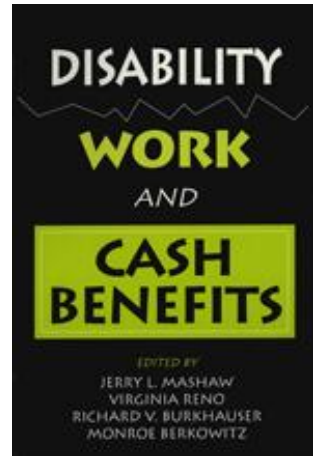

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European Experiences with Disability Policy

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The general aim of public policies toward disability is to share and to contain the associated social cost. Each country develops its own response with respect to disability. National policies typically are a mixture of three main objectives: (1) to ease the burden of impairments and the loss of earning capacity, which Haveman, Halberstadt, and Burkhauser (1984) call the *ameliorative* policy response; (2) to recover the earning capacity and the ability to perform normal social functions, so-called *corrective* policies; and (3) to prevent the occurrence of health impairments and to promote swift restoration of capacities if impairments prove to be irreversible, e.g., by adapting job demands or job conditions, which is the *preventive* approach.

In this paper, we discuss European experiences with disability policy over the last decades and current trends. We do so by presenting four typical national policies, from the Netherlands, Sweden, West Germany, and the United Kingdom. Each of these puts different emphases on compensation levels, on the linkage of ameliorative with corrective approaches, and on employment opportunities for disabled workers.¹ We start by tracking the disability records of the United States in comparison with the other four countries indicated and illustrate how different policy mixtures result in different outcomes. Next, we discuss how these various policy outcomes relate to cross-national approaches to disability insurance and to rehabilitation. We then focus on incentive structures as defined by the design and administration of disability programs and by their broader socioeconomic and policy environment. In the concluding section, we draw some lessons from

other nations' experiences that may be relevant for redesigning U.S. disability policy.

Cross-National Comparison of Disability Records

Over the past two decades, virtually all Organization for Economic Cooperation and Development (OECD) countries have been confronted with excess supplies of labor resulting from demographics (the influx of baby boomers) and changed tastes for market work (the increasing participation of married women). Most of these countries have seen substantial declines in older male labor force participation as well as considerable increases in the availability and generosity of disability, and other early retirement, benefits. The concurrence of these tendencies suggests that disability programs have been generally used to achieve more general social policy goals, such as low (youth) unemployment.

In their comprehensive cross-national study of disability policy, Haveman, Halberstadt, and Burkhauser (1984) attribute the generally observed growth of disability income support to faltering economic growth. According to them, it made older workers with more or less serious impairments targets for layoffs while reducing their opportunities to obtain a job if out of work. In response, eligibility criteria for disability were relaxed. The disability option was attractive to older workers, as benefit payments became increasingly more adequate, and relatively little stigma was attached to the receipt of disability transfer income. Employers, likewise, found this development attractive, as it made release of long-term older, low-skilled, or impaired workers less difficult. With large cohorts of better-educated youths and women entering the labor market, replacement of older workers was not difficult. Disability income support programs became an instrument to encourage early retirement.

To the extent that this scenario holds for most Western countries, disability policy, at least in the 1970s, has emphasized income support rather than rehabilitation. A closer comparison of five countries (table 1), however, reveals that the age-specific trends in the number of disability beneficiaries show significant cross-national differences. To

contain unemployment, the Netherlands clearly chose the income maintenance option, even for those under 45. Sweden and Germany, on the other hand, largely opted for employment security for ailing workers under 60 and restoration of their earning capacities where possible. Part of the German excess labor supply was captured by relaxing benefit eligibility criteria, both for disabled and able-bodied workers over 60. The United States initially showed a tendency towards the income maintenance option but started to tighten eligibility standards at the end of the 1970s. Considering the full 1970-1990 period, the United States accommodated an excess supply of labor by letting wage rates drop and allowing market forces to create low-productivity employment for impaired workers. After 1990, however, disability transfer reciprocity shows a steep increase (for a short description, see U.S. General Accounting Office 1994).

Like the United States, Germany introduced stricter eligibility standards in 1985, which brought the relative size of the 1990 beneficiary volume back to the low level that had prevailed in the 1970s. Note also that the German prevalence rates for younger workers were relatively low over the whole period, and lower in 1990 than in 1970. This suggests that by making older workers redundant, younger workers' employment could be secured. Finally, the United Kingdom has seen disability growth in all age brackets but, contrary to the other countries, only after 1980.

The data in table 1 highlight the unique position of the Netherlands. For those younger than 60, disability prevalence rates have been about three times as high as in other countries (Aarts, Burkhauser, and de Jong 1996). Furthermore, the average Dutch beneficiary age is 49, which compares to 57 in Sweden and Germany. As one can plausibly assume that the Dutch do not have significantly poorer health status and job conditions than other European populations, the difference must be sought in the way disability benefits are being allocated.

Table 1 also shows that, despite having a disability beneficiary volume which is two-to-three times as large as that in comparable welfare states, the Dutch unemployment rate is at about the OECD average level. As a consequence, the employment rate, i.e., employed persons as a percentage of the working-age population, is low, especially among older workers (see OECD 1993). These data on the Dutch labor market suggest that other comparable countries have a stronger capacity to reintegrate, or keep, less productive individuals in the workforce.

Table 1. Disability Transfer Recipients per Thousand Active Labor Force Participants by Age, Unemployment Rates, and Older Male Labor Force Participation Rates, in Five OECD Countries, 1970-1994

	1970	1975	1980	1985	1990	1994
15-44 years						
The Netherlands	17	32	57	58	62	66
United States	11	17	16	20	23	38
United Kingdom	8	9	11	20	23	
Germany ^a	7	6	7	8	5	5 ^b
Sweden	18	20	19	20	21	27
45-59 years						
The Netherlands	113	179	294	305	339	289
United States	33	68	83	71	72	96
United Kingdom	48	46	51	97	119	
Germany ^a	75	64	84	103	75	80 ^b
Sweden	66	95	99	108	116	143
60-64 years						
The Netherlands	299	437	1,033	1,283	1,987	1,911
United States	154	265	285	254	250	294
United Kingdom	219	195	209	357	413	
Germany ^a	419	688	1,348	1,291	1,109	1,064 ^b
Sweden	229	382	382	512	577	658
Total population, 15-64 years						
The Netherlands	55	84	138	142	152	151
United States	27	42	41	41	43	62
United Kingdom	29 ^b	28	31	56	68 ^d	
Germany ^a	51	54	59	72	55	54 ^b
Sweden	49	67	68	74	78	97
Unemployment rate (percent)						
The Netherlands	1.0	5.2	6.0	10.6	7.5	7.2
United States	4.8	8.3	7.0	7.1	5.4	6.0
United Kingdom	2.9 ^c	3.9	6.4	11.2	6.8	9.6
Germany ^a	0.6	3.6	2.9	7.1	4.8	6.9

Table 1. Disability Transfer Recipients per Thousand Active Labor Force Participants by Age, Unemployment Rates, and Older Male Labor Force Participation Rates, in Five OECD Countries, 1970-1994

	1970	1975	1980	1985	1990	1994
Sweden	1.5	1.6	2.0	2.8	1.5	8.0
Labor force participation rates (x 100) for males, 55-64						
The Netherlands	81	72	63	47	46	43
United States	81	76	72	68	68	67
United Kingdom	88 ^c	88	82	69	68	66
Germany ^a	80	70	67	60	58	50
Sweden	85	82	79	76	75	73

SOURCE: United Kingdom age-specific data are derived from Lonsdale (1993) and *Employment Gazette* (several issues), U K disability beneficiary data for 1993 or 1994 were not available.; other data are updates from Aarts, Burkhauser, and de Jong (1992).

a German data refer to the former Federal Republic.

b Figure refers to 1993

c Figure refers to 1971

d. Figure refers to 1991.

Table 2 provides data on “active,” or corrective (vocational rehabilitation, work for the disabled), versus “passive,” or ameliorative (disability benefits), program expenditures. Of the countries listed, Sweden and Holland devote by far the largest shares of their national resources to both types of disability policies. In these countries, the largest parts of redeployment budgets are used to create jobs outside of the market. While in Sweden only a minority of this budget is allocated to sheltered workshops (see “Cross-National Comparison of Rehabilitation Policies” on p. 141), in Holland, the entire budget is used to keep disabled workers who want jobs out of regular employment. Recent changes in Dutch disability insurance legislation seek to reduce disability benefit dependency and to keep people with disabilities in paid work. The Dutch figures for 1993 suggest that these amendments were unsuccessful; however, the disability volume decreased in 1994, for the first time in an almost 30-year history of relentless growth.

The low U.S. spending on disability as a percentage of Gross Domestic Product suggests that this section relies more than do Western European countries on policies that induce impaired persons to

seek private solutions for their employment problems. Germany stands out as a country that emphasizes rehabilitation and spends a moderate proportion on cash benefits, mainly on older workers.

The costs involved with private solutions to the employment problems faced by the disabled depend on regulations such as employment quotas, job protection, and equal opportunity legislation. These types of costs are mainly borne by the employer. Moreover, countries with stringent award policies and low benefit levels shift a larger part of the social cost of disability to the household budgets of people with disabilities. National policies, therefore, not only determine the level of the total, social cost of disability, but also the way in which this cost is shared between the private and public sectors. Countries with comparatively tight budgets for cash benefits are likely to have relatively low social costs, e.g., efficiency losses, and a relatively large share of private costs (to employers and households).

Table 2. Public Expenditures on Labor Market Measures for the Disabled and on Cash Benefits, as a Percentage of GDP, 1991

	Vocational rehabilitation	Work for the disabled	Disability benefits
	(Percent of GDP)		
F.R. Germany	0.13	0.09	2.0
United Kingdom	0.01	0.02	1.9
United States	0.05	a	0.7
Sweden	0.10	0.68	3.3
Netherlands	a	0.64	4.6

SOURCE: OECD (1992, 1993), *Sociale Nota* (1993), and authors' calculations

a Less than 0.01 percent.

Cross-National Comparison of Disability Benefit Policies

In this section, we describe several aspects of disability policies as elements of a broader set of income maintenance and labor market programs. We start with an outline of common features of selected social

security systems and their divergent underlying philosophies. Specific approaches toward disabled citizens are reflected primarily by differences in the accessibility, generosity, and administration of disability transfer programs. The main characteristics of such programs will be discussed and are summarized in an appendix table. Also important is the broader institutional setting, in which the availability of alternative transfers and the scope of rehabilitation and redeployment programs are crucial elements. At the beginning, and at the end of this section, we therefore devote a few paragraphs to more general aspects of social policy.

Common Features: Social Insurance and Welfare Provisions

European social security systems include both social insurance and social assistance (welfare) programs. Social insurance flows from the vision of Bismark, the German politician who, in the second half of the 19th century, introduced the first legally established insurance funds to cover work injuries. Other types of social insurance, covering wage loss due to temporary sickness, nonwork-related invalidity, old age, and unemployment, followed.

Welfare programs germinated from ideas in the Atlantic Charter, drafted by Churchill and Roosevelt in 1941. This document offered a blueprint for the postwar Keynesian welfare state, which rested on the twin principles of “freedom from want” and “freedom from idleness.” For the United Kingdom, this blueprint was elaborated by Beveridge, who proposed a national safety net to protect every citizen against poverty.

Both types of programs are based on the principle of solidarity and on its legal counterpart, the constitutionally established responsibility of the state to protect its residents from poverty. This goal is achieved by two provisions: wage-replacement and minimum income guarantees. Wage-replacement is based on mutual, and intergenerational, solidarity among employees to protect their acquired standards of living. Wage-replacing schemes consist of social insurance covering the loss of earnings due to old age, unemployment, temporary sickness, or permanent disability. Social insurance expenditures are financed by compulsory contributions, and the premiums are determined under a pay-as-you-go system.

Social assistance programs safeguard the subsistence levels of all residents by offering flat-rate, means-tested transfers financed by general revenue and administered by municipalities or local agencies. Statutory, or collectively bargained, minimum wages are intended to protect the livelihood of those who are employed.

Finally, in the European welfare states people have broad access to health care through combinations of public, tax-funded programs, social insurance, and/or regulated private markets. Such arrangements are of prime interest for people with disabilities.

Comparison of these general features of European welfare states with the United States reveals four major differences. First, the United States has no universal safety net provision for those, working or non-working, below the poverty line. Second, contrary to European systems, temporary sickness is not covered by a statutory sick pay plan that encompasses all those in paid employment. Third, Americans are not universally (or federally) insured against loss of earnings due to unemployment. Fourth, despite the existence of two public, federal programs that cover health costs for target groups (Medicare and Medicaid), universal coverage is not available.

Underlying Philosophies

The common features of European social security systems only indicate the broad principles on which they are based. However, as the data in the two preceding tables suggest, the countries surveyed here differ significantly in their treatment of people with disabilities. These approaches are related to varying perspectives on the disabled and translate into cross-national differences in disability policies and policy outcomes.

Considering the 1970-1990 period, Holland is an exceptional case by its emphasis on “freedom from want” at the expense of “freedom from idleness,” which is the overriding principle in Sweden, the United Kingdom, and Germany. Until 1990, when the Swedish economy slipped into its deepest crisis since World War II, the Swedes gave priority to vocational rehabilitation and redeployment of the disabled, mostly through public sector work programs. Since then, job programs have been cut, and unemployment has soared. Nevertheless, swift rehabilitation is still a major goal. Sweden also stresses moderation of

income differentials so that both benefit replacement rates and public sector wages are comparatively high and independent of job performance.

Despite sharp differences in disability policy and records, Holland and Sweden share the economic problems attributable to a wasteful welfare state. Both countries are now reevaluating their social systems, to strike more of a balance between equity and efficiency. One of the focal points of this process is the incentive structure in which relevant parties (covered workers, employers, program administrators) operate (see the section entitled “The Importance of Incentive Structures”).

In comparison to those in Holland and Sweden, the German system appears to be more manageable. *Rehabilitation bevor Renten* (rehabilitation before pensions) is the often-quoted leading principle of German disability policy and of social policy in general. It implies a public commitment to give priority to preventive and corrective policy responses. Strict admission procedures, mandatory rehabilitation, a quota for employers to provide (market) jobs for the disabled, and a separate disabled worker status in employment are the main instruments to support vocational rehabilitation.

Finally, the United Kingdom contains its disability budget mainly by keeping benefit levels low. Vocational rehabilitation is supported by a set of instruments similar to that in Germany. However, these tools are less effective, as the involvement of employers in shaping and administering social insurance programs is weaker than on the European continent, where the concept of a “social partnership” between labor and management has strong traditional roots and pervades the institutional framework in which the labor market operates.

Accessibility I: Coverage²

In European welfare states, all employees are covered by social insurance against the risk of wage loss due to temporary sickness or permanent disablement. Sick pay usually covers all health contingencies, whether objectively assessable or not. If the incapacity has a work-related cause, a separate work injury program may replace wage loss. European work injury plans are similar to the U.S. workers’ compensation program, both in design and origin. Work injury programs were the first form of social insurance in all early market economies.

As a consequence of the Industrial Revolution, a large number of individuals became involved in hazardous jobs. Simultaneously, tort law evolved such that employers were increasingly found liable for the financial consequences of job-related diseases and injuries. These parallel trends spurred a common interest among labor and firms in coverage of the financial risks of work injury. As private insurance markets were unable to provide such coverage, this common interest created a broad political platform for the implementation of statutory social insurance plans.

In almost all welfare states, coverage of work injury and related risks is compulsory for private employment. One of the exceptions is Holland, which abolished the distinction between work-related and other causes of incapacity under its disability insurance scheme in 1967. In the United States, small firms, and firms in certain states, may be exempted from mandated coverage.³

Most disability transfer programs covering social risks, i.e., non-work-related contingencies, consist of an employment-related, social insurance scheme, like the Social Security Disability Insurance (DI) program, and a separate arrangement for disabled persons without, or with limited, work experience, like Supplemental Security Income (SSI). In Holland and Sweden, compensation for loss of earning capacity due to long-term impairments is provided by a two-tier disability insurance program. The first tier is universal, with eligibility being based on citizenship. These national disability insurance programs typically offer flat-rate benefits that are, of course, earnings-tested but are not tested for other household means. They target those handicapped congenitally, or in early childhood, and provide benefits from age 18 onwards. In Holland, these basic benefits also cover self-employed people. In Germany and the United Kingdom, those with insufficient insurance contribution years have to rely on means-tested social assistance transfers. In the United Kingdom, an additional disability premium may be allowed up to the basic rate under invalidity benefits (see the appendix table). In Germany, employees who become disabled before age 55 enjoy entitlements as if they had worked until age 55.

Eligibility for a supplement is restricted to labor force participants. These second-tier benefits are based on age, or employment history, and wage earnings. In Germany and Sweden, as is the case under the U.S. Social Security system, earnings-related disability insurance is

part of the legal pension system. Coverage depends on contribution years. More specifically, at least three years (Sweden) or three out of the five years (Germany) preceding a contingency should have been spent in paid employment. Wage earners are obliged to participate, and the self-employed may participate voluntarily. Holland and the United Kingdom have no contribution requirements for earnings-related benefits in terms of years of covered employment. However, the United Kingdom has a requirement of covered earnings both for statutory sick pay and invalidity benefits, and, in 1993, Holland introduced a system of age-dependent supplemental benefits, which simulate a contribution years requirement.

Accessibility II: Eligibility Requirements and Benefit Levels

By definition, eligibility for disability pensions is based on some measure of (residual) capacity or productivity. The United Kingdom has an all-or-nothing system: after 28 weeks, when sickness benefits have run out, only those fully incapacitated, i.e., more than 80 percent disabled, qualify for invalidity benefits. These are basically flat-rate benefits, which are only distantly related to previous earnings (see the appendix table). Supplements and allowances may be given, depending (inversely) on age and on household situation.

Germany has a dual system, with full benefits for those who lose two-thirds or more of their earning capacity with regard to any job available in the economy and partial benefits for those who are more than 50 percent disabled with regard to their usual occupation. Under the Handicapped Act of 1974, workers having a permanent reduction in their labor capacity of at least 50 percent are entitled to the status of "severely disabled" (*Schwerbehinderte*). Given this status, workers are entitled to extra vacation and enjoy protection against dismissal. Although being recognized as a severely disabled worker does not give access to cash benefits, it allows one to retire at age 60 with a full pension, given sufficient (15) contribution years.⁴

Sweden has a more lenient eligibility standard, as incapacity is measured with regard to commensurate employment instead of any gainful activity. Moreover, the Swedish program has four disability categories, depending on the size of residual capacity, with a corresponding system of full and partial pensions.

The Dutch disability program is unique in that it distinguishes seven disability categories, ranging from less-than-15 percent, 15-25 percent disabled, and so on, to 80-100 percent disabled. The minimum degree of disability yielding entitlement to benefits is 15 percent. The degree of disablement is assessed by consideration of the worker's residual earning capacity. As of 1994, capacity is defined by the earnings flowing from any job commensurate with one's residual capabilities as a percentage of predisability usual earnings. The degree of disablement, then, is the complement of the residual earning capacity and defines the benefit level. Before 1994, only jobs that were compatible with one's training and work history could be taken into consideration. Not only has the definition of suitable work been broadened, but the medical definition of disability has been tightened: under the new ruling, the causal relationship between impairment and disablement has to be objectively assessable.

Administration

The preceding short overview of "the rules of the game" does not say much about how the game is played. It does not explain why different national schemes produce the divergent results recorded by tables 1 and 2. More specifically, the fact that Holland has such a high prevalence of disability transfer payment recipients has more to do with the way in which the rules are applied than with the rules as such.

The Dutch disability plan differs from other national programs, not only because it has no separate work injury scheme and has a more elaborate system of partial benefits, but also because its social insurance programs (disability and unemployment insurance, and sickness benefits) are run by autonomous organizations, which lack direct governmental (political) control. These "Industrial (Insurance) Associations" represent different (19) branches of industry. They are managed by representatives of employers' organizations and trade unions. Membership in one of these associations is obligatory for every employer. The Industrial Associations have discretion to develop autonomous benefit award and rehabilitation policies without having to bear the fiscal consequences of their policy choices, as disability program expenditures are funded by a uniform contribution rate. Thus, administrative autonomy is not balanced by financial responsibility (see the discussion under "The Importance of Incentive Structures").

In Germany and Sweden, disability insurance is part of the national pension program, which is run by an independent, national board that is, however, closely supervised by those who are politically responsible for the operation of the social security system and therefore subject to parliamentary control. These boards monitor disability plans and safeguard uniformity in award policy by issuing rules and guidelines to local agencies. The British administration, being a civil service run by the Department of Social Security, is more similar to the U.S. Social Security Administration. The difference between these countries and Holland, then, is that their disability systems are under some form of budgetary control.

In Holland, disability assessments are made by teams of insurance doctors and vocational experts employed by the administrative offices of the Industrial Associations. These teams also have to examine the rehabilitation potential of disability claimants and to rehabilitate those with sufficient residual capacities. A further potentially important difference with the other European countries, then, is that the Dutch disability assessment teams are legally obliged to examine every benefit claimant personally, not just administratively. This may have spurred a liberal, conflict-avoiding attitude, especially in a setting in which neither the gatekeepers themselves nor their managers are confronted with the financial consequences of award decisions.

Sweden only allows administrative checks of disability claims on the basis of written, medical and other, reports in order to prevent the program gatekeepers from being influenced by self-reports and by the physical presence of claimants. In Germany, too, award decisions are made by using medical reports and by applying uniform decision rules developed by specialists' panels, each covering a diagnostic group. Entry into the British Invalidity Benefit program rests upon the claimant's doctor issuing a statement that advises the person to refrain from work when, in the doctor's opinion, the patient is definitely unable to do so because of a physical or mental disorder or when work would be detrimental to the patient's health. Claimants may be, and often are, referred to doctors of the Benefit Agency's Medical Reference Services. Usually, one in three among those examined by reference doctors is considered fit for either the predisability job or for some other work.

“Hidden” Unemployment

Workers with disabilities have a higher-than-average sensitivity to cyclical downswings. Independent of the operation of disability programs, they are among the first to be made redundant. Both American and British studies show a significant relationship between labor market conditions and disability program participation rates.⁵ These studies do not explain the extent to which there may be severely disabled individuals hidden among workers in boom periods or (mildly disabled) unemployed persons hidden among disability benefit recipients in slack periods.

As discussed, European workers who lose their jobs are usually covered by unemployment insurance. Entitlement to earnings-related unemployment insurance benefits is of limited duration and is followed by flat-rate, means-tested social assistance. In Holland, Germany, and Sweden, entitlement durations depend on age, such that workers older than 58 or 60 may keep unemployment insurance until they reach pensionable age (65) or qualify for disability insurance benefits on non-medical, labor market grounds. Improper use of disability benefits as a more generous, and less stigmatizing, alternative to unemployment benefits was quite common in the 1975-1990 period (see the earlier section on disability records). It provided employers with a flexible instrument to reduce the labor force at will and kept official unemployment rates low. The approach was very popular in Sweden until 1992, when the law was changed and disability pensions based solely on unemployment could no longer be awarded.

Holland had similar experiences. Until 1987, the law explicitly recognized the difficulties impaired workers may have in finding commensurate employment by prescribing that the benefit adjudicators should take account of poor labor market opportunities. The administrative interpretation of this so-called labor market consideration was so liberal as to award a full benefit to almost anyone who passed the low threshold of a 15 percent reduction in earnings capacity. The share of unemployed (or “socially disabled”) among disability insurance beneficiaries, applying the pre-1994 eligibility standards, is estimated to be 40 percent (see Aarts and de Jong 1992, chapters 5 and 11). The fact that the abolition of this legal provision could not halt the growth

in the incidence of disability transfer payment recipients (table 1) induced further amendments in 1992-1994.

Labor market considerations also influence disability determinations in Germany. In 1976, the German Federal Court ruled that if insured persons have limited residual capacities and the Employment Service or the Pension Insurance is unable to find them a commensurate job within one year, they can be awarded a full disability pension retroactively. Because partial disability benefits are based on the availability of commensurate work, certified skilled workers may refuse any job that is not at least semiskilled in nature. A semiskilled worker must only accept unskilled jobs that are prominent in pay and prestige. Unskilled workers who are not eligible for a full disability pension have to resort to unemployment or to social assistance. These regulations, in combination with a slack labor market, have reduced the proportion of partial pensions from 30 percent in 1970 to less than 5 percent in the early 1990s.

Cross-National Comparison of Rehabilitation Policies

Assessment of rehabilitative potential is the counterpart of disability assessment. To contain dependency on transfer payments, impairments should be cured, or their limiting consequences corrected, as soon as possible. The ultimate goal of a vocational rehabilitation plan is work resumption. This involves more than treatment, training, and the provision of corrective devices. It also involves job mediators and employers. Swift rehabilitation and redeployment depend on the willingness of all of these different actors to invest money, time, and/or effort to boost the employment possibilities of impaired workers. The job of some of these participants (doctors, ergonomists, job mediators) is to help people overcome their handicaps. For others, the impaired workers and their employers, it is more or less a matter of choice and, hence, of incentives, as to whether they engage in rehabilitative efforts.

Policies differ with respect to public spending on rehabilitation services and on employment programs for disabled workers (see table 2). Rehabilitation services may consist of (subsidies on) tangible provisions (corrective devices, such as wheelchairs, workplace accommoda-

tions, Seeing Eye dogs) or of intangible ones (training, therapy, counseling, job mediation). Given the broad accessibility of health care in European welfare states, there are no serious financial impediments to obtaining medical rehabilitation. Nevertheless, over the past years, as part of the changes in their welfare programs, Sweden and Holland have introduced patient fees for an increasing number of health and rehabilitation services.

National policies also differ in the extent to which they require rehabilitation efforts. Mandatory rehabilitation is a possible outcome of the disability determination process in both Germany and Sweden. Moreover, Germany and the United Kingdom have quotas, stipulating that firms should employ a certain percentage of workers who are registered as handicapped. Dutch and Swedish civil law similar to the Americans with Disabilities Act requires firms to provide commensurate work to employees who have become disabled in their current jobs.

Public Provision of Rehabilitation Services

In addition to cash compensation, Dutch disability insurance offers in-kind provisions covering job accommodation and training costs to promote redeployment of impaired workers. As table 2 indicates, spending in this area is minimal. In 1993, spending on provisions in kind under the Dutch disability insurance program amounted to 0.8 billion guilders. Only 20 million (2.5 percent of provisions expenditures, about 0.1 percent of total disability expenditures) was used for vocational rehabilitation and workplace adjustment. The rest was spent on provisions for general daily activities (mobility, dwelling, etc.). The amount is extremely low simply because very few claims are filed. On a per-capita basis, Germany spends 42 times more than Holland does on vocational rehabilitation.⁶

Various aspects of the disability pension system reflect the German commitment to a corrective policy response. First, a relatively large amount of money is spent on vocational rehabilitation (see table 2). Impaired workers are referred to rehabilitation by the adjudicators of either the sickness insurance system, the disability pensions, or by the local employment agencies. Furthermore, to encourage employment of disabled workers, the Handicapped Act subsidizes employer expenses related to job accommodations.

The Swedish Social Security Administration and its regional and local offices do not have their own rehabilitation personnel or facilities. Instead, they enlist the services of the various medical, vocational, and other professionals in this field. Each county has AMIs (labor market institutes), special centers for vocational rehabilitation and guidance. The centers are operated by the National Labor Market Board through the county labor market boards. Some of them specialize in groups with specific disabilities. The AMIs provide more detailed examinations than are given at the employment offices, in order to determine the work capacity of people with disabilities and to provide general help in developing the capacities necessary to work. However, in most cases, specific occupational training for the disabled is provided under the same programs that train people without disabilities. The AMIs also serve the nondisabled; the share of those in AMI programs who are able-bodied has gradually increased and is now about 50 percent.

Recently, the general policy emphasis in Sweden has been put on early intervention for those receiving sickness benefits and on the coordination of all the parties involved in rehabilitation, i.e., medical professionals, unions, employers, vocational professionals, and employment service administrators, depending on what the case is judged to require. New legislation gives the social insurance offices the responsibility for initiating and coordinating rehabilitation when necessary. This has enabled social insurance administrators to act more as private insurers with a responsibility to contain costs. The government has established cost-reduction goals for all the regional offices regarding sickness and disability payments. In sum, the trend of recent years has been to make more resources available for rehabilitation, while at the same time goals have been set for reducing benefit payments by returning persons to the workplace.

The British Department of Employment, operating under the responsibility of the Secretary of State for Employment, administers a number of programs aimed at rehabilitation and reentry into the labor market. The United Kingdom provides a status to those who qualify to be registered as disabled similar to the official status of *Schwerbehinderte* in Germany. Being on the register enables a person to claim various kinds of assistance aimed at getting a job.

Vocational rehabilitation is provided mainly through 26 Employment Rehabilitation Centres (ERCs). The ERC staff includes individu-

als such as psychologists, social workers, and technical instructors, who provide fuller assessments of capacity as well as employment rehabilitation and training. Research in 1980 showed that, six months after completing the courses, about half the participants were employed and the other 50 percent were either on sickness benefits or unemployed. To our knowledge, more recent empirical analyses are not available. The present trend is towards privatizing the Employment Rehabilitation Centers.

Employment Policies

Provision of jobs for workers with disabilities can take several forms. One is job creation in the public sector, either as part of an employment policy targeted at a broader population, including the able-bodied unemployed, or via a narrow approach, by creating sheltered workshops as a kind of workfare for the disabled. Another way to promote employment is to hand out wage subsidies to private business. Finally, employers may be forced to make room for handicapped workers by regulations, such as requirements involving special perks for recognized disabled workers, job protection, and employment quotas.

Sheltered Work. Holland, Sweden, and the United Kingdom have forms of sheltered work for the disabled. Holland has a national network of sheltered workshops, employing 88,000 people with disabilities (1.5 percent of total employment). Sweden has 35,000 handicapped workers (0.83 percent of total employment) in sheltered jobs. In both countries, the operating costs of these workshops are almost fully funded by government. On average, wages are higher than disability benefits, and part-time earnings may be combined with partial benefits. Handicapped workers may choose freely whether or not they want to be employed in a sheltered workshop. In the United Kingdom, the range of sheltered employment opportunities goes from large government-supported companies to smaller sheltered workshops that are little more than welfare provision. They all are heavily subsidized by way of grants to cover trading losses and training fees. Quantitatively, the sheltered employment programs are of marginal significance, as only about 20,000 severely disabled people (0.075 percent of total employment) are in sheltered employment. Sheltered placements are increasing, however.

Wage Subsidies and Partial Benefits. Apart from being an insurance device to compensate the exact loss of earning capacity, partial benefits also work as a wage subsidy. In fact, introduction of the fine grid of seven disability categories under Dutch disability insurance was supported by explicitly referring to its rehabilitative aims when the program was enacted in 1967. Partial benefits were intended to help disabled workers find commensurate employment. By liberal application of labor market considerations, it became routine to award full benefits under the presumption of a shortage of employment opportunities. This lenient approach was hoped to have been changed by the 1987 amendments, banning labor considerations, into an administrative practice of accurate assessments of residual capacities. The old routines proved difficult to alter, however, and the amendments did not produce the expected results. At the end of 1993, 77 percent of current disability beneficiaries still had an award based on full disability. Hence, a new series of cuts and changes were introduced in 1993 and 1994.

Like Holland, Sweden and Germany have also seen a growing share of full disability benefits. Currently, 85 percent of Swedish and 95 percent of German beneficiaries (up from a 1965 low of 67 percent) are labeled as fully disabled. These differences suggest that the more stringent the award system, the stronger the pressure to obtain full awards. In Sweden, a separate wage subsidy program was introduced in 1980, replacing two earlier programs. The compensation rate paid to the employer varies depending on the disability, on the duration of employment (compensation is generally higher in the first years after a person is hired; subsidies are not available for already employed persons), on the sector in which the person is employed, and on the person's age (compensation is highest for disabled youth). On average, the compensation rate was 73 percent in July 1992 for those in their first year of support and 61 percent for those assisted for longer periods. These wage subsidies are used by about 1 percent of total employment.

Although the British system does not provide for partial disability benefits, people with severe disabilities are subsidized under the British Sheltered Placement Scheme to work in the open labor market. The wage subsidies are paid to the employers to compensate for the difference in productivity between a disabled and a nondisabled worker. Furthermore, the Disability Working Allowance, a bonus for disability

beneficiaries who have found a job, was introduced in 1992. The allowance depends on the wage and on the disabled person's wealth. Claims are adjudicated on the basis of self-assessed disability. The Department of Social Security anticipated an annual number of 50,000 claims. Within six months following its introduction, around 20,000 claims were received; however, 90 percent were denied, mainly because claimants had not yet obtained a job.

Employer Mandates

Quotas. Employment quotas exist in Germany and the United Kingdom. The German Handicapped Act requires that public and private employers with more than 15 employees hire one severely disabled person for every 16 job slots or pay monthly compensation of deutsche mark (DM) 200 (\$130) for each unfilled quota position. In 1990, approximately 900,000 severely disabled persons were employed, and 120,000 were unemployed. Despite the carrot of subsidies for workplace adjustments and the stick of monthly fines, disabled persons make up only 4.5 percent of the targeted workforce, well below the 6 percent quota. Only 19 percent of the 122,807 public and private employers subject to the quota have managed to fill it; 44 percent of these enterprises employ some severely disabled persons, although the numbers are lower than required by the Handicapped Act. The remaining 37 percent employ no disabled persons (Sadowski and Frick 1992a). Although German authors are rather critical of the effect of the Handicapped Act and compliance is far from full, the employment rate among disabled workers in the market sector is high by international standards, even by comparison with Sweden.

The British Disabled Persons Act of 1944 places a statutory obligation on employers with 20 or more employees to fulfill a "quota" of at least 3 percent of registered disabled people in the workforce. In theory, noncompliance can lead to a fine or even to imprisonment. In practice, however, the quota regulation is not enforced. Fines have been imposed on only a handful of occasions despite the fact that, for the past 20 years, the majority of employers have stayed well below their quota requirements. In Holland, successive governments have also been reluctant to regulate business in this way, preferring to rely on the promotion of voluntary codes of practice.

Job Protection. Dutch legal regulations oblige employers to provide commensurate work to employees who have become disabled in their current jobs. After the onset of impairment, individuals can only be dismissed if continued employment in one's usual, or alternative, work would put a more-than-reasonable strain upon the employer. An absolute dismissal ban is in force during the first two years of disability. After these two years, the employer is usually granted dismissal permission. Similarly, German workers that are recognized as severely disabled have the right to demand workplace adjustments and to enjoy protection against dismissal.

The Importance of Incentive Structures

Overview

European welfare states are in a phase of reorientation. The negative efficiency impacts of the equity principles upon which these states were built have gradually turned into urgent social policy problems. In countries such as Holland and Sweden, the sentiment is that

far too many people rely on social benefits, while too few citizens are at work contributing to economic growth and the financing of social welfare expenditure. The benefit rules and the high levels of taxation required to finance the system affect human motivation in a negative direction and may increase the propensity to work unofficially in the "black" economy.⁷

Among other things, the generosity and lack of control of disability benefit programs are now important entries on the agenda for reform. As we have seen, Germany and the United Kingdom have less generous and, therefore, more manageable disability programs.

Among the four countries studied, Germany probably shows the best example of a balanced approach toward disability in that it is the least controversial. However, national policies have their own historical background and are set in a specific political and socioeconomic context. An exact copy of the German system in another national setting could, therefore, yield very different results. What we can learn from varying experiences in different settings is something about the com-

bined effects of, and possible relationships between, disability policies and their social, economic, and political environment.

Every country develops its own set of policy responses, which are typically mixtures of ameliorative, corrective, and preventive elements. More specifically, disability policies are directed at four goals, namely, (1) prevention of, (2) compensation for, and (3) recovery from losses in earning capacity due to functional limitations, and (4) reduction in the waste of human capital, by either retaining people with residual earning capacities within the employing firm or by gainful redeployment through external channels.

In practice, the second and fourth goals often are in conflict. Since adequate compensation may collide with the need to contain benefit expenditures, each national system has to find a balance by setting priorities and by using a number of instruments that are more or less universal across countries, such as

- social insurance benefits;
- assessment instruments and procedures that help in targeting benefits to the most needy and that facilitate timely interventions;
- rehabilitation services (training, medical services) and other in-kind provisions to accommodate functional limitations;
- redeployment services (job mediation), sheltered employment opportunities for those who are not employable in regular jobs, and quotas;
- legal provisions aimed at reducing the risk of work injury and occupational diseases;
- legal employment protection of functionally impaired people to counterbalance their reduced “market value”; and
- wage subsidies, partial benefits, or disability allowances to compensate employees/employers for productivity losses.

Under the European systems reviewed in this paper, most of these policy instruments are available to the administrators of disability programs. In this respect, European policy approaches are similar. Cross-country differences in policy outcomes, therefore, cannot be explained by a lack of tools. The dominant view in Europe, nowadays also shared

by traditional supporters of the welfare state in Sweden and the Netherlands, is that the incentive structure implied by the design of national disability policies is crucially inadequate. To illustrate this argument, we will identify the major agents involved in shaping disability practices and the ways in which their behavior is affected by the implicit incentive structure.

Who Are the Agents?

The allocation of disability benefits over the population at risk takes place through the operation of three agents: (1) insured/covered persons, mainly employees, who can claim to be unfit for work because of a physical or mental impairment; (2) their employers, if any, who either may support the claim, or, if held responsible, fight it, or may help in overcoming the limiting consequences of functional impairments; and (3) the intermediaries, i.e., private or social insurers and the curative sector, which have to assess the extent to which claimants are eligible and to which their ailments can be cured or their limitations can be overcome.

Each of these three agents is subject to incentives determining the outcome of a process that starts with the manifestation of the symptoms of an ailment. These incentives are primarily defined by the design of the plans covering disability-related needs. For instance, stringent, and easily and unambiguously applicable, eligibility rules for disability (cash) benefits restrict the discretion of both the gatekeepers of the disability plan and the persons covered. On the other hand, disability eligibility rules that encompass every conceivable health complaint leave a great deal of latitude both to gatekeepers in their disability determinations and, hence, to covered persons in weighing the costs and benefits of program participation.

The greater the room for choice, the stronger the impact of other than health-related factors. Such factors may be program characteristics—benefit size and duration, availability of curative, corrective, or rehabilitative provisions in kind, mandated redeployment—or may be more or less independent of the design and operation of the disability plan. These external influences can be found in different spheres of life—personal, vocational, social—of the individuals covered by the program. These factors, however, may also stem from a broader envi-

ronment, such as regional labor market circumstances and the availability of alternative cash benefits.⁸

The Employee/Disability Beneficiary

Economic theory posits that workers supply labor according to their preferences with regard to the trade-off between leisure and earnings, available nonwork income, and earning capacities as reflected by wage rates. The stronger one's taste for leisure, the lower the expected wage rate, and the larger the amount of nonwork income, the smaller the expected number of hours supplied. The expected wage rate is the product of the wage rate in a given job and the probability of finding such a job, taken over all jobs in the relevant segment of the labor market, i.e., the wage offer distribution. Similarly, the expected number of hours is the product of the probability of labor force participation and the preferred number of hours, given participation.

Within this theoretical framework, health impairments may reduce labor supply for two reasons. Impairments affect the demand for leisure positively and, depending on the extent of disablement, have a negative impact on the expected wage rate, both by reducing the earning capacity in a given job and by lowering the mean of the wage offer distribution. The negative effect of a lower wage on labor supplied may be reinforced by disability-related income transfers that replace part of the earnings loss. The relevant concept is the *expected benefit* as a function of award stringency and the benefit stream upon award.

In the absence of mandatory rehabilitation and regular reviews of disability status, eligible workers can choose between permanent withdrawal from the labor force, by enrollment in a disability insurance plan, or reentry into the workforce, by, if necessary, enrollment in a rehabilitation program. As described in the preceding two sections, the Dutch disability insurance system typically offers such discretion to workers who are recognized as disabled. Under the German and British programs, benefit dependency is much less of an option. There, the status of being severely disabled is allowed to keep people in employment instead of making them redundant.

Our research on the determinants of disability benefit reciprocity in the Netherlands strongly confirms the influence of economic factors on the choice between benefit dependency and work resumption. We found that medical factors, such as the nature and extent of disable-

ment and health history, explain only about one-third of the variation in the probability of entry into the disability insurance benefit system. Of the remaining, nonmedical factors, *financial considerations*, indicated by the present value of the benefit stream relative to the present value of the expected stream of earnings upon work resumption, and *unemployment hazards* derived from labor market records have proved to be particularly influential (see Aarts and de Jong 1992, pp. 299-303).

Despite stricter systems in the United States and the United Kingdom, similar results have been found in studies of these countries (see Leonard 1986 and Aylward and Lonsdale 1992). These findings suggest that an inherently vague concept like work disability always allows some room for discretion. Given the availability and generosity of disability benefits, eligible workers with no (further) career prospects and a weak labor market position appear to prefer benefit dependency rather than returning to the hazards of labor market participation. The results also imply that an increase in award stringency and/or a reduction in benefit generosity may boost the demand for rehabilitative services. In Sweden, disability benefit replacement rates are relatively high; however, sick pay is even higher, and the incentive is to extend the sickness period. With no statutory limits on the length of sickness benefit entitlements, the sickness benefit program has many beneficiaries who would be considered disabled under the Dutch ruling. Vocational rehabilitation is stimulated by entitling participants to 100 percent benefits. By paying market wages in sheltered employment, the interest in reemployment is increased in a similar way. Empirical evidence suggests that the modest size of the disability populations in Germany (except older workers) and the United Kingdom is to some extent the result of relatively low benefit replacement rates in these countries.

The Employer

Employers are agents who affect disability policy in two ways. First, they can directly influence the incidence of work injuries and occupational diseases. Second, by offering job opportunities to functionally impaired employees or to disabled people from outside the firm, employers may contribute to reducing disability benefit dependency.

Workers can be gainfully employed only as long as the value of their productivity covers labor costs. Thus, impaired workers with reduced

productivity must be employed in jobs with wages that are substantially below their pre-impairment level, or in jobs where profitability requirements are less pressing, such as public sector employment in general and sheltered work in particular. Private employers can make jobs available to the functionally impaired only if a positive difference between wages and the (marginal) revenue deriving from this labor is covered in one, or more, of the following ways: increased productivity through vocational rehabilitation, partial benefits or disability allowances for disabled workers, or wage subsidies for employers.

A cost-benefit framework may help to unravel the determinants of the firm's willingness to engage in rehabilitation via accommodating workplaces or offering alternative employment. In the short run, given the enterprise's technology and the level of safety provision, the net cost for the employer of an employee entering a disability transfer program primarily depends on the profitability of the job held by the impaired worker. Clearly, the incentive to retain an impaired employee will be very small if the individual's job is redundant. This is one of the reasons why disability transfer payments increase in times of growing unemployment. If the job is not redundant, enrollment into a disability benefit program means hiring a replacement. The cost-benefit approach implies that a firm's inclination to retain and rehabilitate workers who have become functionally impaired depends on the following:

- The value of the impaired employee's productivity. The higher the postadjustment productivity, the more inclined the firm will be to accommodate and retain the worker.
- The labor costs of continued employment of the employee. By allowing for subsidies covering part of these costs, the disability program may encourage firms to retain workers upon impairment.
- The costs of adjustments, net of subsidies, to make jobs and impaired workers match. Lowering these costs may reinforce a firm's inclination to retain impaired employees.
- The potential contribution of a replacement to the firm's proceeds. Other things equal, the higher the expected productivity of a replacement employee, the less inclined the firm will be to retain and accommodate the impaired worker.

- The cost of recruiting and training a replacement. Firms will be more inclined to retain employees after the occurrence of functional impairments if the individuals' skills are hard to find. If a replacement would need to go through a long period of job or firm-specific training to acquire the impaired employee's skills, replacement may be an unattractive alternative. Equally important, finding a suitable replacement in a tight labor market may involve considerable search costs. In this situation, external labor market conditions enter the cost-benefit calculus.
- The costs of enrolling an employee into the disability insurance program and the internal and external financial consequences of program enrollment. The higher these costs, the greater the firm's inclination to retain functionally impaired employees. Insurance devices, such as coinsurance and differentiation of contribution rates (experience rating), raise the cost-consciousness of firms with respect to these external expenses.

The countries reviewed have different approaches to the firm. Until recently, Swedish and Dutch firms did not incur any substantial cost if employees entered the disability rolls. Mandatory employment quotas still are absent, and contribution rates are uniform, although differentiation is under consideration. In both of these countries, program administrators have had a range of instruments at their disposal to help bridge the gap between impaired employees' productivity and market wages: fully subsidized training and rehabilitation, fully subsidized job accommodation provisions, and partial disability benefit entitlements. As mentioned, the effect has been very limited in these two nations.

Since 1987, both Sweden and the Netherlands have taken measures to remove adverse incentives and to introduce alternatives to benefit dependency. Between 1980 and 1987, benefit levels had already been cut. After that, the focus shifted from the employee to the employer, with measures affecting the cost to the firm of disability program enrollment and the benefit of retaining or hiring functionally impaired workers. In the Netherlands, a stick-and-carrot mechanism was introduced that puts a fine on every disability benefit award and provides a bonus for every newly hired functionally impaired employee. In the sickness benefit program, both in Sweden and the Netherlands, the employer has been made accountable for providing benefits during the

first six (Holland) or eight weeks (Sweden). Additionally, in the Netherlands, legislation was put in place by which employers are obligated to make the accommodations necessary to employ functionally impaired employees. As these measures did not bring about the intended effects quickly enough, benefit levels were further reduced in 1993.

It would be unfair, however, to put all the blame on the employer. A provision enacted in 1986 empowering impaired workers in Holland with a legal instrument to enforce (subsidized) workplace accommodation did not have any impact on the claims for in-kind entitlements. Only a few cases were brought to court. This is indicative, not only of the apparent preference of Dutch disability benefit claimants for leaving the labor market, but also of the lax assessment procedures that allow claimants to act according to their preferences.

Germany and the United Kingdom have had a quota system for many years, although enforcement is weak, especially in Britain. Disabled employment is more substantial than in Sweden or the Netherlands, however. In Germany, the registered disabled account for over 4 percent of total employment. In the United Kingdom, this figure may be lower; but considering the huge difference in the sizes of the British and Dutch disabled populations relative to the labor force and the small differences, if any, in unemployment rates, it appears that many functionally impaired British citizens, who would have been entitled to disability benefits under the Dutch system, are gainfully employed.

The Administering Organizations

The extent to which individual preferences or firm-specific considerations have an impact on the number of disability beneficiaries depends on the behavior of the gatekeepers of disability insurance programs. Whether or not firms are successful in discharging impaired employees by making them apply for disability benefits depends on whether benefit dependency conforms with the preferences of the employee and the design and administration of the program. A leniently administered, and generous, disability insurance regime provides older workers with an early retirement option and offers firms ample opportunities to use disability insurance as an instrument for personnel management. Ideally, the adverse stimuli for employers and employees to “play the disability insurance system” should be counter-

balanced by administrative regulations and routines that either reduce the discretionary powers of individual employers and employees or provide contrary incentives. To do this, administering organizations need adequate instrumentation, for example, standardized assessment and review protocols and the authority to enforce compliance with quotas and to prescribe and mandate rehabilitation. The administration also needs the motivation to apply the available instruments adequately.

While private insurance carriers get their incentive from a competitive market environment, public services require either bureaucratic control mechanisms or budget containment of some sort. In the four European countries, disability insurance is publicly administered, but there are significant differences in administrative design. In the United Kingdom, the government bears direct responsibility for administration. The Department of Social Security allocates the benefits, and the Department of Employment administers the job programs. Careful allocation of benefits is safeguarded by combining bureaucratic and budget controls. In the Netherlands, on the other hand, the government, until 1995, had only indirect administrative responsibilities since the actual administration and its supervision and control were delegated to semipublic organizations run by employers' and union representatives (the so-called social partners).⁹ Bureaucratic controls were weak, and budget containment devices were virtually absent. The German and Swedish administrations are somewhere in between those of the Netherlands and the United Kingdom. Germany is closer to the Netherlands in its approach, as it allows some influence from labor and management, be it under strict government control. In Sweden, the system is closer to that of the United Kingdom; Swedish benefits are administered by government agencies, while the social partners only have a say in the provision of employment services. In both Germany and Sweden, the administrative system is closely monitored by the government.

Put in terms of a "principal agent scheme," with government as the principal and the administrative system as the agent, most European governments try to monitor the agents as closely as possible, so that social disability insurance is administered according to the public interest. In Holland, the agents, *in casu*, the social partners have had ample opportunities to serve their own interests, yielding to the preferences of their membership in times of economic recession and struc-

tural economic changes. As a consequence, nothing was done to counterbalance the adverse incentives of a lenient award policy on individual employers and employees. The result has been the two-decade-long sustained process of purging the labor force of marginally productive workers.

Lessons from Europe

In the 1980s, the need to cut back public expenditures led to the reevaluation of social insurance policies all over Europe. Initially, the focus was on the efficacy of social security programs. Measures were taken, for example, to improve the possibilities for timely intervention in order to reduce disability insurance dependency, to disentangle the unemployment and disability components in disability insurance, and to increase job opportunities by making workplace adjustment mandatory and by introducing quota legislation. In more recent years, when earlier policy adjustments appeared to be less effective than hoped for, the focus gradually shifted away from technical changes towards measures intended to restructure the incentives induced by social security systems. Especially in Sweden and the Netherlands, these incentive issues have been, and still are, heavily debated.

In Germany and the United Kingdom, the incentive structure is much less of a problem. In both of these countries, the private sector employment opportunities for people with disabilities are larger than in Sweden or Holland. These higher participation rates probably result from an administrative system that operates more efficiently and effectively and from benefit rates in Germany and, especially, Britain that, by their modesty, may spur preferences for work over transfer dependency. Under these stricter systems, the social costs of disability are likely to be lower and, to a larger extent, borne by private enterprises and households.

Currently, the operations of the third agent, the Social Security Administration, are the major object of policy reform in Holland. In 1993, a parliamentary commission officially concluded what an increasing number of observers already had suspected—that the administering organizations had grossly failed in achieving an efficient

and effective allocation of social insurance resources. Now the debate on the social security system—on the concept of the welfare state, for that matter—is completely open. The proposals put forward range from total privatization of social insurance to full socialization under government control.

Similar developments can be observed in Sweden, the prototype of the welfare state. The general feeling is that government has reached the limits of what it can provide or even should want to provide. In contemporary societies, people are viewed as autonomous citizens, aware of their individual interests, and ready to act in response to these needs. In such an environment, where public authority is no longer obvious, workers, employers, and administrators have become less hesitant to respond to the incentives with which they are confronted.

Good social policy and practice, then, not only require able administrators, using appropriate policy tools, but an intelligent design of the incentive structures implied both by the programs and by their management. This may seem obvious, but it took about three decades before this insight finally broke through among European supporters of the welfare state.

Appendix Table. Disability Policies in Four European Countries

	Netherlands	Germany	Sweden	United Kingdom
I. Temporary disability (employees' sickness insurance)				
Benefit level	70% of earnings	80% of earnings	Day 2-3: 75% of earnings Day 4-14: 90% Day 15-365: 80% Day 366 on 70%	Flat-rate benefit. £45.30 per week (low earnings) £52.50 per week (higher earnings plus dependents' supplements)
Qualifying conditions	Inability to perform current job	Inability to perform current job	Inability to perform current job (short term), other suitable job (longer term)	Inability to perform current job
Maximum duration	52 weeks	78 weeks	Unlimited	28 weeks
Funding Contributors	Employer, employee	Employer, employee	Employer, employee, government	Employer, employee, government
Risk sharing	(Risk groups within) industry	Region, industry, or firm	National	National
Administration	Nongovernmental industry agencies run by employees' and employers' representatives; no direct government supervision	Nongovernmental agencies run by employees' and employers' representatives under direct government supervision	National agency under direct government supervision	National agency under direct government supervision

II. Permanent disability

Employees, Non-Work-Related Risks

Benefit level	70% of last earnings during 6-72 months depending on age at onset if older than 33; thereafter, or if younger than 33, 70% of minimum wage plus 1.4% of (earnings - minimum wage) for each year older than 15	General disability 60% (plus 1.5% times age - 55) of assessed earnings	65% of assessed earnings	Flat-rate benefit. £57 75 - 65.70 per week plus dependents' supplements (e.g., £53 15: spouse + 2 children)
Partial benefits	Percentage of full pension, corresponding to loss of earning capacity (minimum 15%)	Occupational disability: 40% (plus 1% times age - 55) of assessed earnings	75%, 50%, or 25% of full pension corresponding to loss of earning capacity	Disability Working Allowance ^a
Waiting period	12 months	Flexible	Flexible	28 weeks
Maximum duration	Age 65	Age 65	Age 65	Age 65
Qualifying conditions	Incapacity for gainful activity	General. incapacity for gainful activity Occupational 50% reduction of capacity in usual occupation	Inability to work in commensurate employment (above 60 years previous work)	Inability to work
Funding:				
Contributors	Employer, employee	Employer, employee, government	Employer, employee, government	Employer, employee, government
Risk sharing	National	National	National	National

(continued)

Appendix Table. (continued)

Administration	Nongovernmental industry agencies run by employees' and employers' representatives; no direct government supervision	State agencies under direct government supervision	National agency under direct government supervision	National agency under direct government supervision
<u>Employees. Work Injury</u>				
Benefit level	No separate work injury scheme	66.7% of last earnings	70% of last earnings	Flat-rate benefit up to £88.4 per week if 100% disabled plus dependents' supplements
Partial benefits		Percentage of full pension, corresponding to loss of earning capacity	Percentage of full pension, corresponding to loss of earning capacity	From £17.68 (14% disabled) to £79.56 (90% disabled); reduced earnings allowance up to £35.30
Waiting period		Flexible	Flexible	15 weeks
Maximum duration		Age 65	Age 65	Unlimited
Qualifying conditions		Loss of earning capacity due to work injury or occupational disease of at least 20%	Loss of earning capacity due to work injury or occupational disease of at least 6.7%	Loss of earning capacity due to work injury or occupational disease of at least 14%
Funding				
Contributors		Employer	Employer	Employer, employee, government
Risk sharing		Risk group	National	National
Administration	Nongovernmental industry agencies run by employees' and employers' representatives, no direct government supervision	State agencies under direct government supervision	National agency under direct government supervision	National agency under direct government supervision

III. Vocational rehabilitation

Training/workplace adjustment	Programs available, limited significance	Programs available, very significant	Programs available, very significant	Programs available, moderately significant
Sheltered workshops	Available, substantial significance	Available, limited significance	Available, substantial significance	Available, limited significance
Public/private employment for disabled	Both of limited significance	Mainly private sector, very significant	Mainly public sector, very significant	Mainly private sector, moderately significant
Rehabilitation/ redeployment incentives for				
Disabled employee	Trial work benefits ^b	Trial work benefits	Increased benefits ^c	Disability Working Allowance
Employers	Lump-sum bonus, wage subsidies	“Disabled worker” protection, enforced quota regulation	Wage subsidies	Not enforced quota regulation
DI administration	None	Some	None	None
Institutional links with disability insurance programs	Potentially strong, weak in practice	Strong	Strong	Moderate

SOURCE. Based on data published in Aarts, Burkhauser, and de Jong (1996) and U.S. Department of Health and Human Services, SSA (1994).

a. Means-tested benefits payable to disabled people with a job.

b. Continued benefit entitlements while at work on probation or participating in a rehabilitation program

c. Rehabilitation program participants receive 90 percent of lost earnings

NOTES

1. A practical consideration for choosing these four countries is that their disability policies are relatively well documented in the international literature, recently, for instance, in Bloch 1993

2. For additional details, see U.S. Department of Health and Human Services, Social Security Administration (1994)

3. See National Academy of Social Insurance (1994), p. 38

4. A similar early retirement option applies to employees who were unemployed for at least one year in the 18 months before age 60.

5. See, for instance, Lando et al. (1979) and Disney and Webb (1991)

6. Further legislation was enacted in 1986, through the Handicapped Workers' Employment Act (WAGW). The WAGW contains an additional budget to adapt job demands and working conditions to the functional limitations of impaired employees. Spending under WAGW is similarly low

7. Quoted from "Social Security in Sweden: How to Reform the System," Report to the Expert Group on Public Finance, Ministry of Finance, Stockholm, 1994, p. 7

8. For a fuller treatment of the determinants of disability benefit reciprocity, see Aarts and de Jong (1992, chapter 3)

9. As of 1995, supervision of benefit administration is in the hands of an independent agency. The current government proposes privatization of both the sickness benefit and the disability insurance schemes.

References

- Aarts, L.J.M., and P.R. de Jong. 1992. *Economic Aspects of Disability Behavior*. Amsterdam and New York: North-Holland.
- Aarts, L.J.M., R.V. Burkhauser, and P.R. de Jong. 1992. "The Dutch Disease: Lessons for U.S. Disability Policy," *Regulation* (Spring): 75-86.
- _____. Eds. 1996. *Curing the Dutch Disease: An International Perspective on Disability Policy Reform*. Aldershot, U.K.: Avebury. Forthcoming.
- Aarts, L.J.M., W. Dercksen, and P.R. de Jong. 1993. "Arbeidsongeschiktheid, een internationale vergelijking," *Sociaal Maandblad Arbeid* 48: 755-769.
- Aylward, M., and S. Lonsdale. 1996. "A U.K. Perspective on Dutch Disability Policy." In *Curing the Dutch Disease: An International Perspective on Disability Policy Reform*, L.J.M. Aarts, R.V. Burkhauser, and P.R. de Jong, eds. Aldershot, U.K.: Avebury. Forthcoming.
- Berkowitz, M., and M.A. Hill, eds. 1986. *Disability and the Labor Market*. Ithaca, NY: ILR Press.
- Bloch, F. 1993. *Comparative Study of Disability Claim Processing and Appeals*. Provisional draft, October.
- Burkhauser, R.V., and Y.W. Kim. 1991. "The Importance of Employer Accommodation on the Job Duration of Disabled Workers: A Hazard Model Approach." Working Paper, Syracuse University.
- De Jong, P.R. 1994. "Werk en Handicap: Where Are the Twain to Meet?" In *Arbeidsmarkt en sociale zekerheid*, H. Scholten and S.C. de Groot, eds. Tilburg: IVA.
- Disney, R., and S. Webb. 1991. "Why Are There So Many Long Term Sick in Britain?" *Economic Journal* 101 (405): 252-262.
- Employment Gazette*. U.K. Department of Employment. London: Her Majesty's Stationary Office, several years.
- Haveman, R.H., V. Halberstadt, and R.V. Burkhauser. 1984. *Public Policy Toward Disabled Workers*. Ithaca, NY: Cornell University Press.
- Holmes, P., M. Lynch, and I. Molho. 1991. "An Econometric Analysis of the Growth in the Numbers Claiming Invalidity Benefit: An Overview," *Journal of Social Policy* 20: 87-105.
- Lando, M.E., M.B. Coate, and R. Kraus. 1979. "Disability Benefit Applications and the Economy," *Social Security Bulletin* 42: 3-10.
- Leonard, J.S. 1986. "Labor Supply Incentives and Disincentives for Disabled Persons." In *Disability and the Labor Market*, M. Berkowitz and M.A. Hill, eds. Ithaca, NY: ILR Press.
- Lonsdale, S. 1993. *Invalidity Benefit: An International Comparison*. London: Department of Social Security, ASD-Publications.

- Ministry of Finance. 1994. "Social Security in Sweden: How to Reform the System." Report to the Expert Group on Public Finance. Stockholm.
- Ministerie van Sociale Zaken en Werk gelegenheid. 1994. *Sociale Nota*. Den Hague.
- National Academy of Social Insurance. 1994. *Preliminary Status Report of the Disability Policy Panel*. Washington, DC: National Academy of Social Insurance.
- Nijboer, I.D., R.W.M. Gründemann, and F. Andries. 1993. *Werkhervatting na arbeidsongeschiktheid*. Den Haag: Ministerie van Sociale Zaken en Werk gelegenheid.
- Organization for Economic Cooperation and Development (OECD). 1992. *Employment Outlook*. Paris: OECD.
- _____. 1993. *The Dutch Labour Market*. Paris: OECD.
- _____. 1994. *Labour Force Statistics*. Paris: OECD.
- Sadowski, D., and B. Frick. 1992. *Die Beschäftigung Schwerbehinderter: Betriebswirtschaftliche Analysen und politische Empfehlungen*. Schulz-Kirchner, Idstein.
- U.K. Department of Employment. Several years. *Employment Gazette*. London: Her Majesty's Stationery Office. London.
- U.S. Department of Health and Human Services. Social Security Administration. 1994. *Social Security Programs Throughout the World - 1993*. SSA Publication No. 13-11805, May.
- U.S. Government Accounting Office. 1994. *Social Security: Disability Rolls Keep Growing, While Explanations Remain Elusive*. GAO/HEHS-94-34.