

TRANSFERS, EQUALITY, AND THE LIMITS OF PUBLIC POLICY

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The debate about the merits of the redistributive state generally focuses on the proper trade-off between more income equality and more total income. The questions are familiar. What is the optimal distribution of income? How much inequality should a just society accept? How much economic growth should we sacrifice in order to promote the welfare of the poor and disadvantaged? Of course, transfer programs go well beyond the poor. They are aimed variously at farmers whose crops have failed or whose crops "should" sell for more, at governments of nations whose people are worthy of aid, at corporations that employ many workers and are in financial trouble, and at innumerable other entities.

The proposition that transfer policies promote the welfare of targeted groups is generally accepted. Taxes, transfers, and regulatory policies are perceived to be adjustment levers available to fine-tune the economic machine that grinds out goods and services. If we do not like the allocation of economic benefits, corrective action can be undertaken by moving the levers via the political process.

We believe this view of the transfer society is naive. Taxpayers and transfer recipients are human beings, not sheep who can be shorn at will, their wool automatically growing back for the next shearing season. People will adjust their actions for individual advantage, in response to governmental changes in the rules of the game. Similarly, since the political process, like the market, results from individual choices, it may or may not yield its stated goals. Thus, it is not obvious that income transfers emanating from the political process will promote economic equality or even help the targeted groups.

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This paper investigates the expected impact of transfer activities. Section I utilizes public choice theory to analyze the political attractiveness of various types of transfers. Section II focuses on the shortcomings of annual income as a vehicle with which to differentiate between the poor and nonpoor. Section III considers the need to ration transfers and investigates the effects of various rationing mechanisms on the expected actions of recipients, and on their gains. Sections IV, V, and VI focus on the unintended side effects of transfers, which often reduce their effectiveness. The concluding section presents empirical evidence on the impact of transfers on economic equality and poverty.

Transfer activities come in many forms. Some involve direct payments to recipients, either in money or in-kind benefits such as food, medical services, or housing. There are, however, other forms of transfers: Price supports, entry restraints, price ceilings, tariffs, quotas, and subsidies transfer wealth just as surely as direct income transfers. Thus, when we speak of transfer activities we include a broad range of policies intended to increase the economic welfare of various subgroups at the expense of others in society.

I. Public Choice and Politically Attractive Transfers

The political process is widely perceived to be more egalitarian than market allocation. In a democratic setting political votes are equally distributed (one person, one vote), whereas market allocation results in unequally distributed income (consumer votes). However, public choice theory indicates the situation is considerably more complex than the equality of political votes implies.

Just as self-interest is a powerful motivating force in the marketplace, so, too, it is in the political arena. There is little evidence that politicians are an unusually altruistic class of citizens. But even if they were, competition would force them to consider primarily votes when making political choices. Politicians who stake out positions and support policies that maximize their chances of winning elections have a competitive advantage relative to those who place other things (for example, economic efficiency or the interests of groups with little political power) above votes. Survival in the political marketplace forces politicians to support policies that enhance their electoral prospects.¹

¹On the economics of public choice, see Tullock (1976), Lapage (1978, chaps. 5 and 6), Gwartney and Stroup (1983b, chaps. 4, 29, and 30), and Olson (1971).

What types of transfer activities will help a politician win elections? Public choice theory indicates that three major classes of transfers are likely to be politically attractive.

1. *Transfers from many unorganized individuals to concentrated groups of well-organized individuals.* A special interest issue is one that generates substantial personal benefits for a small group of constituents while spreading the cost widely over a large number of other voters. A few benefit a great deal individually, whereas a large number lose a little individually from any particular transfer program.

There are two main reasons why transfers of a special interest nature will be attractive to vote-conscious political entrepreneurs. First, special interest beneficiaries will feel much stronger about the issue than other voters. Many special interest voters will vote for or against politicians almost exclusively on the basis of this issue. Since the issue is of personal importance, special interest voters are also likely to be better informed on the special interest issue and more likely to convince others to vote for favored candidates. In contrast, non-special interest voters are unlikely to be strongly enough affected even to know much about the issue, particularly if it is packaged so as to conceal the source of the small personal cost imposed on the broad cross-section of voters.

Second, special interest groups provide an important source of campaign workers and financial support. Money and volunteer workers are the life-blood of politics. Information designed to create a positive image must be supplied to voters who have little incentive to invest time and personal resources studying candidates and issues. This requires printed materials, newspaper advertisements, television commercials, and campaign workers. Individuals with intense feelings who belong to an easily identifiable, well-organized interest group provide a potential supply of essential political resources.

2. *Transfers from future to present voters.* Policies that provide easily observable, current (before the next election) benefits at the expense of future costs that are difficult to identify will also be attractive to vote-conscious politicians. The pre-election benefits will enhance the image of the politician with the voters on election day. In contrast, post-election adverse effects that are difficult to identify will exert little negative impact. Economists refer to this bias as the shortsightedness effect.

Predictably, a pattern of current benefits relative to future costs will enhance the attractiveness of a transfer policy. Future costs will often go unseen. Future taxpayers who are currently too young to vote will not influence today's election, and therefore politicians have little incentive to support their interests.

The shortsightedness effect helps explain the popularity of several transfer programs that clearly reduce the size of the economic pie. For example, the adverse effects of rent controls on rental housing will be observable only in the future. Further, much of the negative impact will be against people who later want to move into the geographic area—people who clearly have no vote now. Similarly, an increase in the minimum wage will provide easily observable current benefits (a higher wage rate), but the negative side effects on new hires, total employment, and training opportunities will be experienced primarily in the future.

3. *Transfers from the poorly informed and politically inactive to the better informed and more politically skilled.* In the political arena, power is related to information, participation, and political skills. Politicians who cater to the interests of uninformed individuals who seldom vote will be at a disadvantage relative to those who represent the interests of informed citizens who vote regularly. Similarly, politicians have an incentive to cater to the views of the politically persuasive. Persons with persuasive skills, organizational abilities, and financial resources will exert a disproportionate influence on the political process.

Implications for Transfer Policy

Given the nature of the political process, there is little reason to believe that egalitarian transfers will be very attractive to political entrepreneurs. Although the poor are a concentrated group, they are not very well organized. They are less likely to vote than persons with higher income. As Table 1 shows, only 36 percent of the population age 18 and over living in households with less than \$12,500

TABLE 1
VOTER PARTICIPATION BY INCOME GROUPINGS, 1984

Household Annual Income	Percent of Voting Age Population	Percent of Voters in 1984 Election	Percent of Persons Age 18 and Over in Income Group Who Voted, 1984
Less than \$12,500	24	16	36
\$12,500 to \$24,999	27	29	56
\$25,000 to \$34,999	19	22	62
\$35,000 to \$49,999	17	19	60
over \$50,000	13	14	58

SOURCES: *New York Times/CBS Poll* (*New York Times*, 8 November 1984), and U.S. Department of Commerce, *Money Income of Households, Families and Persons in the United States*: 1983.

of income voted in 1984, compared to nearly 60 percent for the rest of the population. The voter participation rate for unemployed workers has consistently been only about two-thirds of the rate for employed workers.² Survey data also indicate that low-income and unemployed voters are more likely to be uninformed (or misinformed) on both issues and candidates than other voters. Uninformed voters with a relatively low voter participation rate are unlikely to use the political process effectively.

Of course, the political process rewards different skills and attributes than market allocation. However, there is little reason to expect that the poor will possess relatively more of the communication and organizational skills that are rewarded handsomely by the political process. In fact, the entrepreneurs and managers in a politically dominated society are likely to be the same people who would excel under market organization. The people with good ideas, creative minds, and more energy will rise to the top in most any society, the business world, or the political arena.

The theory of public choice suggests that successful politicians tend to support programs that aid organized special interests more than programs that help the poor. The empirical evidence is consistent with this theory. Table 2 indicates various categories of direct cash and noncash transfers for 1965, 1975, and 1983. The data illustrate that most income transfers are not directed toward the poor. Counting both cash and noncash benefits, means-tested transfers were \$78.1 billion in 1983, compared to total direct income transfers of \$475.6 billion. Thus, transfers directed toward the poor account for only 16 percent of the total. If indirect transfers (those not involving government checks) emanating from tariffs and other trade restrictions, occupational licensing, and other regulatory programs were counted, the share of transfers directed toward the poor would be even smaller. The bulk of transfer benefits are intended to help politically active groups such as farmers, the elderly, business, and organized labor. The same intelligence, energy, and organizational

²The *Statistical Abstract of the United States, 1982-1983* (Table 805) reports the voter participation rates for employed and unemployed workers during the 1972-80 period:

<u>Year</u>	<u>Employed (%)</u>	<u>Unemployed (%)</u>
1972	66.0	49.9
1974	46.8	28.8
1976	62.0	43.7
1978	46.7	27.4
1980	61.8	41.2

TABLE 2
GROWTH OF TRANSFER PAYMENTS, 1965-83
(BILLIONS OF 1983 DOLLARS)

Type of Benefit	1965	1975	1983
Means-Tested (total)	23.2	70.2	78.1
Cash Assistance ^a	17.7	33.4	27.8
Noncash Benefits ^b	5.5	36.8	50.3
Nonmeans-Tested (total)	125.4	298.9	397.5
Social Security (OASI)	51.9	97.4	151.4
Social Security (DI)	4.9	13.7	18.7
Medicare	—	25.5	52.7
Unemployment Compensation	7.6	22.9	25.5
Farm Price Supports	16.0	3.4	21.8
Other	45.0	136.0	127.4
Total Transfers	148.6	369.1	475.6

^aIncludes Aid to Families with Dependent Children, general assistance, Supplemental Security Income, and means-tested veteran's pensions.

^bIncludes food stamps, school lunches, public and subsidized housing, and Medicaid.

SOURCES: U.S. Department of Commerce, Bureau of the Census, *Estimates of Poverty Including the Value of Noncash Benefits: 1984*; *Statistical Abstract of the United States*; and *Economic Report of the President, 1985*.

skills that enable one to earn money also enable one to be successful in the political arena.

II. Income Is a Poor Measure of Economic Status

Who should receive transfer payments? Annual income is used to qualify persons for means-tested transfers and determine the proportion of one's income allocated to the tax collector. The ability of means-tested transfers financed by progressive taxation to redistribute income from the rich to the poor depends on the reliability of annual income as an indicator of economic status. If annual income is not an accurate measure of economic status, then transfers based on income will often go to the nonpoor. Similarly, high tax rates intended for the rich will often be paid by the nonrich. Under such circumstances, even taxes and transfers designed to promote equality will be relatively ineffective.

Unfortunately, annual income is not a very accurate indicator of economic status (Lilla 1984). First, life-cycle factors reduce the accuracy of annual income as a measure of economic status. Most people have low incomes when they are young (and in school) and when they are old (and in retirement). In contrast, incomes are generally

much higher during the prime working years. Annual income, therefore, is often a misleading indicator of economic status. The annual income of both the young who are acquiring skills and the old who are in retirement generally understates their economic well being. During this phase of their life cycle, many nonpoor individuals qualify for various types of means-tested transfers. In contrast, during their prime working years many individuals and families—who are far from rich—will earn incomes that place them in very high tax brackets. This is particularly true for dual income families seeking to provide for the welfare and education of their children.

Second, cost-of-living differences among geographic areas further erode the usefulness of income as a measure of economic status. In recent years, studies indicate that the cost of purchasing the typical bundle of goods and services consumed by a family of four is approximately 30 percent more in New York and Boston than in Atlanta or Dallas. Once again, annual income is only a crude measure of economic well being.

Third, money income ignores the contribution of nonmarket time. Modern economic theory emphasizes that enjoyment of most commodities depends on both market goods and the nonmarket time (Becker 1965; Becker and Michael 1973). Many commodities such as watching television, reading books, hunting, fishing, playing games, and listening to music require relatively more nonmarket time than market goods. Nonmarket time may also be used to produce goods directly (food, clothing, laundry service, child care, etc.) that others may purchase with market income. To the extent households with higher money incomes have proportionally less nonmarket time, money income data overstate their relative well being.

How important are differences in nonmarket time? In recent years, the top fifth of family income recipients have contributed more than 30 percent of the total weeks worked, compared to only 8 percent for the bottom quintile. Among high income husband-wife families in 1983, more than three-fifths (62.9 percent) of the wives worked in the paid labor force, compared to 37.8 percent of the wives in middle income families and only 14.7 percent of the wives of low income families. The differences in full-time market participation of working wives were even greater. Full-time working wives characterize 47.0 percent of the high income families, compared to 28.5 percent of the middle income families and only 6.7 percent of the low income families. Therefore, the wife was seven times more likely to work full-time in high income families as compared with low income families. Clearly, high income earners work more and have less nonmarket time than those with less income. Yet, the money income

data ignore the contribution of nonmarket time to family living standards. This deficiency further limits the ability of money income to accurately classify the economic status of individuals and families.

Given the loose relationship between annual income and economic status, there will be a great deal of slippage even when taxes and transfers are linked to income. Annual income will often categorize families as rich (and therefore impose heavy taxation) when closer inspection reveals that they are less well off than many others who are taxed less heavily. Similarly, annual income will often place families among those eligible for means-tested transfers even when their economic status is significantly higher than others who are ineligible.

III. The Rationing of Transfers: Eroding the Gains of Recipients

In a world of scarce resources, a government that supplies transfers must limit their size and restrict their availability. Otherwise, the quantity of transfers demanded will far exceed the ability of the government (and the economy) to supply them. Transfers must be rationed. Stated another way, restrictive criteria must be adopted to limit the demand for transfers.

The restrictive criteria accompanying transfers usually limit the options of recipients. For example, means-tested transfers require recipients to limit their income. Rent controls benefit recipients of low-cost housing only if they continue renting the same apartment even when they have changed jobs or retired. Unemployment benefits are linked to continued nonemployment status. These restrictions, which are a necessary element of transfer programs, often impose costs on transfer recipients. Thus, the net gain of the transfer recipient will be less than the size of the transfer. This will be true even in the case of cash transfers.

The most common rationing methods tie the receipt of transfer benefits to something the recipient owns, does, or is. Potential recipients have an incentive to adjust their affairs so as to increase the likelihood and size of personal transfer benefits, but such adjustments are costly. Indeed, most people will forsake the potential transfers because the costs of qualifying are greater than the benefits. Others will perceive that the expected value of the transfer income exceeds the costs of meeting (or continuing to meet) the restrictive criteria. They will choose recipient status. The rationing mechanism used to allocate transfers will influence both the size and distribution of the

recipient's net gain. We next consider the three common rationing devices.

Rationing Transfers Via Ownership of a Tradable Asset

Suppose you are the owner of an asset that promised to provide \$100 of income each year into the future. The market value of the asset is the discounted present value of the future income stream. You can sell the asset for this amount. For example, an interest rate of 10 percent means that the market value of \$100 in annual income forever is \$1,000.

When transfer benefits are tied to the ownership of an asset, the market value of the asset expands to reflect the present value of the expected transfer income stream. In effect, new owners purchase the transfer income stream when they purchase the asset to which the income stream is tied. Several current transfer programs fall into this category. For example, the agricultural price support programs provide a transfer benefit (in the form of above free-market prices) tied to ownership of allotments based on the acres of various crops planted during a prior-based period. In effect, the acreage allotment is a license to sell (to the government if necessary) at a price higher than the opportunity cost (net of the license fee) of production. In the case of feed grains, the allotments are linked to specific farms. Thus, one must buy a farm in order to buy the accompanying allotment. In this case, the value of the allotment gets capitalized into the market value of agricultural land. In the case of tobacco and peanuts, limited trading of the allotments without the land is permitted. The allotments trade for market prices reflecting the flow of income one can expect from production and sale of the products at the artificially high support price. Landowners, not farmers as such, benefit.

This method of rationing transfers is not limited to agriculture. Many cities license taxicabs and limit their supply, driving up taxi fares. The higher fares permit owners of taxi licenses to receive a transfer in the form of an income stream that reflects the higher fares and limited entry into the taxi business. However, as in the case of agricultural allotments, the present value of the expected future transfer income gets capitalized into the value of the licenses (medallions). In cities where the number of licenses is restricted, the license often sells for \$50,000 and up.

In some cases, entry into occupations is limited via tradable licenses. On the West Coast, several states limit the number of licensed maritime pilots and require ships above a certain size to be brought to harbor by a state-licensed maritime pilot. The supply restrictions permit the maritime pilots to command extremely high wages.

However, the additional income in the form of the high wages of pilots will be reflected in the market value of the license. As is the case of taxi operators, qualified maritime pilots pay huge sums for these licenses.

When transfers are tied to the ownership of a tradable asset, the beneficiaries are the owners of assets to which the transfers were tied at the time the policy was instituted (or unexpectedly increased in attractiveness from the viewpoint of recipients). The transfer policy created a windfall gain for these individuals. The primary beneficiaries of long-standing transfer programs are dead and gone.

Continuation of these transfer programs in the expected manner does nothing to improve the economic status of the current recipients. Essentially, the current recipients paid for the transfers when they bought the license, allotment, or other asset to which the transfer is tied. As long as the current transfer program continues at the anticipated level, receipt of the transfer does not influence the profitability (or expected rate of return) of transfer recipients. Only unanticipated policy changes will affect the current recipients.

Our analysis indicates why such transfer programs are difficult to repeal. Ending the program would impose a once-and-for-all reduction in the value of the asset to which the transfer is tied and for which the current owner typically has already paid. Current recipients have a strong incentive to oppose repeal or a reduction in transfer benefits even though they do not gain (net of what they paid) from the transfers. We are caught in a transitional gains trap (Tullock 1975).

Rationing Transfers by Requiring the Recipient to Perform an Action

In this case, transfers are restricted to those who perform certain qualifying actions—for example, waiting in line, passing a test, working in a specified occupation or industry, completing detailed forms, or winning the approval of political authorities. Persons will seek the transfers when the perceived gain from a transfer exceeds the expected cost of qualifying.

To understand how this method of rationing transfer benefits works, consider the following simple case. Suppose the government offers a \$20 bill to any person who waits continuously in line for two days at the U.S. Department of Treasury. This transfer program would have a finite cost. Only a limited number of persons would perceive that the benefits of the transfer were worth the costs. Persons with the lowest opportunity cost of waiting in line would be the primary beneficiaries of the program. However, the net gain of most beneficiaries would be considerably less than \$20. If an individual's oppor-

tunity cost of waiting in line two days at the Treasury were \$12, his net gain would be only \$8. If his opportunity cost were \$19.90, the net gain would only be 10 cents.

This simple example highlights the problem that arises when recipient action is used to ration transfers: resources expended seeking to qualify for the transfer consume a substantial portion of the transfer's value. At the margin, the opportunity cost of qualifying will completely eliminate the expected gain from the transfer. Unlike a cash price, which utilizes no resources and benefits the seller as much as it costs the buyer, the in-kind price generally benefits no one. The resources utilized and convenience sacrificed produce nothing, but are simply means to compete or qualify for benefits. Thus, when this method of rationing transfers is used, the cost of transfers generally far exceeds the net gain of receipts.

What current programs require recipient action as a condition of receiving the transfer? Many state and local governments require new entrants into such occupations as electrician, contractor, realtor, and undertaker to pass a stiff entrance examination primarily designed to restrict supply. Large fees are often charged to take the test or receive an operating license. Since such requirements restrict entry, persons in the occupation are able to obtain a transfer in the form of above free-market prices (or wages) for their services. To qualify for the transfer, however, one has to have a license. Persons who expect the gain from the above-market wages to exceed the opportunity cost of the license will expend the resources to obtain the transfer. The opportunity cost of "earning" the license (for example, study time, waiting to take the test, completing necessary forms, paying required fees, etc.) will consume a substantial portion of the transfer benefits.³ In this case, there may be gains to society from the activities, if they make the applicants more qualified to perform the tasks of a licensee. However, unless the activities are fully justified by such gains, the recipient's *net* transfer gain will be less than the cost of the transfer.

There are many other cases where recipients are required to "earn" the transfer. Craft apprenticeship programs generally require individuals to work for a long period at below-market wage rates before qualifying for the restricted entry wage rates available to journey-

³Supporters of occupational licensing often argue that stiff licensing requirements eliminate unqualified persons and thereby improve the quality of workmanship in the occupation. Detailed studies of several occupations fail to support this dubious proposition. The case of construction crafts is interesting because workmanship is often inspected. Nonetheless, licensing continues in craft occupations.

men.⁴ The opportunity cost of the former erodes much of the benefit derived from the latter. Filing complex documents, enduring lengthy delays, and meeting business structural requirements are distinguishing characteristics of low-interest government loan programs. To a large extent, these procedures are merely sophisticated methods of rationing transfers via the waiting-in-line criteria.

The homesteading period of American history illustrates the operation of this method of allocating transfer benefits. Not wanting to ration western lands to the highest bidders, the government decided to give it away. Of course, this necessitated a method of rationing. The government chose to give a plot of "free" land to the first person who established a legal claim, erected a structure, and lived on the land for a designated period of time (usually five years). In order to get the transfer, homesteaders had to be willing to "wait in line" for the development of a transportation and distribution network that facilitated gains from specialization and exchange. A predictable result of this method of allocation was severe hardship, as persons seeking the transfers settled the land well before it was economically beneficial to do so.

To see the problem more clearly, consider a hypothetical parcel of land not worth farming in 1866, but expected to be worth \$1000 in 1872, when transportation and local population would make it a break-even proposition to farm. Would there be competition to settle the land before 1872? Yes, because anyone waiting until 1872 would almost surely be too late. To settle in 1871 would be socially wasteful, since the labor and other resources needed to settle and farm the land would not produce as much as they would elsewhere. But because the land would be worth \$1000 the following year, some people would be willing to suffer a year's losses to claim the land. How about settling two years in advance, in 1870? Again, if the wasted time, labor, and other resources would total less than the present discounted value of the land, we could predict settlement. Thus resources worth up to the entire value of the land might well be wasted by those competing to claim it first.

In fact, the situation was worse than we describe, because no one knew how difficult the years before the break-even point would be, when the break-even point would occur, or how much the land would

⁴When occupational licensing is instituted (or increased in restrictiveness), current practitioners are nearly always excluded from the restrictive practices. They are grandfathered into the occupation, that is, they are granted positions at the front of the line. Only future practitioners have to wait in line (meet the restrictive requirement). The shortsightedness effect indicates why practices of this type have considerable political appeal.

really be worth afterward. So those most optimistic about low settlement costs, early profitability of farming the land, and greater land values thereafter would compete among themselves and settle even earlier than correct forecasts would have indicated. That is why only about 30 percent of all settlers in the first 30 years of the homestead program (which began in 1862) were able to survive long enough to obtain the land they settled (Stroup 1985, and citations therein). It is no accident that the legacy of western settlements is one of hardy men and women fighting what, for many, turned out to be a losing battle for survival. Essentially, these people were paying a dear price for the property right to a transfer benefit ("free" land).

Rationing the Transfers to Specified Subgroups

This method of rationing allocates limited transfers to persons who belong to a specified subgroup of the population. Current subgroups eligible for various transfers include: (1) persons with a disability, (2) unemployed workers terminated without cause from their previous position, (3) the poor, and (4) the elderly. Receipt of the subsidy depends on continued status as part of a specified subgroup.

These transfers are intended to reduce the hardship associated with such situations as unemployment, disability, or poverty. However, when the probability or duration of the situation is influenced by individual choices, the transfers encourage actions that place one in a subsidized subgroup. Thus, insuring against adversity over which individuals have some control actually promotes the occurrence of the situation. In the insurance industry this is called the "moral hazard problem," and private insurance companies seldom offer protection against adversities that are substantially affected by the behavior of potential claimants (in our case, transfer recipients).

There is one eligibility requirement for government transfer benefits that cannot be satisfied by a change in behavior: age. Moral hazard is therefore not a problem in programs for the elderly. This helps explain why for those over 65, but not for other groups, the poverty rate continued to decline as transfers increased during the last two decades. Nevertheless, some transfer programs limit the elderly's earning, and the expected transfers may influence their behavior when younger. But tying the benefits to age reduces the negative impacts.

IV. Markets Adjust to the Distribution of Transfer Gains

The economy is like a balloon. If you push it in one place, it bulges in another. Prices (terms of exchange) are constantly adjusting to

economic and political change. When changing conditions reduce the attractiveness of earning opportunities in one area, people will shift to other more attractive options.

The rate of return equalization theorem underlies the movement of resources. This theorem indicates that once allowance is made for factors such as risk and nonpecuniary benefits, competition will tend to equalize the after-tax rate of return among earning opportunities. For example, investment project *A* cannot permanently yield a higher after-tax rate of return than *B*. If the net rate of return for *A* is higher than for *B*, with the passage of time *A* will attract investment funds from *B*, and thereby increase the return in *B* and depress it in *A*. The process will continue until equalization is accomplished. As long as individuals are free to decide how they are going to use their time, energy, and resources, they will reallocate resources so as to equalize, at the margin, after-tax rates of return across alternative opportunities.

The rate of return equalization theorem makes it clear that the person paying the tax bill may not bear the complete or even the primary burden of the tax. For students of tax incidence theory, this point is elementary. For example, the burden of an excise tax on gasoline falls primarily on consumers of the product, even though suppliers send the check to the Internal Revenue Service. Adjustments to a higher excise tax on gasoline will take resources away from the production and distribution of gasoline. In the long run, a reduction in supply will push gasoline prices upward until the remaining gasoline suppliers are once again able to earn, at the margin, a competitive rate of return. Thus, the primary burden of the tax falls on gasoline consumers in the form of higher prices.

A parallel analysis applies to transfers. As long as resources are mobile, transfers (subsidies) cannot permanently increase the rate of return of suppliers. To the extent the transfers improve profitability, resources will flow into the subsidized activity until some combination of lower product prices and higher resource costs restore the normal (market) rate of return. Thus, low interest loans cannot make farming or small businesses more profitable for long. Neither can tariffs nor quotas make protected industries more profitable in the long run. The best the transfers can do is create windfall gains, which competition will erode in the long run.

The rate of return equalization theorem also applies to investments in human capital and after-tax wage differentials. Wage differentials do not simply happen; they reflect the sacrifices associated with the acquisition of skills—the opportunity costs of education, training, and experience that lead to greater productivity and high wage rates in the marketplace. High wages also compensate individuals for less

desirable working conditions such as long and inconvenient hours, intense job pressure, out-of-town travel, frequent locational moves, and living in less desirable areas. A structure of wage differentials will evolve that, after allowance for nonpecuniary and risk factors, equalizes the after-tax returns derived from alternative human capital investments.

A more progressive tax structure and an increase in transfers inversely linked to income can temporarily compress after-tax and transfer income differentials and the returns to human capital. With the passage of time, however, human decision makers will adjust their choices to the new incentive structure, and fewer individuals will make the sacrifices necessary to supply labor in occupational categories that are now taxed more heavily.⁵ The supply of labor to the high taxable income categories will decline, causing wage rates to rise until the after-tax net returns in these areas are once again normal (equal to what can be earned on similar investments). In contrast, the lower taxes (and higher transfers) will increase the net after-tax returns in the low-tax occupations. More people will enter such occupations, thereby depressing wage rates and eventually restoring normal returns in the low-tax occupations. Once people adjust, the tax-transfer system will lead to larger before-tax earnings differentials than would have been present had the tax-transfer structure been less progressive (Wagner 1983, pp. 187–201). The adjustment process offsets the apparent egalitarian effects of the tax-transfer structure, at least partially.

V. Negative Side-Effects of General Transfer Programs

As we have emphasized, most transfers are not egalitarian, even in their purpose. Nonetheless, transfers alter the incentive structure in a manner that reduces the size of the economic pie. Two of the negative side effects—the impact of transfers on marginal tax rates and the encouragement of rent seeking—are particularly important. We now turn to an analysis of these two factors, which are a by-product of both egalitarian and non-egalitarian transfers.

⁵We use occupational categories here to represent many categories of productive behavior. Working more intensively, reliably, cooperatively, imaginatively, or using capital more productively are other ways, besides choosing a new occupation, in which an individual can be more productive in return for more pay. But when the added pay is taxed at a higher rate (or transfer payments are reduced) as a result, the incentive to be more productive is reduced.

High Marginal Tax Rates Reduce Incentives and Efficiency

An increase in the size of the transfer sector will lead to higher taxes. In turn, higher marginal tax rates reduce the incentive of individuals to earn and use resources wisely. When individuals are able to reap the benefit of their productive efforts, receipt of personal income induces them to help others and to engage in wealth-creating activities. However, when a substantial portion of their income is transferred to others, their willingness to engage in productive activity declines. Put simply, individuals are not nearly so willing to work and produce when they get to keep only 40 or 50 percent of what they earn. When marginal tax rates are high, lawyers, doctors, and other high income professionals predictably will spend more time on the golf course and consulting with their tax lawyers and accountants, and less time serving their clients.⁶ Similarly, some secondary workers will decide that their jobs are not worth the effort when they get to keep only a fraction of every dollar earned.

Simultaneously, when marginal tax rates are high, individuals do not bear the full cost of tax deductible expenditures. Thus, high marginal tax rates make tax deductible expenditures cheap to the taxpayer-consumer, but not to society. The personal costs of tax-reducing expenditures such as business-related vacations, luxury restaurants, nice automobiles, plush offices, mortgage-financed homes and thousands of other deductible expenditures are substantially reduced by high marginal tax rates. However, deductibility does not reduce the true opportunity cost to society of the valuable resources used to produce these commodities. Since individuals bear only a fraction of the costs, they often choose the deductible goods and services even though the items cost more to produce than their value to the taxpayer-consumer. This process destroys wealth and wastes valuable resources. The result is a smaller output and slower economic growth.

Rent Seeking Wastes Scarce Resources

Rent seeking is a term used by economists to describe actions taken by individuals or interest groups designed to bring about legal changes that either directly or indirectly transfer income to themselves. The incentive to engage in rent seeking is directly related to

⁶At first glance it may appear that higher taxes also have an income effect, reducing the taxpayer's income, and possibly causing more willingness to work, offsetting the negative incentive effect. However, for society as a whole, if the tax dollars are spent efficiently, then there are income gains to offset the taxpayer losses. In aggregate, a net income effect will be present only if recipients have a different response to an income change than taxpayers (see Gwartney and Stroup 1983a).

the ease with which the power of the state can be utilized to transfer income and redefine property rights away from others, in favor of the rent seeker. When the tax-transfer policy of the government plays an important role in the allocation of income shares, substantial resources will flow into rent seeking. Resources that would otherwise be used to create wealth and generate income will be "invested" in rent seeking. In turn, increased use of the political process to gain transfer benefits will lead to defensive action by others seeking to protect their income and wealth from transfers.

As Gordon Tullock (1967) and Terry Anderson and Peter J. Hill (1980, pp. 6-7) have pointed out, in terms of its impact on resource use, rent seeking is similar to theft. Both rent seeking and theft use valuable resources to transfer rather than generate income. Just as an increase in the incidence of theft causes individuals to purchase more burglar alarms, safety locks, and firearms, an increase in rent seeking will lead to more defensive actions designed to resist transfers. For both theft and rent seeking, the flow of resources into transfer (and protective) activities and away from productive activities is a negative sum game. It represents pure social waste.

The resources flowing into lobbying illustrate the growth of rent seeking (and defensive action) accompanying the expansion in the transfer sector during the last two decades. Between 1976 and 1983 the number of lobbyists registered with the federal government rose from 3,420 to 6,500, an increase of 90 percent in 7 years. As recently as 1979 New York had twice as many national trade associations as Washington, D.C. By 1983 the number of Washington trade associations exceeded New York by nearly 20 percent. A recent study found that 65 percent of the chief executive officers of the top 200 Fortune firms are in Washington on business at least once every two weeks, up from 15 percent a decade ago (Boaz 1983). When the political process makes transfers more likely, an increase in rent seeking is a natural by-product.

VI. Negative Side Effects of Means-Tested Transfers

Various transfers are means-tested in order to ration the benefits, to the extent possible, to the poor. We noted earlier that since income is a highly imperfect measure of economic status, a portion of even means-tested benefits will flow to the nonpoor. In addition, means-tested transfers will involve unintended side effects that will substantially reduce their effectiveness as an antipoverty weapon. Three of these side effects are particularly harmful.

1. *Since the high implicit marginal tax rates accompanying means-tested transfers severely retard the incentive of the poor to earn, the net increase in the income of the poor is much less than the size of the transfers.* We already noted the negative impact of high explicit tax rates on the incentive of the nonpoor to earn. The incentive of low income recipients to earn is adversely affected by high *implicit* marginal tax rates. Since the benefits derived from means-tested transfers decline with income, more earned income means fewer transfer benefits. Thus, the reduction in benefit levels as income increases confronts the poor with an implicit marginal tax rate. For individual programs, the implicit tax rate appears to be quite reasonable. For example, food stamp benefits are reduced by \$30 for each \$100 monthly earnings up to \$800. The implicit marginal tax rates associated with cash transfer programs such as Aid to Families with Dependent Children (AFDC) and unemployment compensation are somewhat higher, typically in the 50 to 60 percent range. However, analysis of single programs conceals the true picture.

Most poor people who qualify for one program are also eligible for others. When the compound multiprogram implicit marginal tax rate is calculated, it is exceedingly high. A diverse set of studies indicates the families receiving benefits from AFDC (or unemployment compensation), food stamps, and Medicaid confront implicit marginal tax rates between 70 percent and 90 percent on the first \$10,000 of earnings (Anderson 1978; Bethune 1985; Gwartney and McCaleb 1985; Laffer 1984). When poor families are permitted to keep only 10 to 30 percent of their additional earnings, clearly such high implicit marginal tax rates pose a significant disincentive to work and earn.

Traditional economic theory indicates that both the substitution and income effects of the transfers (that is, both lower net pay per hour and the extra income) will encourage the poor to reallocate time from market work to nonmarket activity including housework, leisure, and the underground economy. Many transfer recipients who would otherwise have engaged in market work will decide to work fewer hours, only on convenient jobs, or not at all. As a result, a significant portion of the transfer income is merely replacement income; it simply replaces income the recipient would have earned in the absence of the transfer. Thus, the money income of recipients increases by less than the amount of the transfer.

Is there evidence that transfers have influenced the work force participation of the poor? As Table 3 indicates, there has been a substantial increase in the proportion of poor household heads who do not work. By 1984 more than half (50.6 percent) of the poor households were headed by a person who did not work at all during

TABLE 3
INCREASING NUMBER OF POOR HOUSEHOLD HEADS WHO DO
NOT WORK AT ALL

Families with Income Below the Poverty Level	1959	1966	1970	1980	1984
<i>All Poor Households</i>					
Householder Did Not Work at All During the Year					
Number (millions)	2.5	2.4	2.3	3.1	3.7
Percent of Poor Households	30.5	39.7	44.0	49.6	50.6
<i>All Poor Female-Headed Households</i>					
Householder Did Not Work at All During the Year					
Number (millions)	1.1	1.0	1.1	1.8	2.2
Percent of Poor Female- Headed Households	57.1	52.7	56.6	61.5	62.5

SOURCES: U.S. Department of Commerce, *Money Income and Poverty Status of Families and Persons in the United States: 1984* (Table 18); *Characteristics of the Population Below the Poverty Level: 1982* (Table 5); and U.S. *Statistical Abstract: 1968*, p. 330.

the year, up from 30.5 percent in 1959. One might think this increase merely reflects the increase in female-headed households among the poor, but such is not the case. The work force participation of poor female-headed households has also declined. The proportion of poor female household heads who did not work during the entire year jumped from 52.7 percent in 1966 to 62.5 percent in 1984. Thus, when the labor force participation rate of females was rising, more and more poor females were opting out of the work force. This is certainly consistent with the view that much of the transfer income was merely replacement for income that otherwise would have been earned, had the incentive structure not encouraged nonwork.

2. *Skill depreciation is a secondary effect of the decline in work force participation of the poor. With the passage of time, declining skills further limit the ability of the poor to escape poverty.* When the poor opt out of the work force, their skills tend to depreciate. Individuals who have not used their skills for extended periods of time find it difficult to compete with otherwise similar individuals who have continuous labor force participation. The long-term con-

sequences of an incentive structure that encourages nonwork is even more destructive than the short-term effects. As marginally poor people opt for nonwork, their work record deteriorates, and they become less and less able to support themselves. Even readjusting to a structured eight-to-five schedule, generally necessary for work force participation, may become difficult. As the length of time out of the work force expands, marginally poor individuals move into the hard core poor category.

If we do not institute a change in policy direction, what will happen to the 3.7 million poor household heads who did not work at all during 1984? Many of these people are capable of self-support. However, if we continue to allow even their limited skills to depreciate, they will soon face a hopeless situation. It is perhaps already too late for some. The nonwork trend illustrated by Table 3 is an ominous sign for the future.

3. *Families, churches, and private organizations reduce their efforts to assist the poor in response to an expansion in antipoverty transfers.* The best excuse to do nothing is the assurance that someone else is already doing the job. Predictably, private groups and individuals will do less when they think the government is doing more. During the 1960–80 period, millions of Americans perceived that increased government involvement relieved them of personal responsibility for the poor. Many churches even shifted from person-to-person assistance to lobbying the government for more funds for antipoverty programs. Just now, as the failure of government programs to alleviate poverty is more readily seen, we are beginning to see a reawakening of voluntary action. Increasingly, we are again beginning to see civic groups supporting soup kitchens and churches opening homes for children and missions for the homeless.

The assistance of families and friends is probably the most important form of voluntary assistance, but the nature of such assistance makes it virtually impossible to quantify. Table 4 presents data on the organized charitable giving of individuals, corporations, and foundations for the 1955–81 period, measured in 1981 dollars. Annual charitable giving for religious purposes more than doubled in real terms during this period. Private donations for education, health, and hospitals tripled during the same period. In contrast, charitable giving for social services (primarily for the poor) was virtually unchanged during the period. As a proportion of private charitable giving, contributions for social services fell from 23 percent of the total in 1955 to 10 percent in 1981 (Roberts 1984, pp. 139–40).

The decline in private assistance to the poor is particularly important because private charity has two major advantages relative to

TABLE 4

INDIVIDUAL, CORPORATE, AND FOUNDATION DONATIONS FOR
SOCIAL SERVICES AND OTHER PURPOSES, 1955-81
(BILLIONS OF 1981 DOLLARS)

Year	Social Services	Religious	Education	Health & Hospitals	Other ^a
1955	5.2	11.3	2.5	2.0	1.6
1965	5.4	18.8	6.5	4.2	3.5
1975	5.3	21.8	6.7	7.5	8.9
1981	5.3	24.9	7.5	7.4	8.6

^aIncluding arts and civic programs.

SOURCE: Roberts (1984).

government programs. First, private individuals and organizations have the capacity to structure help for the poor in ways that minimize the moral hazard problem and avoid harmful disincentive effects. Private aid can better be tailored to the specific needs of the individual or family and structured so as to elicit efforts by the poor to help themselves. Second, since the sacrifice of the donor is far more visible under voluntary charity, recipients are less likely to take the aid for granted and therefore are more likely to respond positively to it. Because of these strengths, private action to assist the poor can do more with fewer resources.

VII. Growth of Transfers, Equality, and Poverty

In the early 1950s direct cash transfers accounted for approximately 5 percent of personal income. Three decades later, the parallel figure had jumped to nearly 15 percent. Since the mid-1960s noncash transfers (primarily food, housing, and health care benefits) have grown far more rapidly than cash benefits. When cash and noncash transfers are considered, nearly 20 percent of the personal income in the United States reflects transfer policies. There can be little doubt that income transfers have grown rapidly, both in real dollars and as a proportion of personal income. Both means-tested and nonmeans-tested transfers have grown rapidly.

Does the growth of the transfer sector promote economic equality and hasten the decline of poverty? Two decades ago, most researchers would have considered this a trivial question. An affirmative answer was widely assumed. The more relevant question was thought to be "What is the proper trade-off between equality (transfers) and efficiency (growth)?"

Today we know that the issue is highly complex and that the answer is not obvious. Given the vast array of transfer programs, precisely isolating their impact on equality is nearly an impossible task. Contrary to the views of some, comparisons of the distribution of income before and after taxes and transfers shed little light on the topic. As we explained earlier, the pretax-transfer distribution would have been different without the programs.

Nonetheless, with the benefit of 20 years of economic experience, there is reason to question whether the growth of the tax-transfer sector has done much to promote equality. As Table 2 illustrates, a relatively small portion, less than 20 percent, of the direct cash and noncash transfers are means-tested (directed toward the poor). Given the imperfection of annual income as a measuring rod, no doubt some of the means-tested benefits accrue to persons and families who are relatively well-off. In addition, theory indicates that a significant portion of the means-tested transfers will be replacement income. The net increase in the income of the recipients will be less than the size of the transfer. Considering all of these factors, it is difficult to believe transfers have done much to promote economic equality.

Studies of changes in the after-tax and transfer distribution of income during the post-World War II era are consistent with this view. The most detailed study of this type was undertaken by Morgan Reynolds and Eugene Smolensky (1977). Rather than focusing only on taxes and a few transfer programs, Reynolds and Smolensky sought to isolate the distributional impact of a broad range of taxes, transfers, and expenditures. They found that despite a vast expansion in redistributive activities during the 1950-79 period, the degree of after-tax inequality was approximately the same at the end as at the beginning of the period. Summarizing their findings, the authors concluded: "It appears to be a common view that, even in a predominantly market economy, the distribution of income, however defined, is subject to government modification. We are not convinced that the conventional wisdom is correct" (p. 96).

Neither is there evidence indicating that transfers have done much to reduce the poverty rate, particularly for working-age Americans on whom the rationing restraints exert their greatest impact. As Table 2 illustrates, means-tested transfers grew rapidly during the 1965-75 period as the War on Poverty programs were put into place. The poverty rate of working-age Americans, which had previously been declining, started to rise during the period of rapid growth in means-tested transfers.

As Table 5 illustrates, the poverty rate of families fell from 32.0 percent to 13.9 percent between 1947 and 1965. The progress was

TABLE 5
OFFICIAL POVERTY RATE AND THE POVERTY RATE ADJUSTED FOR IN-KIND BENEFITS FOR FAMILIES
BY AGE OF HOUSEHOLD HEAD, 1947-1982

Age of Household Head	1947	1959	1965	1968	1970	1975	1980	1982	1984
Per Capita Real GNP (1972 Dollars)	3,263	4,076	4,782	5,271	5,393	5,702	6,480	6,370	6,925
<i>Official Poverty Rate</i>									
Under 25	45.0	26.9	19.4	13.2	15.5	21.0	21.8	26.1	29.4
25-44	27.0	16.5	12.8	9.3	9.5	10.3	11.8	14.2	13.2
45-54	27.0	15.0	9.6	7.0	6.6	6.6	7.6	8.9	8.6
65 and over	57.0	30.0	22.8	17.0	16.5	8.9	9.1	9.3	7.3
All Families	32.0	18.5	13.9	10.0	10.1	9.7	10.3	12.2	11.6
<i>Adjusted Poverty Rate^a</i>									
Under 25	—	—	19.0	12.3	14.2	18.7	18.8	24.0	26.8
25-44	—	—	12.5	8.6	8.5	8.5	9.5	12.3	11.4
45-54	—	—	9.5	6.7	6.1	5.8	6.2	8.0	7.4
65 and over	—	—	22.4	15.9	14.9	6.0	5.4	5.5	4.3
All Families	—	—	13.7	9.3	9.2	8.1	8.2	10.2	9.8

^aThe poverty rate adjusted for in-kind benefits is based on the recipient value method of valuing in-kind benefits.

SOURCES: The 1947 data are from *Economic Report of the President: 1964* (Table 7). Other data are from U.S. Department of Commerce: Bureau of the Census, *Estimates of Poverty Including the Value of Noncash Benefits: 1979 to 1982* and *Estimates of Poverty Including the Value of Noncash Benefits: 1984*.

across the board. The poverty rate of all age, racial, and family status groupings declined during the two decades following World War II. Table 5 indicates that, except for the elderly, the situation began to change in the late 1960s and early 1970s. The poverty rate for the elderly has declined consistently during the last four decades. The declining rate for the elderly pulled down the overall poverty rate and thereby helped to conceal the experience of working-age Americans during the 1970s. Thus, few observers have noticed that the official poverty rate for the nonelderly has been increasing since 1968.

For families headed by a householder under 25 years of age, the official poverty rate rose from 13.2 percent in 1968 to 21.8 percent in 1980. By 1984 the poverty rate of these youthful families had jumped to 29.4 percent, substantially more than the 1965 rate (19.4 percent). Similarly, the incidence of poverty among families headed by persons age 25–44 rose from 9.3 percent in 1968 to 11.8 percent in 1980 and 13.2 percent in 1984. Families headed by a person under age 45 now account for nearly two-thirds of the poor families in the United States. The poverty rate of households headed by a person age 45 to 54 also rose from 7.0 percent in 1968 to 7.6 in 1980 and 8.6 percent in 1984. Thus, reversing the trend of the 20 years following World War II, the official poverty rate of working-age Americans has been increasing during the last 15 years.

The official poverty rate considers only cash income. It does not take into account noncash (in-kind benefits such as food, medical service, and housing) transfer payments. Because the noncash benefits have grown so much more rapidly than cash transfers since the inception of the War on Poverty, some analysts have argued that the official rate is a misleading indicator of changes in the number of families living in poverty. Recent refinements by the U.S. Department of Commerce shed light on this issue.

The Department of Commerce now provides data on the poverty rate adjusted for noncash benefits for the 1979–84 period. Given the size of the noncash transfers and the impact of the in-kind benefits on the adjusted poverty rates in recent years, a poverty rate adjusted for noncash benefits can be reconstructed for earlier years.

Table 5 presents data on the adjusted poverty rate by age.⁷ The

⁷The recipient value method values noncash transfers at the equivalent amount of cash income a recipient would be willing to exchange for the right to noncash benefits. Thus, it takes into account that recipients might rather have cash than the in-kind benefits. It is widely accepted by economists as the most appropriate method with which to impute a value to the noncash benefits.

1965, 1968, 1970, and 1975 adjusted data are reconstructed.⁸ The data for the 1980s are from the U.S. Department of Commerce (1984, 1985). While the adjusted rates are lower, the time path pattern is quite similar to that for the official rate. Both the official and the adjusted rates show that the rate of poverty of the elderly declined sharply throughout the period. By 1984 the poverty rate of the elderly adjusted for noncash benefits had fallen to 4.3 percent, down from 15.9 percent in 1968 and 22.4 percent in 1965.

Once again, the picture is quite different for working-age families. Between 1968 and 1980 the adjusted poverty rate of families headed by a householder under 25 years of age rose from 12.3 percent to 18.8 percent. By 1984 the adjusted rate for this group reached 26.8 percent, well above the rate they experienced during the mid-1960s. For the largest age grouping (25-44), the adjusted poverty rate rose from 8.6 percent in 1968 to 9.5 percent in 1980 and 11.4 percent in 1984. The adjusted poverty rate for the 45-54 age grouping was also greater in the early 1980s than the late 1960s.

Thus, whether one looks at the official or adjusted poverty rates, the picture is the same. Soon after the massive increase in transfer payments in the late 1960s, the steady progress of the pre-War on Poverty era came to a halt and the poverty rates of working-age Americans began to rise. Thus, even though per capita real GNP rose throughout the postwar period (see Table 5), the growth of the last 15 years has not translated into gains against poverty among working-age Americans.

VIII. Conclusion

The impact of transfers on economic equality and poverty is far more complex than most people realize. It is not obvious that the political process will yield egalitarian transfers. And, even when it does, the net egalitarian impact may well be quite modest. Since annual income is a highly imperfect measure of economic status,

⁸Mathematically, the adjusted poverty rate within age group *a* for each year *i* is equal to:

$$APR_{ai} = OPR_{ai} - \frac{MTE_i}{MTE_{80}} (OPR_{a80} - APR_{a80})$$

where APR_{ai} = adjusted poverty rate during year *i* within age group *a*
 OPR_{ai} = official poverty rate during year *i* within age group *a*
 MTE_i = noncash, means-tested expenditures in year *i*
 MTE_{80} = noncash, means-tested expenditures in 1980
 OPR_{a80} = official poverty rate within age group *a* in 1980
 APR_{a80} = adjusted poverty rate within age group *a* in 1980.

some slippage can be expected there. Predictably, market adjustments will erode some of the redistributive effects of egalitarian transfers. An expansion in transfers of any variety will encourage rent seeking and higher marginal taxes, both of which will retard aggregate output. In addition, means-tested transfers confront the poor with high marginal tax rates that reduce their incentive to earn. Thus, a portion of the transfer benefits is merely replacement income. Means-tested transfers also discourage participation in the work force and lead, with the passage of time, to skill depreciation, further reducing the ability of the poor to help themselves. Finally, public sector antipoverty programs tend to crowd out voluntary charity, which is more likely to be cost effective. Thus, when one considers structure and side effects of transfers, their apparent failure to promote equality and improve the economic status of the poor is not surprising.

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