THE INTERTEMPORAL DIMENSION OF DISTRIBUTIVE JUSTICE*

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ALL political ideologies somehow involve economic distribution. Even if they do not specify any distributional norms but primarily deal with questions of resource control and use, the socioeconomic system each of them envisions will inevitably affect the distribution of income, wealth, and economic welfare among different members of society; and that distribution, if not explicitly aimed for, is at least regarded as an acceptable side effect. Each comprehensive ideology thus, explicitly or implicitly, has a built-in norm of "distributive justice" — a term that has aroused new interest because of the works of John Rawls and Robert Nozick but remains muddled and controversial.[1]

At first glance, the connotations of "distribution" appear to be entirely static, involving conditions at unspecified points in time. Yet to characterize a durable social system, we need a broader, more time-sensitive perspective that acknowledges interrelations between conditions in the present and in the future and provides a common yardstick for their measurement. Distribution, and distributive justice, has an intertemporal dimension — which has so far been insufficiently appreciated in the literature on economic-political ideology. Thus we ought to ask the question, What do different distributive schemes imply in regard to the intertemporal socioeconomic positions of different members of society? If distributive justice is defined in terms of opportunity, or in terms of outcome, what intertemporal opportunities, or outcomes, are just? To what extent can current and future opportunities be "traded off" against each other? Or, to put the issue in its more specific, conventional economic context: What do these schemes entail with respect to opportunities to postpone consumption

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— via saving and the accumulation of wealth — or, conversely, to augment current consumption through borrowing against future income? A brief examination of major ideologies yields some interesting results. And since intertemporal choice and planning is an important aspect of individual economic freedom, it seems worthwhile to clarify what, exactly, different ideologies have to offer in this regard.

I

The one social science that is specifically devoted to the analysis of intertemporal problems is finance, or, more precisely, financial economics. This discipline has supplied the main theoretical constructs needed to analyze the various acts that determine the intertemporal allocation of economic resources. Each individual is assumed to have a set of intertemporal preferences, which, together with existing rates of interest and return and risk considerations, determine his desired time pattern of consumption (which is assumed to be the ultimate purpose of his economic behavior). By deliberately weighing his opportunities and selecting what is to him the preferred consumption path (perhaps after allowing for gifts and bequests), he maximizes his lifetime utility, or "welfare." Or, in comparable static terms, he can be said to maximize his total initial "wealth," conceptualized as the present (capitalized) value of his prospective lifetime consumption opportunities discounted at market rates of interest and corrected for changes in the general price level.[2] At a particular moment, a person's wealth is thus an ex ante evaluation of his welfare prospects throughout his remaining life (for the infant, his entire life). This is but a special application of the general theory of utility maximization — special only in that the "commodities" involved (i.e., consumption levels) are defined exclusively by their temporal attributes and in that substitutions among them depend on the rates of interest (the prices of credit) rather than on ordinary commodity prices.

This basic theory derives from the tradition of classical liberal economics, within which the issue of distribution is at best secondary to that of efficiency. Yet, despite its origins, the fundamental logic of intertemporal substitution in consumption applies equally well to governmental or other collective decision making. Consider first a dictatorship or other type of totalitarian regime. If its primary objective is, say, conquest or a domestic restructuring of society, some lesser-order socioeconomic sacrifices, or costs, undoubtedly will have to be incurred along the way. The desired future end-results can be regarded as collective consumption commodities, while any intervening sacrifices of current consumption are in the nature of national saving. From the standpoint of the rulers, intertemporal distributive justice will simply consist of the chance to share in this collective trade-off. It will, of course, not matter much to them that all citizens do not attach the same values to the associated costs and benefits, whether because of different intertemporal preferences or because of different economic circumstances.

At the other ideological extreme, the classical liberal norm of laissez faire can be viewed as an implicit standard for a just distribution of income and wealth. One might, of course, insist — with Hayek, Acton, and Rothbard — that the whole distribution issue is irrelevant or antithetical to the free-market system.[3] Nevertheless, unless all distributional values are rejected, strict laissez faire seems to require an acceptance of the proposition that the free, competitive market is just, as well as efficient (although perhaps only if initial opportunities are somehow equalized). Under the latter view, interpersonal differences in intertemporal consumption patterns must also be considered just if they have been effected in the markets for intertemporal exchange — i.e., the financial markets — and if these, as well as all other, markets are perfectly free and competitive. In this world each individual is free to optimize his intertemporal choice through appropriate decisions in regard to saving, investment, lending, and borrowing. In the absence of any centralized intervention, the market is the sole distributive norm and the sole, impersonal standard of justice. Furthermore, if there were compensations for all net differences attributable to heritage and family environment, the system might be said to produce equality in initial personal wealth, everybody having the same "start-up capital" and hence identical opportunities to satisfy his lifetime consumption desires. Any apparent differences in wealth observed at particular moments in time would then simply reflect differences in prior saving and consumption levels, i.e., in the intertemporal allocation of the identical initial wealth.

But market opportunities depend on the aggregate behavior of all other economic units, which is subject to variation over time. In this context, capital accumulation in excess of the growth of the labor force would tend to reduce the productivity of each added unit of capital and to put downward pressure on the rates of return, with relative consumption benefits through time to borrower-dissavers and below-average savers, despite their unchanged initial wealth. Thus, if one judges "equality" by initial wealth positions, it has to be admitted that the meaning of this term will vary with market conditions, especially with rates of return and interest. The invisible hand is never steady, distributively or otherwise. If we do accept it as distributively just, we tacitly admit that justice is a function of the temporary consensus of the marketplace. Yet we could surely do much worse. And it is worth noting that all welfare comparisons are subject to the same inherent relativity and that the search for a fixed and permanent welfare measure, applicable both interpersonally and intertemporally, will always be futile.

II

The intertemporal-distributive aspects of contemporary U.S. liberalism are particularly ambiguous. Again, the fundamental difficulty lies in accounting for the interrelationships between the present and the future in each person's economic life. Consider, for instance, the general liberal "time-slice" principle (in Nozick's terminology) that the distribution of income or wealth at each point in time should be more egalitarian than that which would be achieved under laissez faire. "Equality" is then conceived with little or no concern about different individual time preferences. Typically, frugality is punished, as through progressive income-tax scales, and this is true whether savings are placed in financial or physical assets or in human capital (i.e., in income-producing education and training).[4] Instead, the eager, "impatient" consumer is subsidized, both through relatively lower lifetime taxes and through possible receipts of transfers ("welfare" in the more popular sense).

If schemes for liberal income redistribution are financed in part through government borrowings, the intertemporal consequences may be slightly different. Government demands for borrowed funds will tend to put upward pressure on interest rates and "crowd out" some potential private borrowers. As a consequence, past accumulators of financial savings — most immediately, holders of fixed-interest assets — will experience capital losses and reduced consumption opportunities. If the central bank tries to offset these tendencies through monetary expansion, similar losses will ultimately result from the accelerated inflation and the erosion of the purchasing power of all non-renegotiable financial savings. By comparison, those who have placed their savings in real assets (real estate, education) will tend to be better protected; so will those who can take advantage of special tax breaks on particular types of income (from oil, cattle, etc.).

The general conclusion stands, however. Among individuals otherwise economically equal, those with high (i.e., present-biased) time preferences will be subsidized, through the combined effects of tax and transfer programs, at the expense of the more thrifty. The advantage for the former is also evident in that their wealth positions, calculated through a capitalization of their total future consumption opportunities, will be superior in the early stages of their lives. It is hard to believe that the makers of such liberal policies actually have aimed at such results or that they have regarded them as desirable side effects.

In self-defense, a liberal might point to some of the restrictive assumptions underlying laissez faire doctrine.

The latter postulates definite, consistent preferences, an ability to acquire knowledge of market conditions (prices), and a "rationality" reflected in efficient (optimizing) market behavior. What if, contrariwise, people are not sure what they want or capriciously change their minds? What if they fail to act in their own best interests? For instance, it might be suggested that some individuals underestimate the value they will ultimately attach to a comfortable retirement and, if left to their own devices, will regret their previous lack of thrift. Or they may not, without undue effort or cost, be able to acquire the rate-of-return and risk information needed for them to weigh the intertemporal consumption opportunities they actually have. Conceivably, a benevolent and well-informed government could protect them from their own potential financial follies and help them achieve more nearly optimal intertemporal consumption paths.

In reply, a free-market advocate can question whether liberal distribution schemes would resolve these problems. If, in a democracy, some people have difficulty articulating their preferences individually in the market, there seems to be little chance that they could do so collectively through the political process; and elected representatives can hardly claim to be able to second-guess the intertemporal preferences of their various constituents. The liberal would be on firmer ground if he could point to specific capital-market imperfections that distort private financial behavior and that call for compensatory government action. But in the United States, observed poverty surely cannot generally be attributed to a prior lack of *market* opportunities for saving or investment. Rather, it reflects a combination of unfortunate heritage and substandard upbringing (i.e., below-average "initial wealth"), as well as inadequate savings — conditions between which broad income-transfer schemes cannot differentiate. In actuality, modern liberalism appears to be geared primarily toward reducing the most glaring inequalities in specific socioeconomic circumstances and to have little interest in the individual achievement of longer-run personal welfare, and hence in the intertemporal consumption problem.

III

Rawls's concept of distributive justice further illustrates some of the theoretical problems inherent in contemporary liberal ideology. His "difference principle," which stipulates the maximization of the welfare of the worst off, is unclear both in its general definition of the "goods" and "rights" that are the objects of his distribution scheme and in their time aspects.[5] Is it a matter of *current* welfare, *current and future* welfare estimated at each point in life, or total actual, or potential, *lifetime* welfare? Current welfare is best approximated by current *consumption*, and the difference principle so interpreted will inevitably be a time-slice principle. Consistently applied, it will require penalties or restrictions on both income- and borrowing-financed consumption, whenever these restrictions permit the consumption of the worst off to be raised. And because of interpersonal differences in income paths over time, some economic groups will see their roles reversed from that of transfer payers to that of transfer recipients during the course of their lives. To put it crudely, the decumulating rich will at first have to subsidize the accumulating poor, only later in life to have a chance to receive return subsidies from the latter. If the sizes of the transfers were identical, both groups would experience a net reduction in their potential lifetime welfare, reflecting their reduced abilities to optimize their time patterns of consumption — an odd result of a policy with humanitarian aspirations. Nozick's criticism that Rawls's distribution rule "fails to yield a process principle" (required to preserve the legitimacy of exchanges, gifts, and other processes) is then quite appropriate.[6] Moreover, by specifying such a rigidly defined end result, Rawls is forced to sacrifice processes (here, intertemporal trade) that could at once satisfy his "first principle of justice" (equal rights to mutually compatible liberties)[7] and raise the lifetime welfare of the participants in these processes (lenders and borrowers), rich or poor.

The interpretation of Rawls's scheme will be somewhat different if the object of distribution is to be *income* rather than consumption. In this case, there will be no penalty on current borrowing-financed consumption, but future interest payments on such borrowings may, as conventional, be construed to reduce future net income, potentially giving rise to claims for subsidies. Conversely, some high savers will be penalized in the future through the obligation to give up part of their increased incomes, augmented by interest receipts, in favor of impoverished high spenders. Again, the distribution scheme will reduce the freedom of financial processes, with a consequent forgoing of the efficiency gains from free intertemporal trade and a potential loss in the lifetime welfare of both rich and poor.

There are hints that Rawls may have been aware of some of these implications. In his brief discussion of time preferences, he declares that "rationality implies an impartial concern for all parts of our life" and that "pure time preference is irrational" and without "intrinsic ethical appeal."[8] If this is meant to exclude intertemporal trade from the areas of basic economic liberties, one can only ask why preferences in the intertemporal dimension should not be accorded the same legitimacy as those in the ordinary intercommodity dimension; are individual preferences less legitimate when they involve, say, the timing of an extended vacation or recreation period than when they involve the choice between a steak dinner and an extra shirt?

If, instead, Rawls means to make an assertion about actual consumer psychology and tastes, that assertion remains to be proven (a futile task), and such an assertion would in any case not suffice to restore the consistency of his scheme. Technically, the absence of "pure" (or intrinsic) time preference refers to a kind of consumer neutrality in the comparative evaluation of the present and the future whenever consumption levels in actuality are identical; it then implies that a one-to-one intertemporal trade-off would keep lifetime welfare unchanged.[9] But as far as we know, this does not describe all or even most consumers' actual tastes. In any case, successive reductions in current (future) consumption typically would require increasing compensations in the form of additional future (current) consumption, for approaching relative starvation in one period tends to involve a greater sacrifice, or overall welfare reduction, than could be offset through comparable additions to consumption volumes in more comfortable times. Yet these desired trade-offs vary among individuals, as do their needs and preferences generally, and each "rational" consumer-saver will adjust his particular consumption path to the prevailing interest rate. It is therefore impossible to estimate the true welfare effects of a simple distribution scheme without considering its implications, via the interest-rate mechanism, on the entire life spans of the socioeconomic groups involved – a difficult task, indeed. And those who seem worst off at a particular moment in time may well seem rather better off in the full intertemporal context. In short, Rawls's ostensibly egalitarian distribution scheme may produce new inequalities, as well as inefficiencies, that stem from interpersonal differences in intertemporal preferences and opportunities.

From Rawls's perspective, the best theoretical approach would be to take the total initial *wealth* position as the key welfare measure for each generation and define the distributional strategy accordingly. The "worst off" – those with the smaller total wealth, say, at age 18 – might accordingly be entitled to receive financial (or in-kind) transfers from the better off; and the former, while disadvantaged in terms of human capital, might as a result become comparatively well off financially. They, as well as all others, could retain their basic freedom to optimize their own individual consumption paths over time by taking the appropriate economic-financial steps. With more individual freedom and a higher minimum level of lifetime welfare, both of Rawls's principles of justice could be satisfied more fully than if the focus was on current consumption or income. Even so, the freedom of exchange processes would still not be completely honored, inasmuch as the improvement of the wealth positions of the worst off would necessitate a forcible negation of some of the wealth-generating acts that had favored the better off, including bequests and a superior upbringing. Thus Nozick's charge that Rawls' "difference principle" is incompatible with accepted process principles would still retain some of its force.[10] But this limitation is inherent in any scheme attempting to predetermine the extent of individual lifetime opportunities.

IV

In conclusion, there is no easy way to compare the lifetime consumption paths of different individuals and unequivocally rank them in terms of overall utility or welfare. Whether the thrifty saver or the impatient, early consumer is in the end better off hence becomes a moot question. Similarly, since personal preferences vary in regard to timing, particular intertemporal consumption trade-offs will have different welfare consequences for different individuals, and so will all schemes for an egalitarian income distribution. This realization greatly complicates the definition and interpretation of "distributive justice." Temporary deprivation may thus be a worthwhile price for the prospect of a better future, and there seems to be no obvious injustice in any phase of an intertemporal consumption path of this type. One would also hesitate to so characterize a situation in which a person has deliberately preempted some of his current consumption opportunities through past borrowing and spending.

Theoretically, the best standard for comparing lifetime consumption opportunities is total personal wealth, defined broadly enough to include both tangible and intangible assets and adjusted for such wealth as may already have been consumed. An equalization of initial wealth, so conceived, could approximately satisfy a requirement for equal opportunity and obviate the need for further interference with intertemporal choice. Any consumption or income path might then be regarded as distributively just, even though the decisions made would be subject to human error or the risk of later regrets.

Modern liberal distribution schemes are ambiguous and contradictory, and so are Rawls's principles of justice. In particular, his apparent willingness to restrict intertemporal choice via his "difference principle" implies both a loss of economic efficiency and a loss of individual freedom — problems that could be substantially rectified by the use of the suggested wealth concept. Nevertheless, there remains an underlying, insoluble problem of completely reconciling free-market processes with extramarket requirements as to their outcomes through time. The flexibility, and efficiency, associated with free individual opportunities for mutually beneficial exchange can never be retained within the straitjacket of rigid distributional norms, and this holds for intertemporal as well as intercommodity exchange.

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1. John Rawls, *A Theory of Justice* (Cambridge, Mass.: Harvard University Press, 1971); Robert Nozick, *Anarchy, State, and Utopia* (New York: Basic Books, 1974).

2. Wealth, so defined, can be viewed both as an "outcome" of past events and as anticipations of "opportunities" in the future. "Opportunities" in this sense are equivalent to the "outcome" of the circumstances that created such opportunities, and the two terms cannot, as often done, be contrasted; in the context of financial analysis and valuation, the anticipated future is always part of the present. Such an interpretation of these terms facilitates comparisons of lifetime, as opposed to temporary, socioeconomic positions. It presumes that all economic behavior is deliberate and "rational," and failure to take advantage of a particular opportunity simply implies that an alternative one has been preferred.

3. F. A. Hayek, *The Constitution of Liberty* (Chicago: University of Chicago Press, 1970), pp. 95-102, 231-32; H. B. Acton, *The Morals of Markets* (London: Longman, 1971), pp. 61, 79-80; and Murray Rothbard, *Power and Market* (Menlo Park, Calif.: Institute for Humane Studies, 1970). Both Hayek and Acton use the term *commutative justice* to suggest the legitimacy of market transactions, whereas to them *distributive justice* implies the superimposition of collective or other extramarket standards. But of course, markets also "distribute."

4. Current U.S. tax laws do, however, make a minor distinction here: the maximum personal income-tax rate on income from nonhuman capital is higher than that on income from human capital, i.e., wages and salaries. (The two categories of income are often referred to as "unearned" and "earned," respectively, but this distinction is misleading.)

5. Rawls, pp. 14-15, 60.

6. Nozick, pp. 207-9.

7. Rawls, p. 60.

8. Ibid., pp. 293-98.

9. An absence of "pure" time preferences (a special intertemporal demand structure) does not in itself define the rate of interest in either monetary or real (price-deflated) terms, since the rate of interest also reflects the stock of accumulated capital and its productivity (intertemporal supply). Positive risk-adjusted rates of return on capital tend to produce positive market rates of interest and induce consumption and saving shifts that, in the consumer's utility evaluation, create a relative premium on current, as against future, consumption. Of course, positive interest rates also make current consumption relatively costly in terms of forgone future consumption. Rawls seems to overlook these interrelationships. Or possibly he wishes to *dictate* society's time preferences so that, at *any* combination

of current and future consumption for *each* individual, the ideal trade-off shall always be deemed to be one-to-one. To induce private behavior consistent with such a norm, the government would have to couple its income transfers with interventions in financial markets that insured an invariant zero real rate of interest. Such interventions would in turn produce further losses in potential individual lifetime welfare across all income and wealth groups.

10. Nozick, pp. 207-9.