How Sweden combats unemployment among young and older workers

Joblessness among the 16- to 24-year-olds and those 45 years and over in Sweden, although low by American standards, worsened during the recessions of the 1970's; government responded with innovative policies to increase job prospects for these groups

HELEN GINSBURG

The Swedish Government Bill of 1966, which forms the basis of labor market guidelines, states that its aim is to "achieve and maintain full, productive and freely chosen employment." Although unemployment only averaged about 2 percent in the 1970's, that goal has not yet been attained for all young people, women, immigrants, older workers, and the disabled. The proportion who are unemployed in these groups is small by American standards, but not by Swedish standards. One of the major challenges of Swedish society, with its strong commitment to full employment, is to provide jobs for these workers. This article discusses some of the policies Sweden uses to contend with unemployment among its young (16 to 24 years) and older (45 years and over) workers.

Causes of youth unemployment

As recently as the mid-1960's, jobs were plentiful for most Swedish youngsters, regardless of whether they had only completed the 9-year comprehensive school (which is compulsory for 7- to 16-year-olds), upper secondary school (which follows), or had graduated from a university.[1]

In the 1970's, job prospects became less promising. Sweden's first recession of the 1970's, starting in 1971, drove the annual unemployment rate up to 2.5 percent and slightly higher for several consecutive years. Youth were hard hit. Since then, unemployment rates of 7 and 8 percent have been common for 16- to 19-year-olds (reaching 9 percent in 1981), as have rates of 3 to 5 percent for 20- to 24-year-olds. (See table 1.) Myriad factors affected the rise of youth employment. For example, apprenticeships practically disappeared and most companies that once provided on-the-job training for youngsters no longer did so because many already received training in the secondary schools. In the 1970's, manufacturing employment stagnated as a result of productivity gains that reduced labor requirements, recessions, structural problems that beset important export industries, and the tendency of Swedish transnational corporations to locate more manufacturing jobs abroad. Thus, many blue-collar jobs that might have been available to youngsters disappeared. Gone, too, were other jobs—such as delivering packages—that once gave some employment in small businesses. Most job creation was in the public sector, but some fast growing areas—for example, hospitals—were often out of bounds for persons under 18 years because they cannot

Helen Ginsburg is Associate Professor of Economics, Brooklyn College, City University of New York. This article is excerpted by permission of the publisher from her forthcoming book, *Full Employment and Public Policy: The United States and Sweden* (Lexington, Mass., Lexington Books, D.C. Heath and Co., copyright 1982, D.C. Heath and Co.).

work at night, drive vehicles, or do other unsuitable work. And in some cases, housewives, who entered the labor force in large numbers, were hired in preference to the young.

In slack labor markets, lack of experience became a more important barrier to employment for young workers, and employers often claimed that wages for youths were too high.[2] Unlike the United States, Sweden has no minimum wage law, but the negotiated contracts that set most wages allow youths to earn less than adults. Partly as a result of the wage solidarity principle of the Swedish Trade Union Confederation (LO), to which most blue-collar workers belong, the youth to adult wage differential narrowed in the 1970's. (The aim of this policy is to reduce wage differentials in accordance with the rule of equal pay for equal work, regardless of the profitability of the firm.) However, the narrowing of the youth to adult differential has been occurring for three decades and some of it reflects the higher average age of young workers resulting from longer schooling. To the extent that this is a factor, subsidies that reduce the cost to the employer of hiring the young have been used in preference to lowering the differential. Swedish unions present no barriers to employment of the young —anyone who is hired is accepted as a member.

Some employers contend that employment security laws caused the youth unemployment problem. However, youth unemployment worsened before the advent of these laws, although employers may now be more reluctant to hire any workers but those perceived as "prime." Interestingly, the law permits hiring for a probationary period if sanctioned by a collective bargaining contract, which usually is the case. Also, many firms had "no hiring" policies in effect at times during the 1970's, especially in the middle of the decade.[3] These policies hurt new labor market entrants. And, with many policies aimed at maintaining employment, recovery from a recession often meant that some additional demand for labor could be met without additional hiring.

In the early 1970's, about 70 percent of Swedish comprehensive school graduates went directly to upper secondary school, and that figure was about 85 percent by the end of the decade.[4] Secondary schools in Sweden are more specialized and more vocationally-oriented than those in the United States. There are more than 20 lines or courses of study that last from 2 to 4 years. Lines are practical or theoretical (academic) and designed to prepare a student for further education, although some higher education is now also open to those who study practical lines.[5] Youngsters from lower socioeconomic backgrounds are more likely to either take shorter, more practical courses and to drop out along the way, or not to enter secondary school at all. Hence, youth unemployment has a class as well as an age dimension. Changes in higher education during the 1970's worsened the relative position of the youngest and least educated workers by increasing the supply of better educated young workers. Unemployment among university graduates led to a substantial decline in enrollment in higher education, which added to the competition in the job market. Some college graduates had to take lower level jobs that they would not have accepted in previous years, including jobs that once had gone to secondary school graduates. These better educated young people were often preferred by employers and this caused a chain reaction that reverberated down the line and ultimately affected even the comprehensive school graduate.[6] Similar competition results from another factor. University applicants with work experience are now given extra credit, making it easier for them to gain entrance. Hence, more students work for a few years before going on to higher education.

Policies to increase job prospects

Policies to combat youth unemployment are wide ranging and include those targeted at youth as well as those targeted at specific kinds of unemployment which disportionately affect young people. General economic policies, needless to say, are particularly important because recessions inevitably hit the young harder than adults.

Role of schools. Within the school system, there are efforts to inform students about the world of work. For example, students visit a variety of work sites in their last years of comprehensive school. In addition, there are vocational guidance officers in all schools, and the

Table 1. National and youth unemployment rates in Sweden, 1963–81

Year	All ages	16- to 19-year-olds			20- to 24-year-olds		
		Total	Men	Women	Total	Men	Women
1963	1.7	3.8	2.9	4.7	2.2	2.1	2.3
1964	1.6	4.4	3.7	5.1	2.0	2.1	1.8
1965	1.2	2.9	1.9	5.1	1.9	1.2	2.9
1966	1.6	3.7	2.7	4.8	2.2	2.0	2.3
1967	2.1	5.2	4.7	5.8	3.2	3.0	3.5
1968	2.2	5.7	5.0	6.5	3.0	3.0	3.0
1969	1.9	4.6	3.8	5.4	2.8	2.6	3.0
1970	1.5	4.3	3.4	4.8	2.2	2.5	2.4
1971	2.5	7.7	7.1	8.4	3.7	3.7	3.8
1972	2.7	8.2	7.8	8.7	4.5	4.2	4.9
1973	2.5	6.8	5.8	8.0	4.4	4.2	4.7
1974	2.0	6.6	5.2	8.1	3.2	2.7	3.8
1975	1.6	5.5	4.2	7.1	2.8	2.1	3.5
1976	1.6	5.5	4.1	7.0	2.7	2.2	3.4
1977	1.8	6.7	5.4	8.1	3.2	2.9	3.5
1978	2.2	7.9	7.1	8.7	4.3	4.3	4.3
1979	2.1	7.4	7.0	7.9	3.7	3.6	3.8
1980[1]	2.0	7.6	6.5	8.8	3.7	3.5	3.9
1981	2.5	9.4	8.2	10.5	4.7	4.8	4.6

[1] Because of a conflict in the labor market, data exclude second quarter.

NOTE: Data are based on Sweden's Central Bureau of Statistics Labor Force Surveys. The unemployment rate is the percentage of the labor force that is unemployed.

Labor Market Board (a tripartite board which carries out labor market policies) provides personnel from its Public Employment Service to talk to secondary school students and at parents' meetings. Also, as part of its broad educational effort, the board prepares printed material and radio and television programs aimed at students.

There is excellent cooperation between the local Labor Market Boards and the Boards of Education. They work together to develop special courses in the adult municipal school system, and in folk high schools (a type of boarding school with no official syllabus or compulsory subject matter and run by local governments, churches, trade unions, temperance societies, and other nonprofit organizations). Labor Market Boards and Boards of Education also cooperate to develop courses in the regular school system and in the more than 50 government-sponsored labor market training centers located throughout Sweden.

Planning councils. Since 1977, there have been planning councils for youth in all municipalities. These are headed by local school authorities and include representatives of other municipal agencies, the Employment Service, labor, and management. Under this arrangement, schools are responsible for maintaining contact for 2 years with all students who leave compulsory school without continuing their education. Until these youths are 18 years of age, they must be guided and advised about jobs or other educational opportunities that may arise, such as special courses or the availability of additional openings in particular lines in the regular school system. The aim is to prevent out-of-work 16- and 17-year-olds from drifting aimlessly on their own.[7]

Occupational stereotyping. Breaking down the stereotyping of jobs by sex is considered very important in the fight against youth unemployment. Young women already in the labor market are encouraged to consider nontraditional jobs and greater efforts are being made within the school system, among employers, within the family, and in the media to stop the stereotyping of occupations.[8]

Monetary support. Cash assistance for those who have never worked or are otherwise ineligible for regular unemployment benefits was introduced in the 1970's with the young and women in mind. Persons who have finished secondary school (or the equivalent) are eligible for these benefits, which pay less than regular unemployment insurance, if they have unsuccessfully sought work for 3 months through the Employment Service. Those who have not completed secondary school and who are at least 16 years old must have worked for at least 5 months. Slightly more than half of all recipients of cash assistance at the end of the 1970's were under 25 years, representing only 30 percent of the unemployed in that age group.[9] However, some may have been receiving regular unemployment benefits. Sweden does not consider unemployment insurance a solution to joblessness among the young; it views such benefits as temporary income until something more substantive can be arranged—a job or training for a job.

Placement efforts. The Employment Service (at which almost all jobs must be listed) helps in the job search and often intensified placement efforts are made for youths. However, if employers demand an experienced worker or a highly skilled worker, there is little the service can do. Telephone follow-ups and even personal visits to job sites by placement officers have occasionally proven helpful in placing young people in jobs.

Relief work. Until the 1970's, there were few young people in labor market training or "relief work" (comparable to Public Service Employment jobs in the United States). With few exceptions, training was reserved for persons 20 years and over. The major thrust of relief work was to help adults in the work force adapt to changing demands for labor. With rising youth unemployment, the proportion of trainees under 25 years rose from 30 percent in 1969 to 38 percent in 1979.[10] In the 1970's, the age limit for relief work was relaxed and about 10 percent of the training slots were taken by teenagers.[11] Youngsters uncertain about their occupational choice were encouraged to try several types of jobs before deciding on further training or more formal education. Programs were developed for those with special problems who were turned off by ordinary schooling: groups of about eight young people were given alternating periods of general education and work—2 weeks of education followed by 6 to 8 weeks of relief work, repeated with different jobs.

The biggest expansion was in relief jobs at regular wages for the young. Between 1970 and 1979, the proportion of persons under age 25 in relief work rose from 4 percent to 68 percent. The expansion was particularly important for young women—83 percent of women, but only 57 percent of men in relief work in 1979 were that young.[12] In the public sector, office work, maintenance and repair work, environmental conservation, and care of children and the elderly were popular, to cite some examples. Private sector employees who hired young people referred by the Employment Service were also able to provide relief work, and received a 75-percent subsidy if these jobs were in addition to their regular recruitment and included some useful training. The hope that employers would offer regular jobs after the 6-month maximum for relief work often did not materialize. Sometimes a succession of relief workers were

taken on for 6 months, and training was sometimes lacking or cursory.

In the case of 16- and 17-year-olds, the government feared that labor market training and relief work would compete with regular schooling and might even induce students to quit school for short-term jobs. Secondary school students in Sweden receive a stipend which, in 1979, was 208 kronor a month (a krona was equivalent to 22 cents in U.S. currencies in 1979), while relief jobs paid from 3,000 to 4,000 kronor a month.

Did this high pay for students lure them away from school and into the temporary jobs? That, along with questions about the reliability of some of the training were major reasons for the policy changes toward 16- and 17-year-olds approved by Parliament in June 1980. The new approach is less costly and possibly that was also a consideration of the government. Both relief work and labor market training were considered inappropriate for youths under 18 years. Now, 16- and 17-year-olds are not eligible for these programs. Instead, they are encouraged to return to secondary school. If they do not wish to do that, they are offered additional vocational education and training within industry or some flexible "sandwich course" arrangement of education and practical work experience, with the responsibility shifted from the Labor Market Board to the educational authorities. The stipend paid is the same as for other secondary school students. The Social Democrats (not in power at the time) opposed ending relief work, contending that to do so would retreat from the Parliament's goal of a "youth guarantee" to insure either training or employment for all out-of-school youth. [13] The success of the new program will surely depend on the adequacy of the training and the ability to attract back into the program students who had become alienated from the educational establishment. Not enough time has elapsed to know the results, but early reports are positive. However, the ability to absorb the young into the labor market in the 1980's will also depend on the state of the economy.

Special protection for older workers

For both men and women in Sweden, unemployment declines steadily with age until it reaches a trough of about 1 percent among 45- to 54-year-olds and then rises to about 2 percent among 55- to 65-year-olds. (See table 2.) Beyond age 65, there appears to be no unemployment, but labor force participation is very low, 14 percent for men and 4 percent for women (1979). Many older workers who lose their jobs slip into retirement, as the pensionable age was lowered to 65 during the 1970's. Although older workers are less likely to lose their jobs, they are out of work longer than those who are younger. This pattern is the same as that in the United States.

Table 2. Unemployment rates in Sweden, by age and sex, 1979–81

Age	Total			Men			Women		
	1979	1980	1981	1979	1980	1981	1979	1980	1981
16–74 years . .	2.1	2.0	2.5	1.9	1.7	2.4	2.3	2.3	2.6
16 to 19 . . .	7.4	7.6	9.4	7.0	6.5	8.2	7.9	8.8	10.5
20 to 24 . . .	3.7	3.7	4.7	3.6	3.5	4.8	3.8	3.9	4.6
25 to 34 . . .	1.9	1.8	2.3	1.8	1.5	2.2	2.1	2.2	2.5
35 to 44 . . .	1.2	1.1	1.4	.9	.9	1.3	1.5	1.4	2.5
45 to 54 . . .	1.0	1.0	1.3	.9	.9	1.4	1.1	1.1	1.3
55 to 64 . . .	2.0	1.6	2.0	1.8	1.6	2.2	2.2	1.6	1.8
65 to 74 . . .	.0	.0	.0	.0	.0	.0	.0	.0	.0

NOTE: These data are based on Sweden's Central Bureau of Statistics, Labor Force Sample Surveys. The unemployement rate is the percentage of the labor force that is unemployed.

The situation of older workers started to deteriorate in the late 1960's and early 1970's, partly because of the demand for higher productivity, the LO contends.[14] During that time, whenever there was a plant closing or cutback in production, most of those who lost their jobs found others. But, even in nonrecession years, a residual group was left without work, usually older workers and the handicapped. The recession of the early 1970's made their plight worse. Many of the laws that protect these workers came after that period, partly in response to these developments in the labor market. Policies towards older workers fall into two main categories: those that seek to maintain employment and those that seek to maintain income when there is no work. (Policies for disabled workers such as subsidized employment and workplace and job redesign also apply to many older workers. These are not discussed in this article.)

Keeping older workers at work

Much of the sweeping labor legislation of the 1970's aimed at increasing the security of all workers. But the vulnerable status of older workers and the handicapped was recognized and they were given special protection. The Security of Employment Act requires prior notice of dismissal and also requires the time of notice to vary with age, reaching a maximum of 6 months for employees older than 45 years.[15] Seniority determines the order of dismissal and that tends to protect older workers. The computation of the length of service for those over 45 years is also governed by more generous rules. And, the Security of Employment Act states that there must be reasonable grounds for dismissal. Illness and reduced work capacity are not generally considered sufficient grounds, unless an employee is "no longer capable of doing work of any significance." In the case of illness, the workers are given disability pensions; if they are unable to carry a full work load, the employer must find less demanding work for them. Thus, there is great job security for older (and disabled) workers whose capacity to do certain work has diminished or who cannot

perform their old jobs but can do other types of work.

The Promotion of Employment Act helps both older and handicapped workers by requiring that the County Labor Market Board be notified before any layoff or plant closing. The employer must, if requested, provide information about the number of employees above a certain age or with diminished work capacity, so that special plans can be made for their reemployment, although these employees are usually retained unless the plant actually shuts down. That act also gives the County Board the day-to-day responsibility of consulting with employers—even when no dismissals are involved—in order to improve the situation of elderly or handicapped workers already within firms and to promote their recruitment.[16] Thus, the primary thrust of policies toward older workers is to prevent their unemployment by maintaining their existing jobs.

Labor market training is not extensively used by the older worker. During the 1979–80 fiscal year, for example, about 15 percent of the unemployed were over 55 years old, but only 2 percent of those in labor market training (excluding inplant training) were in that age group.[17] In most cases, the problem confronting older workers is not lack of skill, but lack of an employer who will hire them. Relocation is not used much either, because older workers have so many ties to a locality and relatively few working years left.

Some older workers are in relief work. Those 45 years and older held about 45 percent of all relief jobs in 1975. But, the large expansion of relief work in the late 1970's was aimed at persons under age 25; as a result, only 13 percent of relief workers were age 45 or older at the beginning of 1979.[18]

Income support

Despite the protection given to older employed workers, unemployment does happen, particularly when plants close. And then, income support plays an important role. Regular unemployment benefits are usually payable for up to 60 weeks, but for persons age 56 to 64, benefits are payable for 90 weeks, if necessary. The Cash Labor Market Assistance, available to those who have exhausted benefits, also varies with age, rising from 30 weeks for persons under age 55, to 60 weeks for those age 55 to 59; for those age 60 and over, and for some structurally unemployed persons, benefits can be paid until age 65, when the normal retirement pension begins.

However, unemployed workers over age 60 often can qualify for a disability pension. The medical test is more lenient for older workers than for younger persons. If a person is considered permanently unemployed, there is no medical test at all, if he or she has exhausted regular benefits or has received cash labor market support for 90 weeks. Liberalization in granting disability pensions resulted from concern of the blue-collar workers' union for older workers who, at the end of the 1960's, began to encounter increasing difficulties in the labor market. Statutory amendments were passed in the early 1970's to change the rules that govern eligibility for disability pensions. It is estimated that a worker earning the average wage receives about 88 percent of prior after-tax income from a government disability pension and, for most workers, there is also a union-negotiated disability pension.[19] So, older workers who leave the labor market in this way maintain their living standards.

While there is much talk in the United States about increasing the age of eligibility for full social security retirement benefits from 65 to 68, Sweden has been going in the opposite direction. In 1976, the pensionable age for full benefits was lowered from 67 to 65, and reduced benefits can be received at age 60. Unlike an American worker, a jobless Swedish worker is not forced to take early retirement with its permanently reduced benefits, because there are no alternative sources of income. The disability pension can maintain income until age 65, when the old-age pension would start.

The most interesting option for an employed worker who wishes to gradually reduce working prior to full retirement is the partial pension system that was introduced in 1976. Partial pensions are geared to part-time work. The rule is that working hours must be reduced by at least 5 hours a week and, after the reduction, must still be at least 17 hours weekly. The worker must also have been employed for at least 10 years after the age of 45. (Because of these rules, the partial pension has been used disproportionately by men.) The partial pension pays 50 percent of the loss of earnings that result from the reduction in hours. However, because of Sweden's high marginal tax rates, the actual disposable income from the combined partial pension *and* part-time earnings is substantial. Unlike early retirement benefits, a partial pension does not result in a smaller pension at age 65. At age 65 a worker can receive a full old-age pension without any retirement test. It is also possible to postpone collecting all or part of the old-age pension. If that is done, the pension will be larger when payments finally start.

The partial pension plan is extremely popular. It provides a bridge between work and full-time retirement. Many people who retired faced a shock—an abrupt change in their way of life after a lifetime of work. They missed their friends and social contacts at work. Doctors and psychologists supported unions in their desire to enable a more gradual transition into retirement. The main argument against disability pensions for the older unemployed worker in Sweden is not based on economics, but is based on the feeling that such pensions lead to social isolation and a self-identification as disabled.[20] The partial pension avoids these problems and also is

available to workers not threatened by unemployment. Partial pensions also enable some workers who might not be able to function on a full-time basis to avoid disability pensions. The partial pension increases the individual's freedom of choice about the age and extent of retirement. It does not, however, resolve the problem of those older workers whose jobs are eliminated by a plant closing. One cannot work part time at a nonexistent job. Nor does it resolve the problems of older jobless workers who still have not reached the age of 60. □

FOOTNOTES

ACKNOWLEDGMENTS: This research, part of a larger study of Swedish labor market policies for full employment, was supported, in part, by a Swedish Bicentennial Fund Travel/Study Grant. The author is grateful to Marna Feldt of the Swedish Information Service in New York for her many years of help and to Charlotte Ganslandt of the Swedish Institute in Stockholm for arranging numerous interviews. Special thanks are due to the following persons for providing information about youth and older workers. In Stockholm: Göran Borg, then with the Swedish Trade Union Confederation—LO (now with the Swedish Metalworkers Union); Lars Ettarp, Ministry of Labor; Ingrid Jonshagen, National Labor Market Board (AMS); Gunnar Lindström, Swedish Employers' Association (SAF): Sten Markusson, Swedish Confederation of Professional Association (SACO/SR); Marianne Pettersson, The Center for Working Life; Bertil Rehnberg, Director General, National Labor Market Board; and Anders Reuterswärd, Ministry of Labor. In Malmö: Björn Pettersson, Director, and Ronny Nilsson, Planning Department, Malmöhus County Labor Market Board; Carl-Axel Johansson, Vocational Guidance Coordinator, Public Employment Service; Sylvia Hyrenium, Immigration Officer, Malmöhus County; and all the members of the "Youth Guarantee" Program. In Lund: Eskil Wadensjö, then with Lund University (now with the Swedish Institute for Social Research, Stockholm). In Östersund: Gert Korths-Aspergren, Director, and Kjell Risberg, Jämtland County Labor Market Board. In Sundsvall: Åke Dahlberg, Chairperson, Employment Committee, Commune of Sundsvall and Curt Landén, Director, Public Employment Service. The author also wishes to thank the following persons for helpful comments on an earlier version of this article: Marianne Pettersson, the Center for Working Life; Anne Marie Qvarfort, Swedish Ministry of Labor; Berit Rollén, National Labor Market Board of Sweden; Eskil Wadensjö, Swedish Institute for Social Research; and Fredrik Winter, National Labor Market Board of Sweden. Thanks also to Sune Åhlen of the Swedish Embassy for his helpfulness.

[1] Eva-Lena Ahlqvist, "Youth Unemployment in Sweden," *Current Sweden*, No. 216, April 1979, p. 3.

[2] This paragraph draws heavily from Gösta Rehn and K. Helveg Peterson, *Education and Youth Employment in Sweden and Denmark*, a Study Prepared for the Carnegie Council on Higher Education (Carnegie Council on Policy Studies in Higher Education, 1980), pp. 75–77. This comprehensive study of Swedish youth deals with all aspects of behavior, attitudes, education, employment, and unemployment.

[3] Rehn, p. 74.

[4] "The Integrated Upper Secondary School in Sweden" (Stockholm, The National Board of Education, 1976), p. 1, and "Primary and Secondary Education in Sweden," Fact Sheets on Sweden (Stockholm, the Swedish Institute, 1981), p. 4.

[5] *Ibid.*, pp. 3–4.

[6] Ahlqvist, p. 3.

[7] See, for instance, *Unemployment Among Young People in Sweden—Measures and Experience* (Solna, Sweden, National Labor Market Board, 1979), p. 3.

[8] Sweden, National Committee on Equality Between Men and Women, *Step by Step: National Plan of Action for Equality*, SOU 1979–56 (Stockholm, Liber Förlag, 1979), ch. 2.

[9] Ahlqvist, p. 7.

[10] Rehn, p. 92.

[11] *Ibid.* Derived from data on p. 91.

[12] Sweden, National Central Bureau of Statistics, *Arbetsmarknadsstatistisk årsbok 1979–1980* (Stockholm, Liber Förlag, 1980), table 2.14.6, p. 179.

[13] Rehn, p. 90.

[14] Swedish Trade Union Confederation-LO, *Report on Labor Market Policy* (Stockholm, Swedish Trade Union Confederation-LO, 1975), pp. 15–17. See also, the Swedish Government's Commission on Long-Term Employment Policy, *Employment for Handicapped Persons: A Summary of the Commission's Report, January 1978 and of Five Research Projects* (Stockholm, Ministry of Labor, 1978), p. 3.

[15] For the detailed contents of this act see, Ministry of Labor, *Swedish Laws on Security of Employment, Status of Shop Stewards, Litigation in Labour Disputes* (Stockholm, Ministry of Labor, 1977), pp. 1–2 and 6–20.

[16] *Ibid.*, pp. 2–3 and 21–24.

[17] Derived from Central Bureau of Statistics, Labor Force Sample Survey, unpublished data; and *Swedish Employment Policy, 1979/80, Annual Report*, Reprint (Solna, Sweden, The National Labor Market Board, 1979), p. 16.

[18] *Swedish Employment Policy 1978/79, Annual Report*, Reprint (Solna, The National Labor Market Board, 1979). Derived from data on p. 23.

[19] Eskil Wadensjö, "Disability Policy in Sweden: The Swedish Contribution to the Cross National Disability Study" (Stöckholm, Swedish Institute for Social Research, March 1981), Part 4, table 4.7, p. 22. This study will be part of Victor Halberstadt and Robert Haveman, eds., *The Economics of Disability: A Cross National Perspective* (tentative title), forthcoming. Wadensjö estimates that a worker earning half the average earnings receives 117 percent of prior after-tax income and one earning twice the average receives 66 percent.

[20] *Ibid.*, part 5, p. 3.