Unemployment insurance in the United States and Europe, 1973-83

In general, comparisons show rising costs, changes in eligibility and benefits, possible disincentives to work, and low replacement ratios for the unemployed; some industrial countries have altered their unemployment insurance provisions with these problems in mind

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The unemployment insurance systems of Western European countries have been subjected to recent strong pressures because of higher unemployment rates and prolonged spells of unemployment. There has been concern that traditional unemployment insurance programs may not be able to cope with the current composition of unemployment. This has led to the search for new approaches in some countries and efforts to curtail expenditures in others.

This article compares the unemployment insurance programs of the United States and five western European countries—Austria, France, Germany, Great Britain, and Sweden. It discusses, among other subjects, the cost of the program, financing, the number of persons receiving benefits, benefit levels, and replacement ratios. In addition, the article outlines the steps taken by the countries to curtail rising unemployment insurance costs, reports the diverse views on the effects of unemployment insurance benefits on work incentives, and raises some questions for which additional research is needed. This study covers the 1973-83 period; two Organization for Economic Cooperation and Development (OECD) studies for other years are briefly discussed for comparison purposes.

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Background

Unemployment rates in most Western European countries were considerably lower than those in the United States through the 1950's and 1960's, rising with the onset of the oil crisis in 1973, dropping slightly for a few years, then increasing sharply in the early 1980's, and remaining at high levels. While the U.S. unemployment rate has dropped since 1983, few European countries have shown much improvement. Along with the rise in unemployment rates, the average duration of unemployment also increased, although less in the United States than in most Western European countries. European employment has grown slowly since 1975, in contrast with substantial U.S. employment growth.

The composition of unemployment also has changed, especially when compared with the pre-World War II period when male heads of household constituted the bulk of the labor force and were the focus of social concern. Structural unemployment, with its adverse effects on older workers, has reached new proportions in Europe, often overshadowing cyclical and frictional unemployment. Professional, white-collar, and skilled unemployment also has increased. Furthermore, unemployment has risen for young people, women, and a markedly enlarged minority population—groups given scant attention when unemployment insurance programs were first designed.[1]

Growth of unemployment insurance costs

Unemployment insurance costs rose more sharply in the 1970's than in the 1960's. An OECD study of unemployment insurance costs in seven countries—the United States, Japan, Germany, Canada, France, Italy, and the United Kingdom—found that, on average, expenditures (in 1975 prices) almost doubled during the 1960's and more than tripled in the 1970's. When the timespan was divided into four periods (1960–64; 1965–69; 1970–74; and 1975–79), France, Germany, the United Kingdom, and the United States showed more periods with increases than with decreases in the average annual growth of unemployment insurance expenditures. Three of these four countries experienced their highest rate of increase between 1970 and 1975; only the United Kingdom had its greatest rise between 1965 and 1970.[2] Another OECD analysis for the 1960–75 period showed an average increase of 180 percent in unemployment insurance expenditures (in constant prices) in the same seven countries.[3]

The 180-percent increase found in the OECD study for 1960–75 was exceeded in the six countries studied in this article during the period 1973–82. Four of the five European countries experienced greater cost increases (in 1973 prices) than did the United States, and all exceeded the United States in 1982 prices. Measured by the increase in expenditures per recipient (in 1973 prices), Austria led, followed by Germany, Sweden, and the United States. Only Great Britain spent less in 1982 per recipient than it had in 1973 (in 1973 prices). The relatively low position of the United States in regard to expenditures reflects its more favorable unemployment record, but the per beneficiary amounts also reflect a less generous approach than in four of five European countries. (See table 1.)

By 1982, unemployment insurance expenditures as a percentage of the gross national product, while modest, were at least 2 to 3 times the 1973 level in four of the six countries; the rise was even greater in France and Germany. (See table 2.) In one OECD seven-country study, it was found that the average rise in unemployment insurance expenditures as a share of gross domestic product (in 1975 prices) was greater in the 1970's than in the 1960's.[4]

In four of the six countries, unemployment insurance as a percentage of total expenditures on all public measures related to employment and training, including unemployment benefits and allowances, rose considerably from 1973 to 1982. (See table 2.) In the United States, "passive" unemployment benefits dominate "active" training and employment programs, while the reverse is true of Sweden and Great Britain. Sweden has emphasized active labor market programs that foster the adaptability and mobility of the labor force and improve the position of disadvantaged groups, areas, and industries, rather than unemployment insurance and other passive income replacement.[5]

Table 1. Indexes of change in expenditures for unemployment insurance benefits over the 1973–82 period, six countries

[1973=100]

Country	1982 prices	1973 prices (constant)	
	Total	Total	Per recipient
Austria	681	401	343
France	2,567	968	—
Germany	1,292	861	143
Great Britain	852	245	51
Sweden[1]	786	333	[3]121
United States[2]	543	278	104

[1]Data are for 1974–83.

[2]Includes programs for special groups (railroad workers, for example). Data for the United States have been computed according to the definitions of unemployment insurance programs adopted for the six-country study by the International Institute of Management. Results may not fully agree with data published on unemployment compensation in the United States.

[3]Calculated from annual average daily benefits.

NOTE: Dash indicates data not available.

SOURCE: Gert Bruche, *The Financing of Labour Market Policy in Austria* (Berlin, International Institute of Management, 1984), tables 1–3; Gert Bruche, *The Financing of Labour Market Policy in France* (Berlin, International Institute of Management, 1984), tables 1–2; Gert Bruche and Bernd Reissert, *The Financing of Labour Market Policy in the Federal Republic of Germany* (Berlin, International Institute of Management, 1985), tables 1, 2, and 5; Bernd Reissert, *The Financing of Labour Market Policy in Great Britain* (Berlin, International Institute of Management, 1985), tables 2–5, and 16; Günther Schmid, *The Financing of Labour Market Policy in Sweden* (Berlin, International Institute of Management, 1984), tables 1, 3, and 4; Eskil Wadensjö, *The Financial Effects of Unemployment and Labour Market Policy Programs for Public Authorities in Sweden* (Berlin, International Institute of Management, 1985), table A6; Bernd Reissert, *The Financing of Labour Market Policy in the USA* (Berlin, International Institute of Management, 1985), tables 1, 5, and 7; and the author's own calculations.

Unemployment insurance expenditures (in 1975 prices) generally increased as a percentage of total expenditures on income maintenance measures, according to one OECD seven-country study. However, the share of expenditures remained lower in Western Europe, mainly because of the commitment to a more complex set of additional income maintenance programs with higher benefits than are found in North America. Thus, Canada spent between 8.43 and 17.35 percent of its income maintenance budget on unemployment insurance benefits during the four 5-year periods of 1960–80, followed by the United States, with 4.81 to 9.92 percent. France, Germany, and the United Kingdom spent under 5 percent, and Italy, under 2 percent.[6]

Why costs rose. Expenditures on unemployment insurance benefits change because of changes in (1) the levels, composition, and duration of unemployment; (2) the size of the labor force and the share covered by unemployment insurance; (3) coverage and eligibility rules and benefits; and (4) family circumstances and previous earnings of unemployed persons. The effects of these factors vary over time and by country.

The OECD analysis of seven large countries for the period 1960–75 established that improvements in real benefit levels were the most important factor contributing to the increase in unemployment insurance expenditures. The study noted that changes in the numbers covered by unemployment insurance (growth of population, labor

force, and unemployment) also strongly affected expenditures, but found no influence from changes in eligibility for benefits.[7]

Another OECD study of the same countries (France, Germany, the United Kingdom, the United States, Canada, Italy, and Japan) for the period 1960 to 1980 found that benefits grew moderately and in line with wages in the 1960's, except in Italy. After the oil crisis of 1973, the growth of benefits accelerated, exceeding that of wages. The growth slowed at the end of the 1970's, when benefits dropped in real value in five of the countries, but not in Japan and France. The OECD study also found that the ratio of unemployment insurance recipients to total unemployed, after dropping slightly in the latter half of the 1960's, except in Japan, rose sharply in the first half of the 1970's, except in Germany, and then dropped again in the late 1970's to early 1960's levels or below.

The following general points also emerged regarding unemployment insurance expenditures trends:

- The behavior of individual factors has not been constant over the period, and the contribution of each to unemployment insurance expenditures has changed.
- Certain factors, such as the number of beneficiaries, are more affected than others by changes in the level of economic activity. Important lags in effect also occur.
- Cyclical influences and long-term trends tend to interact so that the influence of the underlying factors changes over time.
- The slowdown in annual growth rates of unemployment insurance expenditures noticed in 1979–80 has been reversed by the rise in unemployment since 1981. But the tightening of eligibility and payment criteria and slow or negative growth in the real value of benefits are containing expenditures.
- Besides the unemployment rate, discretionary policy changes are of the greatest importance in explaining expenditure trends.[8]

Studies of individual countries, especially Germany, add to the picture, but do not contradict the above general findings.[9]

Table 2. Expenditures for unemployment insurance benefits as a percentage of gross national product and of unemployment, employment, and other labor market programs, six countries, 1973–82

Country	Unemployment, insurance benefits as a percentage of—					
	1973	1982	1973	1975	1980	1982
Austria	.15	.43	37.0	38.8	39.1	43.4
France	.20	1.40	18.6	34.2	40.8	41.4
Germany[1]	.15	1.13	20.4	43.0	36.8	47.0
Great Britain	.25	.56	[2]34.1	[3]36.7	[4]30.9	[5]21.7
Sweden[6]	[7].30	[8].90	[7]15.1	13.8	13.8	24.0
United States[8]	.35	.81	42.1	70.2	55.2	69.6

[1]Excludes special Federal Government labor market programs and State and local measures.

[2]For budget year 1974–75.

[3]For budget year 1975–76.

[4]For budget year 1980–81.

[5]For budget year 1982–83.

[6]Excludes regional development and industrial policy programs.

[7]Data are for 1974.

[8]Data are for 1983.

[9]Includes programs for special groups (railroad workers, for example). Data for the United States have been computed according to the definitions of unemployment insurance programs adopted for the six-country study by the International Institute of Management. Results may not fully agree with data produced on unemployment compensation in the United States.

NOTE: For sources, see table 1.

Policy responses

In the first half of the 1980's, many European countries and American States contained the growth in unemployment insurance costs through tightened eligibility criteria, little or negative growth in the amount and duration of benefits, and restructured programs to limit the unemployment insurance portion of total income replacement programs for the unemployed.[10] These actions were tied to the efforts of nations to cover rising unemployment insurance costs without excessive demands on financing sources.

The main methods of augmenting the funds available to unemployment insurance systems are: increased contributions from employers and workers; special assessments; use of income from reserve funds; drawing down reserve funds; borrowing; and an increased share of costs shifted to the government. The five European countries studied resorted to increased contribution rates. (See table 3.) Nevertheless, after 1973, the total intake from employer and employee contributions formed a declining share of unemployment insurance expenditures in Austria and Germany. France had a fluctuating share, while Sweden balanced a relative decrease in the share of direct employer contributions with a large rise in the share of employer indirect contributions. No calculation was made for Great Britain or the United States.[11] Further increases in payroll taxes to support unemployment insurance would be unpopular in most European countries and are feared as an impediment to employment growth.

When deficits continue despite these measures, governments provide subsidies, required by law in most cases. Governments also assume certain costs, such as all or part of administrative costs or continuation of contributions to old age, health, and other insurance on behalf of unemployment insurance recipients. From 1973 to 1982, the government's share of expenditures was highest in Sweden and lowest in Austria; the United States ranked fourth. (See table 4.) The government's share decreased in Austria over the 1973–82 period, increased steadily in the United States, and fluctuated in the other countries.[12]

In most countries, government funding offers only limited relief. Restraints on expenditures appear to have been the main recourse. In the United States, the Federal Treasury loaned $11.8 billion to State unemployment insur-

Table 3. Rates of contribution to unemployment insurance by employers and employees, six countries, 1973–84

Country	Employer (Percent of eligible payroll)				Employee (Percent of eligible earnings)			
	1973	1975	1979	1984	1973	1975	1979	1984
Austria[1]	1.00	1.00	1.05	2.20	1.00	1.00	1.05	2.20
France[2]	.56	1.92	2.76	4.08	.14	.48	0.84	1.72
Germany[1]	.85	1.00	1.50	2.30	.85	1.00	1.50	2.30
Great Britain[3]	—	8.50	10.00	10.45	—	5.50	6.50	9.00
Sweden	—	[4].40	[4].40	[4]1.3	([5])	([5])	([5])	([5])
United States	([6])	([6])	([6])	([6])	([7])	([7])	([7])	([7])

[1]Contributions are for active labor market programs, as well as for unemployment insurance and unemployment allowance programs.

[2]Rates as of the end of the year.

[3]Includes contributions for all social insurance programs (old age, health, disability, and maternity, for example).

[4]Includes contributions for unemployment insurance and allowances. Data are for 1974 to 1982. From 1973 forward, data include tax for labor market training, previously under a separate payroll tax.

[5]Rates vary among funds.

[6]Tax varies among States.

[7]Most States do not tax employees.

NOTE: Dash indicates data not available.

SOURCE: See table 1.

ance trust funds following the 1981–82 recession. According to a recent General Accounting Office report, pressure by the Federal Government for repayment of the loans led to a tightening of eligibility requirements and/or a cutting of benefits in 44 States. Since 1976, the report declares, no more than two States in any given year have had sufficient funds to cope with a recession without seeking Federal assistance. The report expressed concern that, in the event of another recession, State unemployment insurance systems would lack the financial resources to "stabilize the economy and mitigate the effects of income loss suffered by the unemployed." These and other issues pertaining to the goals and functions of unemployment insurance are under discussion in many industrialized nations and their international organizations.

Because of sluggish employment growth, some European nations have extended the duration of unemployment benefits and instituted early retirement pensions for older workers, despite the increased costs. In addition, European countries have initiated programs that utilize unemployment insurance benefit monies to support employment-related activities beyond the job search. There are three major innovative uses of unemployment funds: (1) to compensate individuals working in regular jobs but on organized and approved short-time work, as in West Germany; (2) to permit fully unemployed persons already receiving unemployment benefits to continue to do so while undertaking an activity (such as training or education) to improve their labor market position, or even while establishing a business as an entrepreneur; and (3) to support particular programs, such as early retirement, public training courses or allowances, private firm on-the-job training, or temporary employment, as well as give employment subsidies to employers who hire unemployment benefit recipients. The rationale for funding such innovations is the presumed reduction of compensable unemployment that follows.

How many receive benefits?

The proportion of the labor force covered by unemployment insurance systems has increased steadily since World War II.[13] However, the percentage of unemployed persons receiving unemployment benefits is smaller than the share of the labor force covered by unemployment insurance programs. This occurs, in part, because those most likely to become unemployed have lower rates of unemployment insurance coverage and also because covered workers either fail to meet eligibility requirements or exhaust their benefits. The proportion of the unemployed receiving unemployment insurance benefits rose in many countries from 1973 to 1975, and then declined. In Austria, Germany, and Great Britain, the proportion of the labor force covered by unemployment insurance was lower in 1983 than in 1973, reflecting not only the further rise in unemployment in the 1980's, but also the tightening of eligibility requirements. (See table 5.) This downward trend, not fully revealed by the 1983 data, contrasts with the 1973–75 period when the proportion of unemployed workers receiving benefits rose because many

Table 4. Government share of unemployment insurance expenditures over the 1973–82 period, six countries

[In percent]

Country	1973	1975	1979	1980	1982
Austria[1]	8.4	6.1	[2]6.6	6.5	4.9
France	29.1	24.8	[3]9.6	25.8	34.9
Germany[1]	0	40.8	0	8.5	21.0
Great Britain[4]	14.0	15.0	18.0	18.0	13.0
Sweden	73.5	[5]39.8	[5]50.9	[5]49.4	[5]40.4
United States[6]	7.0	15.0	11.0	17.0	18.0

[1]Expenditures are for active labor market programs as well as unemployment benefits and unemployment allowances.

[2]Data are for 1977.

[3]Data for 1979 and after are not entirely comparable to those for earlier years.

[4]Includes expenditures for all social insurance programs (old age, health, disability, maternity, for example). Unemployment insurance accounted for 4 to 10 percent of all expenditures during the 1973–84 period.

[5]From 1975 forward, excludes part of government subsidy drawn from tax on employers imposed in 1974.

[6]Includes advances from general fund for unemployment insurance trust fund expenditures on special groups (railroad workers, for example), and supplemental programs.

SOURCES: Robert A. Hart, *Unemployment Insurance and the Firm's Employment Strategy: A European and United States Comparison* (Berlin, International Institute of Management, 1982), table 1; Axel Mittelstädt, *Unemployment Benefits and Related Payments in Seven Major Countries* (Paris, OECD *Economic Outlook*, Occasional Studies, July 1975), table 2; Saul J. Blaustein and Isabel Craig, *An International Review of Unemployment Insurance Schemes* (Kalamazoo, MI, The W. E. Upjohn Institute for Employment, 1977), table 9; Gert Bruche, *The Financing of Labour Market Policy in Austria*, tables 4, 7; Gert Bruche, *The Financing of Labour Market Policy in France*, tables 4, 5; Gert Bruche, *French Unemployment Insurance* (Berlin, International Institute of Management, 1982), table 1; Gert Bruche and Bernd Reissert, *The Financing of Labour Market Policy in the Federal Republic of Germany*, tables 5, 6, 12; Günther Schmid, *The Financing of Labour Market Policy in Sweden*, pp. 20–23, table 7; Eskil Wadensjö, *The Financial Effect of Unemployment and Labour Market Policy Programs for Public Authorities in Sweden*, table A2; Bernd Reissert, *The Financing of Labour Market Policy in the* USA, table 3; and the author's own calculations.

long-term employed persons became unemployed and because of policy changes in unemployment insurance, including extended coverage, new programs, and easing of eligibility rules.

Whether the reduced share of unemployed workers receiving unemployment insurance benefits represents a deterioration in their economic position depends on the available alternative sources of income. Most Western European countries have a national unemployment allowance program which makes payments to unemployed workers who have exhausted their unemployment insurance benefits or who do not qualify for such benefits. Usually, means-tested unemployment allowances may be paid for a stipulated period, or indefinitely, if employment is not obtained. In addition, the safety net includes a local government social welfare payment for which some unemployed persons qualify.

In Britain, between 1973 and 1983, the balance shifted from unemployment insurance to supplementary benefits—the national, means-tested program for all low income persons. During the same period, the proportion of the unemployed who received neither unemployment insurance nor supplementary benefits shrank from almost 25 percent to 12.7 percent.[14]

The decline in the proportion of British unemployed workers without benefits from any national income replacement program is a sign of progress. Also, the shift from unemployment insurance to supplementary benefits is not necessarily an adverse condition. A 1978 study of a cohort of unemployed men found that family income replacement rates of men receiving supplementary benefits only were very close to those of men receiving unemployment insurance only.[15] However, earned unemployment insurance benefits may yield higher psychic benefits than means-tested supplementary benefits.

Germany showed a less favorable trend, although the proportion of the unemployed on unemployment insurance was higher than in Britain. From 1973 to 1983, the proportion of the unemployed receiving unemployment allowances climbed from 8 to 21 percent. Unlike the British case, the maximum German unemployment allowance payment is set at 10 percent below unemployment insurance benefits. Many workers on unemployment allowances receive less than the statutory maximum because other resources, such as a spouse's earnings, reduce the allowance. In April 1983, about one-third of Germany's unemployment allowance recipients were on reduced payments.

Throughout the decade, about one-third of registered German unemployed workers received neither unemployment insurance nor unemployment allowance benefits.[16] The number of unemployed recipients of public assistance grew dramatically in industrial cities in response to the restrictions placed on both unemployment insurance and unemployment allowances. The burden on localities in aiding the unemployed rose markedly after 1978.[17]

A stable percentage of unemployed workers without income provision implies a worse absolute position in the face of rising unemployment totals. Even in Britain, the absolute number of unemployed without income provi-

Table 5. Number receiving unemployment insurance benefits and percent of unemployed receiving unemployment benefits, six countries, 1973–1983 (monthly average)

(Numbers in thousands)

Persons receiving benefits by country	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Austria:											
Number	34	—	35	—	33	—	—	35	—	67	75
Percent	81.3	—	68.5	—	61.5	—	—	65.7	—	63.5	59.2
France:											
Number	128	152	225	—	—	—	—	—	—	—	—
Percent	32.4	30.5	35.4	—	—	—	—	—	—	—	—
Germany:											
Number	154	352	707	615	557	516	448	454	698	926	1,014
Percent	56	60	66	58	54	55	51	51	55	51	45
Great Britain:[1]											
Number	210	292	553	—	589	517	494	984	—	1,013	938
Percent	39.2	44.6	49.0	—	41.8	40.6	40.6	49.5	—	33.9	31.2
Sweden:[2]											
Number	—	8,625	8,718	8,128	8,161	10,597	11,036	10,666	14,485	20,018	23,594
Percent	—	41	50	47	42	45	48	47	52	56	60
United States:[3]											
Number	1,793	2,558	6,116	4,974	3,683	2,686	2,592	3,837	3,410	4,795	4,660
Percent	41.1	49.6	77.1	67.2	52.7	43.3	42.2	50.2	41.2	44.9	43.5

[1]Data relate to November of each year.

[2]Number of persons not available. Data are annual total days of unemployment and percent of days compensated by unemployment insurance benefits.

[3]Includes all unemployment insurance programs.

NOTE: Dashes indicate data not available.

SOURCES: Gert Bruche, *The Financing of Labour Market Policy in Austria* (Berlin, International Institute of Management, 1984), table 3; *Unemployment Compensation and Related Employment Policy Measures in France* (Paris, Organization for Economic Cooperation and Development, 1976), table 6; Gert Bruche and Bernd Reissert, *The Financing of Labour Market Policy in the Federal Republic of Germany* (Berlin, International Institute of Management, 1985), table 2; Bernd Reissert, *The Financing of Labour Market Policy in Great Britain* (Berlin, International Institute of Management, 1985), table 1; Eskil Wadensjö, *The Financial Effects of Unemployment and Labour Market Policy Programs for Public Authorities in Sweden* (Berlin, International Institute of Management, 1985), table 3; Bernd Reissert, *The Financing of Labour Market Policy in the USA* (Berlin, International Institute of Management, 1985), table 5; and the author's own calculations.

sion tripled (128,000 to 383,000) between 1973 and 1983, despite a reduced share of unprotected workers.[18]

Austrian data, while not entirely reliable, show a stable trend since 1975 in the proportion of unemployed workers with neither unemployment insurance nor unemployment allowance benefits. After 1973, the proportion of unemployed in neither program rose from less than 10 percent to about 25 percent.[19]

The proportion of the Swedish unemployed workers covered by unemployment insurance funds (for the most part, the funds are organized by trade unions) has risen dramatically over the years, especially among women. In 1963, one-third of men age 16 to 74 were covered; by 1982 the proportion had risen to 60 percent. For women, the proportion increased from 7 percent in 1963 to 50 percent by 1982.[20] During the period 1974–84, it is estimated that the proportion of Swedish unemployed workers who received benefits from unemployment insurance funds rose from 41 percent to 69 percent, while the proportion receiving the government's unemployment insurance benefit, payable to eligible nonmembers of funds, increased from 10 to 18 percent. This left 13 percent of the unemployed dependent on the social welfare payments of local governments in 1984, down from one-half in 1974. Unemployed persons whose unemployment insurance or allowance has expired have the right to publicly created jobs; through these jobs, they acquire unemployment insurance eligibility once more. These "transitional measures," introduced in the 1970's and made a legal right in the 1980's, are credited with producing the much smaller proportion of long-term unemployed workers in Sweden than is found in other western European countries.[21]

The evidence for Great Britain, Sweden, and the United States indicates that for much of the 1973–83 period, fewer than half of the unemployed received unemployment insurance benefits. (See table 5.) In the United States, according to a recent General Accounting Office report, only 32 percent of unemployed civilian workers received unemployment benefits in 1986, compared to 55 percent in 1952. At the same time, it is not well established how levels of payment from unemployment allowance and local welfare programs compare with unemployment benefits.

Replacement ratios

How well off are those on unemployment insurance compared with their own earnings from full-time work? The definition and computation of appropriate replacement ratios are complex, especially for comparative purposes. The first comparative efforts simply measured the percentage of average weekly earnings replaced by average weekly unemployment insurance benefits. More recently, a comprehensive concept of replacement ratios takes account of both net losses and net additions of income from all sources while unemployed. For example, net unemployment insurance benefits may drop if recipients are liable for income tax, Social Security contributions, or other charges. However, the unemployed may receive assistance from other social programs, in addition to basic unemployment insurance. Net unemployment insurance benefits also may vary by family size. In some countries, benefit levels differ by region and occupational group. These and other factors can significantly affect the calculation of the replacement ratio.

The United Nations Economic Commission for Europe examined replacement ratios from 1972 to 1982 in 17 European countries, Canada, and the United States. The results show that:

- Unemployment insurance benefits usually were lower than previous take-home pay from employment in all countries over the entire period.
- The replacement ratios varied significantly among countries, with average income losses during unemployment ranging from 8 percent to more than 50 percent.
- The percentage income loss was greater for a single man than for a married man in most countries, except Austria, Denmark, Norway, Switzerland, Spain, and the United States.
- Replacement ratios for the majority of countries remained unchanged or fell between 1972 and 1982, but rose markedly in France and Sweden (after 1975), Portugal (during the early 1980's), and less sharply in Italy.
- A special analysis of Finland and the United Kingdom in the same study, using an alternative calculation based on the average earnings of typical unemployed workers while employed, instead of the actual last earnings of the unemployed, found a sharp decline over time in replacement ratios.[22]

Another issue concerns net replacement ratios over longer periods, weighing all forms of replacement income, because unemployment may continue after unemployment insurance benefits are exhausted. An OECD study assessed how the incomes of model families in five countries—Australia, Canada, Germany, the United Kingdom, and the United States (represented by Michigan data only)—changed as the principal earner moved from full-time employment into prolonged unemployment.[23]

For a married couple with the earnings of an average production worker and no spousal income or children, the replacement ratio during the first year of unemployment ranged between 35.9 percent in the United States and 68.5 percent in Canada; for single people, the variation was greater. Replacement ratios varied by family size, and were as high as 90 percent or more in Austria and the United Kingdom for families with two children, whose single-earner family income previously was half the na-

tional average. When average earnings were assumed, the replacement ratios ranged from 41 percent in the United States to 72 percent in Canada.

In most countries, the continuation of the spouse's earnings meant that family income fell less and that the replacement ratio was higher. In addition, the study found that in some countries, replacement ratios tend to decline over time as unemployment insurance benefits end and primary earners move from a nonmeans-tested program to a means-tested program; the value of the contribution of the second earner will tend to decline sharply, given that such earnings limit the means-tested benefit of the unemployed principal earner.

The conclusion was that there is a wide disparity in income replacement during prolonged unemployment. This is so between countries for families of the same type at comparable earnings levels, and between families of different types at a range of earnings levels within the same country. In general, unemployment implies a substantial drop in net income, although there are exceptions. Replacement ratios during long-term unemployment are much lower than those during short-term unemployment and display much more variation.

Do benefits affect work incentives?

If workers lose only a small part of their disposable income when they become unemployed, they may delay their job search, perhaps waiting until their unemployment insurance benefits are about to expire. Unemployment insurance recipients with high replacement ratios may search for a job less actively than they would if they had lower replacement ratios. Finally, the level of replacement income will influence the reservation wage, that is, the wage the unemployed are willing to accept on a new job.

In a cross-national framework, no correlation appears between the level of replacement ratios in a country and the extent or depth of its belief, as expressed in popular, official, and academic opinions, that replacement ratios are too high and act as a work disincentive. In fact, countries with relatively high replacement ratios, as in Scandinavia, may be least vocal on the issue. Moreover, in countries where the issue has been raised, the volume of comment has not responded much to the downward trends in replacement ratios noted by the United Nations Economic Commission for Europe:

> . . . the fact that for the majority of countries considered the replacement ratio has either remained unchanged or has fallen since 1972 suggests that unemployment benefits have had little to do with the increase in unemployment since 1974, and especially with the large increase since 1979.[24]

The adverse effects of unemployment insurance benefits on work incentives appear to concern the English-speaking countries far more than continental Europe. The United States, Great Britain, and Canada provide the bulk of academic contributions on this issue.[25]

Some multicountry studies have found that unemployment insurance benefits deter the search for a job and prolong unemployment.[26] H. Grubel and M. A. Walker assembled studies on 10 countries, of which 7 showed that by lowering the cost of not looking for work, unemployment insurance benefits increased voluntary unemployment. Significant effects were found in the United States, Canada, Ireland, and the United Kingdom, but only limited evidence of induced unemployment was found in France, New Zealand, and Belgium. Germany and Italy showed no evidence of this effect.[27] In Italy, flat-rate unemployment benefits, financed by a payroll tax on employers, are very low and are used less often than an alternative system of benefits for temporary layoffs and short-time working.[28]

Great Britain has translated its academic findings into policy. Earnings-related unemployment insurance benefits were abolished in 1982, leaving only the basic flat-rate benefit. British economists have developed optimal unemployment insurance programs to minimize work disincentives and have suggested reforms, some of which were implemented in the 1970's.[29]

In contrast, discussions and public concern are rarer in the continental European countries, and especially in Scandinavia where replacement rates are relatively high.[30] A recent German analysis contends that unemployment insurance protects the existing wage structure, the skills hierarchy, and working conditions on the job against the adverse effects of unemployment. This social function of unemployment insurance might be regarded less benignly in other countries. Also, reductions of unemployment insurance payments or restrictive definitions strengthen the employers' bargaining position while undermining that of the unions.[31]

Many continental Europeans might agree with an OECD multicountry report that declared:

> . . . [A] small but not negligible amount of additional unemployment may be induced by the level of benefits, but these benefits are intended to raise social welfare, and the fact that people prolong their job search by an extra week or two may well improve the match between their skills and job opportunities and reduce labour turnover in the longer run.[32]

Only a few official representatives who attended the 1982 OECD conference on income support policies mentioned that work disincentives or other distorting effects on the labor market resulted from unemployment insurance benefits, instead pointing to factors other than replacement ratios that affect unemployment duration. They suggested that governments could more accurately test unemployment insurance recipients' willingness to work by taking responsibility for effective placement services and job offers.[33] An earlier review of the academic literature had concluded that, although the phenomenon

of insurance-induced unemployment exists, its importance should not be exaggerated, especially as a factor in the post-1979 rise in unemployment.[34]

Despite increased sophistication in recent economic studies on the work disincentives of unemployment insurance benefits, many questions persist about the concepts, methodology, and data, including the way the replacement ratio is derived and interpreted. For example, replacement ratios based on prior earnings—the usual measure for such studies—may be less relevant to reservation wages than the comparison of disposable resources during unemployment with those on the proposed new job. Hypothetical, rather than actual, income data are faulted as are the limited number of worker or family types studied. The studies need a complete distribution of replacement ratios, rather than averages. While the most appropriate unit for measuring the replacement ratio may be the household, more information is needed about income sharing and the basis upon which work decisions are made within households. For most countries, it is misleading to compute replacement ratios only for recipients of unemployment insurance, omitting the unemployed receiving other income replacement. More insights are needed into the way unemployed persons think about their replacement ratios, their alternatives, and the time frame (weekly, monthly, annual) they use in looking for new employment. Such information might indicate that some theoretical models are inappropriate for predicting behavior. For policy purposes, it is important to know how the replacement ratio changes over time for particular unemployed individuals. Another question that needs to be treated is replacement ratios for the employed population so that insights can be gained into the motivations for remaining in work when high replacement ratios are available for not working. A high replacement ratio may be a commentary on too low a wage while employed.[35]

Other questions about the labor supply also have been addressed. Studies have explored the effects of unemployment insurance on labor force participation and migration rates, and the aggregate unemployment rate. Studies have also inquired into the effects of unemployment insurance on the distribution of unemployment among various age-sex groups, insured and uninsured workers, and registered versus unregistered unemployment.[36]

Another approach to the subject stresses that existing analyses are lopsided in concentrating on the effects of unemployment insurance on the supply of labor. The reduced form equation with deviations from the trend in output used to capture influences on the demand side is considered inappropriate for two reasons. First, the underlying structure of the labor market is not explicitly outlined and, as a result, the structural parameters cannot be retrieved. Second, European academic studies ignore the possible effects of unemployment insurance programs on employment or unemployment via the demand for labor, as well as the potential of demand for confounding the estimation of a labor-supply response.

Specifying a complete model of the labor market and using British data for the period between World Wars I and II, Alan Harrison and Robert A. Hart found that unemployment insurance influenced unemployment via the demand for labor, but did not influence the supply of labor or labor force participation.[37] Hart found that unemployment insurance affects the firm's employment and layoff strategy in European countries as well as in the United States.[38] This challenge to the most common analytic approach to work incentives and unemployment insurance benefits indicates that it will remain a lively issue.

Conclusion

Since 1973, many Western European countries have felt severe pressures on their unemployment insurance systems because of elevated unemployment rates, longer spells of unemployment, and a changed composition of the unemployed from the time when unemployment insurance was introduced. Unlike the United States, many of the European countries experienced a 5- to 10-fold increase in the number of recipients of unemployment insurance benefits from 1973 to 1983.

Expenditures on unemployment insurance rose more sharply in the 1970's and early 1980's than they had in the 1960's; the United States was less affected by cost pressures than the five European countries studied in this article. In these and other industrialized countries, unemployment insurance also accounted for a rising share of gross national product and of total expenditures on all public measures related to unemployment, employment training, and other labor market programs. Unemployment insurance accounted for a rising share of income maintenance program expenditures.

In the 1970's and 1980's, many European countries sought to contain the growth in unemployment insurance costs through tighter eligibility criteria, little or no growth in the amount and duration of unemployment benefits, and restructuring of labor market programs to limit the unemployment insurance share of the various methods used to improve the position of the unemployed. In addition, unemployment insurance funds were augmented by increases in the contribution rates paid by employers and, in some cases, employees, as well as by drawing down reserve funds or by borrowing. Governments gave aid to a limited extent. Financing remains a problem for many unemployment insurance systems, especially in planning for possible recessions.

Despite the financial crunch, some European countries have extended the duration of unemployment benefits for older unemployed workers, easing them into earlier retirement and in the process reducing the labor supply. Programs also have been instituted to utilize unemploy-

ment insurance monies to support employment-related activities of claimants beyond job search.

The proportion of unemployed workers receiving unemployment benefits tended to rise from 1973 to 1975 and then decline through 1983. Various forms of unemployment allowances and local social assistance filled the gap left by a declining role for unemployment insurance. At the same time, most countries reduced the proportion of the unemployed who were not served by any income-replacement program. However, the absolute number of unemployed without any public support tended to increase because of the sheer escalation in the numbers of unemployed workers.

The adequacy of income replacement programs, their relation to previous income and reservation wages, and the impact on incentives to seek and obtain new jobs have been increasingly studied in individual countries and in cross-national perspective. Findings in one large study indicate that there is significant variation in the amount of income loss from country to country and that unemployment insurance benefits were lower than take-home pay from employment over the 1972–82 period. Replacement ratios in a majority of the countries declined from 1972 to 1982. Another study found that the wide disparity in income replacement during prolonged unemployment affected families of the same type at comparable earnings levels among countries, as well as families of different types at a range of earnings within a country. In general, unemployment implies a substantial drop in net family income, especially in long-term unemployment, although there are exceptions.

These exceptions, whose income during unemployment is higher, the same as, or only slightly lower than their last earnings or reservation wage, form the basis for the concern about the disincentives to work inherent in unemployment insurance; the concern is much stronger in the English-speaking industrial countries than in others. Many questions remain about the concepts, methodology, data, and conclusions in studies of the work disincentives of unemployment insurance.

Others point to the need to study additional aspects of the impact of unemployment insurance—on the labor demand, labor force participation rates, migration rates, the aggregate unemployment rate, unemployment rates of various age-sex groups, insured versus uninsured unemployed workers, and registered versus unregistered unemployed workers. It is fair to say that the last word on work incentives has not been said. □

——*FOOTNOTES*——

[1] *High Unemployment: A Challenge for Income Support Policies* (Paris, Organization for Economic Cooperation and Development, 1984), pp. 83–86.

[2] *High Unemployment*, pp. 193–94.

[3] "Social Expenditure: Erosion or Evolution?" *OECD Observer*, January 1984, pp. 3–6.

[4] French unemployment insurance expenditures as a share of gross domestic product showed the strongest growth, with considerable increases in Germany and the United Kingdom. The United States, Canada, Italy, and Japan, however, showed decreases in the share of gross domestic product going to unemployment insurance benefits in the 1965–70 period. Only small changes occurred in the United States, Italy, and Japan in subsequent periods, but Canada tripled its percentage from 1965–70 to 1975–80. Canada ranked first in the share of gross domestic product going to unemployment insurance benefits in each period, but the other rankings shifted. In 1970–75, the percentages ranged from 1.4 to 0.18 among the seven countries, with the United States second, followed by the United Kingdom, Japan, Germany, Italy, and France. During the 1975–80 period, when the range was 1.74 percent to 0.25 percent, France moved to third place after Canada and the United States, with Germany followed by the United Kingdom, Japan, and Italy. See *High Unemployment*, pp. 193–94.

[5] Research on Sweden suggests that active labor market programs are more fiscally sound policy than passive programs. The rise in the unemployment insurance share of Sweden's total labor market expenditures in 1982 reflects an increase in unemployment insurance costs as well as a new emphasis on the less expensive forms of active labor market policy, for example, placement rather than public works or public service jobs. See Inga Persson Tanimura, *On the Costs of Unemployment in Sweden* (Berlin, International Institute of Management, 1979), Discussion Paper IIM/LMP 79–16; Jan Johannesson, "Financing Active and Passive Labour Market Policy in Sweden" (Stockholm, unpublished paper, 1984); and Günther Schmid, *The Financing of Labour Market Policy in Sweden* (Berlin, International Institute of Management, 1985).

[6] *High Unemployment*, pp. 193–94.

[7] "Social Expenditure," pp. 3–6.

[8] *High Unemployment*, pp. 193–204.

[9] For example, see "Unemployment Compensation and Related Employment Policy Measures in Germany" (unpublished OECD paper, 1976), pp. 11–27; and Gert Bruche and Bernd Reissert, *The Financing of Labour Market Policy in the Federal Republic of Germany* (Berlin, International Institute of Management, 1985), pp. 12–15, table 2.

[10] Gert Bruche, *The Financing of Labour Market Policy in France* (Berlin, International Institute of Management, 1984), Discussion Paper IIM/LMP 84–21b; Bernd Reissert, *The Financing of Labour Market Policy in Great Britain* (Berlin, International Institute of Management, 1984), Discussion Paper IIM/LMP 84–21c; *High Unemployment*; "Percentage of Jobless Lacking Benefits is Highest in 30 years," *The New York Times*, Nov. 12, 1987; and "GAO Warns on Jobless Insurance Reserves," *The New York Times*, Sept. 27, 1988.

[11] Gert Bruche, *The Financing of Labour Market Policy in Austria* (Berlin, International Institute of Management, 1984), Discussion Paper IIM/LMP 84–21d; Bruche, *The Financing of Labour Market Policy in France*; Bruche and Reissert, *The Financing of Labour Market Policy in the Federal Republic of Germany*; Bernd Reissert, *The Financing of Labour Market Policy in the USA* (Berlin, International Institute of Management, 1985); and Eskil Wadensjö, *The Financial Effects of Unemployment and Labour Market Policy Programs for Public Authorities in Sweden* (Berlin, International Institute of Management, 1985).

[12] In most countries, administrative costs are included in the base for calculating the government's share. The comparability of the data in table 4 is limited. Data for Austria and Germany refer to the government's subsidy to all labor market programs of the Austrian Unemployment Insurance Fund and the German Federal Employment Institute, while French data include government support of income maintenance for the unemployed other than conventional unemployment insurance programs. British government subsidies support all social insurance programs, but rising unemployment largely accounts for the increased

government share in the budget years 1973–74 and 1980–81; the drop in the next three budget years reflects the increased share of employer and employee contributions in total intake. Noncomparability of the data does not fully explain the extent of government sharing in unemployment insurance expenditures. Germany probably has had no Federal subsidy to the Federal Employment Institute for unemployment insurance, because unemployment insurance benefits are a first charge on the Federal Employment Institute Fund, taking precedence over discretionary expenditures or active labor market measures. In the few years when the Federal Employment Institute required a Federal subsidy, it was not necessarily used to cover expenditures on unemployment insurance. The same would be the case in Austria. If the French data concerned only the government share for conventional unemployment insurance benefits, the proportion would probably drop to near the British or Austrian level.

[13]As a percentage of the civilian labor force, those covered by unemployment insurance programs increased from 38.2 percent in 1960 to 59.4 percent in 1975 in France; from 38.0 percent in 1957 to 47.7 percent around 1980 in Italy; from 50.2 percent in 1950 to 87.7 percent in 1975 in Canada; and from 55.2 percent in 1950 to 89.5 percent around 1980 in the United States. In the United Kingdom, the coverage rate decreased from 88.9 percent in 1950 to 73.8 percent in 1974. See *High Unemployment*, p. 28.

[14]British unemployment insurance recipients constituted 39 percent of the unemployed in 1973, but reached highs of nearly 50 percent in 1975 and again in 1980, and then fell to 31 percent in 1983. Means-tested supplementary benefits took up most of the slack. From 1973 to 1976, about one-third of the unemployed received supplementary benefits, rising to more than two-fifths at the end of the decade and more than half in 1982 and 1983. See Reissert, *The Financing of Labour Market Policy in Great Britain*, table 1.

[15]M. White, *Long Term Unemployment and Labour Markets* (London, Policy Studies Institute, 1983), Publication No. 622; and *High Unemployment*, pp. 121–33.

[16]Bruche and Reissert, *The Financing of Labour Market Policy in the Federal Republic of Germany*, p. 82, table 2.

[17]Between 1982 and 1983, three cities in the Ruhr reported a 70-percent increase in unemployed recipients of local public assistance. By 1983, 7 percent of the total expenditure was borne locally. Bruche and Reissert, *Financing of Labour Market Policy in the Federal Republic of Germany*, p. 102, table 14.

[18]Reissert, *The Financing of Labour Market Policy in Great Britain*, table 1.

[19]Bruche, *The Financing of Labour Market Policy in Austria*, table 3.

[20]Anders Björklund and Bertil Holmlund, *Arbetslöshetersättningen i Sverige-motiv, regler och effekter* [*Unemployment Programs in Sweden.*] (Stockholm, Publication No. 151, Industriens Utredningsinstitut, 1983), table 3.

[21]Schmid, *Financing Labour Market Policy in Sweden*, pp. 10, 19; and Wadensjö, *Financial Effects of Unemployment and Labour Market Programs*, Sweden, table 3.

[22]United Nations, *Economic Bulletin for Europe* (New York, Pergamon Press, September 1983), pp. 289–306.

[23]See *L'Indemnisation du chômage en France et a l'Etranger* [*Unemployment Compensation in France and Abroad.*] (Paris, Centre d'Etude des Revenus et des Couts, 1982), Document No. 62; *Employment Outlook* (Paris, Organization for Economic Cooperation and Development, September 1984), pp. 93–96; and *High Unemployment*, pp. 98–120.

[24]*Economic Bulletin for Europe*, September 1983, pp. 295.

[25]For British and Canadian examples, see A. B. Atkinson, "Unemployment Benefits and Incentives," in J. Creedy, ed., *Economics of Unemployment in Great Britain* (London, Butterworth, 1981); A. B. Atkinson and others, *Unemployment Benefit Duration and Incentives: How Robust is the Evidence?* (London, London School of Economics, 1982); D. K. Benjamin and L. A. Kochin, "Searching for an Explanation of Unemployment in Inter-war Britain," *Journal of Political Economy*, June 1979; A.W. Dilnot and C.W. Morris, "Private Costs and Benefits of Unemployment: Measuring Replacement Rates," *Oxford Economic Papers*, November 1983, supplement; S. F. Kaliski, "Real and Insurance-Induced Unemployment in Canada," *Canadian Journal of Economics*, 1975; S. F. Kaliski, "Unemployment and Unemployment Insurance: Testing Some Corollaries," *Canadian Journal of Economics*, 1976; C. Green and J. M. Cousineau, *Unemployment in Canada: The Impact of Unemployment Insurance* (Ottawa, Economic Council of Canada, 1976); H. Grubel and M. A. Walker, eds., *Unemployment Benefits: Global Evidence of Its Effects on Unemployment* (Vancouver, BC, The Fraser Institute, 1978); R. Layard and S. J. Nickell, "The Causes of British Unemployment," *National Institute Economic Review*, October 1985; D. R. Maki and Z. A. Spindler, "The Effect of Unemployment Compensation on the Rate of Unemployment in Great Britain," *Oxford Economic Papers*, December 1975; W. Narendranathan, S. J. Nickell, and J. Stern, *Unemployment Benefits Revisited* (London, London School of Economics, 1983); S. J. Nickell, "The Effects of Unemployment and Related Benefits on the Duration of Unemployment," *Economic Journal*, March 1979; Z. A. Spindler and D. R. Maki, "More on the Effects of Unemployment Compensation on the Rate of Unemployment in Great Britain," *Oxford Economic Papers*, 1978.

[26]B. M. Walsh, *Unemployment Insurance and the Labour Market: A Review of Research Relating to Policy* (Paris, Organization for Economic Cooperation and Development, 1981).

[27]Grubel and Walker, *Unemployment Benefits.*

[28]"International: Unemployment Benefits in Twelve Countries," *European Industrial Relations Review*, October 1982, p. 12.

[29]The United Kingdom and Ireland set limits on replacement ratios at 85 percent; Canada reduced the rate of benefit; and Australia tightened eligibility criteria, widened the definitions of suitable jobs, and required more frequent registration by the unemployed. Some countries introduced taxation of unemployment insurance benefits, but government financial stringency played a role, along with the aim of reducing work disincentives. See Walsh, *Unemployment Insurance and the Labour Market*; Richard Disney and David Metcalf, "Financing Labour Market Policy in Great Britain" (Canterbury, England, University of Kent, unpublished).

[30]Björklund and Holmlund, *Unemployment Insurance and the Labour Market*, p. 108ff.

[31]Bruche and Reissert, *The Financing of Labour Market Policy in the Federal Republic of Germany*, p. 180.

[32]*Unemployment Compensation and Related Employment Policy Measures* (Paris, Organization for Economic Cooperation and Development, 1979).

[33]*High Unemployment*, pp. 14, 81, 87–89, 95, 125, and 134–36.

[34]Walsh, *Unemployment Insurance and the Labor Market*, p. 61.

[35]*High Unemployment*, pp. 121–35.

[36]Walsh, *Unemployment Insurance and the Labour Market*, p. 61.

[37]Alan Harrison and Robert A. Hart, *A Labour-Market Model of Unemployment Insurance* (Berlin, International Institute of Management 1982), Discussion Paper IIM/LMP 82–19.

[38]Robert A. Hart, *Unemployment Insurance and the Firm's Employment Strategy: A European and United States Comparison* (Berlin, International Institute of Management, 1982), Discussion Paper IIM/LMP 82–11.