal policy maker is entitled to be more concerned about monopoly in the market for some staple, such as paper box manufacturers or soybeans, than for a luxury good. Although the neoclassical "social cost" of a monopoly depends entirely on the elasticities of supply and demand, the cost in well-being may depend on the identity and relative wealth of the consumers.

C. Identifying the Beneficiaries and Victims of Wealth Transfer Programs

The final important function of welfare economics is to aid the legal policy maker in identifying those who will benefit from a particular wealth transfer proposal or program and those who will pay for it. Neoclassical economics aided by empirical data concerning observed transactions can be of enormous assistance. Tax incidence theory is the classical example of such a use.¹²⁶ The person upon whom a tax is nominally placed is often not the person who eventually bears it. He may be able to pass all or part of it along to others. In some cases, the intended beneficiaries of a wealth transfer program may end up paying for it.¹²⁷

Similarly, Tullock has argued at some length that wealth transfer programs that pay benefits to the population generally, such as Medicare, Social Security, or public education, really do not benefit the poor at all. In most cases the greatest beneficiaries are the middle class and the providers of the services, who are largely among the middle and upper middle classes.¹²⁸ Once again,

¹²⁸ See Hovenkamp, 42 Stan L Rev at — (cited in note 7); Herbert Hovenkamp, *The Indirect Purchaser Rule and Cost-Plus Sales*, 103 Harv L Rev — (1990) (forthcoming); and Richard A. Musgrave and Peggy B. Musgrave, *Public Finance in Theory and Practice* 445-48 (McGraw-Hill, 4th ed 1984).

¹²⁷ To take a simple example, a tax on landlords' receipts, with the money used to rehabilitate dilapidated apartments, might be passed along to tenants in the form of higher rents. Landlords in general try to pass on their costs, and a tax is merely a type of cost. In that case the tenants will simply end up paying for their own rehabilitation, or tenants whose apartments do not need rehabilitation (but whose landlords pay the tax) will end up subsidizing tenants whose apartments do need rehabilitation. This result is not necessarily bad, but it may be inconsistent with the legal policy maker's objectives.

¹²⁸ See Tullock, *Economics of Income Redistribution*, especially chs 6-9 (cited in note 21).

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whether such a result is bad is for the legal policy maker to decide. But the economic theories of shifting and incidence can help her identify legislation's real gainers and losers.