This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Distribution of Economic Well-Being

Volume Author/Editor: F. Thomas Juster, ed.

Volume Publisher: NBER

Volume ISBN: 0-884-10478-8
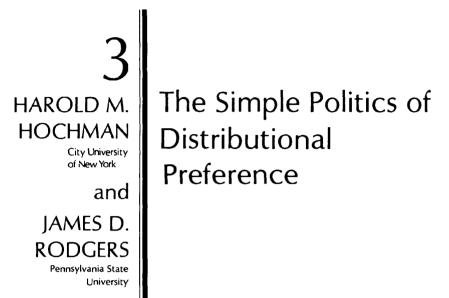
Volume URL: http://www.nber.org/books/just77-1

Publication Date: 1977

Chapter Title: The Simple Politics of Distributional Preference

Chapter Author: Harold M. Hochman, James D. Rodgers

Chapter URL: http://www.nber.org/chapters/c4370

Chapter pages in book: (p. 71 - 114)

3

HAROLD M.
HOCHMAN

City University
of New York

and

JAMES D.
RODGERS

Pennsylvania State
University

The Simple Politics of Distributional Preference

Income redistribution, in its many facets, poses extraordinarily difficult
and complex problems for both normative and positive economics. For
normative economics, it has, until recently,[1] meant irreconcilable con-
flict. With regard to how much redistribution should occur, scholars,
notwithstanding long debate, remain agnostic, as they have been since
Lord Robbins shattered the scientific illusion of classical utilitarianism.[2]

For positive economics, the realm of this paper, efforts to interpret
redistribution have exposed the limited extent of our progress in over-

coming the conundrums of empirical measurement and modeling. The measurement problem itself poses two broad problems. One relates to the adequacy and availability of data and the other to the conceptual difficulties encountered in determining the incidence of public expenditures. While there exist studies of the redistributive impact of individual programs,[3] general-equilibrium problems have befuddled efforts to develop convincing estimates of the overall amount of redistribution.[4]

The development and empirical testing of positive theoretical models intended to explain the extent to which individuals and communities choose to engage in income redistribution has also produced but limited progress. Existing positive research can be divided into two parts, one dealing with transfers carried out in the private sector (through charity, donations of time, and intergeneration gifts)[5] and the other, on which this paper focuses, with income redistribution through government programs.

In a society with a democratic government,[6] there are at least two different, though complementary, ways in which the analysis of public redistribution may be approached. The first inquires into how much redistribution will occur and what its pattern may be expected to be.[7] The second starts with the overall pattern of redistribution produced by an existing government, or by the existence of a particular redistributive program, and attempts to construct a theory to account for it. In one sense these two approaches are similar. Both call for a theory that contains not only a model of individual behavior subject to constraints, but also a model of the political process through which preferences for goods and services with "public" characteristics are transmitted. The difference is that the first approach asks a question that is open-ended, while the second starts with a particular pattern of redistribution.

This paper adopts the second approach. Its concern is with explaining, in terms of individual preferences, public redistribution to low-income persons—to be specific, those distributional adjustments, taken as a group, that are commonly referred to as "welfare" programs.

A number of recent papers have argued that income redistribution, through tax-financed, poverty-alleviating income transfers, may represent a collective response to the existence of nonmarket interactions between the poor and the nonpoor, the nonpoor being concerned, for a variety of reasons, with the well-being, or the consumption-leisure choices, of the poor.[8] One ground on which this explanation of income transfers has been criticized is that transfer recipients, as well as taxpayers, have the franchise, so that observed transfers may well be attributable to the political power of the former rather than to the preferences of the nonpoor.[9] Thus, provided that transfer recipients exercise their right to vote, the conventional assumption of universal

independent preferences, combined with direct or representative decision making by majority rule, may in itself be sufficient to account for transfers to the poor.

While we have no intention of denying that transfer recipients, through voting, will support programs that provide them with benefits, either monetary or in kind, the thrust of our argument will be that the support of recipients, given the voting rules in force, cannot itself account for the existence of such programs. This does not mean that self-interest considerations play no part in generating support for redistribution to the poor. But it does mean that something must be present, in addition to simple recipient self-interest, to account fully for the redistribution that is observed.

The remainder of this paper presents the analytical basis for these remarks and some evidence of individual preferences which seems to support them. In Part I, we discuss the basis of nonrecipient support for redistribution. Part II contains a model of redistribution in direct democracy. In Part III, this model is extended to a setting of indirect or representative democracy, and we explore how much nonrecipient support the enactment of redistribution requires. In Part IV, an effort is made to derive real-world measures of distributional preference from the responses of a panel of California citizens to queries about welfare spending and other redistributive expenditures. In Part V, the implications of these responses are examined in terms of the political models developed in Parts II and III. Part VI, set at a more general level, offers a few concluding remarks about the line of reasoning pursued in this paper.

I. THE BASIS FOR NONRECIPIENT SUPPORT FOR REDISTRIBUTION

A major theme of this paper is that the political base on which support for redistribution rests extends well beyond its direct recipients. We imply by this that many nonrecipients do not behave like simplistic "economic men," concerned with their own disposable incomes and the goods and services these incomes can buy for own-use, and nothing else.

Some nonrecipients, of course, may support redistribution to the poor for reasons that seem almost as straightforward as those of recipients. A nonrecipient may support welfare programs because (a) he expects, with high probability, to himself be a direct recipient at some future time; (b) he may derive income from some activity that is favorably affected by such redistributive programs (e.g., farmers presumably have higher incomes because of food stamps, and social workers receive higher

salaries because of Aid to Families with Dependent Children); or (c) he may view transfer programs as substitutes for transfers he would otherwise feel obliged to make privately, entirely on his own (e.g., persons with parents drawing Old Age Assistance).

But the basis of nonrecipient support for redistributive programs may extend beyond simple self-interest. Transfers to the poor may be viewed, as mentioned earlier, as a collective response to nonmarket interactions between the status or activities of the poor and nonpoor members of the community. Such nonmarket interactions may take several forms. Nonrecipients may be concerned, for a variety of reasons, with the well-being of the poor, or at least interested in seeing that all individuals have access to minimum amounts of certain commodities and services, such as food, housing, and medical care. Thus, the individual's utility function may include, as an argument, the welfare (or some proxy for welfare like income) of other persons, as in

(1) $$U^A = U^A(Y^A, Y^C)$$

As specified in (1), A's utility function includes not only his own income, Y^A, but C's income, Y^C. With this specification, A will desire to make a transfer to C whenever the rate at which he is willing to trade increments in own-consumption for increments in C's consumption (his marginal rate of substitution between own-consumption and C's) exceeds the rate at which such trades can be made. In the N-person case, where such demands are satisfied (for familiar reasons) through the political process, A may well feel that welfare spending, as financed by taxation, satisfies this condition. Alternatively, if A cares about C's consumption pattern, e.g., with the food or housing that C consumes, the specification of A's utility function will be

(2) $$U^A = U^A(X_1^A, \ldots, X_n^A, X_1^C)$$

where $X_1^A, \ldots, X_n^A$ are the rates of consumption of each of the n goods consumed by A and X_1^C is the amount of X_1 which C consumes. In this case, A will favor transfer activities aimed at increasing C's consumption of the particular commodities with which he, A, is concerned. He will tend to favor, say, price subsidies for consumption of these goods to programs providing C with cash payments.[10]

Nonmarket utility interactions may also arise, however, because A sees the existence of poverty as a source of negative externalities. Although A may not "care" about C for C's own sake, he may be affected adversely by particular aspects of C's behavior. In such cases, transfers for him are a kind of input used to "produce" a reduction in such social maladies as crime and public health inadequacies.

In the discussion that follows, actions directed to the reduction of such negative externalities, as well as to the maximization of own-consumption (as opposed to utility) or to the minimization of private costs (payments for goods and services, directly or through taxes) are considered to be based on self-interest. Thus, if all individuals act only on self-interest, to be more precise, "narrow" self-interest, nonrecipient support for redistributive transfers must derive from nonmarket utility interactions that are negative or from the motives described as (a) and (b) in our first set of examples.

On the other hand, we define behavior which results from *positive* nonmarket interactions among utility functions as *benevolence*. Nonrecipient support for redistributive transfers that derives from utility interdependencies, as described in the two-person example of equation 1, and from the motive described as (c) are included in this category.

Our discussion of the implications of nonrecipient support for redistribution concerns itself only with the existence, not the pattern, of benevolence. At issue is whether individuals, through the mechanisms of public choice, support transfer programs that enable others to augment their consumption, not whether the beneficiaries are relatives or friends or anonymous persons, identified only by, say, inferior income status.

Note also that benevolence, in our definition, is fully consistent with the maximization of own-utility. Individuals support transfers that are based on benevolence because they reflect preferred income allocations. Such transfers are, then, a matter of "rational" calculus, consistent with the private utility functions of the actors. It is for this reason that such choices can be accommodated within the corpus of economic theory.

Nothing that we say implies that benevolence is based on altruism. Altruism, which Webster's dictionary defines as "unselfish concern for the welfare of others," relates to motivation, not preference, and implies something more; namely, selflessness. Strictly speaking, therefore, in an analysis grounded in the postulate that choice is "rational," in the sense of being consistent with an objective function that is internal to the individual, altruism is an empty box.

II. REDISTRIBUTION IN DIRECT DEMOCRACY

This section begins our attempt to determine the circumstances under which a political democracy may be expected to produce redistribution to the poor. It deals, as a first step, with the simple but revealing case of direct democracy, in which the political community votes directly in referenda on public programs rather than for representatives who vote

on such programs in legislatures. Part III then turns to the more complex and realistic case of representative democracy.

One important determinant of the amount of redistribution is the voting rule through which the community reaches its decisions. If unanimity is required, preference independence and income certainty, taken together, suffice to rule out all redistribution. Only if the unanimity requirement is relaxed can redistribution occur in a model that abstracts from both interdependent preferences and uncertainty. More plausible, however, is the assumption that simple majority rule prevails, implying that a motion will be adopted if favored by $(N+1)/2$ of the voters. What we wish to determine is whether, with this voting rule, redistribution favoring the poor is likely to be enacted.

Assume that (a) each person has one vote and (b) the distribution of income among persons is unequal. One might predict, then, following Anthony Downs (1957), that the 51 percent of the voters with the lower incomes would enact a tax on the 49 percent with the higher incomes and transfer the proceeds to themselves, each member of the "coalition" receiving an equal share of the redistributive pie.

A three-person model provides the simplest example that can illustrate this kind of redistributive outcome of direct democracy. Suppose three voters, A, B, and C, have initial incomes of Y_A^0, Y_B^0, and Y_C^0, where $Y_A^0 > Y_B^0 > Y_C^0$. By assuming away incentive effects so that each party maintains his market income at Y^0, regardless of which redistributive policies are adopted, the situation can be characterized as a constant-sum game. If income redistribution among the three members of the community is the only issue with which public choice deals, and if revenue is obtained from the members of the group through the taxation of income at a single tax rate, t, the characteristic function of this game can be identified in terms of the payoffs to the various coalitions that may form.

(3)   i. $V(A) = V(B) = V(C) = 0$

   ii. $V(A, B) = t Y_c$; $V(A, C) = t Y_b$; $V(B, C) = t Y_a$

No payoff is available to one-member coalitions such as $V(A)$. Two-member coalitions receive an amount $t Y_i$, where the income that is taxed is that of the excluded party. Since $Y_A^0 > Y_B^0 > Y_C^0$, the payoffs in the three possible two-member coalitions are ranked as $V(B, C) > V(A, C) > V(A, B)$. The highest payoff is earned by the coalition (B, C) which excludes A, the highest-income voter, and this result is the basis for the Downsian conclusion that the 51 percent coalition will consist of the voters with the lowest incomes in an N-voter model.

The second part of this Downsian solution, which specifies that B and C will share equally in the gains, is not necessarily compelling. To obtain this result, one seems forced to make some very special assumptions

about expectations. B and C, for example, may anticipate that unequal sharing would significantly enlarge the chance of their coalition proving unstable. The prospect that the (B, C) coalition will disintegrate and permit the formation of another coalition from which one of them is excluded must be assumed so unfavorable that neither will risk demanding a disproportionate share of the coalition gains. There is no compelling reason, however, why either B or C must be so risk averse.[11]

We may now inquire how likely it is that the redistribution that democratic societies effect on behalf of the poor will reflect the kind of coalition that emerges in our example, viz., a (B, C) coalition with equal sharing. Clearly, one of the main problems with this is that the maximum income at which a voter can remain eligible for transfers in the real world is far below the median. A substantial number of those at the top of the bottom 51 percent receive zero cash transfers and, absent all interdependencies positive or negative, would vote for transfers only if they view the existence of such programs as a means of generating private income (i.e., as suppliers) or as a kind of insurance against the hazard of becoming impoverished.[12] That these motives apply for all those in the bottom 51 percent of voters with incomes too high to be eligible for redistributive transfers is open to considerable doubt. Those nonrecipients who see private gain in transfer programs, after accounting for their shares of the tax costs, are unlikely to be more than a very small minority of the voting population. Nor is the receipt of welfare payments now treated as a right to which persons are "entitled." The barriers erected to exclude the "undeserving" poor from recipient status and to prevent cheating serve also to reduce the insurance value of the programs to those who are not poor. There is, moreover, no reason for the nonpoor to content themselves with programs that provide only insurance benefits, as they would surely be better off with actual transfers. For various reasons then, existing welfare programs, in which means tests exclude a large number of voters with incomes below the median from benefits, are not easily accounted for by the simple Downsian coalition hypothesis.

Within the context of a direct democracy model, what alternative hypothesis can we invoke to account for transfers to the poor? One alternative is to assume that voters with above-median incomes have utility functions that reflect interdependence. This being the case, they may support and willingly consent to finance transfers to that one-fifth to one-quarter of the population that they classify as poor.

As far as the theory of redistribution in direct democracy is concerned, what does such nonrecipient support imply? In terms of our three-person model, the fact that high-income A may derive benefits from transfers can be examined on the assumption that such benefits are greater if the recipient is low-income C, rather than B. This would be true, presumably,

if the source of A's benefits is positive utility interdependence, as in equations 1 and 2. It would also be true if A perceives a link between low income and crime.

On these assumptions, it is clear that a coalition of A and C is much more likely, relative to one of B and C, than it was in the previous analysis. B's support need no longer be obtained to enact a transfer program, and A has an incentive to break up a (B, C) coalition if it should form, not just to reduce his tax bill, but to assure that the transfers will be used in what he thinks to be a more appropriate way (going just to C instead of to B as well as C).

These conclusions may now be applied to an N-voter model. If some individuals with above-average incomes benefit from income transfers to the poor, a phenomenon that simple self-interest models, with no recognition of externalities, are hard put to explain, ceases to be a mystery. Given a transfer program which restricts net payments to, say, the low 20 percent of the income distribution, it is very difficult to assure the support of a majority in a model which ignores utility interdependence. But recognition of nonrecipient support surmounts this difficulty.

III. REDISTRIBUTION IN REPRESENTATIVE DEMOCRACY

Political models in which public decisions are made by popular vote describe but a limited number of real-world situations. The lion's share of collective decisions are made in representative bodies. Thus, it is to an analysis of the redistributive policies that may be expected to emerge from such representative assemblies or legislatures that we now turn.

Consider a hypothetical community of 25 persons, divided geographically into five equal parts, among which there is no short-run mobility.[13] These parts can be considered districts, provinces, counties, or states. In each district one person is elected by simple majority vote to serve as member of the community's legislature. It is assumed that this person clearly perceives the preferences of the majority responsible for his election and honors these preferences when voting in the legislature. Decisions in the legislature are also made by simple majority rule and, for purposes of the present argument, on an issue-by-issue basis with no vote trading. Finally, the legislature concerns itself only with policies explicitly designed to redistribute income—its jurisdiction is a kind of special district with a distributional mandate.

Assume initially that voters, as in the Downs model, have independent preferences and that no person fails to exercise the franchise.[14] Thus,

each voter unfailingly votes for the candidate who supports programs that yield him the largest positive fiscal residual (the transfers he receives less the taxes he pays). A description of the decision-making process implicit in these assumptions is provided in Figure 1. Each column represents one

FIGURE 1

D_1	D_2	D_3	D_4	D_5
X	X	X	O	O
X	X	X	O	O
X	X	X	X	X
O	O	O	O	O
O	O	O	O	O

of the five districts, D_1 to D_5, and the five cells in each column represent the five voters in this district. A representative is elected by majority vote from each district, and the assembly therefore contains five representatives. In Figure 1, an X is displayed in a cell if the voter approves and votes for a proposal; an O is displayed if the voter opposes it. As is apparent from Figure 1, with simple majority rule, both in voting for representatives and in voting on legislation, a motion *may* be enacted if favored by a *minimum* of nine voters. This is because three representatives must vote for enactment, and each, to be elected, must be favored by at least three constituents.[15]

To illustrate the implications of such a model, we may examine several situations. These differ in their assumptions about (a) the number of people eligible for transfers and (b) their dispersion among the districts. Throughout, the redistributive program is assumed to be explicit, with upper-income groups being taxed at a uniform rate t and the receipts being distributed uniformly to those with incomes below some specified level. We are not concerned with what this level is or how it is decided, but take it as given. In the illustrations that follow, each person in each district is either eligible for transfers and thus designated "poor" and identified by an X, *or* pays taxes to finance transfers, in which case he is called "rich" and is identified by an O.

A distribution of poor voters among districts like that represented in Figure 1 illustrates the situation in which the number of "poor" people (assuming simple self-interest—no utility interdependence—on the part of the rich) required to enact redistribution is at its minimum of nine. If

one of the poor were to shift from D_1 to, say, D_4, the redistributive proposal would fail. Hence, it is clear that the spatial distribution of supporters is crucial. Another way of demonstrating this is to consider the situation represented by Figure 2. Here, even though the "poor" number sixteen, they are unable to vote themselves income transfers from the wealthy.

FIGURE 2

D_1	D_2	D_3	D_4	D_5
X	X	X	X	X
X	X	X	X	X
O	O	O	X	X
O	O	O	X	X
O	O	O	X	X

The general implication of these illustrations is that redistribution is bound to be enacted, no matter what the distribution of the poor among districts, if their number exceeds sixteen—with a population of twenty-five and majority rule in force—and that redistribution will never occur if the poor are less than nine. However, if the poor number between nine and sixteen, inclusive, their distribution among districts determines whether redistribution will occur. In the general case of K districts, each with N persons, at least 25 percent of the population must be poor if redistribution on their behalf is to occur, and it is enacted in this case only if the poor are evenly distributed over $(K + 1)/2$ districts and absent entirely from the remaining $(K - 1)/2$.[16]

Now consider the implications of utility interdependence on the part of the nonrecipient rich. Assume, for the sake of argument, that there is no negative externality basis for redistribution, so this interdependence is entirely a matter of benevolence. If there are more than sixteen poor, the effect of introducing such interdependence into the twenty-five person model is nil, inasmuch as redistribution would be enacted in any case. However, with sixteen poor or less, interdependence can bring about redistribution which would not occur without it. This effect can be illustrated for two extreme cases:

    a.   If there are sixteen poor, distributed as in Figure 2, only one of the nonrecipients in D_1, D_2, or D_3 must be benevolent, to a degree

sufficient to be made better off by redistribution, to reverse the outcome.

b. With, say, but one poor person in each district, a much higher proportion of nonrecipients must be benevolent, as Figure 3 illustrates.

FIGURE 3

D_1	D_2	D_3	D_4	D_5
X	X	X	X	X
O	O	O	O	O
O	O	O	O	O
O	O	O	O	O
O	O	O	O	O

Here, six is the minimum number of benevolent nonrecipients (the minimum of nine supporters minus the three poor blokes in any three of the other five districts). The maximum number of rich who can be benevolent without assuring legislative enactment of redistribution is eleven, the maximum of sixteen less the five poor, distributed one to a district.[17]

For the relevant cases (situations in which the number of poor is less than seventeen), the implications of nonrecipient benevolence can conveniently be summarized in a table of "minimum requirements," such as Table 1. While the transfer recipients must number at least nine (must exceed 32 percent of the population) with no benevolence, its introduction can reduce the minimum number of recipients to one. The implicit arithmetic is simple. In political effect, the rich, if benevolent, are perfect substitutes for poor recipients. Depending on the overall spatial distribution of supporters, a benevolent minority among the nonpoor can assure the passage of legislation that transfers income to the poor, and this minority need be nowhere near so large as it must be with the same decision rule in direct democracy.[18]

Several issues of practical policy and constitutional politics can be discussed in terms of this model. The first is the impact of reapportionment as a means of long-run recourse open to a defeated opposition on the redistributive outcome. At one level of analysis, the answer to this question must remain indeterminate. To know the effects of reapportion-

TABLE 1 Number of Benevolent Rich Required for Enactment of Redistributive Legislation

Number of Poor (Actual Transfer Recipients)	Poor as a Percentage of Community	Number of Benevolent Rich to Ensure Enactment		Percentage of Rich Who Are Benevolent		Percentage of Benevolent Rich in the Community Population	
		Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
17 (or over)	68	0	0	0	0	0	0
16	64	0	1	0	11	0	4
15	60	0	2	0	20	0	8
14	56	0	3	0	27	0	12
13	52	0	4	0	33	0	16
12	48	0	5	0	38	0	20
11	44	0	6	0	43	0	24
10	40	0	7	0	47	0	28
9	36	0	8	0	50	0	32
8	32	1	9	6	53	4	36
7	28	2	10	11	56	8	40
6	24	3	11	16	58	12	44
5	20	4	12	20	60	16	48
4	16	5	13	24	62	20	52
3	12	6	14	27	64	24	56
2	8	7	15	30	65	28	60
1	4	8	16	33	67	32	64

essential to the analysis of redistribution through the public sector. What we can point out here is that to the extent that all constituents have intense feelings (either positive or negative) about redistribution relative to other issues, logrolling is not likely to be an important factor.

A second complication, also with some real-world importance, is that rates of voter participation, obviously much less than 100 percent, tend to vary directly with income. The analytic equivalent of such variation in voter participation, in terms of our model, is a disproportionate reduction in population, which eliminates more potential voters with low incomes than with high incomes. Other things equal, inverse voter participation reduces the ability of the poor to gain income transfers through use of the political process. By raising the minimum proportion of nonpoor who must favor a redistributive proposal to obtain its legislative enactment, it increases the importance of nonrecipient support in accounting for observed transfers to the poor.

IV. EVIDENCE OF DISTRIBUTIONAL PREFERENCE

Other things being equal, direct recipients of income transfers, together with those who think themselves likely to become recipients, can be expected to look favorably upon redistributive programs. To assure this, one needs only the comfortable assumption that the marginal utility of net increments in disposable income (the difference between transfers and perceived taxes) is sufficient to offset any implied costs in terms of lost privacy associated with the transfer process itself.[21]

But preferences of nonrecipients, which are transmitted through a political process that sets out to define new programs or to propose changes in the level or content of existing programs, are less transparent. In representing nonrecipient demands, one may, to start, presume that the capacity and taste for redistributing income vary with conventional socioeconomic and demographic indexes. Thus, even if all nonrecipients have identical tastes for redistribution, their willingness to transfer income—the "effectiveness" (marginal relevance) of their demands— will vary with these indexes (in other words, income and other claims, implied by family size, age, and so on, on nonrecipient resources).

Unfortunately, data that indicate the incidence of utility interdependence, benevolent or other—much less the critical levels the enactment of redistributive motions require—are not only difficult to delineate, but are difficult to obtain. Indeed, even if such data were identifiable, the fact that political institutions do not generate data in the required form precludes definitive investigation. Since what one has to work with is fragmentary

and imperfect, little choice remains but to arm oneself with such tenuous assumptions about patterns of preference interdependence as seem to fit the evidence and institutions and to proceed.

To examine redistribution in direct democracy, one can turn to, as Wilson and Banfield (1964) have done, voting patterns in public expenditure referenda with redistributive overtones, involving school tax decisions or the capital financing of such facilities as a general hospital with a low-income clientele.[22] Or, in examining referendum voting on such measures as Proposition I (the California tax initiative rejected in November 1973, which proposed the constitutional restriction of public expenditures), one may introduce into the relationship variables used to explain the voting outcomes in precincts or census tracts that putatively reflect utility interdependence, as Levy (1974) has done. Where inference about the prevalence and strength, much less the political significance, of interdependencies is at issue, however, these procedures have a number of drawbacks. Citizen perceptions of the implicit distributional implications of the proposals under study are bound to be imperfect, not just because voters differ in fiscal sophistication, but because such effects are inherently unclear. This may not only affect how people vote but whether they vote. Moreover, the data examined, which represent averages for voting precincts or census tracts, can only provide evidence of central tendency, indicating median voting behavior (in terms of income, education, or other indicators of preference) within such political units. Our political models, on the other hand, indicate that it is the distributional preferences of critical minorities that determine whether proposed redistributive measures are successful. While it is possible to infer something about the size and composition of such minorities from cross-section voting data, provided detailed information on voter characteristics within political units exists, this is at best a tricky business.

Thus, to study actual and (for political acceptance) necessary levels of nonrecipient support for redistribution, it seems worthwhile to seek data in which the individual voter is the unit of observation. Periodic polls of a sample of California voters by the Field Research Corporation appear to be a workable mine of such data. Several of the Field polls conducted during 1970 (in May, August, and November) posed a variety of questions, designed to ascertain attitudes toward government expenditures in general and toward welfare spending in particular, to just over half of their samples of more than 1,100 voters. The focus on welfare spending, the most obvious means of redistribution to the poor, was attributable to the fact that Governor Reagan had made welfare reform a major issue in his reelection campaign. A defect of these data is that they measure intention, without enforcement of performance, rather than revealed preference. In one sense, however, this is a virtue, for it

eliminates the distortions of actual distributional preferences that occur in candidate voting, where there is issue packaging, and in logrolling, which figures significantly in legislative decision making.[23]

Distributional preferences, as implied by responses to the welfare spending questions of the 1970 California polls, are summarized in Table 2. Income is the primary classification variable, in recognition of its importance in determining whether utility interdependencies are marginally relevant, and whether respondents are likely to be welfare recipients.[24] The sample responses have been recalculated (producing but minor changes of a percentage point or two) to reflect California population weights, which are, aside from vagaries of voter participation, measures of voting strength. Though the May, August, and November samples from which the data were compiled included different respondents, the responses are assumed to be comparable.

Within each income group (summarized in rows 1 through 3 of Table 2), the responses may be interpreted as the data of a simple cumulative function, though one for which the variable which interests us, attitude toward spending, is qualitative and discontinuous. The family of such functions (one for each income-bracket column in Table 2) describes variation, with income, in respondent satisfaction with particular welfare spending levels, relative to the existing level and to a regime in which there would be no welfare program at all. Rows 1 through 3 of the table each indicate a different respondent attitude. Row 1 measures the percentage of respondents who believe that some level of welfare spending (a level which is greater than zero but by an unspecified amount) must be considered a "moral imperative." Such persons responded with "agree strongly" or "agree somewhat" to the statement: "In spite of some waste in the welfare program, it would be morally wrong to do away with it." Row 2 indicates the proportion who consider the present level of welfare spending either "adequate" (that is, not too frugal) or "insufficient" (that is, desiring that it be increased). Taken together, we interpret these respondents as viewing the present level as "not unduly generous." This is obviously a weaker and more inclusive indication of support than that registered in row 3 by respondents who think that the present level of welfare spending is insufficient and desire more.

On inspection, a number of implications seem clear. First, only a small percentage of persons in any income bracket oppose any and all welfare spending. Only 11 percent do not feel that it is a "moral imperative" to maintain *some* positive level of welfare spending.

Second, in each of the three rows there is in general a systematic break in the relationship between the response percentages and income at roughly $7,000, and this income is interpreted as the breakpoint between the actual and potential welfare recipient population and the nonrecip-

TABLE 2 Derivation of Distributional Preferences from Reactions to Statements on Welfare Spending
(Sample percentage responses weighted to reflect California population)

	Income ($1,000) and Income Distribution (in parentheses)							
	Less than 3 (10%)	3–5 (10%)	5–7 (11%)	7–10 (21%)	10–15 (27%)	15–20 (14%)	More than 20 (6%)	All (100%)
1. Moral imperative	92	96	96	88	87	93	82	89
1a. Not moral imperative	8	4	4	12	13	17	18	11
2. Present level not unduly generous (adequate or insufficient)	82	64	79	63	60	65	61	66
2a. Present level adequate	44	26	39	44	36	39	47	39
3. Desire more spending	38	38	40	19	25	25	14	27
4. Helps prevent crime	75	68	58	49	48	47	26	65
5. (1) – (4)	18	28	37	39	39	46	56	24
6. Provide housing to those who can't afford it	71	63	49	50	39	42	32	46
7. (1) – (6)	21	33	47	38	48	51	50	43
8. (5) – (6)*	(53)	(35)	(12)	(11)	nil	4	24	(22)
9. Able-bodied men should not collect welfare	72	86	76	78	82	74	79	79
10. (1) – (9)	20	9	19	10	5	19	3	10

NOTE: All questions except those in rows 6 and 11 are from the August 1970 poll. Lines 6 and 11 are from the November 1970 poll. Defects in comparability, in addition to those attributable to sample composition, arise because the November (but not the August) poll permitted "undecided" responses (which we treat as "disagreement"). The following explanation relates to the various rows.

1. Welfare is a moral imperative. Reactions of "agree strongly" and "agree somewhat" to the statement: "In spite of some waste in the welfare program, it would be morally wrong to do away with it." Response that welfare is a moral imperative is taken to imply the marginal relevance of some utility interdependence.
   1a. The complement of 1.
2. Response that "more" spending is desired or current level of spending is "adequate" to the question: "Where should welfare, relief, and poverty programs fit in government spending?" implies that respondent does not believe the current level of the program to be unduly generous.
   2a. Response that current level of spending is "adequate."
3. Response that "more money" should be spent.
4. Reaction of "agree strongly" or "agree somewhat" to statement that "if if weren't for welfare, there would be a lot more stealing, burglaries, and other crime." Interpreted as the upper limit on support for welfare spending that is based on narrow self-interest rather than benevolence.
5. The difference between percentage responses under 1 and 4. Interpreted as lower limit of support for welfare that is benevolence-based.
6. Reactions of "agree strongly" and "agree somewhat" to "it's only fair for government to provide good housing for people who can't afford it."
7. The difference between the percentage responses under 6 and 1.
8. The difference between the percentage responses under 5 and 6. Asterisk indicates that the percentages contain negative percentages.
9. Reactions of "agree strongly" and "agree somewhat" to "no able-bodied man who is healthy enough to work should be allowed to collect welfare."
10. The difference between the percentage responses under 1 and 9.

ient population.[25] The decline in what appear, on the whole, to be favorable attitudes toward welfare spending may be interpreted as reflecting a rise, with income, in its net "price," more than sufficient to offset any increases in "tastes" for redistribution. Several factors contribute to this: (a) direct variation of the tax cost of income transfers with marginal tax rates and (b) inverse variation with income of the monetary benefit of transfers, because the probability of ever being poor declines and welfare programs consequently become a much worse form of insurance.

Third, only in the $3,000 to $5,000 group (where the figure is 25 percent) do less than 36 to 47 percent believe that the existing level of welfare spending is "adequate," a characterization that implies an absence of any demand for increases in such programs. The difference between the 25 percent response rate in this group ($3,000 to $5,000) and the 44 percent response in the lowest group (less than $3,000) seems to be primarily a matter of differences in age composition and in experience with the inadequacies of existing levels of welfare payments.[26]

In examining Table 2, one might inquire why prowelfare sentiment is less than unanimous in those income groups in which direct recipients are likely to be concentrated. Higher levels of redistributive transfers are, after all, in their apparent private interest. Doubtless, a part of the answer is that the Field polls inquired about attitudes toward welfare spending and not, more inclusively, about redistributive transfers or, in even more general terms, about income transfers, including those like social security, which are at least partially (even if more in perception than fact) annuities financed by prior social insurance payments. Some of those in the lowest income groups are, moreover, transients who had incomes that were below long-run expectations in the year concerned. Others, such as the "working poor," may well have taken the survey questions literally, interpreting them as referring to a particular package of welfare programs, monitored through complex rules and regulations that they consider unpalatable. These rules may have made them ineligible or made their participation so uncomfortable that they registered negative responses even though they could be quite favorably disposed toward such familiar systems of "no strings" income transfers as the Family Assistance Plan or a demogrant system of the type proposed by Senator McGovern in 1972. Without probing deeper through further questions (an alternative not available to us) there is no way of telling which of these motivating factors were operative, or to what degree.

The responses themselves offer little in the way of precise basis for inferring the motives of nonrecipient support. In this regard, agreement that "it would be morally wrong to do away with" welfare spending is of some help, inasmuch as it does indicate benevolence, as we have defined

it, but it does so, strictly speaking, only for marginal departures from program levels of zero. As Part I has indicated, however, benevolence, deriving from a sense of fairness or caring about the well-being of others, is but one basis of nonrecipient support.[27]

The role of negative externalities, grounded in a distaste for behavior patterns associated with absolute or relative deprivation, must also be considered. It should be stressed that these need not be founded on a dislike of the poor. They may derive, for example, from presumed implications of poverty for the stability of the social and political fabric, or the quality of community life.

A crude, though suggestive, attempt to distinguish positive or benevolent interactions from negative utility interactions as the basis for nonrecipient support of welfare spending is made in rows 4 and 5 of Table 2. For hints into the real-world operation of the models of democracy that Parts II and III have presented, these rows contain some of our most interesting data. Reactions to the statement: "If it weren't for welfare, there would be a lot more stealing, burglaries, and other crime," are recorded in row 4. Among nonrecipients, agreement with this statement (responses of "agree strongly" and "agree somewhat") is here interpreted as an indication of support for redistribution (a belief that welfare spending is desirable) on grounds of negative utility interactions and not on grounds of benevolence. The strong inverse relationship between income and agreement that "welfare prevents crime" is worth noting. It suggests that those most experienced with crime (which in prevalence varies inversely with neighborhood quality and, thus, income) seem most convinced that the statement is correct.

As far as negative interactions deriving from crime itself are concerned, these figures are, of course, at most an upper limit—more likely an overstatement—to which nonrecipient support does not derive from benevolence. Here, however, for the sake of argument, we treat the responses in row 4 as a proxy for all negative sources of nonrecipient support.

Differences between the responses to "welfare is a moral imperative" (row 1) and "welfare prevents crime" (row 4) are reported in row 5. These derived figures are then our measures (in a sense, minimum measures) of the frequencies with which benevolence itself is a factor in distributional preferences, in the sense that nonrecipients prefer *some positive* level of welfare spending.[28] That "net" benevolence, thus measured, varies directly with income is what one would expect if "concern for the well-being of others" is a normal good.

The frequencies in row 5 rise from 18 percent among respondents with incomes under $3,000 to 56 percent among those with $20,000 or more. Among all those who are presumed to be nonrecipients (those over

$7,000) its range is 39 to 56 percent, and its average incidence is 47 percent.[29] However, since some respondents who agree that "welfare prevents crime" did not consider it a moral imperative, the deductions row 4 provides are too large. The 47 percent figure should, therefore, be adjusted upward by 3 percent, producing a corrected estimate of 50 percent. In the context of our political models, in which low frequencies of nonrecipient benevolence can be crucial, this minimum estimate of the incidence of benevolence in nonrecipient preferences must be considered quite significant.

The substantive focus changes in row 6 to the form in which non-recipients prefer their redistributive transfers to the poor to be made. At issue here (and in the remaining rows of Table 2) is whether the levels of self-perceived well-being of recipients—or alternatively, their consumption patterns or work-leisure choices—are the basis of donor concern.

In models of democracy without benevolence, all transfers will be in cash. Transfers in cash provide a wider range of consumption options and will be preferred by recipients who enact redistribution on their own behalf. On the other hand, in models with benevolence (or negative utility interactions), nonrecipient preferences are also relevant, both in determining whether redistribution will occur and in establishing its form and amount. If nonrecipient support does not derive from concern with the self-perceived well-being of transfer recipients, but extends to the sources or uses of their incomes, cash transfers may no longer be preferred. Specifically, if the utility interdependence of the marginal donor in the coalition required to enact a redistributive motion is of the particular-commodity type, the preferred transfers will be in kind and not cash. Row 6, taking up this issue, indicates nonrecipient reactions of "agree strongly" or "agree somewhat" to the statement posed in the November 1970 poll that "it's only fair for government to provide good housing for people who can't afford it." Because a different sample was used in November, comparisons with the August responses for inference about patterns of benevolence and the preferred form of income transfers must be taken with a large grain of salt. Still, provided one has a bit of a speculative bent, such comparisons are enlightening.

The responses in row 6 can be interpreted loosely as evidence of donor concern with the consumption patterns rather than the general well-being of recipients. In the housing case, this might have any of a number of sources: concern with how well recipients are housed, an objection to the aesthetics of ill housing or, to stretch a point, an aversion to the implications of housing inadequacies for social behavior. For the moment, there is no need to discriminate among these explanations; it can simply be assumed that the response frequencies in row 6 are an upper limit on the incidence of particular-commodity interdependence,

ment, one must specify the initial situation, the specific inter-district reallocation of voters that it contemplates, and the constitutional constraints under which it operates. But a specific example can illustrate some of the possibilities.

Suppose that the legislature has passed a redistributive proposal and that Figure 4 illustrates the distribution of its supporters, consisting of both the poor and the benevolent rich (denoted by B). In this setting, reapportionment that shifts any individual from district D_4 to D_5 (or vice versa) can have no effect, for both of these districts are opposed to redistribution in any case. But the outcome may be quite different if reapportionment affects one of the districts in which a majority supports redistribution. If, for example, reapportionment shifts a benevolent person from D_3 to D_4, it changes to one in which three out of five representatives (those from D_3, D_4, and D_5) oppose redistribution, resulting in its termination.

FIGURE 4

D_1	D_2	D_3	D_4	D_5
X	X	X	B	B
X	X	X	O	O
B	B	B	O	O
B	O	O	O	O
O	O	O	O	O

At another level of analysis, the possibility of reapportionment, at least in a long-run sense, may make redistribution more difficult to effect. This is true, for example, if significantly less than 50 percent of the community supports redistribution, while a decision to reapportion requires but a simple majority among the electorate. To see this, one need only observe that if, say, only nine persons out of twenty-five secure the enactment of a redistributive program, a substantial majority opposes it. If reapportionment can be carried out in any manner whatsoever, no matter how arbitrary, it is an easy matter for this majority to bring about the redistricting needed to terminate the program. In the real world, of course, reapportionment is constrained by rules governing the geographical basis of representation, rules which require, for example, spatial continuity within jurisdictions. This constraint limits the efficacy of

reapportionment as a means of recourse to a defeated majority. Still, on the average, the prospect of reapportionment does increase the minimum level of overall support under which redistribution is likely to be enacted.[19]

Metaphorical swords, however, usually have two edges. Just as the possibility of reapportionment can limit the ability of a minority as small as 9/25 to secure enactment of a redistributive program, so it can also prevent a minority of 9/25 from blocking the passage of such a program. Reapportionment can, for example, easily convert the situation in Figure 2, in which redistribution is favored by 16/25 of the population but fails, into a situation in which redistribution will occur.

It should be noted, finally, that reapportionment can make the outcome of collective decision making in representative democracy more like the outcome under direct democracy only if apportionment decisions are themselves decided by a simple majority rule. In contrast, if, say, three-fourths of the population must approve reapportionment, its potential impact is nullified.

A related issue, similarly elucidated by our model, concerns the effect of the spatial distribution of potential recipients, the poor, on the likelihood that a transfer program will be enacted. Put a bit more pragmatically, it is relevant to ask whether the poor are likely to enjoy more political success (obtain larger per capita transfers) if they are dispersed across districts or concentrated. Our model suggests that this question is relatively easy to resolve. In the absence of nonrecipient support, neither concentration nor an even distribution among districts benefits potential recipients. Where there are ten such persons, the implications of an even distribution of two per district and the concentration of all ten in but two districts are the same—redistributive proposals will fail. To make the most of their numbers, potential recipients must be "semidispersed."[20]

Clearly, the model of representative democracy that this section has presented is innocent of many of the realities of collective decision making. A number of complications are, therefore, apparent. Two of these, hitherto ignored, are discussed here, together with some modifications that they might require.

The first complication is that collective decisions are often outcomes of a logrolling process in which representatives trade votes on different issues. To gain support on issues on which they hold strong views, representatives may either vote for legislation to which they (and, on our assumptions, their constituents) are mildly opposed or vote against legislation which they mildly favor. Such behavior immediately takes us beyond the confines of our simple single-issue model and poses the question of when an extension of the model to accommodate logrolling is

as opposed to general and nonspecific utility interdependence with which we are concerned here.[30]

Our specific interest in this connection is with the interpretation that might be given of the responses of individuals with incomes above the breakpoint, which is, in this case, $5,000 rather than $7,000. Among such respondents, 38 to 51 percent of those agreeing that welfare is a moral imperative did *not* express the opinion that government is obligated to provide good housing for those who cannot afford it (see row 7). The theory suggests two possible reasons for this. Either these respondents were concerned with the overall welfare and not the consumption patterns of the poor, *or* they were not concerned with the poor at all, but supported welfare spending because of a belief that it prevents crime or ameliorates other undesirable side effects of poverty. To "net out" the effects of such negative interactions, we then deducted the "provide housing" responses from the calculated "net" benevolence levels (in row 8) rather than deducting them only from the "moral imperative" frequencies (as in row 7). Of course, "helps prevent crime" and "good housing" are not mutually exclusive as this procedure taken by itself implies. Many observers would argue that the housing component of welfare spending plays a major role in its effect on crime. Row 8's "net" estimates of benevolence, attributable to general and nonspecific, rather than particular-commodity utility interdependence, are minima in two ways: first, because the "prevents crime" frequencies place an upper limit on nonrecipient support that is not attributable to benevolence; and second, because of overlap among responses to the "prevents crime" and "provide housing" queries.

Taken at face value, the *negative* net frequencies in row 8 of Table 2 suggest that nonrecipient support for redistribution is (strictly) a matter of particular-commodity interdependence for respondents with incomes between $5,000 and $10,000. From $10,000 to $15,000, the net figure is effectively zero and warrants a similar interpretation. Over $15,000, however, it rises from 4 percent to a maximum of more than 24 percent among respondents with incomes over $20,000.[31] This is a large enough frequency to suggest with some force that donor concern with the self-perceived well-being of welfare recipients is a normal good which holds little interest at or near the breakpoint between recipients and nonrecipients but which is in significant demand among voters in the top decile of the income distribution. This inference, based on the indications of distributional preference summarized in Table 2, lends strength to the argument (developed elsewhere)[32] that support of redistribution by the rich, in the coalitions required to enact welfare programs, varies directly with income and is disproportionately derived from those donors with the highest incomes.

Another key issue in the investigation of distributional preference is whether nonrecipient donors are concerned with levels of self-perceived welfare among the recipient population or with the potential levels of their money incomes.[33] Donor aversion to work disincentives is evident in public discussion of redistributive proposals (in connection, for example, with the family assistance legislation and, in particular, with income-maintenance experimentation) and is corroborated by the almost uniformly positive poll responses to the statement that "no able-bodied man who is healthy enough to work should be allowed to collect welfare" (summarized in rows 9 and 10 of Table 2).[34]

Within the present frame of reference, the differences between nonrecipient responses on the "moral imperative" and "able-bodied man" issues may be taken as evidence of a minimum level of interdependence in which the recipient's welfare, pure and simple, rather than his earned income is what counts. The average of these differences, which vary but little across income classes, approximates 10 percent. This contrasts with the 50 percent estimate of the incidence of "net" benevolence implied by the differences between the responses to the "moral imperative" and "welfare prevents crime" statements. It may, therefore, in a very rough sense, be interpreted as a lower limit on the extent to which nonrecipient supporters of welfare spending are likely to support a simple program of cash transfers containing no work requirement provisions.

V. IMPLICATIONS OF NONRECIPIENT SUPPORT UNDER DIRECT AND INDIRECT DEMOCRACY

This section examines with the derived evidence from the California polls the degree to which nonrecipient support for welfare spending (or opposition to it) is essential to its enactment. We do this by treating the queries posed to the California sample in the May and August 1970 polls as though they were referenda or legislative motions. The relevant responses, classified by respondent income, are reported in row number 3 of Table 2 and in Table 3. Table 4 displays the levels of nonrecipient support required for enactment of each of these motions, under a variety of decision rules, given the levels of support that recipient groups have evinced.[35] These decision rules range from a minimum of one-fourth to a maximum of three-fourths. One-half is obviously the operative requirement for the overall population for a referendum decided under direct democracy with majority rule. One-fourth and three-fourths define the limiting cases for the model of indirect democracy developed in Part II. Population distribution and apportionment are, however, seldom favor-

able enough to permit these minimum coalitions to pass or block any motion. Thus, from a practical standpoint, limits of one-third and two-thirds seem more sensible, and even these may well be too wide.

In May 1970 poll interviewees were asked (in separate open-ended questions) which, if any, of a list of eight government programs categories involving large expenditures of money they would like to see "increased or kept at the same level of spending" or "reduced in spending." Table 3 summarizes the frequencies with which the respondents mentioned welfare spending.[36] Since some 7 percent of the interviewees mentioned welfare spending in neither case, some inconsistency is reflected in the responses. The inconsistency decreased with income, producing an upward bias in the support level required to enact a legislative motion proposing an increase in welfare spending and a downward bias in the level of nonrecipient support required to defeat it.[37]

The legislative motions implicit in the May 1970 questions for which distributional preferences are indicated (in Table 3) are set out in rows 1a, 1b, 2a, and 2b of Table 4. The right-hand side of this table reports

TABLE 3 Responses to Distributional Preference Questions on May 1970 Poll
(Sample percentage responses weighted to reflect California population)

	Income ($1,000) and Income Distribution (in parentheses)							
	Less than 3 (10%)	3–5 (10%)	5–7 (11%)	7–10 (21%)	10–15 (27%)	15–20 (14%)	More than 20 (6%)	All (100%)
1. Increase or maintain the same	64	75	67	59	56	52	43	59
2. Decrease	18	15	22	37	40	37	57	34
3. Inconsistent: no mention of welfare in (1) or (2)	18	9	11	4	4	10	–	7

NOTE: The explanation relates to the various rows.

1. Frequency with which "welfare spending" was mentioned by respondents when interviewer stated: "Here is a list of some government programs which require large expenditures of money. Which would you like to see increased or kept at the same level of spending?" The query was open-ended, and the responses were neither mutually exclusive nor constrained, either by a budget limitation or by a requirement that priorities be specified.
2. Responses to: "Here is a list of government programs which require large expenditures of money. Which would you like to see reduced in spending?" The same comments apply as in row 1.
3. No mention of welfare in either of the above responses, reflecting implicit inconsistency. Note that this inconsistency is, on the average, lower for the income groups of $7,000 and above.

TABLE 4   Referenda Implicit in Attitudes toward Welfare Spending
(Sample percentage responses weighted to reflect California population)

Implicit Referenda on Welfare Spending	—Income[a]— Less than $7,000 (32%)	More than $7,000 (68%)	Required Support among Those with Incomes of $7,000 or More to Achieve Indicated Population Support Level 1/4	1/3	1/2	2/3	3/4
			Questions on May 1970 Poll				
1a. Increase or maintain the same	68	55	8	19	43	66	78
1b. "Don't" decrease	81	60	3	14	38	61	73
2a. Decrease	19	40	27	39	62	86	97
2b. "Don't" increase or maintain the same	32	45	22	34	57	81	92
			Questions on August 1970 Poll				
3a. Spend more	39	22	19	31	55	80	92
3b. "Don't" spend more	61	78	8	20	45	69	81

NOTE: The population is apportioned between the 32 percent with incomes "less than $7,000" and the 68 percent with incomes "$7,000 and above." This breakpoint, we assume, distinguishes between respondents who, given current economic status, are or have a significant likelihood of becoming welfare recipients. The choice of $7,000 rather than $5,000 as the breakpoint between the current and potential "poor" (recipients) and the "rich" (individuals who are unlikely to become recipients) is based on an apparent discontinuity in the responses, thus in distributional preferences, at this income level.

Figures in the right-hand half of Table 4 indicate percentage levels of support among the population with incomes of "$7,000 or more" required to achieve the indicated overall level of support (across all income groups) for the implicit referenda on welfare spending listed at the far left.

Support levels indicated in 1a and 2b are derived from reactions (and the negative complement of reactions) to: "Here is a list of government programs which require large expenditures of money. Which would you like to see reduced in spending? Which would you like to see increased or kept at the same level of spending?" and its negative complement. These questions were asked in the May 1970 poll.

Required support levels in 3a and 3b are derived from the response of "more money" to "Where should welfare, relief, and poverty programs fit in our government spending?" and its negative complement. This question was asked in the August 1970 poll.

[a]The figures in parentheses are population weights.

levels of nonrecipient support required for this enactment. For both the "increase or maintain" and the "decrease" questions, required support levels for the negative complement ("don't decrease" and "don't increase or maintain") have also been calculated to delimit the significance of the response inconsistencies discussed above. Inspection of

Table 4 indicates that the inconsistencies were not very important, since their effect, which was to produce differentials of approximately 5 percent across the board in nonrecipient support requirements, was not very important.

The necessary levels of nonrecipient support in a referendum on whether "more money" (as distinct from enough to "increase or maintain" the present level) ought to be spent on welfare programs are reported in rows 3a and 3b of Table 4. These figures are derived from the August 1970 responses summarized in row 3 of Table 2 and discussed in Part IV. Although, as mentioned earlier, the composition of the May and August samples differed, so that the responses are not strictly comparable, these outcomes are consistent with what one would expect, given an inverse relationship between the extent to which utility interdependence is relevant at the margin and the price of acting upon it. Still, the low level of support for higher welfare spending ("more money") among respondents with incomes of "less than $7,000" is puzzling. One possible explanation is that the August queries were not phrased in the open-ended language of the May questions but in terms of spending priorities, thus imposing an implicit but rough budget constraint into the calculus of the respondents.

In understanding Table 4, it is useful first to think of the implicit referenda as if they had been proposed in a regime of direct democracy, with enactment requiring overall support of 50 percent. In this case, enactment of an increase in welfare spending requires support (given, as the first column indicates, 39 percent support among the "poor") from 55 percent of the nonrecipient rich, while the assent of but 40 percent (a rough average of the 38 and 43 percent in rows 1a and 1b) is required to pass a motion to "increase or maintain." To effect a "decrease" in welfare spending, on the other hand, 60 percent of the "rich" (a rough average of 62 and 57 percent) must consider the present level of welfare spending too high.

These figures may now be contrasted with the actual frequencies. In fact, only 22 percent of the "rich" would like to see welfare spending increased, while 40 to 45 percent would like it decreased. However, virtually 60 percent, the same proportion enactment requires, favor its being "increased or maintained." There seems then a clear implication (to the extent the California samples are representative) that the existing level of welfare spending is stable,[38] at least under simple majority rule. The fact that nonrecipient support levels of three-fifths to four-fifths are required to pass on all two-thirds positive motions, and roughly a one-third minority among nonrecipients is in all cases sufficient to block any two-thirds motion for change in the present level of welfare spending, supports this conclusion.[39]

Under indirect democracy, the required levels of overall support may range, in theory, from 25 to 75 percent. In consequence, the variety of possible levels of required nonrecipient support multiplies. With a given decision rule, and the information Table 4 contains, one may work through the prospects of each motion, under whatever assumptions about voter participation (among recipients and nonrecipients) and the "optimality" of the spatial distribution of supporters (apportionment) he may wish to make. Since the character of this exercise is clear, specific discussion does not seem necessary at this juncture.

It is now possible to return to our crude estimate of the lower limits on "net" nonrecipient benevolence and "nonrecipient support for a cash transfer" program without work requirements and inquire, speculatively, into their implications for the likely success of proposals to institute transfer programs. Recall that the first limit, 50 percent, was derived from the "moral imperative" and "welfare prevents crime" responses and the second, 10 percent, from the deduction of the "able-bodied man" (implying a concern with the effects of income transfers on work incentives) from the "moral imperative" responses. The former can then be interpreted as a lower bound on the extent of nonrecipient support for some sort of cash redistribution program, whereas the latter indicates the minimum level of nonrecipient willingness to support such a program without imposing work requirements.

That some program of cash transfers can be enacted, whatever the decision rule, seems apparent if 50 percent is the operative limit of nonrecipient benevolence. Even the 10 percent figure, which permits some defection of recipients, is likely to be consistent with enactment if, as the case may be in representative democracy, only one-third of all voters must agree. However, the data, as available, provide no grounds on which to base estimates of the magnitude of such programs.

As indicated in the earlier discussion, the limits in themselves simply indicate prevalence and do not measure the significance or marginal relevance of benevolence at the current level of welfare spending, the base to which the implicit motions considered in Table 4 refer. To ascertain this, we require a heroic assumption about the rate at which income transfers beginning from a base of zero succeed in internalizing benevolence. To this end, assume for the sake of argument that the basis for nonrecipient support for income transfers to the poor is simple positive utility interdependence, that all welfare spending at the start is in cash, and that the initial level of cash transfers from which departures are being considered internalizes half the benevolence that would be present at a zero level of transfers. The implied operative limits of nonrecipient support for marginal changes in the initial level of cash transfers (as

distinct from maintenance of the program at its current level) are then 25 and 5 percent.

The levels of required nonrecipient support spelled out in Table 4 indicate, in this case, that in direct democracy (in a referendum decided by simple majority rule) there is no "positive" motion to "increase or maintain" the level of transfer programs that could pass. But, depending upon the spatial distribution of their supporters, the same motions, set forth under representative democracy, might well stand some chance of success. If, for example, the distribution of supporters is ideal, so that overall support of but 25 percent is required, motions to "increase or maintain" and "spend more" would both do well. This also seems true for the former if one-third support is required.[40] On motions to decrease welfare spending, the benevolence limits imply that three-fourths support is simply unattainable and that other, less restrictive support levels, such as two-thirds, are unlikely to be attainable.

Admittedly, such argumentation is tenuous, as it must be, given the character of the evidence at our disposal. It does, nonetheless, suggest directions in which research must proceed if our practical understanding of the workings of democratic political process is to be meshed with theoretical models of public choice that attempt to interpret it. What is needed, first, as in discussing more conventional topics, are better structural models, with tangible counterparts in empirical evidence. To characterize democratic processes in terms of such models, one requires a consistent body of microdata, capturing the preferences of the individual actors upon which politics builds. To obtain such data, a suitable panel must be subjected to a carefully structured series of questions, capable of measuring gradations in preference and linking choice, grounded in such preference, to the price and reward systems implicit in public policies. The applicability of such data would be much less limited than that grounded in hypothetical binary choices. For the researcher interested in distributional preferences, the best of all worlds would provide matched data, relating preferences, as discerned through such surveys as the California polls that we have used, and voting through which such preferences are revealed.[41] It is obvious that this is a great deal to ask. And as if it were not already enough, or too much, the ambitious scholar may even hope for data that relate the choices of legislators and legislatures, adjusted somehow for their constituents.[42]

VI. CONCLUSION

The classical preoccupation with income distribution enjoyed a renascence in the 1960s. In motivation, this was largely pragmatic, a matter

of discomfort with the apparent coexistence of social deprivation and general prosperity, rather than analytic interest in the empirical dimensions of an elusive social optimum. Disenchanted with the structure and the outcome of prevailing property rights, which define claims to human and nonhuman capital, some writers went so far as to suggest that distributive justice requires a radical restructuring of social institutions, holding that there is no way in which the social and economic system, in its present form, can accommodate the adjustments they think "necessary." Others, more cautious, and, frankly, more committed to liberal values, argued that more redistribution would occur if only the democratic political process and the social programs it produces could be made to more accurately reflect the "true" preferences of the voters from whose consent they derive.

For the practicing social scientist, which way of posing these issues is more accurate is less interesting than the question of which is more open to inquiry. To us, the apparent stability of a distributional outcome that conforms with voter preferences seems sufficient to make the investigation of redistribution as a matter of public choice, within a predefined system of rights and rules, the prior research topic. It seems more efficacious to make use of familiar concepts and methods, even when they can be adapted only with difficulty to current concerns, than to disregard them and seek, like Lancelot, a new paradigm.

Recently within the public choice frame of reference, some considerable effort has been devoted to the normative question of how much income redistribution is appropriate, and whether its form should be cash or kind. Treatment of the positive counterpart of this issue, the effort to determine the kinds of preferences reflected by income transfers carried out through private charity and public programs, has been much less satisfactory. As means of explaining redistribution, the basic deficiency of traditional neoclassical analysis resides in its formulation of the objectives, thus the preferences, which motivate voters and politicians. The requirement that rational behavior be consistent with simple self-interest, in particular, makes it far more difficult than need be to explain redistributive activities. The appropriate extension of the neoclassical paradigm, which permits more realistic interpretation of redistribution, introduces choices which reflect benevolence into the objective function.

In the present paper, we have developed this theme by building utility interdependence into models of redistribution in direct and indirect democracy. Perhaps our most significant conceptual finding is that widespread, much less universal, benevolence need not be postulated in order for its impact on the distributional outcome to be substantial. We have also attempted, using data from poll responses, to determine some of the dimensions of nonrecipient support for redistributive transfers

through welfare spending. We believe the results are quite striking and offer support for assertions about the existence of benevolence and the significance of its impact on redistributive outcomes.

NOTES

1. See Aaron and von Furstenberg (1971), Becker (1969), Buchanan (1968), Goldfarb (1970), Hochman (1971), Hochman and Rodgers (1969, 1970, 1971, 1973, and 1974), Johnston (1972), Mishan (1972), Musgrave (1970), Olsen (1969, 1971a, 1971b), Pauly (1970), Peterson (1972), Rodgers (1973), von Furstenberg and Mueller (1971).
2. Robbins (1932), pp. 136–143.
3. For example, an estimate of the redistributive effects of the U.S. farm program is given in Schultze (1972).
4. See McGuire and Aaron (1970) and Gillespie (1965).
5. See Becker (1969), Dickinson (1962), Hochman and Rodgers (1973), and Schwartz (1971).
6. By a democratic system of government, we mean a set of institutional arrangements governing the procedures through which a community arrives at collective decisions in which individuals compete for the votes of a broadly based electorate. On the appropriateness of defining political democracy in this way, see Schumpeter (1942), Chapters 21 and 22.
7. Since an infinite number of transfer patterns are consistent with any total amount of redistribution, any discussion of this subject must also specify who pays and who receives. But the level of redistributive activity has some importance independent of its pattern, since it gives an indication of the proportion of resources that the community is devoting to transfer activities. For a discussion suggesting that a society, with certain institutions and rules, may be caught in a prisoner's dilemma and excessively engage in these activities, see Tullock (1971a).
8. See the references cited in note 1.
9. See Buchanan (1972).
10. For more detailed consideration of these nonmarket interactions in the two-person and N-person cases, see Hochman and Rodgers (1969), Rodgers (1973), and Rodgers (1974).
11. The essential difficulties in the view that (B, C) with equal sharing is the most likely outcome of the redistribution "game" can be seen by examining this solution more closely and comparing it with some alternatives. If the (B, C) coalition forms and votes to tax A, collecting tY_A, B and C, with equal sharing, each receive $tY_A/2$. The redistribution pattern in each period is then $(-tY_A, tY_A/2, tY_A/2)$. Whether this represents a stable solution depends on the deals that B and C, respectively, can strike with A, the expectations of each party about the behavior of the others, and the aversion of each party to the uncertainties associated with instability.

    To consider one possibility, A could bribe either B or C to forsake the coalition and to join with him. If either B or C were offered anything more than $tY_A/2$, either would be willing to defect the (B, C) coalition. At first sight, the bargaining range might appear to be between tY_A and $tY_A/2$, for C must receive at least $tY_A/2$ in a coalition with A, while A would be agreeable to a coalition with C that costs him anything less than tY_A. But this potential gain to A and C from forming a coalition as an alternative

to (B, C) actually understates the potential gain, since the (A, C) coalition can also tax B, obtaining an additional tY_B. If, then, an (A, C) coalition forms, it would clearly be possible, even with no redistribution from B, for both A and C to be better off. But with redistribution from B, both A and C stand to gain even more. If C is content with $3/4$ tY_A and $1/2$ tY_B, A will suffer a net income loss of only $3/4$ $tY_A - 1/2$ $tY_B = t(3/4 \ Y_A - 1/2 \ Y_B)$. Moreover, if $tY_B \geq 1/2 \ tY_A$, A need pay nothing at all to C in order for C to be better off in a coalition with A than in (B, C). But before the reader gets the impression that an (A, C) coalition is more stable, he should note the possibility that B might be able to induce A to foresake C by agreeing to give A a sizable amount of his income. The possibilities are endless. Indeed, the situation is not unlike price warfare among a group of oligopolistic firms; and the outcome is indeterminate for much the same reasons.

12. The notion that income redistribution through the fiscal structure may, in part, serve the function of income insurance has a substantial intellectual history and is much discussed in the literature. See, for example, Buchanan and Tullock (1962), Chapter 13, and the summary discussion in Rodgers (1974).

13. This assumption rules out the location effects on which the Tiebout thesis focuses (1954). Implications of redistribution for location are described and discussed in recent papers by Buchanan (in Hochman and Peterson 1974) and Pauly (1972).

14. Later in the analysis, we drop this assumption and consider the significance of voter participation rates and variation in such rates across income classes.

15. In general, with K districts, each containing the same odd number of people, n, the minimum number who must favor legislation for its adoption, is given by $[(K+1)/2][(n+1)/2]$. Thus, the smallest fraction of voters who must support a proposal to insure its adoption by the legislature is given by

$$\frac{\left(\frac{K+1}{2}\right)\left(\frac{n+1}{2}\right)}{Kn} = 1/4(1 + 1/K + 1/n + 1/Kn)$$

As n and $K \to \infty$, the last three terms in the right-hand parentheses drop out and the value of this expression approaches 25 percent. See Buchanan and Tullock (1962), pp. 220–221. We have borrowed our diagrammatic representation from them.

16. With a bicameral legislature, in which constituent sets in the two houses overlap, the minimum percentage is likely to be higher. However, consistencies in voting, as between representatives of the same district in the two houses, and offsets across districts imply that it is unlikely to come at all close to doubling.

17. Note that the payment per recipient will differ in cases (a) and (b) if the tax cost of redistribution is the same for each nonrecipient. Suppose that the tax rate on the rich is a flat 10 percent, that rich persons all have incomes of $20,000 and that each poor person has an income of $4,000. Then in case (a) the nine nonrecipients each pay $2,000 and the payment to each poor person is $18,000/16 or $1,125. The single rich person who is benevolent gives up $2,000 to see the incomes of each of the sixteen poor persons raised by $1,125. Each of the other nonrecipients is made worse off since they have independent preferences. In case (b), if the benevolent rich distributed are such that only six are required to enact redistribution, the total tax collected is $20 \times \$2,000 = \$40,000$, and each poor person receives $40,000/5 = $8,000.

18. Table 1 also illustrates how small differences in benevolence may produce substantial differences in the degree to which societies (contrast, for example, Sweden, Great Britain, and the U.S.) pursue egalitarian social policies.

19. Related to this, for distributional adjustments at subnational levels of government, is the observation that voters, if dissatisfied with distributional connotations, can move

away. This is the phenomenon of "voting with one's feet" on which the so-called Tiebout thesis rests. One implication of utility interdependence, justifying redistributive income transfers, is that the structure of local communities is more stable than a public choice model with independent preferences might suggest. As potential transfer recipients enter a community, responding to the generosity of its welfare levels, the price of liberalism rises, leading marginal supporters of redistributive activity to emigrate and making any given level of redistributive activity more costly for those who remain. This process feeds upon itself. In these circumstances, whether redistribution will be maintained at its initial level depends on the conflicting population flows, with recipients moving in and erstwhile nonrecipient supporters moving out.

20. For the case of racial integration, this suggests that partial dispersal of the ghetto, limited to jurisdictions in which the formation of sympathetic coalitions is feasible, may be a much more effective means of increasing the political power of the minorities than the reinforcement of concentration (ghetto-gilding) or equi-proportional representation (total integration).

21. With respect to welfare spending, there are only a few obvious cases in which this assumption, with nontrivial likelihood, might be expected to fail. One is where the welfare authorities apply a "man in the house rule" or pry into private morals in screening applicants for "Aid to Dependent Children." Another is where inquiries into financial status offend potential recipients of, say, "Old Age Assistance." Even in these circumstances, however, it seems unlikely that the implied costs in terms of privacy will predominate for any more than a minority of the individuals concerned.

22. Note, however, that the examples Wilson and Banfield (1964) have cited need not be redistributive in the larger sense. Favorable votes, as for the hospital, need not imply benevolence or "public-regardingness" at all, but a desire to drain off the low-income population, permitting more effective segregation of community health facilities by income or race.

23. In general, it seems preferable to ask the reader to grant our awareness of the problems inherent in the sampling techniques of the Field Surveys, through which the data were derived, and just as important, the objective imperfections of the questions. Exhaustive presentation of qualifications, already too familiar to anyone who has worked with such data, would add little but boredom.

24. Unfortunately, to the best of our knowledge, the poll did not ask whether the respondent was or had been a welfare recipient.

25. Consider, for example, the difference between the 38 to 40 percent support for an increase in welfare spending among those with incomes of less than $7,000 and the 14 to 25 percent levels of support among those with incomes of $7,000 or more.

26. In the under $3,000 bracket, 72 percent of the respondents were sixty years of age or older, while only 49 percent of these in the $3,000 to $5,000 bracket were over sixty. A larger proportion of elderly respondents may feel that welfare is inadequate because fewer are likely to be recipients of both welfare and social security, and retirees, even if receiving social seurity, may not identify with welfare recipients. However, Radosevich (1974), in a careful study of nonsupport among the probable net recipients, found that age itself did not seem to account for such deviant responses. What seemed important, rather, was the interaction between age and level of education, inasmuch as nonsupport was more likely among those with high school or less than three years of college (as opposed to even less or more education).

27. One might also, as we mentioned in Part I, attribute a portion of nonrecipient support for welfare to government employees or others with a private interest in the magnitude of public programs. Aside from utility interdependence or insurance, however, there seems no reason for government employees, except for those who are direct suppliers of welfare spending, to be more favorably disposed to it than the average voter.

Indeed, if welfare competes with other uses of public funds, the incentives that face government employees who are not directly involved in supplying welfare services are quite the opposite.

28. This ignores support which derives from expectations of income insurance benefits and the support, based on self-interest, of government welfare workers. Both these sources of demand are likely to be small, the former because few people with 1970 incomes over $7,000 are likely to view welfare programs as providing more than the remotest possibility of potential direct benefits, and the latter for the reason already given, because the proportion of social workers in the total population is small.

29. In examining row 5, note that the rise in net benevolence with income runs counter to the decrease in the percentage of respondents who considered welfare spending a moral imperative.

30. Implicitly, we are assuming here that the housing responses are an adequate proxy for all types of particular-commodity interdependence, as we did with the crime responses and negative utility interactions. As a source of income augmentation, recipients, other things being equal, may be expected to view such in-kind transfers as inferior to cash, though they will certainly prefer them to nothing at all. If sophisticated, however, they may realize that the dollar value of transfers obtainable in kind, if interdependence is of the particular-commodity type, may well exceed that of transfers obtainable in cash.

31. Presumably, this maximum would be even larger with a more detailed income breakdown above $20,000.

32. See Hochman and Rodgers (1969), Section IV.

33. See Rodgers (1973), Peterson (1973), and Zeckhauser (1971).

34. That these responses were not unanimous may be attributed to recognition of the income deficiencies of some "working poor" and to the failure of this statement to discriminate between voluntary and involuntary unemployment.

35. Part V maintains the assumption that those with incomes of less than $7,000 are recipients and those with incomes of $7,000 or more are nonrecipients. This may well be an oversimplification. The issues the California polls posed were in terms of attitudes toward spending or public spending generally rather than in terms of income redistribution. The reasons why "recipient" groups are not unanimous in their support of motions proposing that welfare spending be increased or maintained have been discussed earlier.

36. Since these questions as posed were open-ended, the mention of welfare spending may be taken to imply that the respondent did not think it insignificant. That welfare reform was, as noted earlier, an issue in the ongoing gubernatorial primary campaign must certainly have strengthened such feelings.

37. One may speculate on the reasons for such inconsistencies, though they are of doubtful importance here. Such explanations include, for example, imperfect tax-consciousness (varying inversely with income) and general indifference. Surprising though it may seem for some respondents wishing to limit the number of their responses to open-ended questions, welfare spending may have been less salient than, say, education, the environment, and law enforcement.

38. Whether the present level of spending is stable because respondents are more comfortable with a program level to which they have been accustomed and thus favor the status quo, or viewing the political process as rational, as we have, because this level accurately reflects median voter demand, is beyond the informational capabilities of the data at hand.

39. As William Niskanen has pointed out, the two recent presidential candidates who took strong, though opposing, positions on the adequacy of present levels and systems of

welfare spending, Senators Goldwater and McGovern, were both soundly defeated. While this bit of circumstantial evidence supports our inference that the present level of welfare spending is stable, at least in terms of distributional preference, the reasons why one should not overstress it are obvious.

40. In general, Table 4 indicates that motions to "increase" or "increase and maintain" welfare spending have a somewhat better chance of success, given the parameters, than motions to decrease it.

41. It would be useful to find out if individuals, some months after voting, would repeat their choices if given the opportunity to do so. The 1973 and 1974 Gallup and Harris polls assessing the popularity of President Nixon were, to be sure, evidence of modified preference attributable to changes in perceived "prices" and "rewards."

42. Davis and Jackson (1974) provide an example of this, but make no use of underlying data on individual preferences.

REFERENCES

Aaron, Henry, and von Furstenberg, G. M. "The Inefficiency of Transfers in Kind: The Case of Housing Assistance." *Western Economic Journal* 9 (June 1971): 184–191.

Becker, G. S. "A Theory of Social Interactions." Department of Economics, University of Chicago, Sept. 1969.

Bicker, W. E. "Public Attitudes and Opinions of the Current Welfare System and Components of the Proposed Family Assistance Plan." Findings of a study undertaken for the Department of Health, Education, and Welfare. Institute of Governmental Studies, University of California at Berkeley, July 1970.

Buchanan, J. M. *Public Finance in Democratic Process.* Chapel Hill: University of North Carolina Press, 1967.

————. "What Kind of Redistribution Do We Want?" *Economica* 35 (May 1968): 185–190.

————. "Who Should Distribute What in a Federal System?" In H. M. Hochman and G. E. Peterson, eds., *Redistribution Through Public Choice.* New York: Columbia University Press, 1974, pp. 22–42.

————. "The Political Economy of the Welfare State." Research Paper # 808231-1-8. Center for Study of Public Choice, Virginia Polytechnic Institute and State University, June 1972.

Buchanan, J. M., and Tullock, Gordon. *The Calculus of Consent.* Ann Arbor: University of Michigan Press, 1962.

Downs, Anthony. *An Economic Theory of Democracy.* New York: Random House, 1957.

Dickinson, Frank G., ed. *Philanthropy and Public Policy.* New York: Columbia University Press, 1962.

Fry, B. R., and Winters, R. F. "The Politics of Redistribution." *American Political Science Review* 64 (June 1970): 508–522.

Gillespie, W. Irwin. "Effect of Public Expenditures in the Distribution of Income." In R. A. Musgrave, ed., *Essays in Fiscal Federalism.* Washington, D.C.: The Brookings Institution, 1965.

Goldfarb, R. S. "Pareto Optimal Redistribution: Comment." *American Economic Review* 60 (Dec. 1970): 994–996.

Hochman, H. M. "Individual Preferences and Distributional Adjustments." *American Economic Review* 62 (May 1972): 353–360.

Hochman, H. M., and Rodgers, J. D. "Pareto Optimal Redistribution." *American Economic Review* 59 (Sept. 1969): 542–557.

―――. "Pareto Optimal Redistribution: Reply." *American Economic Review* 60 (Dec. 1970): 997–1002.

―――. "Is Efficiency a Criterion for Judging Redistribution?" *Proceedings of the International Institute of Public Finance.* Leningrad Congress, 1971, pp. 1236–1248.

―――. "Brennan and Walsh Reconsidered (Mutt and Jeff Ride Again)." *Public Finance Quarterly* 1 (Fall 1973): 359–371.

Johnston, John. "Utility Interdependence and the Determinants of Redistributional Public Expenditures." Ph.D. diss., Duke University, 1972.

Levy, Mickey. "A Study of Voting on the California Proposition I Referendum." Graduate School of Public Policy, University of California at Berkeley, 1974.

McGuire, M. C., and Aaron, Henry. "Public Goods and Income Distribution." *Econometrica* 38 (Nov. 1970): 907–920.

Mishan, E. J. "The Futility of Pareto-Efficient Distribution." *American Economic Review* 62 (Dec. 1972): 971–976.

Musgrave, R. A. "Pareto Optimal Redistribution: Comment." *American Economic Review* 60 (Dec. 1970): 991–993.

Olsen, E. O. "A Normative Theory of Transfers." *Public Choice* 6 (Spring 1969): 39–58.

―――. "Some Theorems in the Theory of Efficient Transfers." *Journal of Political Economy* 79 (Jan./Feb. 1971): 166–176.

―――. "Subsidized Housing in a Competitive Market: Reply." *American Economic Review* 61 (Mar. 1971): 220–224.

Olson, Mancur. *The Logic of Collective Action.* Cambridge: Harvard University Press, 1965.

Pauly, M.V. "Income Redistribution as a Local Public Good." *Journal of Public Economics* 2 (Feb. 1973): 35–58.

―――. "Efficiency in the Provision of Consumption Subsidies." *Kyklos* 23 (Mar. 1970): 33–57.

Peterson, G. E. "Welfare, Workfare, and Pareto Optimality." *Public Finance Quarterly* 1 (July 1973): 323–338.

Radosevich, Ted. "An Estimation of Non-Support Among Probable Net Recipients of Income Transfers, State Data Program of the Institute of Governmental Studies." Institute of Governmental Studies, University of California at Berkeley, 1974.

Robbins, Lionel. *An Essay on the Nature and Significance of Economic Science.* London: Macmillan, 1932.

Rodgers, J. D. "Distributional Externalities and the Optimal Form of Income Transfers." *Public Finance Quarterly* 1 (July 1973): 266–299.

Rodgers, J. D. "Explaining Income Redistribution." In H. M. Hochman and G. E. Peterson, eds., *Redistribution Through Public Choice.* New York: Columbia University Press, 1974, pp. 165–205.

Schumpeter, J. A. *Capitalism, Socialism, and Democracy.* New York: Harper and Bros., 1942.

Schultze, C. L. *The Distribution of Farm Subsidies: Who Gets the Benefits?* Washington, D.C.: The Brookings Institution, 1971.

Schwartz, R. A. "Personal Philanthropic Contributions." *Journal of Political Economy* 78 (Dec. 1970): 1264–1291.

Tiebout, C. M. "A Pure Theory of Local Expenditures." *Journal of Political Economy* 64 (Oct. 1956): 416–424.

Tullock, G. "The Cost of Transfers." *Kyklos* 24 (1971a): 629–643.

———. "The Charity of the Uncharitable." *Western Economic Journal* 9 (Dec. 1971b): 379–392.

Wilson, J. Q., and Banfield, E. C. "Public Regardingness as a Value Premise in Voting Behavior." *American Political Science Review* 58 (Dec. 1964): 876–887.

Zeckhauser, R. "Optimal Mechanisms for Income Transfers." *American Economic Review* 61 (June 1971): 324–334.

3 ‖ COMMENTS

Thomas E. Weisskopf
University of Michigan

I. SUMMARY

Hochman and Rodgers (H & R), in their paper on "The Simple Politics of Distributional Preference," are concerned with "explaining, in terms of individual preferences, public redistribution to low-income persons" and, in particular, with explaining "those distributional adjustments taken as a group that are commonly referred to as 'welfare' programs" (p. 72). Observing that (in the United States, at least) the actual recipients of welfare transfers are not sufficiently numerous to cause a system of direct or representative democracy to institute such programs against the will of all nonrecipients, H & R focus their attention on the sources of *nonrecipient support* for redistribution which must be present to account for the existence of welfare programs.

The paper explores three related but separable topics. Part I considers potential sources of nonrecipient support for redistribution. Parts II and III construct and analyze simple models of redistribution under direct and representative democracy in order to determine how much nonrecipient support is necessary for the enactment of redistribution programs. Part IV attempts to use the results of certain public opinion polls to assess the actual sources and magnitude of nonrecipient support for redistribution in the United States, and Part V examines whether or not this support is sufficient to account for the enactment of U.S. welfare programs when considered in the framework of the models of democracy previously constructed.

1. Sources of Nonrecipient Support for Redistribution (Part I.) H & R distinguish three major categories of such support: simple self-interest, concern for others, and negative externalities. *Simple self-interest* can arise from: (a) the expectation of becoming a recipient at a future time; (b) participation in activities whose income potential is affected favorably by the demand

shifts accompanying redistribution; or (c) the prospect of having public transfers substitute for otherwise unavoidable private transfers to dependents. *Concern for others* can be characterized by an individual utility function including as an argument not only the individual's own income but also the income of another person, or some variable that contributes positively to the welfare of another person. *Negative externalities* can generate nonrecipient support for redistribution when it is expected that redistribution will help to reduce the impact of certain social maladies (e.g., crime, disease) on nonrecipients.

Among these sources of nonrecipient support for redistribution, H & R introduce a significant distinction between those involving "narrow self-interest" and those involving "benevolence." "Narrow self-interest" is said to underlie support due to sources (a) and (b) of simple self-interest, as well as support due to negative externalities. The term "benevolence" is used to characterize support due to source (c) of simple self-interest and support due to concern for others. H & R emphasize that both of these basic motives—"narrow self-interest" and "benevolence"—are perfectly consistent with a rational calculus based on the maximization of own-utility by individuals; their analysis can therefore be grounded in the corpus of orthodox economic theory.

2. Models of Redistribution under Democracy (Parts II and III.) H & R
seek "to determine the circumstances under which a political democracy may be expected to produce redistribution to the poor" (p. 75) first by considering the simple case of direct democracy and then by turning to the more complex case of representative democracy. Under direct democracy with simple majority rule, it would take a 51 percent coalition of voting citizens to enact a redistributive program. In the absence of nonrecipient support, such a coalition would have to be formed by the 51 percent of voters with the lowest incomes. As H & R observe, such a model cannot explain existing welfare programs in the United States because large numbers of voters with incomes below the median are excluded from welfare benefits. Either the voting behavior of many nonrecipients is governed by considerations other than simple self-interest, or the direct democracy model is inapplicable to welfare-program decision making in the United States, or both.

H & R go on to note that direct democracy is in fact rarely exercised in real-world situations; most collective decisions are made in representative bodies. They then construct a model of the decision-making process in which voters in separated districts elect district representatives by majority vote. These representatives, in turn, vote directly by majority rule on explicit redistributive programs, taxing all persons above a given income level and redistributing the proceeds uniformly to all persons below that level.

In such a model of representative democracy, the circumstances under which a redistribution program will be enacted depend not only on the number of citizens who favor it but also on their distribution among districts. In general, H & R show that there is a minimum proportion of voter support α which is necessary to pass a bill under *optimal* spatial distribution, and a minimum proportion β which will get the bill passed under *any* spatial distribution. As the number of

voters and districts increase, the values of α and β approach 25 percent and 75 percent, respectively.

H.& R draw several conclusions from this model. First, in a representative democracy a smaller proportion of voter support can (under certain circumstances) enact redistributive programs than in a direct democracy; one might be able to explain existing welfare programs in the United States on the basis of minority support from recipients plus a limited number of nonrecipients. Second, reapportionment of districts brought about by a defeated majority can make the outcome of collective decision making in a representative democracy more like the outcome of direct democracy *if* reapportionment decisions themselves require less than β in total voter support. Finally, the optimal spatial distribution of a political minority—from the point of view of their political power in a representative democracy—is neither concentrated nor evenly distributed, but "semidispersed."

H & R mention two significant limitations of their model when confronted with real-world processes of decision making in democracies. One is the model's failure to take into account the process of logrolling, in which votes are traded on different issues. H & R suggest that this is not important insofar as feelings about redistribution are much more intense than feelings about other issues. The second problem cited is the model's failure to account for differential rates of voter participation, which tend to be directly related to income. But H & R suggest that it would be easy to adjust the model for this phenomenon, treating variations in voter participation as analytically equivalent to corresponding reductions in voter population in each income class.

3. Empirical Evidence on Distributional Preferences (Parts IV and V.)
In this section H & R seek to derive and apply empirical evidence on voter attitudes toward redistribution, using the results of several opinion polls on welfare spending conducted with a sample of California voters in 1970. Their primary purpose is to obtain measures of the nature and extent of nonrecipient support for welfare programs (viewed as an imperfect proxy for generalized redistribution to the poor). The results of the poll were classified by income class; because of strong discontinuities in responses, an income level of $7,000 was identified as the breakpoint between nonrecipients and actual or potential recipients of welfare transfers.

The poll results show that large majorities of all income classes consider some amount of welfare spending as a "moral imperative," but the level of welfare spending considered adequate is on the whole inversely related to the respondent's income level. H & R focus particular attention on the relationship between the percentage of voters viewing some welfare spending as a "moral imperative" and the percentage of voters who believe that welfare spending helps prevent crime. Among nonrecipients, the latter percentage is interpreted as an upper limit on a measure of the frequency with which distributional preferences reflect self-interest arising from negative externalities. The difference between the two percentages (subject to a minor correction) is interpreted as a lower limit on a measure of the frequency with which distributional preferences reflect

"benevolence" rather than "narrow self-interest." This minimum indicator of "benevolence" varies directly with income and averages around 50 percent for the nonrecipient population.

H & R consider their finding of such a high level of "benevolence" a highly significant one in the context of their models of democratic decision making. They also take satisfaction from the fact that the positive correlation between income and "benevolence" is consistent with a utility-maximization model in which benevolent transfers are a normal good.

H & R then go on to examine the question of whether nonrecipient concern about welfare recipients is based upon the recipients' general level of self-perceived utility or applies to their particular sources and uses of income. The percentage of voter support for public provision of housing to those who cannot afford it is interpreted as an upper limit on nonrecipient preference for particular-commodity rather than general-utility concern. This percentage is subtracted from the previously derived percentage measuring "benevolence" to get a new measure representing a lower limit on nonrecipient concern for the general welfare of the poor. This lower limit rises with the income class of nonrecipients from negative figures to a maximum of about 25 percent in the highest income class. H & R infer that "donor concern with the self-perceived well-being of welfare recipients is a normal good" (p. 93) and that support of redistribution by nonrecipients "is disproportionately derived from those donors with the highest incomes" (p. 93).

Finally, H & R address themselves to the issues of whether nonrecipient donors are concerned with the self-perceived welfare or the money income of recipients. The percentage of voters agreeing that able-bodied men should not collect welfare is subtracted from the percentage believing in some welfare spending as a "moral imperative" to get a measure of the "lower limit on the extent to which nonrecipient supporters of welfare spending are likely to support a simple program of cash transfers containing no work requirement provisions" (p. 94). This measure averages about 10 percent and does not vary with income class.

In Part V (pp. 94–99), H & R go on to estimate tentatively the degree to which nonrecipient support is actually needed in order to pass motions concerning welfare spending. Using referenda considered implicit in further sample polling in California in 1970, H & R calculate the support required from nonrecipients to reach total support levels ranging from 25 percent to 75 percent (the limits on required voter support to enact motions in a representative democracy). The results indicate that to reach a total support level of 50 percent, motions to increase welfare spending require 55 percent support from nonrecipients, while motions to decrease welfare spending require 60 percent support from nonreci-pients. Both of these support levels exceed by a considerable margin the corresponding actual frequencies suggested by nonrecipient responses to the polling; H & R draw the implication that current levels of welfare spending are stable under a system not too far from simple majority rule.

Finally, H & R attempt to bring to bear their estimates of nonrecipient "benevolence" (lower limit: 50 percent) and nonrecipient preference for cash transfers (lower limit: 10 percent) on the prospects for enacting transfer

programs. These estimates suggest that some program could be enacted, but they say nothing about the magnitude of the program or the marginal preferences of nonrecipients at current levels of spending. At this point, H & R must introduce some strong assumptions about the structure of nonrecipient preferences in order to conclude (ever so tentatively) that a motion to increase the level of transfer programs might have a chance to pass in a favorably distributed representative democracy.

In their concluding remarks, H & R underline the weakness of their empirical evidence and urge further work both on constructing theoretical models and on collecting a suitable body of microdata to estimate and to apply the models.

II. CRITIQUE

H & R have written an article that is in many ways ingenious, and I trust that it will be considered an interesting contribution to its particular field of research. As one who is not very familiar with work in this field, I shall find it difficult to separate criticism of assumptions and practices common to most researchers in the field from criticism of H & R's work in particular. Indeed, I suspect that much of my criticism will really be applicable to the field as a whole. If so, I hope it will be understood that I am not singling out H & R for reprobation, but rather that I am raising a few basic issues that seem to me to call for more careful thought by all researchers in this area.

I shall divide my comments into three sections: a discussion of the authors' models of democratic decision making, an analysis of the authors' use of the concept of "benevolence," and some concluding observations.

1. Models of Democracy   The models of direct and representative democracy constructed by H & R in Parts II and III are very neatly and cogently developed. The analysis of representative democracy, in particular, leads to some interesting implications that, if not exactly counter-intuitive, are nonetheless far from obvious at the start. I have no criticism to make at the level of logical consistency and mathematical accuracy.

However, I do feel that H & R's analysis reflects an extraordinary degree of naiveté about the way the political process works in a real-world "democracy" such as that of the United States. H & R are aware that they are imposing certain simplifying assumptions on their model of representative democracy; the most important of these are spelled out (Pt. III). After concluding their analysis they cite two major "complications"—logrolling and variable rates of voter participation—which might affect the conclusions that they draw. But one is left with the impression that no other major factor would interfere with the validity of their results.

Completely ignored by H & R is any hint of a relationship between economic and political power, other than one mediated by actual voter participation. In this era of Watergate, it should hardly need to be stressed that a realistic analysis of the American political process must deal with the various mechanisms whereby the rich can translate their economic power into disproportionate influence on political decisions. Whether through the financing of political campaigns, the

organization of lobbying efforts, influence over the mass media, and so on, the economically powerful can have a decisive influence on what questions are submitted for political decision making, on the form in which they are posed, and on the outcome of any votes.

Indeed, how can models of representative democracy of the kind used by H & R begin to explain the numerous cases of "antiwelfare" programs that characterize contemporary American society? Through tax loopholes, subsidies, special treatment, and so forth, many high-income Americans are able to bring about redistribution in their own favor at the expense of the great majority of citizens in the low-income and/or middle-income classes. To explain such phenomena one must deal seriously with the vastly unequal distribution of effective political power that characterizes the American system of democracy.

H & R might suggest that "differential voter effectiveness" could be incorporated into their model in the same way that variable voter participation rates could. But this would beg the question—for the model itself does nothing to illuminate the immensely important links between economic and political power.

A second important criticism of H & R's model of the political process is that it is rooted in the dominant liberal conception of a system of independent voters, with independently determined and consistently articulated preferences. Yet the presumption of "voter sovereignty" in democratic politics seems to this critic to be no more tenable than the presumption of "consumer sovereignty" in capitalist economies. Although each individual votes in isolation, he/she is continuously bombarded with opinion-molding influences ranging from overt propaganda to subtle persuasion. The result is that rational and predictable utility maximization (however broadly construed) may have great difficulty emerging in even the most (formally) democratic of political systems.

2. Self-interest and Benevolence   H & R make much of the distinction between "narrow self-interest" and "benevolence" as independent motives for nonrecipient support of redistributive programs. Both of these words are highly charged with moral connotations. "Narrow self-interest" suggests a kind of scheming egoism which is morally repugnant. "Benevolence" suggests admirable and virtuous behavior: "an inclination to do good; kindliness," according to Webster's dictionary. H & R insist that their notion of "benevolence" is not associated with altruism and its suggestion of selflessness (p. 75), but their most important category of benevolence—concern with the welfare of others, for their own sake—certainly suggests altruistic behavior.

Words *do* matter. Much of H & R's concern focuses on the extent of "benevolence" on the part of nonrecipients of welfare spending, i.e., the middle and upper classes. Indeed, one of the most significant conclusions reported by H & R is a remarkably high (at least 50 percent) incidence of "benevolence" among nonrecipient classes in the United States. An implication of this finding—perhaps not conscious on the part of the authors, but certainly part of the message conveyed by their article—is that the American system is blessed with a happy correlation of wealth and virtue. This is a political message and a conservative one.

Here I want to do more than draw attention to the danger of using value-laden terms and the difficulty of pursuing politically neutral social-science research. I want to suggest that the political issues bound up with the authors' research may well have affected their interpretation of the data. For it seems to me that the inferences they draw from the voter-attitude polls are biased in overemphasizing the "benevolence" of the middle- and upper-income classes and consequently exaggerating the potential for equity in the American social order.

H & R derive their critical quantitative measure of "benevolence" from differences in the polled responses to two statements, the first implying that welfare is a moral imperative and the second implying that welfare prevents crime. The measure of "benevolence" thus obtained is inflated by at least two sources of bias. First, agreement with the statement "in spite of some waste in the welfare program, it would be morally wrong to do away with it" (note to Table 2) may reflect a variety of attitudes other than a genuine interest in redistribution. Respondents might feel that, once instituted, a welfare program should not suddenly be abolished because of the commitments and expectations generated by it. Respondents might feel that as a statement of general principle they should espouse what appears to be a laudably "Christian" attitude, without necessarily being prepared to pay for the cost of the programs implied.

More serious, however, is the bias introduced by treating agreement with the statement: "If it weren't for welfare, there would be a lot more stealing, burglaries, and other crime" (note to Table 2) as the upper limit on support for redistribution for reasons other than benevolence. Crime is only one of many possible sources of negative externalities that might induce the middle and upper classes to support redistributive transfers in their own self-interest. Not only should specific social maladies such as disease and drug traffic be added to the list, but more generally, I would think that a concern for maintaining the overall stability of the social system (from which they benefit) would motivate the middle and upper classes to alleviate conditions of poverty that might lead to social and political turmoil. Indeed, the history of American welfare spending suggests that it is precisely when threats to the social order arise that redistributive programs get enacted and implemented (see, for example, Frances Piven and Richard Cloward, *Regulating the Poor*, 1972). To suggest that this is the result of "benevolence" rather than enlightened self-interest seems to me to distort words or to misread history.

Ignoring the above reasons for suspecting that their estimate of the incidence of benevolence is much too high, H & R actually regard their estimate as a *minimum* measure. This is apparently because a positive response to the welfare-prevents-crime statement, contrary to the assumption on which their numerical calculation is based, need not necessarily exclude the motive of "benevolence." Self-interested concern about negative externalities may coexist with some degree of "benevolence" in the same individual. To the extent that this is true, and ceteris paribus, the incidence of "benevolence" would be underestimated by the H & R procedure.

Currently available data do not permit one to determine the precise quantitative significance of this last source of misestimation; I should very much doubt that it offsets the effects of the sources of upward bias in H & R's estimate of the

incidence of "benevolence." But even if it does so, it does nothing to offset the downward bias in H & R's estimate of the incidence of self-interested concern about negative externalities. Such concern is clearly far more important than suggested by H & R. And it follows that inquiry into political support for redistribution in a society such as ours should focus much more attention on the perceived self-interest of the middle- and upper-income classes.

My emphasis on "self-interest" rather than "benevolence" as a motivating force should not be attributed to a generalized cynicism about human nature. On the contrary, I believe that human beings have an immense potential for benevolence. The problem is that this potential may be frustrated by the particular institutional framework within which individuals act. In a capitalist society, one is expected to act in, and one is rewarded for acting in, one's narrow self-interest. To act in a benevolent manner is to act counter to the logic of the system, very possibly to one's own detriment. It is therefore only realistic to expect that under capitalism self-interest will play a much more important role than benevolence. And it follows that a greater degree of benevolence can only be expected under a very different socioeconomic system, with a very different pattern of values and incentives.

3. Conclusion In their own conclusion (Part VI), H & R introduce a radical/liberal dichotomy of the kind that has almost become de rigueur in contemporary writing in the social sciences. Radicals "suggest that distributive justice requires a radical restructuring of social institutions" (p. 100); liberals "argue that more redistribution would occur if only the democratic political process . . . could be made to more accurately reflect the 'true' preferences of the voters" (p. 100). As a longtime member of the Union for Radical Political Economics, I accept H & R's characterization of the radical position on distributive justice and I espouse it. Yet at the same time, I see no reason to disagree with the liberal argument cited by H & R. If the American democratic political process could be made more truly democratic, I have no reason to doubt that more redistribution would occur than at present. This follows directly from my observation that the American political process is one which now grants vastly disproportionate political power to the rich vis-à-vis the poor.

I believe that there are two principal questions—one normative, one positive—that really divide radicals and liberals in their approach to the issue of distribution: (1) What constitutes "distributive justice"? and (2) What would it take to make the American political process truly democratic? The radical response to each question would involve a much greater departure from the current American status quo than would the liberal response.

H & R's posing of the radical/liberal dichotomy is thus misleading. Their subsequent comments also seem to me very questionable. H & R imply that their characterization of the liberal approach to the issues is much more "open to inquiry" than the radical approach (p. 100). Why is not a potentially radical restructuring of social institutions open to inquiry? Why is the investigation of distributional preferences "within a predefined system of rights and rules" the prior research issue? I need hardly emphasize the conservative conception of the role of the intellectual which is reflected in such remarks.