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THE DISTRIBUTIONAL IMPACT OF
INFLATION AND ANTI-INFLATION POLICY

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ABSTRACT

This paper reviews evidence regarding the distributional impact of inflation on purchasing power, income, and wealth, and analyzes the impact of anti-inflation policy and its interaction with distribution policy. The evidence suggests that recent inflation has worsened relative economic position of low-income families. A contractionary fiscal-monetary policy, which seems likely to be the keystone of the anti-inflation program to be followed in the foreseeable future, would substantially worsen the economic position of low-income families unless major redistributive policies are enacted at the same time.

THE DISTRIBUTIONAL IMPACT OF
INFLATION AND ANTI-INFLATION POLICY

In the not so distant past, high rates of inflation were associated with high rates of growth of GNP and low unemployment. One sometimes heard it remarked that inflation was the best anti-poverty program--and this made sense. Currently, with high rates of inflation coupled with increasing unemployment, we need to reexamine our understanding of what affects the distribution of income and to evaluate the impact on distribution of proposed anti-inflation policies.

The first part of this paper examines the distributional impact of inflation on purchasing power, on total income and its major components (labor income, transfer income, and other income), and on wealth. The second part examines the distributional impact of anti-inflation policy and its interaction with distribution policy: The impacts of fiscal-monetary restraint, wage and price controls, welfare and tax reform, and long-run anti-inflation policy are considered. A variety of evidence is put forward indicating that inflation generally does not have beneficial effects on the relative incomes of the poor and that it has had an adverse impact in recent years. It would not be in the interests of the poor, however, to follow a new policy solely because it promises to lessen inflation. In fact, the program of anti-inflation policies most likely to be followed in the next two years will probably place its heaviest burden on low-income families. It is imperative that anti-inflation policy be coordinated with distribution policy if equity and economic justice are not to be sacrificed.

Throughout, the distributional impact of any particular action is measured in terms of the proportional changes in income (or wealth) that are or would be experienced by persons and families of various income levels. For example, if a certain action were to result in the income of families at all income levels being reduced by 10 percent, there would be no distributional impact; the incidence of the action would be uniform. Measurements of proportional changes in income readily allow a restatement in terms of changes in relative incomes--i.e., the change in one family's income, or a group of families' incomes, relative to the mean income in the population. This characterization of changes in the distribution of income does not measure the changes in the distribution of well-being or welfare, but these may be inferred.

I. THE DISTRIBUTIONAL IMPACT OF INFLATION

Analyzing the distributional impacts of inflation is a complex task because inflation and the distribution of income are determined simultaneously by that complex interaction of individuals and organizations we call the economy. At least to a first approximation, it is possible to examine the short-run impacts of changes in the aggregate economy on the distribution of income by characterizing or measuring the performance of the economy along just two dimensions. The first is the price dimension, which measures the inflation or deflation of the average level of prices in the economy. The second is the real dimension, which measures the expansion or contraction of output and employment in the economy. Of course, a fuller understanding of distributional changes would require a more complete characterization of the state of the economy.

During the 1950s and the 1960s economists recognized a fairly regular relationship between measures along these two dimensions. The inverse but nonlinear relationship between the rate of change in some index of prices or wages and the level of unemployment is widely known as the Phillips curve. Often "inflation" has been used to mean the simultaneous occurrence of rising prices and low unemployment, and "recession" has been used to mean the simultaneous occurrence of relatively stable prices and high unemployment. The historical correlations recorded in the Phillips curve sanctioned this terminology, but recent experience has shown it to be invalid, or ambiguous, and has given rise to the awkward term "stagflation."

Even recently some analyses of the distributional impact of inflation have failed to separate sufficiently those aspects of the changes in macroeconomic conditions that should be measured along the price dimension from those that should be measured along the real dimension.¹ In the following sections, the impact of inflation--holding constant the real performance of the economy--on the distribution of real income is analyzed as it occurs through changes in purchasing power, income, and wealth. Where appropriate, the impacts of changes in real performance are also noted.

A. Purchasing Power

In times of general and rapid inflation, nearly everyone perceives that the purchasing power of the dollars he spends are being eroded by rising prices. During any particular period of inflation, however, some prices will rise faster than others. As a consequence, the degree to which any given person's expenditure dollars are eroded in real value depends upon the composition of the total basket of goods and services that he buys.

For example, if the price of food rises more rapidly than the prices of other goods and services, a person whose expenditure budget is food intensive will tend to be hurt more than a person whose purchases are concentrated on other items. If the composition of market purchases depends systematically on income level, the impact of inflation will vary among income groups. Because of this, we may speak of the distributional effect of inflation on purchasing power.

The most common measure of inflation for considering consumer purchasing power is the Consumer Price Index (CPI), compiled by the Bureau of Labor Statistics (BLS). This index is scientifically designed to be representative of the prices paid for the combination of goods and services usually purchased by urban wage earners and clerical workers. Generally, the CPI is used as proxy for the price index that would be appropriate for other types of families as well. Because price indexes do tend to move together, this is reasonable. It would be difficult and expensive to continually calculate a series of indexes--one for each type of consuming unit--with the precision and rigor with which the CPI is constructed. However, any attempt to speak of the distributional effect of inflation on purchasing power requires specific indexes that are appropriate for the poor and for other income classes. Unfortunately, the announced plans of the BLS for an expansion of its CPI program do not include such indexes.

Several years ago, Robinson Hollister and John Palmer [7] calculated price indexes that were relevant for the poor, the rich, and for other income groups, by reweighting the component indexes of the CPI. Underlying their Poor Price Index (PPI) is a market basket that has heavier weights assigned to food and to housing than does the CPI; underlying their index

for the rich (RPI) is a market basket that has a heavier weight assigned to those goods and services on which the higher income groups concentrate their spending.

Over the period 1947-1967, Hollister and Palmer found that prices rose about as fast as measured by the PPI as by the CPI, and that prices for the rich rose even faster. Hence, relative to other groups the poor were not hurt by inflation over that long period. Some further disaggregation showed that the PPI might have risen more slowly than the CPI during this period, indicating that rising price levels bore less heavily on the poor than on other income groups.

What about the period since 1967, and especially the recent period of rapid inflation? An updating of the Hollister-Palmer results, using monthly as well as annual data, answers this question. It appears that the pattern of the previous two decades continued through 1971: the PPI and CPI remained close in value, although rises in the RPI were less than would be expected from the previous experience. Since 1971, however, the situation has reversed from that of the previous twenty-five years. Prices for the poor have been rising faster than the CPI, and prices for the rich have been rising more slowly. A disaggregated analysis shows clearly that it is the rapid rise in the prices of food and housing that leads to this result.²

Table 1 shows an excerpt from these calculations, stating the price indexes relative to their value in August of 1971--the month wage and price controls were inaugurated. By June 1974, prices facing the poor had risen a total of 22.8 percent, while the CPI had risen by 20.5 percent. The bulk of this gap has opened up during the rapid inflation of the last

TABLE 1
Comparative Price Indexes
(August 1971 = 100)

	PPI	CPI	RPI
August 1971	100.0	100.0	100.0
June 1972	102.6	102.4	102.4
December 1972	104.6	104.3	104.1
June 1973	109.9	108.4	108.3
December 1973	115.9	113.4	113.0
June 1974	122.8	120.5	120.1

Source: See text.

two years. While the differences are not overwhelming, it does mark the recent inflation experience as different in effect from the gradual inflation of the 1950s and the 1960s.

It should be emphasized that no price index, not even the CPI, is actually a cost-of-living index. This is so because none of them take into account the responses of consumers to changes in relative prices. The normal response would be to buy less of the items whose prices have gone up the fastest and more of the others. The ability to make these substitutions among items actually purchased causes all of the indexes discussed here to overstate the true inflationary impact on people's purchasing power. In considering the problems involved in constructing indexes for special classes of consumers, Eleanor Snyder [17] suggested that the poor have somewhat less freedom to make substitutions among the commodities they purchase, because they spend such a large percentage of their budgets on necessities and lowest priced items. Thus it is likely that the increases in the cost of living for the populations represented by the CPI and the RPI are overstated, but that the increases for the poor represented by the PPI are not. This reinforces the implications of the data examined here: the rapid inflation of the last few years has borne more heavily on the purchasing power of the poor than on that of others.

Whether this new development will continue during the anticipated wind-down of inflation is difficult to predict. The answer will depend on the basic causes of the continuing inflation. The more one expects that continued adverse conditions in commodity and raw materials markets will contribute to future inflation, the more one would predict that the

distributional impact of inflation in the future will be similar to that of recent years.

Inflation also bears heavily on the poor through its effects on capital markets. Increases in the rate of inflation normally lead to increases in short-term interest rates. While data are not readily available, it seems likely that poor and low-income families have less flexibility in their budgets and are less likely to escape the higher interest charges on consumer credit and installment loans than others.³ These higher interest charges may be considered part of the purchase cost of commodities, and thus effective prices for the poor might be expected to rise faster than for other groups. In addition, if there exists some degree of capital rationing, it is the poor who are likely to get squeezed the most.

B. Total Income

Inflation and other changes in macroeconomic conditions will affect the incomes of various families and individuals differently. If the changes in income resulting from alterations in macroeconomic conditions are systematically related to the original levels of income, rather than being randomly scattered through the population, then the distribution of income will be affected. Just what these effects have been in the past and what they are likely to be in general has been the subject of considerable research in recent years.

A number of studies have measured the distribution of income in each of several years by an index of equality or by the parameters of a specific statistical distribution, and then have attempted to relate changes in these

measures of distribution to both inflation and real economic variables. T. Paul Schultz [16] used the Gini coefficient to describe income equality and found that decreased unemployment as well as inflation led to increased income equality, but not in a statistically significant way. Employing similar data for the post-World War II period, Lester Thurow [18] used the two-parameter Beta function to describe the income distribution, and concluded that both expansion and inflation, separately considered, led to greater income equality. Hollister and Palmer [7] focussed on the percentage of the population that was poor in any year as an index of the distribution, and found that both decreases in unemployment and increases in inflation led to a decrease in the proportion of the population classified as poor. Finally, Charles Metcalf [11] analyzed changes in the distribution of income among six demographic-economic groups in the population, measuring each distribution by the three parameters of a displaced lognormal form. He found that low-income families with a labor force orientation benefit from tight employment and inflationary situations, while other low-income households tend to be harmed during inflationary periods. Restrictive policies, which would tend to decrease inflation and increase unemployment, were found to increase the numbers of the poor and to decrease income equality. With general consistency, these studies have indicated that inflation has tended to increase income equality and reduce the incidence of poverty.

By contrast, studies by Edward Budd and David Seiders [3] and by myself [13] do not find that inflation has a beneficial effect on the poor. In addition, they provide measures of the distributional importance of inflation. Budd and Seiders simulated the distributional impact of an

increase in the rate of inflation by calculating the adjustment of each of many types of aggregate income and allocating these income adjustments to a sample of families on the basis of the composition of the families' incomes. Their results show that, on average, the poorest 40 percent of the population and the richest 5 percent are made worse off by increased inflation, while all those in between are made better off. Especially with regard to the poor, this pattern of inflation-induced income redistribution is at variance with the findings of the previous studies. Also, Budd and Seiders show that the quantitative importance of this redistribution is small.

While my work was similar to Budd and Seiders's, there were several important differences and some improvements. The portion that is of interest here is a simulation of moving down the Phillips curve, presumably as a consequence of restrictive monetary-fiscal policy (the exogenous variables were not actually specified). The effects of the resulting decrease in inflation and contraction were analyzed separately, and then combined. The distributional effects of the decrease in inflation were comparable to Budd and Seiders's results. In terms of changes in relative incomes, the very rich benefitted from disinflation, the poor tended to be unaffected or possibly benefitted somewhat, and the rest of the population tended to be adversely affected. However, the magnitude of the disinflation-induced redistribution was swamped by the effect of the associated contraction. The combined effect of the two was to make the rich and the working poor and near poor worse off relative to the upper middle class, while the very poor appeared to be left about as well off as average or maybe even a bit better off; the very rich seemed to bear the greatest proportional loss of income caused by moving down the Phillips curve.⁴

The question of the impact of inflation on the relative incomes of the poor would seem to be unresolved. Statistically, disentangling the real and the price effects remains tricky business. On the theoretical side, no one has provided a convincing discussion as to why the incomes of the poor should rise faster--or slower--than others' as a result of inflation. In my own view, it is hard to see how the poor would come out ahead: surely it is not the poor who are the victors in the recurring struggle for increased relative incomes, nor is it likely that they lead the wage-price spiral.

Some of the differences between the conclusions of the last two studies and those of the previous ones may lie in the statistical methods used to characterize or measure the distribution of income and the equality of distribution. In any situation, if the rich are made worse off to a considerable degree then most measures of income equality will indicate an increase in equality even if the poor have not been affected at all or have been affected adversely to a small degree. Perhaps reconciliation of these studies demands only that we recognize that inflation may increase income equality without increasing the relative incomes of the poor.

C. Labor Income

The ways in which inflation and other macroeconomic conditions affect the amount and distribution of labor income ultimately depend on the economic behavior of labor markets. Holding constant the real performance of the economy, if inflation is to affect labor incomes then it would be necessary to view inflation not as a uniform increase

in prices and wages, but as an increase in the average level of prices brought about by the competitive struggle of factors for an increased share of total income, or by shifting demand and supply conditions among the many sectors of the economy.

The ways in which increased unemployment or a worsening of the real performance of the economy affect labor incomes is easier to envision. As production and employment fall off, total labor income decreases, thereby affecting the overall distribution of income. If, for economic or other reasons, the decreased employment is concentrated among particular types of workers, such as the low skilled, then there will be an effect on the distribution of labor incomes also. The decreased employment opportunities in a contracting economy may take the form of shorter work weeks, involuntary part-time employment, and unemployment. These effects of contraction on the distribution of income will be considered again in a later section.

There has long been the proposition that wages lag behind prices during a period of inflation, until workers or their unions are able to regain the initial equilibrium. In general, if real wages rise more slowly in a period of inflation than they otherwise would, there occurs a redistribution of income from workers to owners of capital--from the working poor and the middle class to the rich. While some of the old evidence has been found wanting under reexamination, recent econometric analyses of wage and price dynamics consistently show the feedback of price inflation onto wages to be less than unity.⁵

In recent years, the indexing of wages to the Consumer Price Index in escalator clauses of labor contracts has become more common, and

may have lessened the lag of wages behind prices. It should be noted, however, that very few of the escalator clauses lead automatically to full adjustment of wage rates to the CPI. The trend toward indexing is likely to continue into the future. Indeed, some of the adverse distributional effects of inflation might be ameliorated if Federal government leadership spreads this inflation protection to low wage workers.

The degree to which price increases have been anticipated will also help determine the adjustment of wages to price inflation. Since many workers are covered by contracts negotiated months or years before the current experience, their wages reflect the bargains made with a specific set of expectations in mind. If the rate of price inflation turns out higher than expected then wages will tend to lag behind prices, and if actual inflation is less than expected, the opposite would occur. cursory examination of the evidence suggests that in the last two years labor unions must have underestimated the rate of price inflation that occurred subsequently.

Inflation will bring about changes in the distribution of labor income among workers when some are better able to exert market power than others. The existence of escalator clauses in union contracts and the general success of unions in raising wages suggest that unionized workers will be better able to keep up with inflation than nonunionized workers. The traditionally sticky wages in the public sector make it likely that private-sector wages will rise more rapidly in inflationary periods. Both of these phenomena would tend to result in the wage rates of the lowest skilled workers rising slower than average, and hence in inflation having relatively adverse effects on the poor. However, these propositions about union and public-sector behavior deserve scrutiny.⁶

Some evidence regarding changes in the relative wage structure in the last few years may be gleaned from examining changes in the median wage and salary incomes of full-time, full-year workers among various occupations. For men, wages have risen less rapidly for generally well-paid professional and managerial workers than for others; wages for low paid service workers and general laborers also seem to have risen somewhat more slowly than average. Among women no such pattern emerges clearly from the data. This evidence can only be suggestive, because the data reflect not only the impact of increasing inflation, but the impact of gradual expansion through 1973 as well. A full examination of changes in the relative wage structure would be interesting.

Overall, the evidence suggests that the relative labor incomes of low skill workers suffer during inflations in general and have suffered recently in particular because of an aggregate shift in income from labor to capital and because of a shift in the distribution of labor income toward more skilled workers.

D. Transfer Income

The bulk of the income transferred by government to individuals accrues primarily to the poor and to other families with low and modest incomes. Because these income flows are largely dependent on legislative decisions, they would be expected to react to inflation only with some lag. As a result of this process, the relative incomes of low-income families would be expected to suffer during inflationary periods. However, the transfer system is a very complex one with quite varied adjustment processes. As a consequence, these a priori expectations should be given careful scrutiny.

Until recently, no major transfer income program granted automatic adjustments to changes in the cost of living: payment schedules remained fixed until Congress or the state legislatures chose to alter them. Although it may be fruitless to search for a fixed structure in the behavioral response of legislatures to inflation, it may be possible to infer some systematic behavior from examining trends over many years.

Hollister and Palmer [7] show that over the decades of the 1950s and the 1960s average payments in Federally related transfer programs not only kept up with the slow but continuing inflation of that period but grew in real terms at roughly the same rate as per capita disposable income. Thus one might infer that legislatures sought to adjust transfer income not to take into account inflation, per se, but to keep the standards of living of those depending on transfer income at their original positions relative to those who depend on their current earnings. One should recall that during this long period, inflation occurred simultaneously with real growth in the economy, and therefore with increases in the average standard of living.

It has been the habit of legislatures to make the necessary adjustments in benefit schedules only from time to time, rather than on a frequent basis. In a period of continuously rising prices, each recipient senses that he is being hurt by inflation from the moment just after one benefit increase is put into effect until the moment when the next one takes effect. And, in a very true sense, he is being hurt by inflation. However, one need not interpret the legislatures' slowness to act as neglect of the recipients. The historical record is consistent with legislatures' guiding transfer benefits along a real growth path--not

neglecting them. Regardless of the generosity of a benefit schedule, if the schedule is adjusted only periodically then in a period of continuous inflation recipients will feel they are being victimized.

In periods of more rapid inflation, the sense of victimization is clearly increased. Perhaps because of this, recent legislative action has established mechanisms to increase benefits automatically in response to inflation for three major programs--Social Security, Supplementary Security Income, and Food Stamps.⁷

Under the 1972 amendments to the Social Security Act, monthly benefits will increase automatically in response to inflation starting in 1975. The adjustment will be annual, if at least 3 percent inflation occurs, and will be calculated on a twelve-month inflation experience with a six-month lag. For example, the relative increase in the CPI from second quarter of 1974 to second quarter of 1975 will be used to adjust benefits beginning January 1, 1976. Thus, a spurt of inflation in the third quarter of 1974 would not be reflected in increased retirement benefits for fifteen months. In addition, if the general benefit is increased through new legislation, future cost-of-living adjustments would be based from the date of enactment.

The new Supplementary Security Income program, which replaced a system of aids similar to AFDC for the aged, the blind, and the disabled, recently was amended to include an automatic cost-of-living adjustment for Federal government payments. However, it is not clear whether states that are supplementing SSI will pass this cost-of-living adjustment onto the program recipients, or whether some will reduce their supplements by an equal amount. Even before this change, the actual benefit levels in the program had been increased twice since the initial legislation.

The Food Stamp program, only about one decade old, is perhaps the fastest growing transfer program--both in terms of coverage and size of benefit. The bonus, or net benefit, per month to a family of four with no net income increased from \$50 per month in fiscal 1968 to \$150 per month in the second half of 1974. Currently, the law requires the face value of a family's food stamp allotment to be adjusted semi-annually, in response to recent changes in a special food price index of the Department of Agriculture. This semi-annual adjustment superseded an annual automatic adjustment, which in turn superseded adjustment by administrative discretion.

Aid to Families with Dependent Children is a Federally supported set of programs with independent decision-making at the state level. In the period from July 1970 to July 1973, when prices were rising at historically high rates, eighteen states made no increase in the largest amount paid for basic needs, which can be used as a proxy for the generosity of benefit schedules. The largest increases in that period were 46 percent, in both Oregon and Hawaii. Among states with large programs, California and Michigan increased benefits generously in that period. Illinois, Pennsylvania, Ohio, Texas, and New Jersey did not increase the value of benefits, and New York increased its benefit slightly. (Since July 1973, there have been further changes, but the data are not yet available.) Clearly, the response of AFDC to inflation has been spotty.⁸

None of the other transfer programs funded by the Federal government are indexed to the cost of living, although there is pressure on Congress to do so. Given the facts (1) that not all programs are indexed, (2) that

indexing with the CPI may understate the true cost-of-living adjustments needed by low-income families, and (3) that indexing occurs only with a lag, it seems fair to conclude that inflation hurts the relative income position of the poor, but not by so much as the "fixed-income" stereotype would suggest.

E. Other Incomes

Each of the various nonlabor factor incomes have their own peculiar responses to inflation and to changes in the real performance of the economy. In the following paragraphs, only the effects of inflation on these flows and the resulting distributional impacts will be discussed.

Corporate profits have been declining gradually since 1950, with the decrease in the period 1966 to 1970 a substantial one. Since 1970, however, profits have increased as a share of national income. From 1972 to 1973, corporate profits, after adjustment for inventory revaluation, rose from 9.8 to 10.3 percent of national income, despite the sluggishness of the economy overall. Because depreciation charges are allowed only on the basis of book-valued, uninflated investment, rising prices tend to boost paper profits. Profits may also be increasing because inflation causes or is caused by widening profit margins. In any case, because profit income accrues primarily to those in the upper tail of the income distribution, increases in profits tend to be unequalizing on the income account.

Interest income does not respond fully to unanticipated changes in the price level because a large proportion of interest payments are a return on long term contracts. Very short term interest rates do get adjusted by the market in response to inflation. By and large, higher

income groups are recipients of interest income; and to the extent that interest income accrues to the poor, it is primarily to the aged poor. In general, interest income received by the aged does not get adjusted so much as it might because the aged tend to put their savings in institutions that are subject to deposit rate ceilings.⁹

Rental income is derived from activity in which a large proportion of the costs are fixed in nominal terms; hence one would not expect rental income to be adjusted upward fully in response to inflation. Not unexpectedly, then, the share of rent in national income has dropped somewhat in recent years. Because the bulk of rental income flows accrue to higher income classes, this effect of inflation would tend to be equalizing.

Proprietors' income is a return to both capital and labor services of the owners of unincorporated businesses, and shares the properties of both during an inflation. In the very recent period, farm proprietors' incomes--a large component of proprietors' income--have increased dramatically, largely in response to the inflationary process. The special accounting provisions available to farmers often make their incomes appear unwarrantedly small, hence making difficult a distributional interpretation of this income shift.

Private pension income is generally fixed in nominal terms, but is sometimes increased through negotiation in response to inflation. In contrast, Federal government employee pensions are now fully adjusted to inflation. Since pension recipients tend to have low incomes, inflation tends to be unequalizing on this item.¹⁰ However, among the aged, those with private or government employee pensions tend to be better off than those without them.

F. Wealth

How does inflation affect the net worth of families of various income levels? During any short period of rising prices the holding of fixed price assets such as bonds will dampen the rate of increase in value of a portfolio of assets and liabilities, while the holding of fixed price debt will accelerate the increase in value. Since it is usually assumed also that variable price assets such as stocks or real estate will keep up with inflation, the greater is the proportion of these assets in net worth, the greater will be the increase in value in response to inflation.¹¹ Over a longer period of time, persons have the option of adjusting their portfolios in accordance with their anticipations about future prices. Also, short-term financial assets and debts may be renegotiated at different interest rates. Whether these adjustments are in fact carried out is a question on which there is little evidence.

G.L. Bach and James Stephenson [1] have recently examined sample survey data gathered for the Survey of Consumer Finances series. On the basis of households' reported asset and debt holdings, they computed a leverage ratio indicating the elasticity of net worth with respect to the general price level, under the assumptions noted above. Table 2 reproduces some of their calculations. On average, families with incomes below \$5,000 in 1968 and those with incomes above \$50,000 had portfolios that would be expected to increase in value at a rate less than the rate of inflation, and families with incomes in between had portfolios that would increase at a greater rate.

While the poor as a group would tend to be hurt by inflation, the situation is more complicated than the simple poor-to-nonpoor comparison

TABLE 2

The Impact on Inflation on Net Worth

Households Classified by 1968 Money Income	Percent of All Households	Leverage Ratio
under \$3,000	17	.87
\$3,000 - \$4,999	14	.94
\$5,000 - \$9,999	33	1.06
\$10,000 - \$14,999	24	1.22
\$15,000 - \$24,999	9	1.11
\$25,000 - \$49,999	2	1.05
\$50,000 and over	.4	.91

Source: G.L. Bach and James Stephenson [1].

suggests. Poor families with aged heads have portfolios that differ markedly from those with younger heads, because they were not necessarily poor before retirement. About 70 percent of aged married couples who are poor are homeowners, as are 30 percent of the aged nonmarried poor.¹² Among the aged the other major assets are financial items, and there is little debt. Thus, the aged are fairly exposed to inflation. It seems probable that the younger poor are debtors to a greater extent than the older poor, as are all young families in general. This indicates that their portfolios would fare relatively well in inflation, but of course their net worth is likely to be small.

The very rich probably fare even less well than these calculations indicate. The authors infer from various sources that the rich grossly understate their monetary assets in the survey; thus, their true leverage ratio would be lower than that reported. Also, the paper profits generated by inflation through the tax treatment of depreciation results in a greater tax burden on corporations. This should be reflected in lower equity values. Moreover, the current experience of the economy does not show stock values responding positively to increases in the general price level; if this fact were incorporated into Bach and Stephenson's study, it would adversely affect mostly the very wealthy.

II. DISTRIBUTION POLICY AND ANTI-INFLATION POLICY

A. Fiscal-Monetary Restraint and Unemployment

At this time, the anti-inflation program which appears most likely to be followed is a fiscal and monetary plan aimed at reducing aggregate

demand. The anticipated result would be a decrease in the rate of inflation accompanied by an increase in the rate of unemployment. At least for the short run, this combination resembles the discussion of the Phillips curve tradeoff that was popular in the late 1960s. However, even believers of Phillips curve orthodoxy do not consider that the current situation represents a point on the long-run tradeoff curve. The complicated dynamics of fiscal and monetary restraint are likely to lead us along a path that first leads to decreased employment and decreased inflation, and then to further decreases in inflation without further decreases in employment. The major unanswered question of such a policy is whether the benefits of this program are greater than its costs--costs that can be measured in terms of output and income forgone by the nation as a whole but borne, inequitably, by a fraction of its citizens. Unemployment and subemployment are not casual by-products of this anti-inflation policy; they are part of the main mechanism through which it operates.

The best prediction of the impact of the unemployment brought about by a generally restrictive fiscal and monetary program would be that the resulting income losses would fall most heavily on workers with low and modest skills. The incidence of these losses will be evidenced by increases in the already-high rates of unemployment among blacks, teenagers, women, and all of those who are generally at a disadvantage in the labor market. In terms of the overall distribution of income, the poor are not likely to be the hardest hit because such a large proportion of their income normally is derived from sources other than earnings. However, among the poor, those dependent on the labor market as their primary source of income--the working poor--are likely to be the most

heavily impacted group. Moreover, other families that do suffer unemployment because of the policy will likely join the ranks of the poor, at least temporarily.¹³ The very rich are also likely to suffer a relatively large proportional loss of income in a period of unemployment, because of the loss of business profits.¹⁴

To help offset the inequities of this process of contraction, some functioning programs are already in place: unemployment insurance, job training and replacement, and a limited public employment program. These programs might be expanded in coverage and generosity. Good distributional policy would seem to call for additional programs designed to offset the maldistribution of private losses caused by a public anti-inflation program. The program most often mentioned is large scale public employment.

There is great uncertainty surrounding the economic efficiency and equity consequences of a massive public employment program because of the limited experience of operating such programs on a national scale.¹⁵ Who will be admitted to the program--the low skilled who are hurt the most by unemployment or the skilled who will be preferred by state and local governments? What kinds of jobs will be created--make-work or highly productive ones? How will these jobs match the skills of the participants? Will there be an incentive for workers to prefer private- to public-sector employment if both are available? How will participants be terminated? These are only some of the unanswered questions regarding the public employment option.

If such an option is chosen, careful attention must be given to providing incentives for job-taking in the private sector, while at the same time offering special assistance for those displaced by the

anti-inflation policy. This concern for job-taking in the private sector rests on the need to have labor markets that operate flexibly, which means having large numbers of persons flowing from employment to unemployment, and vice versa, during any time period. Flexibility in this sense is a desideratum because its absence creates bottlenecks, which lead to inflation. One possible approach would be to limit participation in the program to those persons who have been unemployed while looking for work for a certain period--8 or 13 weeks, for example. The mean duration of normally completed spells of unemployment might be expected to be less than this, and hence fewer than half of the spells of unemployment would be ended by participation in public employment.¹⁶ In addition, some participation might be offered to those newly entering or re-entering the job market, when, having demonstrated extensive search, no job is available.

Even a temporary increase in the unemployment rate will have long-term impacts that are more difficult to measure, but not necessarily less important. During a period of contraction, private and public programs aimed at increasing workers' skills and bettering their labor force orientation tend to be cut back; marginal workers are the first to be laid off. This occurred most recently during the 1970 recession, when training programs such as JOBS were trimmed because of firms' layoffs. Clearly, these effects impact most heavily on low-income families.

B. Wage and Price Controls

By their very nature, wage and price controls affect the distribution of income. Their effects in this regard depend on their specification and on whether the economy is expanding or contracting. If price and wage

controls were part of the anti-inflation policy program, they could be structured to achieve distributional goals. At the very least, care should be taken to avoid adverse distributional effects.

Controls on profits can be positively redistributive if they expand the share of labor income relative to capital income in the entire economy. The importance of this is surprisingly small, however. For example, if profit incomes were decreased by 20 percent and this money were distributed to the recipients of wage and salary income in proportion to their actual earnings, the share of total family income received by the poor would be increased only marginally.

Controls, or the lack thereof, on certain classes of commodities can differentially affect purchasing power and can alter the distribution of real income. In our last experience with price controls, raw agricultural products were not controlled, which may well have contributed to the regressive effect on purchasing power noted before. If selective controls were to have significant redistributive effects, the commodities and services on which they would have to be imposed would be those that form a large share of the budget of the poor relative to that of other income classes. The difficulty of targeting such controls on the appropriate items is clear--especially in face of the dubious general effectiveness of controls.

It is in the area of wages that controls can likely have their biggest impact on the distribution of income. Two years ago, when Congress considered maintaining a system of controls while expanding the economy, Robert Haveman and I [6] emphasized the importance of distinguishing between the natural rates of wage increase and the

ceiling rates allowed by law. In an expanding economy we expected that the natural cyclical change in the structure of relative wages would cause low wages to rise more rapidly than middle and high wages. In that circumstance, ceilings that prevented wages from growing faster than some fixed rate would be regressive.

However, if wage controls are applied during a period of contraction as a complement to fiscal-monetary restraint, then the opposite would hold. We would expect the natural structure of wages to become less equal. A fixed rate ceiling in this circumstance would have more bite on high wages than on low wages, and the system would be positively redistributive.

C. Welfare Reform and Tax Reform

Although legislative activity on broad measures of welfare and tax reform has slowed as the nation's interest has focussed on inflation and other matters, the inequities inherent in the current system remain, and they will be highlighted if increased unemployment and cut-backs in social programs result from an anti-inflation program.

The inequities of the welfare system will tend to be more serious in a contractionary period than in a period of full employment. For example, the unemployed-father option of the AFDC program is available in only 23 states, and the loss of jobs for poor families without this coverage would cause major hardship. While a complete overhaul of the welfare system is not likely, a number of incrementalist reforms remain on the agenda. These include broadening coverage so as to eliminate inequities among the poor and removing the notches and work disincentives resulting from the current method of program integration.

A recent study by Joseph Pechman and Benjamin Okner [15] shows that the Federal tax system is only slightly progressive overall and in fact is regressive at the very lowest income levels. When state and local taxes are taken into account, the study shows that the U.S. tax system is essentially proportional for the vast majority of families, hence having little effect on the distribution of income. Tax increases may be asked as an initial part of anti-inflation policy, and decreases may be needed if the contraction is to be turned around. Each time the tax code is reopened, good distributional policy calls for making the system as progressive as it is in its ideal form: special provisions need to be closely scrutinized and erosion of the tax base needs to be halted and reversed.

In recent months, politicians and others have suggested small reforms that would make the tax system more progressive. These include establishing an earnings exemption system for the Social Security payroll tax and increasing the value of exemptions under the personal income tax. These reforms would be welcomed by low-income working families at any time, but especially in times of economic hardship.

New programs and ideas also deserve consideration in this period of searching for policies to control the economic condition. One such plan could easily serve as an instrument for both macroeconomic and income distribution goals. A modest tax credit that would be refundable to those with low or zero current tax liability might be enacted, with Congress granting to the President limited power for discretionary changes. For example, a credit of \$200 for adults and \$150 for children might be financed by substituting it for the current system of exemptions. The

President could be empowered to increase or decrease the credit by up to 25 percent in any calendar year, subject to review after-the-fact by Congress. The macroeconomic benefit of such an instrument is clear: the President would be in a much better position to coordinate decisions on monetary and fiscal policy if he did not have to follow the lawmaking procedure when he felt a tax change was necessary.

The distributional benefit would be two-fold. First, it would give a trial run to an important redistributive program and would allow the public to make informed judgments about its desirability based on real experience. Second, it could be a vehicle for assisting the working poor and near poor, who are excluded by many of the nation's other income support programs. The efficiency achievement of this purpose, however, depends crucially on the specific rules by which this credit is integrated with other programs. In a modest program, it would be desirable for most other income transfer programs to treat the credit as unearned income. For example, a family receiving AFDC assistance would have its benefit reduced dollar for dollar by the amount of the credit, leaving its net position the same, while a poor family receiving no income assistance at present would be made better off than before.

ED. Long Run Anti-Inflation Policy

Over the long run, the best anti-inflation policy is one that alters the structure and functioning of the economy in such a way as to allow us to attain and maintain low rates of unemployment and inflation simultaneously. In the jargon of economics, such a policy approach would aim to "shift the Phillips curve," which means creating more favorable sets of tradeoffs.

Part of this long-run policy must include the reestablishment and maintenance of free and competitive markets. In noncompetitive markets, suppliers are hesitant to allow prices to fall even when demand conditions so indicate. This resistance to downward movements in nominal prices imparts an inflationary bias to the economy. The efficient allocation of goods and services in the economy demands that relative prices change in response to other changes in the economy; if prices are sticky on the downward side, then the only way for relative prices to change is to have the average level of prices increase. Specific action in this direction includes vigorous enforcement of anti-trust laws and removal of certain government restrictions.¹⁷

Another part of the long-run solution to inflation involves manpower policy. Charles Holt and his colleagues [8] cite four areas in which manpower policy can help reduce both vacancies and unemployment, and thereby shift the long-run Phillips curve: (1) improving the quality of matches between workers and jobs, to reduce turnover due to dissatisfaction, (2) increasing the efficiency of the job search process, to reduce the length of unemployment spells, (3) decreasing artificial barriers of discrimination, to increase market efficiency, and (4) facilitating the retraining of workers and the redesigning of jobs, to reduce structural imbalances.

These manpower actions would serve to reduce frictions in the labor market and to increase the utilization of workers' earning capacities. As recent research has demonstrated, the utilization of this capacity is substantially lower for workers with low skills than for those with high skills, even in periods of high employment overall. It is the

working poor who have the most to gain from this manpower policy. In addition, making labor markets more competitive and less discriminatory will tend to reduce the exploitation of low skilled and minority labor. Long-run anti-inflation policy along these lines would improve the distribution of income and hence would be consistent with good distribution policy.

NOTES

¹ Andrew Brimmer's recent paper [2] on inflation and income distribution may be criticized on this point.

² These calculations must be viewed as rough approximations to the true indexes they seek to measure. They have been carried out at a more aggregated level than is employed by the BLS in constructing the CPI, and there are other technical difficulties that make them imperfect. Nonetheless, these indexes allow us to make tentative judgments about price movements, and the qualitative results are hard to disbelieve.

³ This is so because the poor have smaller savings than other families, and are not able to arrange self-financing.

⁴ In considering these results, one should note that in this model, the original classification of families is according to an income concept closely related to permanent income; also, transfers were excluded in order to focus on factor income. I consider the inflation results in my study to be less reliable than the real-side results.

⁵ On the reexamination of old evidence, see Kessel and Alchian [9]. A good collection of price and wage studies were prepared for a Federal Reserve conference on price determination [4].

⁶ In recent years, hourly earnings in the executive branch of the Federal government have been rising as fast as, or faster than, compensation per man-hour in the private sector. Evidence on union-nonunion differentials should be examined also.

⁷ Now that these recipients are "taken care of," one must wonder whether Congress will find occasion to reconsider the benefit schedules and whether transfer payment benefits will increase in real value as they have in the past.

⁸ In 1967 Congress recognized that states were neglecting to adjust AFDC benefits to inflation, and mandated the states to increase cost standards to account for price rises to that time. The states resisted complying, and most missed the legal deadline. Increases in AFDC benefits in the years immediately following implementation of the law ought to be attributed largely to the law and not considered voluntary responses to current inflation. For a discussion of this and related changes in AFDC, see Irene Lurie [10]. Since the 1967 amendments there has been no mandated catch-up, and one clearly is needed.

⁹Removal of the ceilings on savings account interest rates would benefit the aged poor and other unsophisticated investors. Tobin and Ross [20] have suggested, in addition, that the government issue purchasing-power bonds, to protect the real value of interest and principal. If made available in limited amounts to each family, this could be especially helpful to the aged poor.

¹⁰To ameliorate some of the distributive impact of inflation, the Federal government might supplement private pension incomes, just as it adjusts Social Security benefits and Federal pensions.

¹¹This common assumption, which lies behind many studies of inflation's impact on the distribution of wealth, seems to be at odds with the realities of the current situation.

¹²These data are based on Janet Murray's analysis of the 1968 Survey of the Aged [14].

¹³A 1 percent increase in the unemployment rate, sustained for a full year, will result in an increase of up to 900,000 persons in the poverty population. This projection is based on an unpublished paper by Charles Metcalf and James Mooney written in 1965 and on some recent work by Bob Plotnick at the Institute for Research on Poverty. Edward Gramlich [5] calculates that the increase would be between 500,000 and 900,000 persons.

¹⁴This analysis is based on the accepted truth among economists, on my own research noted earlier [13], and on recent research by Edward Gramlich [5]. Gramlich finds that the transfer system replaces about 40 percent of the income losses arising from unemployment among the poor and lesser proportions for families that are better off. Even after this income replacement, the qualitative pattern of the income incidence of unemployment remains the same. In a study that measured and described the distributional impact of the 1970 recession [12], I found that the heaviest burden of that recession was borne by middle-income working families, with incomes in the \$15,000 range (the rich were excluded from consideration). This high impact group was better off--had higher normal incomes--than the high impact group in my simulation model, which was based on earlier experience. In part, the particular incidence of the 1970 recession can be traced to the special Federal budget cutbacks that helped create it, namely, the cutbacks in defense and aerospace industries. Gramlich's study used practically the same data, but for the years 1967 to 1972, and came to different conclusions. These differing measurements of the impact of the most recent recession have yet to be reconciled.

¹⁵In the 1930s, public employment was one successful element in a concerted expansionary policy program of the Federal government. Currently we are being asked to consider a public employment program as an element of a contractionary policy program. Surely, one must

15 (cont.) have a good understanding of all the subtle and interacting effects of government economic policy in order to advocate that the Treasury and the Federal Reserve should create unemployment on one hand and that Labor should create jobs on the other.

16 Under the public employment provisions of the Comprehensive Employment and Training Act, participants must have been unemployed about 4 weeks. This is probably less than mean duration of unemployment spells for low skill workers in a contraction.

17 It is often argued that monopoly power is a direct cause of inflation, in the sense that firms with monopolistic or oligopolistic market positions raise their prices faster than others. The economic reasoning behind this argument is not usually spelled out. It is likely that monopoly power is responsible for the relatively high levels of prices and wages in some sectors, but less likely that it can sustain higher than average rates of increase of prices and wages for longer than a short period of time.

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