Toward a definition of economic justice

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MODERN economics springs from the search for a definition of economic justice, but has largely abandoned that search. Thus, 19th-century utilitarian economists, such as John Stuart Mill, spent much of their time searching for the principles that would lead to a condition of equity. But by the 1940's, economists reluctantly came to the conclusion that there were no *economic* statements that could be made about equity. In this they were in agreement with moral philosophers and other social scientists that no ethical statements can be deduced from purely factual or purely logical statements—the only two kinds of statements to be found in modern economic theory. By the 1950's questions of economic equity were not even discussed in the basic textbooks, except to note that it was necessary for a market economy to start with a "just" distribution of economic resources. What made any such distribution "just" was left blank or was vaguely handed over to the political process.

For a time economists thought that progress could be made by shifting from utility theory, with all of its technical problems of quantification, to the analysis of choice and preference. An attempt would be made not to quantify utility, but simply to determine whether individuals preferred State A to State B. Individuals would rank different states of the world in a certain order of preference, and these different rank orderings could then be combined to make a social judgment about economic equity. Kenneth Arrow's impossibility theorem shattered this vision. He was able to show that there was no method of combination—no social decision rule (e.g., majority voting)—that could in all circumstances lead to a "social ordering" without violating some seemingly mild and reasonable conditions. As a result, even the political process could not handle the question of economic equity perfectly.

Such intellectual conclusions, however, neither obviate the need to make decisions about economic equity nor stop such decisions from being made. They are in fact being made all the time. Every time taxes are levied, or public expenditures are made, decisions about economic equity are being made. Even if governments had no public expenditures programs, the problem would exist. It is unavoidable. In market economies, individual preferences determine market demands for goods and services, and as a consequence determine the market distribution of income—but individual preferences are weighted by economic resources *before* they are communicated to the market. An individual with no income or wealth may have needs and desires, but he has no economic demands. To make his personal preferences felt, he must have economic resources. If income and wealth are distributed in accordance with equity (whatever that may be), individual preferences are properly weighted, and the market can efficiently adjust to an equitable set of demands. If income and wealth are not distributed in accordance with equity, individual preferences are not properly weighted. The market quite efficiently adjusts to an inequitable distribution of purchasing power.

To have no government programs for redistributing income is simply to certify *de facto* that the existing market distribution of incomes is equitable. One way or another, we are *forced* to reveal our collective preferences about the "just" distribution of economic resources. As a result, one basic responsibility of government in a market economy is to create an equitable distribution of income and wealth if it has not been produced by the market.

While the tension between the need to make decisions about economic justice and the intellectual desire to avoid discussion of economic equity can be suppressed, it eventually breaks out. John Rawls's recent and much-discussed book, *A Theory of Justice,* is the start of such an outbreak. As is usual in such cases, both the pessimism with which the discussion was abandoned and the optimism with which the discussion is reintroduced are probably excessive. The problem of specifying economic equity is simply a difficult problem to which there is no universal answer. At the same time, there are important arguments to be understood.

There are several directions from which one can attempt to specify economic equity:

(1) Reliance can be placed on process and procedures. An economic game is specified as fair or equitable when individuals agree on the rules of the game, and any outcome of that game is thus considered just.

(2) Individual preferences can be the key criterion. If the outcome of an economic game is in accordance with the individual preferences of the citizens of a country, the outcome is equitable. Equity is achieved when society reaches the distribution of economic resources that generates the most agreement.

(3) Merit, however defined, can be used to specify equity. Equity occurs when resources are distributed in the same manner as merit. In 19th-century liberal economic thinking, this would mean rewarding everyone based on his or her marginal product as determined in a free market place. The person who contributes most, gets most.

(4) Equity can be related to the common good, however defined. Equity is that distribution of economic resources that maximizes the common good. Substantively, the problem then devolves into one of determining the common good.

Obviously, any actual specification of economic equity can, and probably will, have elements of all four of these facets of equity. At the same time, there are problems with using any and all of these techniques for specifying a just distribution of economic resources. To clarify some of the issues surrounding the problem, I shall outline the fundamental reasons that have led economists to abandon their search for economic equity, examine some of the practical and intellectual escapes that have been proposed, and suggest a candidate of my own for a definition of an equitable distribution of economic rewards.

The undiscussability of economic equity

No one can deny that value judgments play an important role in specifying economic equity. Often this observation has led to the invalid conclusion, however, that economic equity is therefore undiscussable. Thus, one hears it said that there are economic statements to be made about the character of economic efficiency, but there are no economic statements to be made about the character of economic equity; there are only prejudices. But, in fact, statements about economic efficiency are not value free. They depend upon an underlying set of discussable value judgments, just as statements about equity depend upon an underlying set of discussable value judgments. In both cases, there are technical studies to be done once values are adopted.

Modern analysis of economic efficiency depends upon the acceptance of what our textbooks call Pareto optimality: State A is better than State B if at least one person is better off in A and no one is worse off. (A person is assumed to be better off in A if he prefers to be in A rather than in B.) In a weaker version of the same principle, State A is better than State B if those who are better off in State A could adequately compensate those who are worse off in State A. We move toward Pareto optimality when scarce resources are used in such a manner as to maximize potential output, which in turn maximizes potential choices. When efficiency improves, there is a larger bundle of goods and services (including leisure) that individuals can choose among. More is better.

All analysis of economic efficiency depends upon these postulates. All of these postulates are thoroughly ethical in nature. A value judgment is made that each individual is the best judge of his or her own happiness, and that more choices are always better than less. Without such value judgments, "efficiency" in modern economics ceases to have any meaning.

Paretian efficiency values were easily absorbed into economics because they seemed to be universally held. They are, after all, the values of a liberal-individualistic society. The invocation of value judgments that are universally held has been the traditional way to avoid discussing values. This occurs partly because we believe what is universally held does not need to be discussed, but also because values that are in fact universally held seem to be intuitively true and are often held to be facts rather than values. To many "more (choice) is better" is a fact and not a value.

We may all share such postulates, but this does not alter the fact that they are value judgments or elevate them beyond the realm of analysis. Take the inviolability of consumer preferences. Given the 19th-century belief in the existence of innate wants within the individual, the inviolability of consumers' preferences seemed sensible. Given modern sociology and psychology, the postulate of innate wants is no longer so plausible. We now perceive that every society or culture generates the "wants" of its population. Moreover, as our knowledge of how "wants" are generated improves, the activity of generating wants will increasingly fall within the domain of deliberate policies. Indeed, the debate as to whether our society should try to generate traditional economic "wants" or other life styles is currently under way.

As this example illustrates, various types of beliefs about matters of fact—psychological and sociological matters of fact, above all—can force alterations in values. Similarly, many economic beliefs about matters of fact can affect values. Two examples are: "Income equality is bad because it leads to less work," or, "Socialism is good because it stops an individual from acquiring economic power over other individuals." Before going to the barricades over either of these statements, a lot of hard empirical economic research and tough economic analysis must be done. Does income equality lead to less personal effort? Is economic power less concentrated under socialism? When does the adverse work effort effect set in? How should economic power be measured?

If "more is better" and the "inviolability of consumers' preferences" are both values underlying any analysis of economic efficiency, what are the values underlying the analysis of economic equity? The problem fundamentally depends upon whether you subscribe to Rousseau's belief that all men are by nature equal or the Greek belief that men are by nature unequal. It also depends on how you proceed to define these beliefs more precisely. The argument gets complicated, but it nevertheless does seem clear that a belief in the equality of men means that social and economic differences must be based on the conviction that such differences contribute to the common good. In other words, these differences must be justified as *functional.* They must be shown to lead to something else of merit that legitimates a departure from the norm of equality.

Traditionally, the American goal for economic rewards has been phrased in terms of "equal opportunity." But subscribing to equal opportunity answers only part of the problem. There is still the problem of determining (a) what economic game should be played and (b) what the structure of prizes should be. This involves two different determinations. Playing a mixed free-enterprise game does not say anything about the optimum structure of economic prizes. Markets can always be adjusted to yield almost any structure of prizes.

Nor is there any escape from such moral determinations via the route of "fair process." The "natural lottery" and "equal opportunity" are all variants of the fair process argument. But what constitutes a fair game? Do we let consumers' preferences determine the economic merit of an opera company or do we create, through education, a public demand for operatic performances? Is a fair game a game where each person has an equal chance to win? If chances of winning are to be equalized, do we handicap those born with advantages or compensate those born with disadvantages? What constitutes an equal start? Should every individual be subject to the same initial budget constraint? Consider inheritances. Is there any difference between the individual who inherits one million dollars and the individual whose athletic talents will earn him the same lifetime income?

As these questions indicate, the rules of the natural lottery are not intuitively obvious. The rules can only be specified when one knows the desired distribution of prizes to be generated. The rules cannot be used to determine the desired distribution of prizes, since lotteries or market economic games can be formulated to yield any distribution of prizes. The market may be a "fair process" to which most Americans are willing to submit, but it is necessary to stipulate some other principles to determine the equitable distribution of economic prizes within this game.

Aggregating preferences

The basic thrust of both nineteenth-century liberal thinking and the economics profession has been to seek specifications of economic equity in the aggregation of individual preferences, or "utility functions." Unfortunately, the process of aggregation has run into seemingly insoluble difficulties. Economists, therefore, have more recently been inclined to leave the problem to "someone else." The most recent "someone else" to attempt the isolation of a social welfare function is John Rawls. He uses a belief in process to establish both the natural equality of men and the optimum distribution of prizes. As in Rousseau, the natural equality of men comes from a social contract in which each man's signature is as necessary and important as anyone else's. But, unlike Rousseau, Rawls sees the structure of economic prizes as also being determined in the process of signing the social contract. Rules for distributing prizes are to be set on the assumption that each person, so far as he knows, has an equal chance of landing at the top or middle or bottom of the social order. Rawls argues that there is only one structure of prizes that everyone would be willing to accept: This is a prize structure that maximizes the minimum prize. In economists' terms, Rawls is asserting that every individual is (or should be) absolutely "risk averse." Everyone acts on the assumption that he will be getting the smallest prize, and thus wants to maximize the smallest prize. No one wants to take a chance on winning a larger prize. No one thinks about anything but his own prize.

Although maximizing the minimum prize seems egalitarian (Rawls believes it to be so), it need not be. Under this rule, I can undertake any project that raises my income by any amount so long as it also raises the income of the poorest group—no matter by how little. Rawls believes that the trickle-down effect is so large that it would be impossible to design economic activities that concentrate income gains among high-income groups. As an economist, I do not share this faith: The world is not divided into economic activities with no trickle-down effects and activities with substantial trickle-down effects. There are many economic activities with marginal amounts of trickle-down. To be really egalitarian, social rules would have to state that individuals must choose those economic activities with the largest trickle-down effects.

As Rawls's specification of economic equity indicates, a great many assumptions about preferences must be made to generate his desired distribution of prizes. The gambling man's preferences are illegitimate. Given that the economic lottery is a game where some prize is necessary to survive, the idea of a minimum prize makes sense (although there probably are some people who would be willing to take a chance on their own starvation); but maximizing the minimum prize is something else again. Empirical evidence would seem to point toward the viability of lotteries that do not maximize the minimum prize; people are clearly willing to bet a small part of their current prize (income) in exchange for a very small chance on a very big prize. Rawls is also forced to rule out the envious man. Suppose the worst-off man were envious. In this case, anything that lowers the income of better-off people faster than it lowers the income of the worst-off man maximizes the minimum prize. If envy were not ruled out, maximizing the minimum prize could lead to zero incomes for everyone.

The distinction between factual states and preference states creates problems for Rawls as it has for other philosophers. His golden rule is "do unto the worst-off man as he would be done unto." To some extent the worst-off man will be the man with the worst measurable economic position; but to some extent he will also be the man with the preference structure that is hardest to satisfy. To what extent should the distribution of economic prizes take into account the personal usefulness (utility) of those prizes? Should the man who is relatively inefficient in processing economic prizes—who gets less satisfaction out of his income than do others with the same income—get larger prizes because of his inefficiency?

Perhaps Rawls could convince us that the willingness to take risks, or that an interest in factors other than one's own income, is a perverse preference in the same sense that masochism is a perverse preference. But it is not obvious that this is the case. And Rawls certainly cannot persuade us that maximizing the minimum prize constitutes economic equity unless he involves something other than the process of signing a universalizable social contract.

Rawls has, however, isolated two important ingredients in a specification of economic equity. (1) *A belief in the natural equality of man (no matter how established) leads to the conclusion that deviations from economic equality must be shown to be beneficial.* The burden of proof is on those that advocate inequality. (2) If one is willing to assert that a rational man is risk averse enough to want to avoid suicide, then *some minimum economic prize is an essential ingredient in economic equity.*

Finding the Archimedean point

Rawls also implicitly focuses attention on another essential distinction in specifying economic equity. There is a difference between allowing individual preferences to affect the form of the social welfare function and making social welfare purely a function of individual utilities.

Individuals have different levels of preferences. They have preferences about the rules of the economic game and the distribution of prizes that it should generate; but they also have preferences about how to maximize their own utility in the current economic game—no matter how much they dislike the economic game they are forced to play. There is nothing self-contradictory, for example, in seeking to become extremely wealthy and powerful in our current economic game, yet believing that a better economic game would be one where there are no "extremely wealthy" prizes to be had. To distinguish these two levels of preferences I will call the one *individual-societal preferences* and the other *private-personal preferences.*

This distinction makes it possible to avoid some of the problems in individualistic social welfare functions. Societies can, if they wish, discuss what constitutes economic equity without worrying about individual differences in the efficiency with which people process economic goods. A preference such as envy is ruled out, not because it does not exist and not because it does not affect private personal preferences—it does—but because society chooses not to take envy into account in its social rules, even though each one of its members may be envious. In their individual-societal preferences, individuals decide to rule out the private-personal preference of envy, since collectively it can lead to absurd results.

If social welfare is a function only of private-personal utilities, it is not in general possible to specify economic equity. Using our individual-societal preferences, however, we can make economic equity a separable problem, if we so desire.

More fundamentally, the whole "utility function" approach is misconceived in a world without innate preferences. The social welfare function is the place where society is supposed to make interpersonal comparisons—yet the individualistic social welfare function lets each person determine his own importance in social welfare. In addition, how does society determine that two people are equally happy? You cannot have an individualistic social welfare function unless utilities can be added together. To compare utilities, you need some "objective" criteria of when two people are equally well off. Utilities theory has been searching for its Archimedean point for a long time without success. In a world that does not believe in innate preferences, the search is futile.

It is, however, also unnecessary. Although the Archimedean point cannot be derived from private-personal preferences, it *can* be specified on the basis of individual-societal preferences. Socially, we simply decide that individuals are economic equals—i.e., are equally "happy"—under certain circumstances. Thus, the specification might say that individuals are economic equals when they have the same income, wealth, and family size. But whatever the conditions, the Archimedean point is clearly specifiable by an act of social judgment. In a similar manner, the optimum distribution of economic resources is socially specifiable even though it is not derivable from any aggregation of private-personal preferences. This is because the distribution of economic resources may itself be one of the factors in determining individual utility functions. Individuals may want to live in a society where economic prizes are distributed in some specified manner—even if they live (and express their preferences accordingly) in a society with a different scheme of distribution.[1]

"Wants" and "needs"

But what are our individual-societal preferences about the distribution of economic prizes? What kind of society do we wish to live in? At least since Marx, there has been a widely held belief that individuals do not need to have preferences about the just distribution of rewards. This belief is based on two related doctrines. The first is (a) the doctrine of "superabundance," and the second is (b) the doctrine of "satiated needs."

(a) In the doctrine of superabundance, equity decisions do not need to be made since the problem will wither away as we get richer. Economic wants will be satiated, each of us will have everything he wants, and no one will care what someone else has or does not have. Since all personal preferences will be satisfied, it will not matter that individuals have different preferences. With superabundance and satiated wants, Marx thought that both nation states and personal budget constraints would wither away.

Conservatives often subscribe to this solution of the equity problem, but they usually add a subsidiary proposition! To eliminate the problem of economic equity, society should concentrate on economic growth without worrying about the current distribution of economic resources. Do everything possible to hasten the day of satiated wants. Today's inequalities are then justified in terms of their contribution to such economic growth.

Unfortunately, our demonstrated ability to create new wants has eliminated the possibility—for both Marxists and conservatives—of ever being able to satiate everyone's wants. The problem of unsatiated wants is always with us. This means that the problem of specifying economic equity is always with us.

(b) In the doctrine of satiated needs, wants cannot be satiated but needs can be. Economic equity is achieved when the minimum economic prize is large enough to satiate the poorest man's needs. The U.S. poverty program is based on such a definition of economic equity. Its problems reveal the limitations of the approach.

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[1] The distinction between individual-societal preferences and private-personal preferences does not, however, solve Arrow's aggregation problem. There is no perfect way to aggregate individual-societal preferences, any more than there is a perfect way to aggregate private-personal preferences. This simply means that no society can be based on unanimity of economic or political preferences. Some elements of coercion must exist when a social decision is made.

The appeal in the doctrine of satiated needs is to physiological needs, as opposed to wants that are artificially generated by society or wants that do not serve some physiological need. What is the minimum amount of income a person (or family) would need to have a perfectly balanced diet and to have as long a life expectancy as is medically possible? This is the basic question. But problems arise, since the answer to this question yields a very low poverty line. Consider the cheapest medically balanced diet. By combining soybeans, lard, orange juice, and beef liver (edible, cheap, nutritious, but hardly enjoyable foods), a medically balanced diet can be created that costs less than $80 per person per year (in 1959 prices). It would be a better diet, medically speaking, than most of us now eat. But are we ready to compel people to eat it? Similarly, how much housing space per person is necessary to live to a ripe old age. The answer—very little. Are we then prepared to ignore the housing wants of poor people?

And what does society do about poor families that are ignorant, inefficient, or stubborn? Does a family have an unmet need if it does not know the cheapest way to have a medically balanced diet? Does a family have an unmet need if it does not want the diet that it knows it should have and can afford? Does a family have an unmet need if it simply refuses to eat an unappetizing or unusual diet?

Since the United States has very few people in poverty when poverty is based on such a definition of physiological "needs," the OEO's poverty lines were specified in terms of need—but need itself was defined in a relative manner, i.e., in terms of "wants." Given that a family is going to want to eat as other American families, and given that it is going to manage its resources in the same inefficient manner, how much income does it need to get a medically balanced diet (in spite of itself, if you will)? Given that it is going to want to consume something like the same amount of space per person, how much housing does it need? But the minute that "needs" are defined in terms of "wants," the concept of need loses its concreteness. Wants become necessities whenever most of the people in society believe that they are in fact necessities. Anything to which we have grown accustomed and that is generally available becomes a necessity. Needs, thus defined, grow right along with average incomes. Like satiated wants, satiated needs will not occur.

This phenomenon can be seen in Gallup polls which asked, "What is the smallest amount of money a family of four needs to get along in this community?" The responses are a rather consistent fraction of the average income of the time at which the question was asked—but the sum grows in absolute terms. As Lee Rainwater has shown, the answers to this question in the post-World War II period have indicated that families estimate their own needs to be a little more than half of the average family consumption of the day. Similarly, when Rainwater asks individuals to categorize people as "poor, getting along, comfortable, prosperous, or rich," they rather consistently do so relative to average incomes.

What sociologists call "relative deprivation" is a very real feeling in a liberal democracy. Studies in this area indicate that individuals have a very strong feeling that economic benefits should be *proportional* to costs (i.e., efforts, hardships, talents, and the like), but that equals should be treated equally. Since there are various types of such "costs" in any situation, and different rewards (income, esteem, status, power), the problem immediately arises as to how equals are defined and how proportionality is to be determined. This has led to the difficult problem of "reference group" determination. To what group of people do you compare yourself to determine whether you are being treated relatively equally and proportionally?

Reference groups seem to be both stable and restricted, in that people look at groups that are economically close to themselves. This explains why inequalities in the distribution of economic rewards that are much larger than inequalities in the distribution of personal characteristics seem to cause little dissatisfaction, and why people tend to ask for rather modest amounts if they are asked how much additional income they would like to be making. The happiest people seem to be those that do relatively well within their own reference group rather than those that do relatively well across the entire population. It also explains why studies such as those of Rainwater find immense anger at the welfare system among working people. Those on welfare are clearly a group where benefits are not proportional to costs, since they do not need to incur any costs (make any effort) to receive welfare.

The historical factor

Apart from obvious cases such as welfare, where benefits and costs are out of proportion, our conception of what constitutes proportionality and relative equality tends to be heavily determined by history and culture. Distributions of the past are fair until proven unfair. Great social shocks, such as wars and economic depressions, seem necessary to change specifications of relative deprivation.

This is evident in American history. The only recent periods of rising income equality in the United States occurred during the Great Depression and World War II. From 1929 to 1941, the share of total income going to the bottom 40 per cent of all families rose from 12.5 per cent to 13.6 per cent, while the share of income going to the top five per cent fell from 30.0 per cent to 24.0 per cent, and the share of income going to the top 20 per cent fell from 54.4 per cent to 48.8 per cent. From 1941 to 1947, the share going to the bottom 40 per cent rose further to 16.0 per cent, while the share going to the top five per cent fell to 20.9 per cent and the share going to the top 20 per cent fell to 46.0 per cent. In the Great Depression, an economic collapse was the mechanism for change. Large incomes simply had further to fall than small incomes. In World War II there was a consensus that the economic burdens of the war should be shared relatively equally ("equal sacrifice"), so the federal government used its economic controls over wages to achieve such relative equality. Wage policies during World War II were a manifestation of a change in the sociology of what constituted "fair" wage differentials, or relative deprivation. As a consequence of the widespread consensus that wage differentials should be reduced, it was possible to reduce wage differentials deliberately. After they had become embedded in the labor market for a number of years, these new differentials became the new standard of relative deprivation, and were regarded as the "just" wage differentials, even after the egalitarian pressures of World War II had disappeared.

The important thing to note, however, is that the new standards were not imposed by government on a reluctant population but were imposed on the market by popular beliefs as to what constituted equity in wartime. No one knows how to engineer such changes in less extreme situations.

The economics literature has the concept of relative deprivation, but under a different name—wage contours. Different groups of workers expect to be treated equally and to have a fixed structure of wages with respect to other groups. Historic differentials are to be observed. Labor economists report that observing these wage contours is the key ingredient in running any successful program of wage controls. In a situation like Phase II, it is much easier to lower the general level of wages than it is to alter wage contours. One of the major elements leading to wage inflation is the leapfrogging that occurs where wage structures start to get out of line with historic wage contours. One group gets ahead of its historic position and other groups attempt to reestablish their historical positions, or even to get ahead so as to "get even" for the initial violation of "equity." As with relative deprivation, the wage contour theory runs into problems in that it seems to be impossible to find general principles for determining why specific wage contours exist. They are heavily conditioned by historical accidents.

In economics textbooks, satisfaction springs only from a man's own income. In the real world, relative incomes seem to dominate absolute incomes in terms of making people satisfied or dissatisfied. Preferences are interdependent rather than independent. Psychologists would label the same phenomenon envy.

Relative deprivation, wage contours, interdependent preferences, envy—they all mean that social stratification is man-made, but that it is to a large extent self-perpetuating and autonomous. When opportunities for certain kinds of rewards are diminished, other kinds of rewards tend to receive more emphasis. If economic rewards are more equally distributed, differences in esteem, status, and power would probably receive more importance.

None of this means that there is no room for public incomes policies. All of these relative concepts are loosely held, with a range of acceptable outcomes. The economic room there is in which to maneuver also depends upon how fast changes are to occur. Historic relationships can change with least controversy if they change slowly and gradually. (Such a change has come about in the position of public employees in the post-war period.) This does indicate, however, that to a great extent the real economic lottery is a relative lottery. Higher incomes for everyone do not solve the problem. There is no specification of economic equity from which everyone will gain, since such a specification is bound to affect the historic shape of wage contours, and to create a sense of relative deprivation among someone, somewhere. Achieving economic equity will involve some individual losers as well as some gainers.

In short, the social specification of equity is a problem in relative income determination. There is no single distribution of economic resources that constitutes absolute equity, but there may be a distribution of economic resources that is more equitable (more in accordance with individual-societal preferences) than the one now in effect. If this new distribution of resources were obtained and digested, there might again be a demand for a new distribution of economic resources that was "more equitable." In any movement toward relative income equity, two constraints are to be honored—or, more accurately, not too badly violated—with respect to both the general distribution of resources and the minimum economic prize. Economic benefits are to be proportional to the individual's economic costs, and those who incur equal economic costs are to be treated equally. The exact specification of what constitutes "proportionality" and "equality" can, however, be gradually altered.

Economic merit

Within economics, economic merit has a precise definition—a definition that springs from the profession's interest in efficiency. Economic efficiency occurs when there are no changes that could be made that would make some people better off without making others worse off. If every factor is paid its marginal contribution to the total supply of economic goods and services (its marginal product), and if marginal products are determined by competitive supply and demand conditions, then economists can show that a market economy is efficient, or Pareto optimal. Any attempt to pay people other than their marginal products will lead to a situation where it would be possible to make changes where some were better off and no one was worse off. In Marxian terms, a factor that is paid less than its marginal product is being exploited; a factor that is paid more than its marginal product is an exploiter.

Abstracting from the problem that marginal products depend upon the initial set of market demands, one may ask: Can marginal productivity theories be used to specify economic equity? If every factor were paid its marginal product, would economic equity be achieved? To answer this question, it is necessary to answer three related questions. *Should* workers and capitalists be paid their marginal products? *Can* workers and capitalists be paid their marginal products? *Are* workers and capitalists paid their marginal products?

While there isn't perfect agreement among American economists as to the answers to these three questions, I will nonetheless attempt to summarize what I perceive to be the basic viewpoints and some important divergencies. There are indeed real divergencies in opinions, in part because the profession is ambivalent in its beliefs vis-à-vis marginal productivity.

Are factors of production paid their marginal products? No one has ever been able to prove that they are. In the mid-1960's I wrote a series of articles seeking to test the validity of the theory empirically. According to these tests, factors of production do not seem to be paid their marginal products. Although I convinced myself, and the articles stand unrefuted, I did not convince the profession. There is still a general belief in the validity of the marginal productivity theory of distribution. Economists differ, however, in how widely they would cast the net of its applicability. Most economists would argue that specific individuals are not necessarily paid according to their personal productivity but that groups of individuals are paid their marginal products. Wage contours, envy, relative deprivation, what-have-you may explain wages within groups, but marginal productivity determines average wages. The disagreements arise as to how narrowly the groups can be delimited. As a general rule, the closer economists are to actual wage determinations, the more broadly would marginal productivity groups be defined. But however broadly the groups are defined, most economists would say that marginal productivity determines the broad structure of incomes and the direction of movement in the incomes of different groups.

At the same time, most economists would admit that competitive supply and demand conditions are often not met. Factors are paid their marginal products, but these marginal products are artificially high or low since monopolistic practices are used to limit the supplies of some factors and raise the supplies of others. To some extent, the distribution of economic resources reflects monopolistic marginal products rather than competitive marginal products.

Although it substantially undercuts the usefulness of marginal productivity, economists, when asked to explain the existence of unemployment, will often argue that marginal productivity is a theory of employment rather than a theory of distribution. This occurs since unemployment cannot theoretically exist in a competitive world where every factor is paid its marginal product. When marginal productivity is used as an employment theory, wage rates are determined in some sociological manner, but factors are then hired until their marginal products equal this sociologically-set wage or price. Factors are paid their marginal product, but wages or prices determine marginal products rather than the reverse. In this case, marginal productivity determines a group's income by affecting a group's unemployment.

Despite the problems associated with this idea of marginal productivity, economists are extremely reluctant to abandon it, since they do not know how to replace it and since it is central to much of the theoretical apparatus of economics. If it ever had to be abandoned, much of economics would have to be abandoned with it.

Can individual factors of production be paid their marginal products? All economists admit that there are three circumstances under which marginal products cannot be paid. If there are economies of scale in production, marginal products exceed average products and there simply isn't enough output to pay every factor its marginal product. If there are diseconomies of scale in production, marginal products are less than average products and there is a surplus after each factor has been paid its marginal product. In cases of joint production, factors cannot be paid their marginal products since marginal products cannot be calculated. (Whenever one unit of a factor is withdrawn from the production process, output falls to zero.)

In none of these cases are there economic rules for what to do. Some principle other than marginal productivity must be involved to solve the distribution problem. However, while their theoretical existence is acknowledged, instances of these three cases are thought to be rare. Most economies do not exhibit economies or diseconomies of scale, and cases of true joint production are hard to find.

The important constraint on the possibility of paying each factor its marginal product comes from the sociology of interdependent preferences. Labor economists would generally argue that it is impossible to pay each individual his marginal product. Individual morale and teamwork is essential in most production processes, and ignoring interdependent preferences would cause more disruption than it would be worth. Such problems tend to be dismissed by economists without experience in labor relations.

Should factors of production be paid their marginal products? While most economists would subscribe to the principle that factors of production should be paid their marginal products, they would not consider marginal productivity payments *ipso facto* a state of equity. They would go on to argue that a tax and transfer system should be imposed on market incomes to generate whatever distribution of income society thinks is equitable. The only major exception is the so-called Chicago school (George Stigler, Milton Friedman, *et al.*). They are for eliminating monopolistic marginal products from the economy, but they would consider competitive marginal products a state of equity. But from the vantage point of the non-Chicago economists, marginal productivity does not help specify economic equity. It only helps specify the instruments that should be used to achieve equity.

From the standard economic perspective, tax and transfer schemes (such as the negative income tax) should be used if the distribution of economic rewards is to be altered. Anything else is not Pareto optimal. As a result, although economists may differ on the specifics of the proposal, there is an overwhelming consensus in favor of some variant of the negative income tax if income distribution is to be altered. By the same token, there is an overwhelming consensus against the minimum wage as a technique for altering the distribution of economic rewards. If people are hired until their marginal products equal the minimum wage, a higher minimum wage will result in more unemployment and consequently less output. Economies with minimum wages are not Pareto optimal. They can be altered in ways to make everyone better off, since they can be altered to produce more jobs and more total output.

Consequently, there is a broad agreement among economists that individuals *should* be paid their marginal product—but that these marginal products *should* be competitive marginal products. Monopolistic marginal products are ruled out, since they lead away from rather than toward a state of efficiency. These competitive marginal products may, however, be altered with tax and transfer systems to produce a distribution of economic resources that a society, at any particular moment, regards as equitable.[2]

Popular views of redistributive justice

When tax and transfer systems are compared with the principles of relative deprivation, problems emerge in achieving equity in the economists' preferred manner. To some extent the process (costs) of generating incomes plays a role in legitimizing incomes. People react differently to having tax-free earnings of \$100 per week and to having earnings of \$150 per week with a tax bill of \$50 per week. Redistributive tax and transfer schemes can sometimes be cloaked with ethical legitimacy (Social Security wears such a cloak), but they more often are thought to violate the canons of redistributive justice.

In this context, it is instructive to compare the properties of Social

[2] While marginal productivity payments are in accord with the basic principles of relative deprivation (benefits are proportional to costs and equals are treated equally), they are at variance with envy and interdependent preferences. With interdependent preferences there may be no way to pay each person his marginal product. If the attempt is made, it is so disruptive that production and marginal products fall. As a result market incomes will be to some extent conditioned by interdependent preferences even if they should be generated by marginal productivity.

Security with the properties of a negative income tax. Social Security preserves rank-order equity. The retired man who pays the most gets the most; the man who pays the least gets the least. Equals are treated equally, but there is not a constant proportionality between benefits and costs. Everyone must contribute, but in absolute dollars and cents the poor get a better deal than the rich.

The negative income tax also preserves rank-order equity. The largest income before imposition of the system will be the largest income after the imposition of the system; the smallest income will remain the smallest. Equals are treated equally. Once again, there is not a constant proportionality between costs and benefits—but in this instance everyone does *not* need to contribute to make himself eligible. Some people will gain benefits without incurring any costs. If you want to retire for a lifetime on the guaranteed minimum, you can. Under Social Security, you cannot retire without contributing.

Politically, the Nixon Administration attempted to paper over this problem with a set of compulsory work provisions in its Family Assistance Plan (a version of the negative income tax), but these provisions were perceived as unworkable, and probably were in fact unworkable. As McGovern found out the hard way, the negative income tax is as unpopular among the populace as it is popular among economists. Conversely, the minimum wage is as popular among the populace as it is unpopular among economists. It guarantees a minimum income for those that incur a cost (work) and helps keep the incomes of the poorest part of the population in approximately the same benefit-cost area as the rest of the population. It is felt that there is a relative income below which a man should not fall, but a man should be forced to work or save to earn that income.

Where does this leave us with respect to deriving economic equity from economic merit? Given that actual economic rewards are, and to some extent always will be, conditioned by relative deprivation, wage contours, envy, interdependent preferences, and the like, tax and transfer systems are not axiomatically the preferred method for altering the distribution of economic rewards. As noted, they were not the only instruments used during the one time that incomes were altered by public policies—World War II. Progressive taxes were imposed, but market incomes were also narrowed by narrowing the range of market wages, through government controls.

To the extent that tax and transfer systems are to be used to alter market incomes, the principles of relative deprivation should be remembered. Equals are to be treated equally, benefits are to be proportional to costs, and everyone with benefits must incur costs. Presumably the negative income tax would be seen as "fair" if it were offered only to those that have been working in the labor force and paying taxes for some period of time. This does not, of course, offer the same comprehensive solution to the problem of minimum incomes as a general negative income tax.

Substantively, marginal productivity does not help much in specifying economic equity. Its major contribution is to impose yet another constraint on equity. Whatever redistribution of income is to occur, rank-order equity is to be maintained. Market incomes get to determine who is the wealthiest person in society and who is the poorest person in society, even if they are not allowed to determine the absolute incomes of either the richest or the poorest.

The common good

The idea of the common good contributes to the specification of economic equity by isolating those distributions of economic rewards that contribute to other social goals. Thus, liberals and conservatives often argue whether social externalities flow from the distribution of economic resources. If social unrest, crime, riots, and other such phenomena are caused by maldistributions of economic resources, then these undesirable social events can be eliminated by altering the distribution of economic resources. Liberals often argue from exactly such a viewpoint—but the evidence, or lack of evidence, is on the side of the conservatives. There is little or no empirical evidence (economic, sociological, or psychological) showing such a connection.

But there are other considerations. In a political democracy, greater economic equality may be necessary to preserve political equality, if economic power can be translated into political power. Given the techniques for financing political campaigns in the United States, it would be hard to argue that a considerable amount of political power does not come out of the end of a dollar bill. But this does not automatically lead to arguments for economic equality. It is possible to design political democracies (such as the United Kingdom) where there is much less opportunity to translate economic power into political power. Presumably, the preferred technique would be to isolate political and economic power, so that economic power does not yield political power. As Veblen once remarked, the best argument for capitalism is that it allows individuals to tyrannize their bank accounts rather than other individuals.

Economically, the common good is often taken to be a higher Gross National Product. Current inequalities in the distribution of economic rewards are then justified as necessary to promote growth, and to insure more income for everyone.

In the 1950's, economists extensively studied the conflict between economic equality and growth. The studies focused around a discussion of whether the high progressive tax rates that were then embodied in the federal income tax led to less work effort and less personal saving. Although the empirical studies of work effort and savings yielded similar results, only the work effort studies are relevant to the problem at hand. After all, economies can and do grow without personal savings. Saving is then done collectively either by corporate businesses or by government. Governments simply collect more taxes than they need for public consumption and invest the remainder. Personal work effort is a real constraint on economic growth, however, since collective work cannot be substituted for individual effort. And empirical studies are necessary, since it is not possible to determine theoretically the degree to which high progressive taxes might affect work effort. High taxes lower after-tax wage rates, leading theoretically to less work and more leisure; but they also lower after-tax incomes, leading theoretically to more work and less leisure. Much to the surprise of the initial investigators (several were employed by the Harvard Business School), the studies indicated that high taxes either did not affect work effort or might even increase work effort among executives and professionals. This result has been found in every succeeding study. People work as hard or harder to restore their previous incomes or to obtain their income goals.

With the current interest in the negative income tax, a series of studies have been commissioned on the effects on work effort of transfer payments in a system of negative income taxes. Most of these studies are not yet completed, but there are some preliminary results. Individuals who receive transfer payments and who are not faced with effective tax rates much in excess of 50 per cent work fewer hours per year and use their guaranteed income as a cushion to find jobs where they earn more than the control group. From a simple hours viewpoint, work effort declines; but from a growth and productivity viewpoint, work effort increases.

As a result, both high progressive taxes at the top and a negative income tax at the bottom seem compatible with economic growth.

The present degree of inequality cannot be justified as functionally necessary to promote economic growth. Substantial equalization could occur before growth would be adversely affected.

Another element of the common good revolves around the provision of a limited number of goods and services. Whatever the reason, many societies—including ours—seem to think that medical care, education, and housing should be more equally distributed than goods in general, or that these goods should be subject to high minimums. This may spring from a belief that these particular goods are more basic to human existence and should participate more in the natural equality of man. But if, as a matter of right, societies want some goods to be more equally distributed than others, the only practical way to accomplish this in a market economy is through the public provision of these goods, either directly or indirectly. This involves income redistribution.

Economic equity

Since individual-societal preferences about the structure of the economic game and its distribution of prizes are continually changing as preferences are molded by history and culture, economic equity is not a static condition. At the same time, it is possible to consider the different facets of equity and come to the conclusion

TABLE 1. *U.S. Distribution of Family Income in 1970*[1]

PORTION OF TOTAL FAMILIES BY INCOME	PER CENT OF TOTAL FAMILY INCOME
Lowest Fifth	5.5
Second Fifth	12.0
Third Fifth	17.4
Fourth Fifth	23.5
Highest Fifth	41.6
(Top 5 per cent)	(14.4)

[1] Median income = $9,867, mean income = $11,106.

TABLE 2. *U.S. Distribution of Family Wealth in 1962*[1]

PER CENT OF TOTAL FAMILIES BY WEALTH	PER CENT OF TOTAL FAMILY WEALTH
Lowest 25.4	0.0
Next 31.5	6.6
Next 24.4	17.2
Top 18.7	76.2
(Top 7.5)	(59.1)
(Top 2.4)	(44.4)
(Top 0.5)	(25.8)

[1] Median net worth = $7,550, mean net worth = $22,588.

that one particular distribution of economic resources is more equitable than another at some moment in time. The current distributions of income and wealth are given in Tables 1 and 2. What would constitute a more equitable set of distributions?

To be both concrete and provocative, let me suggest a set of more equitable distributions. These suggestions are not my personal "individual-societal preferences" about the optimum distribution of prizes, but are my interpretation of our society's revealed preferences, upon consideration of the four facets of equity.

While there is general social allegiance in the United States today to the fairness of the market process in determining incomes, this allegiance is not to marginal productivity payments but to marginal productivity as it is modified by wage contours, relative deprivation, interdependent preferences, and so on. At the same time, there is a general perception that the market does not generally meet the competitive axioms for many groups. The group that comes closest to the "natural lottery" is composed of white adult males who work full time and full year. In general, these workers do not suffer from the handicaps of race, sex, age, personal deficiencies, or adverse macro-economic policies. By examining their earnings rather than their income, the effects of inherited wealth can be eliminated. As can be seen in Table 3, the earnings for this group are more equal than the income distribution for the whole population. *Income dispersions would be reduced 40 per cent if the national economic lottery yielded a structure of prizes as equal as that now generated for fully employed adult white males.*

TABLE 3. *The Natural Lottery*

Annual Earnings (in Thousands of Dollars)	Distribution of White Male Money Earnings for Those Working Full Time and Full Year in 1970[1]	Distribution of Total Money Income for All Individuals 1970[2]
0 – 1	1.7%	10.4%
1 – 2	1.3	8.3
2 – 3	1.5	6.9
3 – 4	3.0	6.8
4 – 5	4.4	6.2
5 – 6	6.8	6.7
6 – 7	8.6	7.0
7 – 8	10.5	7.8
8 – 10	19.7	13.2
10 – 15	27.9	17.7
15 – 20	11.2	6.8
25 & over	3.3	2.3

[1] Median = $9,223, mean = $10,218.
[2] Median = $6,670, mean = $7,537.

Since adult white males who work full time and full year are the majority and backbone of the work force, the dispersion in economic rewards necessary to keep them working is certainly wide enough to keep the economy and other groups working. At least this much reduction in inequalities could occur without having to worry about adverse work effects.

I would argue that considerations of both "fair process" and the "common good" would seem to lead to a specification of this distribution as an interim equity target to which the economy should be slowly moving. The process is the market process, which is regarded as fair, and which clearly does not conflict with the common good of more growth and thus higher incomes for everyone.

An important question remains, however, as to whether public efforts should focus on restructuring market rewards or whether reliance should be placed on tax and transfer policies. My own view is that both will have to be used, but *the emphasis should lie on establishing an equitable distribution of market rewards before, rather than after, taxes and transfers.* The political unpopularity of universal tax and transfer systems, the experience of World War II, and the political popularity of minimum wage legislation all point in this direction. As the recent Social Security legislation indicates, there is a willingness to establish an adequate transfer payment income floor for those too ill or old to work; but as our experience with the Family Assistance Plan indicates, there is no willingness to do the same for those who can work. Those who *can* incur a cost *must* incur a cost.

While the distribution of earnings for fully employed white adult males may constitute an interim specification of general economic equity, it does not handle the minimum income dimension of economic equity. Using Rainwater's finding that the public basically believes that those who make a full-time effort should not have less than half of what the general population has, would lead to a minimum annual earning of approximately $5,000 for a fully employed head of a household. Such a number is also consistent with the belief that those who work should get more than those on welfare. At the moment, welfare levels for a family of four are in the neighborhood of $4,000 in most Northern urban states. Five thousand dollars conveniently preserves a gap. As Table 3 indicates, however, almost 12 per cent of the fully employed white male population makes less than $5,000 per year. This means there is a need for public policies to insure that no full-time worker falls below $5,000 per year.

Examination of wage contours, relative deprivation, interdependent preferences, and the rest, would lead to the clear understanding that tax and transfer policies are *not* the optimum instruments for establishing this floor. The preferred method would be minimum wage legislation coupled with public employer-of-last-resort programs to guarantee that everyone who wanted full-time work at the minimum wage could have it. Since fully employed workers work about 2,000 hours per year, the minimum wage would need to be about $2.50 per hour.

Obviously, achieving a minimum earning for those with no wealth of $5,000 a year, and achieving a distribution of income above this level that is no more unequal than that now in place for fully employed adult white males, has implications for the distribution of wealth. It is at this point that the tax system plays its major role. A progressive wealth and/or inheritance tax system would be necessary to hold the distribution of income from wealth within the same proportions as that of income from earnings.

Since the top 14.5 per cent of the adult white fully employed males earns 28 per cent of the total earnings of this group, a wealth and/or inheritance tax would need considerably to reduce the current inequalities in wealth. The wealthiest 14.5 per cent of the families now have between 60 and 70 per cent of total wealth. This would have to go down to about 30 per cent. While a cut from 60 per cent to approximately 30 per cent is substantial, it is hardly confiscatory.

No one need agree with my specification of economic equity; but if there is one lesson in the state of the art of equity economics, it is that there is no way to avoid the problem of specifying economic equity. It is a problem that is not going to fade away. Our political history has been a verbal subscription to the ideal of equality coupled with the practical desire to avoid having to specify what constituted equity (i.e., an acceptable degree of inequality). As with all temporary solutions, this one now seems to be breaking down.