Macroeconomic Adjustment and Poverty in Selected Industrial Countries

Christopher A. Pissarides

The business cycle affects the incidence of poverty, as shown by evidence from Australia, Sweden, the United Kingdom, and the United States. Many of the poor in these countries are outside the labor market, and transfers are a major source of income for many others, but the unemployment and wage reductions that occur in recession increase the incidence of poverty. Major causes of poverty are unemployment in Australia and the United Kingdom and low wages in the United States. Similar cyclical effects are observed in Sweden, but a vast transfer program virtually eliminates poverty. There are several policy options for combating poverty caused by recession. A combination of unemployment insurance for a limited period followed by a job guarantee is the most effective policy toward unemployment, whereas poverty caused by low earnings can be remedied by redistribution through the tax system.

This article analyzes the relation between macroeconomic adjustment, in particular cyclical booms and recessions, and poverty in four industrial countries: Australia, Sweden, the United Kingdom, and the United States. The countries were selected for their diverse characteristics. The United States has the richest, most decentralized, and most diverse economy in the world, yet officially measured poverty is high and has remained largely unchanged since the late 1960s. The United Kingdom was the first country to introduce a comprehensive welfare state, but more recently it has been noted for its inflexible economy and high unemployment. Sweden is the most egalitarian Western society, with high taxation, a vast transfer program, and low unemployment. Australia combines features of the United Kingdom and Sweden: more corporatist than the United Kingdom but still suffering from many of its labor market problems.

Section I examines the characteristics and labor market status of the poor in each of the four countries. Although transfer payments are the main component of the income of the poor, the key to their changing fortunes during macro-

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economic adjustment is their labor market status. Individuals close to the poverty line move in and out of poverty during the business cycle in response to both changes in their employment status and fluctuations in their wage earnings.

Section II examines the differing incidence of unemployment, the income distribution, and the behavior of low wages during the business cycle. Recent theories of wage determination under different institutional arrangements suggest that, in the United States in particular, low wages are likely to be much more responsive to cyclical macroeconomic fluctuations than average wages are. Although this pattern is found to some extent in other countries, unemployment is likely to be a more serious cause of poverty during a recession in the United Kingdom and Australia than falling wage earnings.

Finally, section III considers the policy options available to combat the effects of the business cycle on poverty. Sweden's experience has shown that the combination of an unemployment insurance system with a job guarantee for the unemployed after some months of unemployment, or a training scheme for young unemployed persons, can be very effective in dealing with the poverty caused by unemployment. When poverty results from low wages, a negative income tax is the most natural way to provide income support. Institutional change can increase the flexibility of the labor market.

Although the emphasis here is on short-run changes in poverty resulting from temporary fluctuations in economic activity, labor market changes that are unrelated to the business cycle also affect the poor. Recent examples of such changes are the rise in European unemployment since 1974 and especially since 1979, which many think cannot be reversed by macroeconomic expansion, and the increased divergence between skilled and unskilled (and between white and black) earnings in the United States. I shall largely ignore specific references to such "structural" or "secular" changes in unemployment and wages, except to note two things. First, although in theory it is clear what is cyclical, secular, or structural, in practice these are less easy to identify. The recent fall in unemployment in the United Kingdom is a pertinent example: what many considered to be a secular rise in unemployment was largely reversed when the economy expanded after 1986. Second, changes in labor market incomes have the same effect on the poor, regardless of the source of the change. Thus, any discussion about the effects of cyclical fluctuations in labor market incomes applies equally well to changes in incomes caused by secular or structural factors. But the policy responses to structural or secular changes are likely to be different from the ones discussed here. Groups in the population that are chronically poor and are largely unaffected by business fluctuations may well see no benefit from the policies discussed.

I. The Poor and Their Sources of Income

In advanced countries where objective measures of poverty, such as malnutrition, are not relevant, poverty is a difficult notion to define. The approach
usually followed is to adopt a fairly simple definition that incorporates measured “equivalent” income, which is household income adjusted for household composition, and some broadly defined measure of household needs (for more discussion on the measurement of poverty see, for example, Sen 1976, Atkinson 1987, and Hagedaars 1986). Most countries adopt one of three conventions when measuring poverty. The first convention is to draw a “poverty line” such that all persons with equivalent income below this line are counted as poor. The poverty line is defined in real terms, so it is adjusted for inflation but not for changes in average income or in any other characteristics of the distribution of income. The United States was the first country to adopt such a definition of poverty. The real level of income that is used to define poverty in that country has not changed since its introduction in the 1960s.

The second commonly used definition of poverty is an administrative one and depends on existing social welfare policies. Many countries effectively guarantee a minimum level of income through income support programs, incorporating both cash and in-kind benefits. The income guaranteed is not in the form of a clear-cut “line” but depends partly on the subjective judgment of the social welfare officer in charge of each case. Nevertheless, the case officers follow guidelines established by a central welfare department, so it is possible to calculate the number of families receiving this kind of assistance and others with similar incomes not receiving it. These families are counted as the poor. This definition of poverty was in general use in the United Kingdom until 1985, when it was discontinued in favor of the third definition discussed below, and it is in use in public discussion in Sweden. The effective poverty line according to this definition varies with average income, because policymakers usually define the level of income support on the basis of average earnings. But adjustment of the guaranteed income level is not automatic and depends on the generosity of the government.

The third convention defines poverty in terms of the distribution of income; in the United Kingdom those with incomes not exceeding one-half of mean income are regarded as poor. When this definition is adopted, economic growth or business fluctuations do not influence officially measured poverty, unless they also influence the distribution of income. This definition of poverty is easier to compute than the others, and it is comparable across national frontiers and over time. For this reason it is often used in reports prepared for or by international organizations, such as the European Community (Commission of the European Communities 1981), the Organisation for Economic Co-operation and Development (OECD 1976), and the International Labour Office (Beckerman and others 1979).

Important as the difficulties in measuring poverty are, their significance for social research can easily be exaggerated. For many purposes, the precise definition of poverty is not very important. Indeed, for this study, an examination of the implications of booms and recessions for the incomes of households at the bottom end of the income distribution is sufficient. Exactly where the line that
divides the poor from the nonpoor is drawn is not very important in this analysis. What is more important are the sources of income of the poor and in particular how different types of income are affected by booms and recessions.

For the purposes of calculating poverty in the United States, household income is defined to include transfer income but not benefits in kind. (It is likely that in the future benefits in kind will also be included in official poverty statistics, but no comprehensive series is currently available.) The United States poverty rate was about 22 percent of the population in 1959 and 13 percent in 1988 (see figure 1). The poverty rate declined up to 1969, when fast economic growth and the introduction of a number of transfer programs reduced the poverty rate to 12 percent. Since 1970 the poverty rate has fluctuated around a flat trend line, with the fluctuations reflecting the temporary changes in incomes associated with the business cycle. This is shown in figure 1 by the close association between the poverty rate and the unemployment rate, which in the United States is a good cyclical indicator. The position of the poverty line in the income distribution has also been stable since about 1970, at about one-third the level of mean income (see the contributions in Danziger and Weinberg 1986, for example, Danziger, Haveman, and Plotnick 1986, p. 54).

Figure 1. Poverty and Unemployment in the United States, 1960 - 88

Note: The poverty level reflects different consumption requirements for families based on size and composition and on the age of the householder (before 1981 the sex of householder and farm-nonfarm residence were also considered). The unemployment rate refers to the total labor force.

Source: United States (1990), tables C-30 and C-39.
Table 1. Composition of the Poor in the United States, 1967 and 1983
(percentage of households)

<table>
<thead>
<tr>
<th>Household head</th>
<th>1967</th>
<th>1983</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-transfer</td>
<td>Post-transfer</td>
</tr>
<tr>
<td>Over age 65</td>
<td>50.6</td>
<td>40.4</td>
</tr>
<tr>
<td>Female with children under age 6</td>
<td>5.5</td>
<td>6.7</td>
</tr>
<tr>
<td>Student</td>
<td>4.0</td>
<td>5.5</td>
</tr>
<tr>
<td>Disabled</td>
<td>9.4</td>
<td>10.0</td>
</tr>
<tr>
<td>Full-time worker</td>
<td>14.7</td>
<td>19.1</td>
</tr>
<tr>
<td>All others</td>
<td>15.8</td>
<td>18.0</td>
</tr>
</tbody>
</table>

Note: The “all others” category includes single persons, male household heads, and female household heads with no children under age 6, who did not have a full-time job for the full year.

Source: Danziger, Haveman, and Plotnick (1986, table 1.3.4).

When discussing the composition of households below the poverty line, it is useful to distinguish between those who, because of personal circumstances, are not expected by society to work and those who are expected to work. The first group includes the elderly (over age 65), the disabled, and students; I also include women with children under school age, although whether this group should be included or not is more controversial. Women with children at or below pre-nursery-school age (about three years) are usually not expected to work if they do not want to, but the welfare services of the United States (supported by the Family Support Act of 1988) do expect women with older children to work. Norms are also beginning to change in the other countries because of the increasing availability of child care groups in society, which are often government-supported.

If transfers are ignored, the group not expected to work made up 65 percent of the poor in the United States in 1983, with the bulk (43 percent) composed of the elderly (see table 1). When transfers are taken into account, this group accounted for just 51 percent of the poor. If benefits in kind are also taken into account (for example, medicare, food stamps, and so forth), the group with labor market potential make up an even larger proportion of the poor. But even ignoring benefits in kind, as many as 62 percent of the poor under age 65 have no visible characteristic that should restrict their entry into the labor market. Since 1967, the relative importance of the group that is expected to work has increased. Table 1 shows that between 1967 and 1983 the proportion of the elderly decreased (largely because of an increase in transfers), whereas the proportion of workers without a full-time job throughout the year increased significantly.

The proportion of the income of the poor earned in the labor market and the proportion received as transfers are not available in official statistics. But using the panel study of income dynamics (PSID) of the University of Michigan, Blank (1989) estimates that labor earnings make up only 33 percent of the income of households in poverty, the rest being made up of transfers. Her figures include the elderly and the disabled, however, who earn less than 10 percent of their
income in the labor market. If this group is excluded, the percentage of income accounted for by earnings for the remainder of the households rises to about 55 percent.

More important, in contrast to labor income, the real value of the transfers received by the poor are largely unaffected by the business cycle, so that the financial circumstances of the poor change during booms and recessions because the labor component of their income changes. This is borne out by the analysis of Bane and Ellwood (1986), who find that for the poor less than 65 years old, about half of all poverty spells begin with a loss of earned income (38 percent because of the loss of the household head's income and 11 percent because of the loss of some other household member's income). Another 40 percent of poverty spells begin with a change of family circumstances, such as divorce or the birth of a child. Moreover, 73 percent of the poor move out of poverty when the household's earned income increases (50 percent because of an increase in the household head's income and 23 percent because of an increase in someone else's income) and only 15 percent of poverty spells end with an increase in transfer payments. Thus the study of the labor market status of individuals near or below the poverty line is critically important for understanding changes in poverty status during macroeconomic adjustment.

An analysis of the composition of households at the low end of the income distribution in the United Kingdom brings out even more strikingly the importance of the labor market for the poor during macroeconomic adjustment. The analysis of the composition of households with low incomes began in 1988 and is available only for three years, 1981, 1983, and 1985 (DHSS 1988). Because the statistics are not widely available, table 2 presents in full the composition of households with incomes below one-half the average income, by the economic status of the household head. The figures are very similar to those relating to the bottom percentile of the income distribution.

If the poor are defined as the members of households with less than half the average income, the most important factor associated with poverty is unemployment, with full-time work at low income coming second. The unemployed and

<table>
<thead>
<tr>
<th>Table 2. Composition of the Poor in the United Kingdom, 1981–85</th>
</tr>
</thead>
<tbody>
<tr>
<td>(percentage of households)</td>
</tr>
<tr>
<td>Household head</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td>Pensioner</td>
</tr>
<tr>
<td>Full-time worker</td>
</tr>
<tr>
<td>Sick or disabled</td>
</tr>
<tr>
<td>Single parent</td>
</tr>
<tr>
<td>Unemployed</td>
</tr>
<tr>
<td>Others</td>
</tr>
<tr>
<td>All poor as percentage of population</td>
</tr>
</tbody>
</table>

Note: Income is defined as total disposable income of the household, including transfers, and adjusted for household needs.

full-time workers combined make up almost 70 percent of the poor in 1985. Thus changes in unemployment and low wages during macroeconomic adjustment are likely to have a big effect on poverty. The increase in poverty between 1983 and 1985 is explained largely by the increase in unemployment between these two years. Figure 2 demonstrates with a different set of data the importance of unemployment in British poverty. This figure uses the administrative definition of poverty commonly used until recently, which counts as poor all those receiving the supplementary benefit and those with similar incomes who do not receive it. Unemployment and poverty in the United Kingdom from 1975 to 1985 clearly moved together.

The income of the bottom percentile of the income distribution in the three years covered by table 2 consisted mainly of transfer payments. Transfers accounted for 71 percent of all income in 1981, 73 percent in 1983, and 75 percent in 1985 (DHSS 1988; no other breakdowns of income sources are possible with the available data). This, however, does not negate the importance of the labor market in determining the extent of poverty. All groups listed in the table, except for full-time workers, are automatically entitled to some form of income support because they have insufficient labor-market income. Sometimes full-time workers are also entitled to support if their income is too low. If the
labor-market income of a household increases, transfers drop, but the household still has a better chance of moving out of poverty.

Sweden has the most generous social welfare system in the Western world. Expenditure on social services by the government amounts to about 30 percent of gross national product (GNP), whereas in the United Kingdom it is less than 20 percent and in the United States less than 15 percent of their respective GNPs (Luxembourg Income Study 1979–80, reported in Gustafsson and Uusitalo 1989). A definition of poverty based on the level of income assistance is therefore likely to show high poverty rates in Sweden. Indeed, this is borne out in recent estimates of the administrative poverty rate in Sweden by Gustafsson (forthcoming) and Gustafsson and Uusitalo (1989) (see figure 3). The estimates are based on the guidelines for social assistance for a single year (1985) so the implied poverty line is fixed in real terms. The fall in poverty since 1975 has largely been the result of transfers. Pre-transfer poverty (for families) increased between 1975 and 1985, from 35 to 42 percent, whereas post-transfer poverty fell from 15 to 11 percent. Figure 3 also shows movements in Swedish unemployment. Although there is some connection between short-run fluctuations in

Figure 3. The Administrative Poverty Rate and Unemployment in Sweden, 1975 - 85

Note: Persons below the absolute poverty line estimated by Gustafsson-Uusitalo (1989). The unemployment rate refers to the total labor force.
Source: Poverty data from Gustafsson-Uusitalo (1989); unemployment rate data from OECD, Historical Statistics, table 2.15.
Table 3. Percentage of Families in Lowest Sextile of Income Distribution in Sweden, the United Kingdom, and the United States

<table>
<thead>
<tr>
<th>Family type</th>
<th>Sweden</th>
<th>United Kingdom</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single men</td>
<td>15.3</td>
<td>5.9</td>
<td>21.4</td>
</tr>
<tr>
<td>Single women</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with no children</td>
<td>21.4</td>
<td>20.0</td>
<td>19.5</td>
</tr>
<tr>
<td>with children</td>
<td>30.8</td>
<td>68.6</td>
<td>57.7</td>
</tr>
<tr>
<td>Married couples</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with no children</td>
<td>9.8</td>
<td>6.7</td>
<td>5.4</td>
</tr>
<tr>
<td>with children</td>
<td>18.4</td>
<td>17.7</td>
<td>16.1</td>
</tr>
</tbody>
</table>

Note: The classification is according to equivalent disposable family income.
Source: Rainwater, Rein, and Schwartz (1986, table 1.3.6).

the poverty rate and fluctuations in unemployment, the link between them is not as close as in the United States and the United Kingdom. Unemployment does not appear to be as important a cause of poverty in Sweden as in the other countries, almost certainly because of the many measures of support available to unemployed workers in Sweden. Another way to look at the Swedish data, which puts into better perspective the small extent of poverty in that country, is to make use of the comparative study by Rainwater, Rein, and Schwartz (1986). Although the study uses data for 1970, or a year near it, it is unique in its coverage of comparable income distribution data in Sweden, the United Kingdom, and the United States. The study defined poverty as the head count of those 25 to 55 years old with income below half of median income. Using this definition, poverty in Sweden amounted to 2.1 percent, in the United Kingdom 3.4 percent, and in the United States 10.9 percent. Interestingly, the poor in Sweden had closer (or the potential for closer) ties with the labor market than the poor in the other two countries. Table 3 gives the proportion of five family types that are found in the lowest sextile of the income distribution, on the basis of equivalent disposable income. Although in all three countries the group with the biggest concentration at the bottom end of the income distribution is single women with children, in Sweden the percentage is much lower than in the other two countries. Altogether, low-income rates in Sweden are more uniform across different groups of the population. Thus, when compared with the other two countries, Sweden has more of its poor in groups that have closer attachment to the labor force, such as single men and married couples with or without children. The role of Sweden's welfare state in lifting the groups with less labor force attachment out of poverty is the key to this comparison. Moreover, because Swedish unemployment is much lower than in either the United States or the United Kingdom, more poor families in Sweden have an employed head. In all three countries, but even more so in Sweden, most married couples with working wives escape poverty.

Poverty in Australia was first studied systematically by a Commission of Inquiry, which reported in 1975 (Australian Commission of Inquiry in Poverty 1975; the recommendations of the commission were not officially accepted but
became a standard reference on poverty in Australia). It recommended the adoption of what became known as the Henderson poverty line, first applied by R. F. Henderson in a study of the poor in Melbourne in 1966. The Henderson line was first defined along the lines of the U.S. poverty line, but after 1980 it was fixed in terms of the distribution of income, at about half of the mean income for the standard family.

The commission made a detailed study of the poor in Australia on the basis of a survey conducted in 1972–73. Beckerman and others (1979) did a similar study for the International Labour Office using a 1973–74 survey, and the Australian Social Welfare Policy Secretariat (1981) further calculated the extent of poverty, comparable with Beckerman's, for 1978–79 (despite the existence of an updated poverty line, it has not been possible to find a time series of poverty rates for Australia comparable with the ones that appear in figures 1–3 for the other countries). These studies concluded that poverty in Australia followed a pattern similar to that in the United States and the United Kingdom. The role of unemployment as a cause of poverty was once again brought out, although, as in the other countries, the main feature of poverty in Australia is the overrepresentation among the poor of single mothers and those over 65 years old. Table 4 gives some of the results of the comparison between the 1973–74 and 1978–79 surveys, in a form comparable with that used in table 3 for the other countries.

The groups that had the highest incidence of poverty in Australia in 1973–74 were the elderly and single parents. The poverty rate of the elderly, however, declined dramatically between the two surveys because an increase in pensions lifted them just above the poverty line. The poverty rate of single parents remained constant, whereas that of married couples and single people without children increased. The reason behind the increase in poverty is the higher unemployment in 1978–79. Unemployment in 1973–74 was 2.5 percent, and in 1978–79 it increased to 6.5 percent. In addition, the final column of table 4 shows that most of the poor belong to demographic groups that have close links

Table 4. **Composition of the Poor in Australia, 1973–74 and 1978–79**

<table>
<thead>
<tr>
<th>Family type</th>
<th>Percentage of family type counted as poor</th>
<th>Percentage of all poor, 1978–79</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over age 65</td>
<td>26.1</td>
<td>8.9</td>
</tr>
<tr>
<td>Single persons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>with no children</td>
<td>8.9</td>
<td>11.2</td>
</tr>
<tr>
<td>with children</td>
<td>36.8</td>
<td>36.3</td>
</tr>
<tr>
<td>Married couples</td>
<td></td>
<td></td>
</tr>
<tr>
<td>with no children</td>
<td>3.4</td>
<td>4.0</td>
</tr>
<tr>
<td>with children</td>
<td>6.8</td>
<td>7.4</td>
</tr>
<tr>
<td>Total</td>
<td>11.1</td>
<td>9.3</td>
</tr>
</tbody>
</table>

*Note:* The computations are on the basis of equivalent disposable income.

*Source:* Calculated from the information in Australian Social Welfare Policy Secretariat (1981, table 5.6)
with the labor market. The group labeled single persons with no children are mostly youths who are either unemployed or employed in low-income jobs. The other principal group, married couples with children, consists mainly of one-income families with one to three children, although there are also some unemployed heads. Families with two incomes are rarely, if ever, found below the poverty line, confirming the importance of working wives for a family’s financial well-being.

Thus, although in the four countries under study the elderly and single parents have on average lower incomes than the rest of the population, most of the poor are persons with close links to the labor market. Part of the reason is that welfare policies are targeted mainly at groups that are not expected to have those links. But another reason is simple demography: in advanced countries healthy people under age 65 who are not single parents of preschool-age children are in the vast majority of the population. Among these, some are employed in low-wage jobs, some are unemployed, and some have irregular work patterns. These groups make up the majority of those who move in and out of poverty during recessions and booms. Even if a large part of their income consists of transfers, it is fluctuations in their labor income that determine whether they become poorer or richer during the cycle. Given this fact, the response of real wages and unemployment to macroeconomic change is a central issue in the study of poverty during macroeconomic adjustment.

II. CYCLICAL FLUCTUATIONS IN LOW INCOMES

It is natural for the economist interested in employment and wage determination during the business cycle to turn to supply and demand analysis. Can equality between the supply and demand for labor services explain employment and wage determination during the cycle? The answer most frequently given is that it cannot. Two related empirical features of cycles are inconsistent with the “competitive” equilibrium framework. First, employment fluctuates by more than this framework would lead us to expect, and, second, wages fluctuate by less. Thus during recession there is high unemployment and little change in average wages. The cost of recession is borne mainly by those who lose their jobs, whereas those retaining employment apparently suffer little in comparison.

These observations relate to total employment and average wages, and they have stimulated many interesting new ideas in modern macroeconomics. Their relevance to poverty during macroeconomic adjustment is twofold. First, the preceding section argued that there is a close link between unemployment and poverty. So, if cyclical fluctuations cause fluctuations in unemployment rates, they should also be expected to cause similar fluctuations in poverty rates. Second, the modern theory of wage determination provides insights into the factors that are likely to influence wages during macroeconomic adjustment. It is argued by proponents of this body of theory that such factors are not likely to
cause large fluctuations in average wages. By applying the same principles to the
determination of low wages, we may well be able to make some inferences about
the behavior of low wages during the business cycle.

Three implications of recent theories of employment and wage determination
are of particular relevance to the poor. First, in most industrial countries low-
income workers are likely to be unskilled and employed mainly in manufactur-
ing and other production industries, which are the sectors of the economy most
exposed to cyclical shocks. (The United States provides an exception that will be
discussed below.) It follows that if cyclical shocks lead to fluctuations in unem-
ployment, low-income workers will be more at risk than the average worker.
Moreover, because they are the unskilled workers in their sectors, low-income
workers are also likely to bear most of the unemployment in their sector.
Workers in unskilled occupations frequently fall into poverty because of unem-
ployment; when the economy picks up and they move back to employment, they
cannot move far from the poverty line because of low wages.

This description is certainly true of the poor in the United Kingdom and
Australia, and to a lesser extent in Sweden, which does not suffer much unem-
ployment in recession (on the United Kingdom see Pissarides and Wadsworth
1990). In the United States, manufacturing wages are higher than in unskilled
jobs in the service sector, where many of its poor work. Although the service
sectors are also exposed to cyclical risks, they are not as exposed to the risk of
unemployment as the manufacturing sectors are. Thus moving in and out of
unemployment may well not turn out to be as serious a problem for the poor in
the United States as it is likely to be in the United Kingdom and elsewhere.

The second implication about low wages that can be drawn from recent
theories of wage determination relates to the responsiveness of wages to cyclical
change. Recent theory argues that although wages are not very flexible during
the cycle, they do respond to a rise in unemployment because of the threat that
unemployment imposes on those still employed. Because low-income workers
are more exposed to the risk of unemployment, their wages are also likely to be
more responsive to cyclical shocks than the wages of the average worker. The
average worker is hardly exposed to the threat of unemployment in most coun-
tries because of long job tenures and, in some countries, job security legislation
and union influence. Average wages respond to unemployment over the cycle
almost certainly because low wages respond to it.

The third argument of relevance here is that many of the unskilled, low-paid
workers who make up the bulk of the poor are likely to be found in secondary
sectors of the labor market that lack the organized institutions of the primary
sectors. This is certainly true of low-income women without regular work pat-
terns, but it may also be true of some men, especially youths and minorities. The
low-skill service jobs that employ many of the poor in the United States are
typical examples of the jobs found in the secondary sector of the labor market.
Enterprises in secondary sectors operate in a market environment that is closer
to the competitive paradigm than is the market environment of the primary
sectors, so that the business cycle is likely to lead to more wage fluctuations in the secondary sectors than it does on average in the primary sectors. Because incomes in the secondary sectors are typically lower than in the primary sectors, this is another reason for expecting the business cycle to lead to more wage fluctuations at the lower end of the wage distribution than on average.

A related factor is that much of the production in the secondary sectors takes place at the margins of profitability. Many companies in these sectors are not well-established, profitable concerns, and even small recessions may lead to bankruptcies and closures. In events such as these, the workers in these sectors are once again likely to lose income because of unemployment.

Thus comparing the fortunes of the poor with the fortunes of the average worker during recession may well show that the poor experience more unemployment and more wage reductions. Both unemployment and wage reductions contribute to poverty. In the final analysis, what cushions poverty in recession is not any particular response of market variables to the recession, but the response of transfer payments that are designed to provide income support for the unemployed and those with low incomes.

Evidence on the behavior of low wages and the unemployment of those who receive them during the business cycle is scant. Blank (1989) examined the behavior of the income of various groups of the population during 1969–81 using the Michigan PSID. Although she did not distinguish between the changes in annual hours of work resulting from unemployment and the changes resulting from overtime, short time, and other variations in the length of the work week, her results shed interesting light on the behavior of the income of poor households in the United States. As might be expected from the preceding discussion, heads of poor households experience more cyclical variations than other workers in both annual hours of work and in hourly earnings. Hours of work and hourly earnings are both strongly procyclical, so total labor income increases during a boom for both reasons. A 1 percent increase in $GNP$ is associated with a 2.57 percent increase in the average hourly earnings of the heads of poor households and with a 1.25 percent increase in their annual hours of work. Total labor income increases 3.05 percent. The other components of household income (spouse's labor income, transfer income, and other income) do not show much cyclical variation, so, despite the small fraction of total income accounted for by the head's labor earnings, the total income of poor households shows procyclical behavior. On average, the total income of poor households increases by 1.61 percent when $GNP$ increases by 1 percent.

The responsiveness of hours of work and hourly earnings to the cyclical changes in $GNP$ declines at higher incomes, so persons higher up in the income distribution experience less cyclical variation in their earnings than persons below them. For example, the total income of the third quartile increases only by 0.82 percent when $GNP$ increases by 1 percent, with total hours increasing by 0.52 percent and hourly earnings by 0.64 percent. This is very much in line with the argument that higher incomes are found in the primary sectors of the economy,
in which workers are less exposed to the risk of unemployment and wages are more protected from cyclical shocks than are wages in other sectors. Thus the income distribution shrinks in booms and expands in recessions. In a recession, poverty increases not only because incomes are generally lower, but also because the expansion of the income distribution shifts more households into poverty at given mean income.

The labor income of wives in poor households does not show strong cyclicality on average. This apparently paradoxical conclusion is explained by offsetting changes in the hourly earnings and hours of work of wives. The hourly earnings of wives show even more procyclicality than the average earnings of heads of households, perhaps because wives are even more likely to be in the secondary labor market than their husbands are. But wives in poor households also exhibit strong anticyclical behavior in their participation decision (what is often called the "added worker" effect). Although continuously employed women reduce slightly their hours of work during a recession, women previously outside the labor force seek employment to cushion the loss of household income resulting from the loss of the head of household's income. Usually the jobs that these women get pay well below the average paid by jobs held by similar continuously employed women. When the economy recovers and their husbands regain their lost incomes, these women leave the labor market. Thus the added worker effect provides an important cushion against the loss of income of poor households in recession, although the labor market performance of women as a whole offsets only the loss suffered by the drop in the earnings of those women already in the labor force.

Detailed information on the behavior of low earnings (and more generally on the income of the poor) during recession in Australia, Sweden, and the United Kingdom is not available. Comparing the structure of the labor market in the United States and in the other countries may allow some inferences about the behavior of low earnings in the other countries. The main question is whether the market at the low end of the wage distribution in the other countries is organized like it is in the United States. The answer is that it is not likely to be. There are important organizational differences at the mean, and this alone should warn that there may be organizational differences at the low end. More direct evidence relates to union coverage in the four countries and to the influence of central institutions in wage bargaining.

The United States has the least union coverage, and central institutions have no influence on wage negotiations. The market at the low end of the wage distribution is not well organized, and, as argued in this section, the behavior of wages and employment at this end is far closer to the competitive paradigm than the behavior of the same variables at the mean. In Sweden the wages of blue collar workers in manufacturing are negotiated at the central level, so union influence and centralization are as prevalent as for the average worker. Complete centralization, however, may produce as much flexibility as complete decentralization (Calmfors and Driffill 1988). The reasons behind the flexibility
are different but the outcome need not be. In a completely decentralized economy, wage flexibility results from the forces of competition operating at the level of the firm. In a centralized economy, wage flexibility is the outcome of the realization by the central negotiators that their own wage choices influence aggregate employment. If they want to have more employment, they cannot rely on someone else to bring it about (be it the central government or other unions moderating their wage demands). It can be brought about only by moderating their own wage demands. Thus the economic forces in Sweden may well produce as much wage flexibility at the low end of the wage distribution as in the United States.

One must also consider Sweden’s policy of egalitarianism. Aggregate employment and wages are not the only objectives of central wage negotiators; the narrowing of differences in income is another. Although egalitarianism is achieved mainly through large transfers, it has also affected wages and employment policy. Big discrepancies in the wages negotiated for different job classes are avoided, and the workers displaced during recession have the choice of a job created by the government for the unemployed. About half of the workers who lose their jobs in Sweden gain employment through this scheme. These government job offers are in addition to the large transfers to low-income workers, which all but offset the effects of the fluctuations in market wages and unemployment on poverty.

In the United Kingdom wage negotiations take place in a different institutional environment. Unions or the wage councils affect the wages negotiated in virtually all of manufacturing and in about three-quarters of the rest of the labor force. Negotiations take place at the enterprise level, with central policy or central institutions having little influence. This has been especially true since 1979, when free market discipline has been used as the main weapon against union wage demands. The United Kingdom’s institutional wage structure is the least flexible of the countries under consideration. When wages are negotiated by unions that are strong in their own enterprise but weak in influencing wages elsewhere, the link between a single union’s wage demand and national unemployment is broken. Each union attempts to protect the wages of its members and feels unable to do much about the unemployed: even if it moderated its own demands to encourage more job creation, the number of jobs created would be insignificant compared with aggregate unemployment. If all unions behave in the same way, wages become highly unresponsive to macroeconomic shocks, and unemployment bears the burden of adjustment. This is as true on average as at the bottom end of the wage distribution, except that at the bottom end unemployment is more of a threat. A prolonged recession may eventually lead to wage reductions. This seems to have occurred in the United Kingdom during the severe recession of 1979–81. After two decades of remarkable stability in the earnings distribution, the ratio of wages in the lowest decile to median wages fell from 66 percent in 1979 to 61.6 percent in 1981 (Atkinson 1989, chap. 6). But overall, the structure of the labor market in the United Kingdom is such that
wages, even at the lower end of the wage distribution, are expected to be much less flexible than they are in the United States. The main factor influencing low-income households during recession in the United Kingdom is unemployment.

The Australian labor market is somewhere between the British and Swedish examples, with features of both in the behavior of wages and unemployment. Although wages are negotiated largely within each enterprise, as in the United Kingdom, direct government interference with the wage negotiation process and central institutions (in particular the Arbitration Commission) have had some influence on wage negotiations. Australia's institutional arrangements are a mechanism that influences wage negotiations by improving the general understanding between national union organizations and national employer organizations. Their direct effect on particular episodes of wage negotiations appears to have been exaggerated by some Australian economists: the Australian labor market certainly resembles the British market more than the Swedish market (Pissarides 1991, Calmfors and Driffill 1988). Thus the main implications of recession for the poor can be discerned by looking at the behavior of unemployment and overall wages in manufacturing. Manufacturing wages declined slightly after 1975 (elsewhere in the economy there has been moderate growth), and this has probably had some effect on poverty. But as in the United Kingdom, the main effect of recession on the poor in Australia is through unemployment.

Other evidence of relevance to the poor may be obtained by looking at changes in the distribution of total disposable income during the cycle, without attempting the difficult task of decomposing these changes into individual components. The poor are inevitably concentrated at the lower end of the income distribution, and their welfare depends, in the final analysis, on their total disposable income. Thus, looking at changes at the low end of the income distribution offers an all-encompassing approach to the investigation of the effects of the cycle on poverty.

Looking again at the evidence for the United States, it appears that the conclusion reached by Blank (1989) with data from the \textit{psid} is confirmed with aggregate data. Blinder and Esaki (1978) and Blank and Blinder (1986) examined the response of the income distribution during the cycle. They used both unemployment and inflation as cyclical indicators and regressed the income share of each quintile in the working population on the two cyclical indicators, on time trends, and on lagged dependent variables. They concluded that although inflation has no discernible effect on the distribution of income, unemployment has a strong expanding effect: when unemployment increases, incomes at the lower end of the distribution fall by more (in relative terms) than incomes at the higher end of the distribution, so income shares shift rightward. This confirms earlier results about the effect of unemployment on income shares (see, for example, Metcalf 1969).

Similar work with aggregate time series data was carried out by Nolan (1987) with data from the United Kingdom. The results with the U.K. data were similar to those with the U.S. data, but they were less well determined. Results for the
lowest quintile were statistically better than for higher quintiles and showed that a 1 percentage point increase in unemployment reduced the income share of the lowest quintile by 0.21 percentage points. This compares with Blinder and Esaki's (1978) estimate for the United States of a 0.13 percent reduction and Blank and Blinder's more recent (1986) estimate of a 0.185 percent reduction.

Thus unemployment is found to influence the distribution of income. The magnitude of the effect of unemployment on the overall income of those who suffer it will also depend on the duration of unemployment. Here again there are some differences among the four countries. In the United Kingdom and Australia, increases in unemployment tend to be accompanied by increases in duration. Thus in these two countries the direct effect of unemployment on the distribution of income, through the income of those that experience it, is likely to be larger than it is in Sweden and the United States. In Sweden unemployment is low and of short duration because of the job guarantee available to unemployed persons, whereas in the United States the average duration of unemployment is shorter at a given rate of unemployment than it is in the United Kingdom and Australia. Allowance should also be made for the available state support to the unemployed. In this regard, the United States offers the least support, followed by the United Kingdom and Australia and then Sweden, where unemployed workers have as much as 88 percent of the disposable income of full-time workers (Vogel and others 1988, p. 145). Although no similar statistic is available for the other countries, their unemployment compensation averages about 50 percent of lost wage earnings. Coverage in the United States is only 25–30 percent of the unemployed, whereas in the United Kingdom and Australia coverage is virtually universal. The direct effect of unemployment on the distribution of income also depends on whether we consider the distribution of annual income or the distribution of income in a shorter time period, such as a reference week. For annual incomes, the effect of unemployment is reduced (see Nolan 1987, chap. 5–6).

III. POLICY OPTIONS

Economic policy affects poverty at three levels. First, policies that are not specifically designed for the poor, such as macroeconomic management, have an influence on poverty through their effect on variables that enter the poverty equation, such as unemployment and wages. Second, transfer payments, most frequently designed to provide income support for low-income groups, influence the well-being of those who receive them and those who pay the taxes that finance them. Third, some of the policies designed to provide income support, especially transfer payments, influence the behavior of recipients. Such “disincentives” may offset to some extent the original policy goals.

The debate over the effects of policy on poverty has centered mainly on the question of the disincentives of transfers. An optimal government policy to fight poverty through redistribution should redistribute a given income to the poor
with minimum efficiency loss. The efficiency loss in transfers to the poor results from reduced labor supply by the recipients and possible changes in family structure induced by the policy. The corresponding financial cost consists of the loss of output because of the reduced labor supply, and the extra cost of the transfers to those who need to be supported for longer because of the choices they make. From society's point of view, the limits to redistribution are the efficiency losses of the policy.

Of course, policies designed for some specific purposes have implications for policy goals outside their immediate environments. This is as true for macroeconomic policy as for other policies. Macroeconomic policy is usually directed at things like price stability, full employment, exchange rate stability, credibility in foreign debt obligations, and so on. The policies designed to achieve these objectives have implications for poverty, but normally their influence on poverty is incidental, and it does not receive high priority in the design of macroeconomic policy.

If the reduction of poverty were a goal of macroeconomic policy, it is clear what the recommendation would be: lower unemployment. But this recommendation may conflict with other objectives, such as price and exchange rate stability, that do not directly influence poverty. A better policy advice would be to identify the poor as a group and target redistributive policy toward them in a way that offsets any harmful effects of macroeconomic policy on poverty. The reduction of poverty as a policy objective should come into the macroeconomic policy debate only if redistribution cannot undo what macroeconomic policy does to poverty. This is where the disincentives of transfers become the key to policy design. Without disincentives, transfers can obviously achieve any poverty rate that is desired, regardless of macroeconomic policy. But if the disincentives of transfers are serious enough, this will not be possible. In this case, the choices made at the macroeconomic level become crucially important for the cyclical fluctuations in poverty.

Consider unemployment and policy toward it. All governments now provide some support for the unemployed. Support takes the form of a direct income transfer (unemployment insurance), some payments in kind, and help with finding alternative employment. If unemployment insurance can replace all the income lost by the unemployed without costly implications elsewhere, macroeconomic policy need not be concerned with the poverty implications of unemployment. However, although small changes in the rate of insurance (say from 45 to 50 percent of income loss) do not appear to cause serious disincentives, as the rate approaches 100 percent (full income replacement), massive withdrawal from work is to be expected. (See, for example, the reviews by Danziger and others 1981, and Hamermesh 1982. On the United Kingdom see the studies by Nickell 1979 and Atkinson and others 1984.) Thus this is one case in which either some other policy for compensating the poor needs to be found or poverty reduction needs to be considered as one of the goals of macroeconomic policy.
Sweden's policy of offering jobs to the unemployed should be viewed in this light. Currently, some 2–3 percent of the work force are in state-financed labor market programs. The United Kingdom also started its own more limited scheme, targeted mainly at youths, when unemployment rates increased in the early 1980s. Although such programs have some adverse effects—such as increasing the cost of labor to private employers by removing some of the unemployed from the market—their disincentive effects are not as prohibitive as full income replacement would be (for an evaluation of Sweden's programs see Calmfors and Forslund 1990). As antipoverty programs, however, state-financed labor market programs for those who are able to work are as effective as transfer programs.

For groups of the population not expected to work, transfer programs are a more effective way of dealing with their poverty than labor market programs. The most important groups in this category are the elderly, the disabled, and mothers of very young children. Transfers do have a disincentive effect for these groups; if pensions were eliminated, for example, labor participation rates among the elderly would certainly be much higher than at present. But the cost of such disincentives is politically acceptable, because society has adopted the view that transfer-financed retirement is a right for all individuals. The main feature of the recent history of the transfer programs of the four countries under study is a large increase in the transfers to these groups that has either lifted them (just) out of officially measured poverty or has left them just below the line.

It has been argued by several commentators that most remaining poverty in the United States and elsewhere is concentrated in groups that do not have easy access to the labor market. The implication drawn from this claim, for example by Danziger and Gottschalk (1986), is that economic growth is not likely to contribute as much to eliminating poverty in the future as it did up to the early 1970s. Notwithstanding this claim, in the long run economic growth is the best weapon against poverty. The taxes needed for redistribution are more easily raised when average incomes are rising than when they are static. The claim by Danziger and Gottschalk and others should be taken to imply that although in the future economic growth alone cannot reduce poverty as much as it did in the past, economic growth with redistribution remains the best weapon against it.

Although the changing composition of poverty has some implications for the optimal design of antipoverty policy, the evidence and arguments examined in this article have shown that cyclical fluctuations in economic activity still influence the incidence and extent of poverty. For these "cyclical" poor, better economic performance is indeed a solution. In the absence of cyclical stability, the best approach is first to identify which demographic groups are likely to suffer most in recession and then to devise compensating policies for them with minimum disincentives. The elderly, the disabled, and single mothers of young children are clearly not the target groups for antipoverty policy in recession. The target groups are those who suffer most in recession: the unemployed and the workers in jobs with unprotected wages (for example, those in the secondary
The corresponding demographic groups are youths, unskilled workers, and women without regular work patterns (see Gramlich and Laren 1984, and Ellwood and Summers 1986).

If recession cannot be avoided, there cannot be complete protection from unemployment and wage reductions. Thus choices made at the macroeconomic level, such as the United Kingdom's high unemployment policy or Australia's recent (1986–87) policy of wage restraint, have implications for poverty. In such cases, what are the main factors for the design of policy specifically aimed at reducing the poverty of those affected by recession? A minimum level of support, say up to the current level of about 50 percent of income loss, may be provided by unemployment insurance. Small changes in the rate of benefits at these levels do not appear to produce substantial disincentives. What is more important for the disincentives of unemployment insurance at these levels is not the precise rate but the duration of benefits and the ease with which they can be obtained. Thus unemployment durations are shorter in countries where benefits run out after a certain period, such as in the United States, than in countries where some kind of benefit is available indefinitely, such as the United Kingdom (where unemployment benefits run for one year, after which a means-tested income support is available). Long unemployment durations are undesirable, not only because of their effect on family income and assets, but also because they may erode the work ethic and the worker's human capital. Thus indefinite unemployment benefits, even at low levels, may not be a desirable policy.

If unemployment benefits should not last forever, is there a replacement policy for long durations? One possibility, of course, is to let the long-term unemployed sink into poverty: the threat of poverty may ensure that they do find work before the benefit runs out. In the United States many do find jobs before reaching long unemployment durations, but there are also many, especially minority youths, who do not. Sweden's example has shown that there are viable alternatives to unemployment insurance for long durations: job creation by the government for the unemployed. The disincentive from this scheme is not reduced overall labor supply, as with unemployment insurance, but more scarcity of labor for private enterprise. Calmfors and Forslund (1990) show that labor programs increase the cost of labor to private employers for given unemployment. But because the government scheme offers employment to workers already unemployed, the cost takes the form of a smaller reduction in the real wage associated with a given fall in private employment. This cost does not appear to be too high in Sweden. If a job guarantee is available to the long-term unemployed, ending unemployment insurance when the guarantee comes into effect becomes a more acceptable policy. Similar arguments hold for youth employment programs. Indefinite subsidization of unemployed youths is an undesirable policy. They are at an age in their work horizon when they need to learn skills and start regular career patterns. Many governments, most recently the United Kingdom, subsidize training programs for youths. Such policies are attractive substitutes to unemployment insurance, both for the youths undergoing them and for the firms employing
them. They need not be more costly to governments than the unemployment insurance programs that they replace.

Thus effective antipoverty measures for the unemployed exist. The combination of unemployment insurance for a while, to help while the unemployed place themselves in jobs, combined with a job guarantee for those who do not succeed and job training for youths, appears both feasible and desirable. What of low wages? This is in many ways easier to deal with than unemployment. For a start, low wages are not as serious a cause of poverty as total loss of income. Also, countries have elaborate systems of taxation with details of earnings during long periods for each individual. Redistributive taxation is an obvious solution to the problem of poverty caused by low wage earnings. A negative income tax, for example, long advocated by Milton Friedman and others, is an effective tool, and one that is easy to administer, for maintaining incomes above certain policy-determined levels. Means-tested benefits, as currently practiced in the United Kingdom, are more difficult to administer and less effective in reaching those eligible than a negative income tax would be.

The policies outlined so far are policies that take the country's institutional environment as given. The discussion of wage determination, however, has shown that institutions do matter in determining the economy's adjustment path. Cyclical unemployment is less of a problem in a centralized economy such as Sweden's or a decentralized one such as the United States' than in a unionized decentralized economy such as the United Kingdom's and Australia's. Some attempts at more corporatism in the latter two countries have succeeded, with good results for the labor market. Australia in particular often achieves more corporatist policies, with more flexibility, as in 1986-87, when unions agreed to wage reductions on the understanding that there would be more investment for job creation. The United Kingdom too has an example of a briefly successful "social contract" in 1976-77. More recently the United Kingdom has tried to move in the opposite direction, toward less centralization. Again this policy has had some success in increasing the flexibility of real wages, but it appears that this success was bought at the cost of increased poverty: unemployment has been very slow to recover after a big initial rise, and the real wages that have fallen are those at the bottom end of the wage distribution. On the whole, institutional reform in the United Kingdom has not been successful in changing the fundamental structure of the labor market.

In Australia reform has a better chance of success because of the existence of the Arbitration Commission, whose authority is respected by unions and employers. Sweden's example shows that if the Arbitration Commission is given more power in wage determination, the results can be good for employment. The general principle for institutional reform to emerge from the study of the four countries is that if a social contract of the form practiced in Sweden and the other Nordic countries is not feasible, a decentralized labor market with fewer institutional constraints is more likely to facilitate the recovery of employment from recession than one with more constraints. But for such reforms to operate
successfully for the low end of the income distribution, antipoverty policies of
the kind described earlier are also necessary.

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