

SICK SOCIETIES?

Trends in disability benefits
in post-industrial welfare states

Editors

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Preface

The 1980s and 1990s saw a significant rise in the number of disability benefit claimants in all but a few OECD countries. Yet the increase cannot be linked directly to population health, ageing societies or the economic cycle. General population health has been improving, the disability benefit population includes a rising proportion of young people, and good economic prospects do not directly result in greater outflow from disability benefit. The countries in which this trend has been observed do, however, share the characteristic that they have all recently moved, or started to move, to a post-industrial phase of development.

This volume comprises the findings of a research project initiated by the International Social Security Association (ISSA). Launched by the ISSA Advisory Board on Social Security Research, the purpose of the project is to develop a better understanding of why a rising number of people are claiming disability benefits in certain post-industrial welfare states, to consider which policy interventions are most effective in reversing the trend, and to produce new insights of relevance for administration and policy-making.

ISSA is ideally placed to stimulate comparative, forward-looking international research of this nature, and the project has formed part of ISSA's research programme. It builds on an earlier ISSA study on work incapacity and reintegration, which aimed to develop a better understanding of the interaction between social security, the labour market and health care systems in different countries, and evaluate the effect of measures taken. The conclusions of that project were published as a book in 2001 (Bloch and Prins: *Who Returns to Work and Why?*), as part of Transaction Publishers' International Social Security Series. An executive summary booklet is available on the ISSA website (www.issa.int).

One of the key findings of that earlier work was that, in an era of "welfare to work" and other activation policies, insufficient attention has been paid to early intervention and prevention. The early intervention theme is developed further in this volume, which examines the changing characteristics of the disability population in post-industrial welfare states and the relative success of interventions to reduce benefit inflow and increase outflow.

During 2003, research teams were established by the participating ISSA member organizations in Denmark, Great Britain, Israel, the Netherlands, Sweden and the United States. Each of these countries has seen a steady increase in the number of

disability benefit recipients over the past two decades (with the exception of the Netherlands since the 1990s and, more recently, Denmark), and they share a common interest in how to tackle the trend.

Each country team was responsible for producing an analysis of trends and policy interventions in their country, after which comparisons were made on the trends, the scope and effectiveness of interventions used. Stimulating debates took place as the research teams met in Copenhagen (May 2003), The Hague (January 2004) and York (June 2004). The project was co-ordinated by the research unit of the ISSA Secretariat – Roland Sigg, with help from Becky Taylor and Birgit Rochet-Jäger. Progress was overseen by a small committee, which I chaired. Initial findings from the project were presented at the ISSA General Assembly in Beijing in September 2004.

The real heart of the project has been the research teams that conducted the detailed analysis of national case studies, whose enthusiasm and hard work has driven the project forward. I would like to thank all of the principal researchers for their efforts and contributions:

Denmark: Martin Rasmussen and Ole Gregersen (National Institute of Social Research);

Great Britain: Peter A. Kemp (University of Oxford) and Patricia Thornton (Voluntary Service Overseas) – both previously University of York;

Israel: Dalia Gordon, Leah Achdut and Ester Toledano (National Insurance Institute);

Netherlands: Bernhard Bakker Tauritz (Ministry of Social Affairs and Employment) and Wim Landheer (Institute for Employee Benefit Schemes – UWV);

Sweden: Ingemar Svensson, Sisko Bergendorff and Annika Sundén (National Social Insurance Board);

United States: Richard Balkus, L. Scott Muller, Mark V. Nadel and Steve Wamhoff (Social Security Administration) and Michael Wiseman (George Washington University).

Sincere thanks are also due to Marilyn Howard, who worked alongside the main team to produce a first report and summary booklet on the results of the project.

Finally, I would like to gratefully acknowledge the financial contribution made by the participating organizations, without whose support this project could not have been completed:

National Institute of Social Research, Denmark;

Ministry of Social Affairs and Employment, the Netherlands;

National Insurance Institute, Israel;

Department for Work and Pensions, United Kingdom;

National Social Insurance Board, Sweden;

Social Security Administration, United States.

In taking this project forward it has been clear that in order to evaluate the effectiveness or success of policy interventions, it is essential first to be clear about what the aim of those policy interventions is. In the case of disability benefits, for example, is

the ultimate goal to reduce expenditure, to promote work participation or to tackle social exclusion — or a combination of all three?

The real value of comparative international studies lies however in enabling policy-makers to consider national problems in an international context. They allow us to identify common developments and trends and isolate those that are specific to one country, leading to a greater understanding of the underlying causes and possible solutions. That is what this volume attempts to do.

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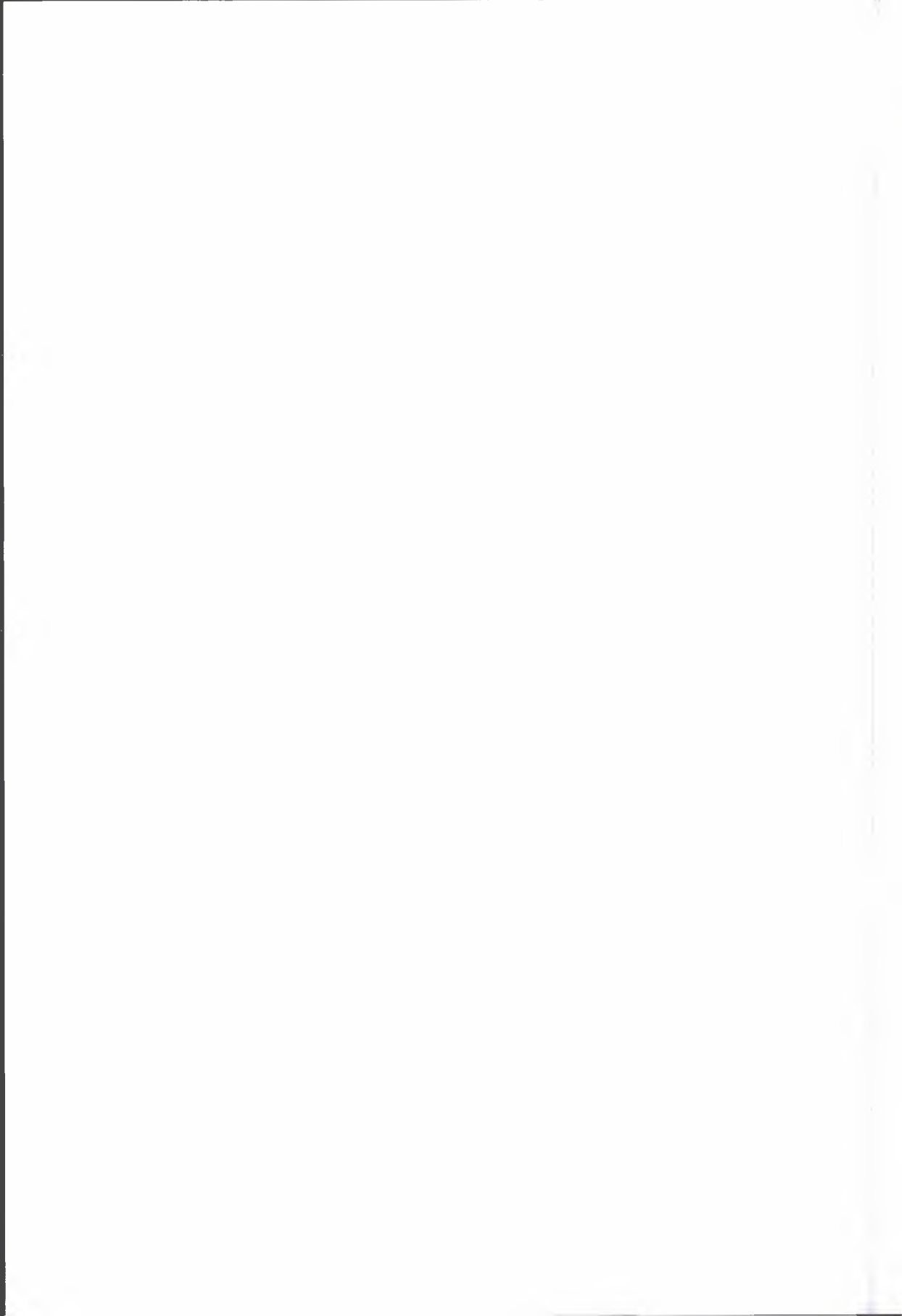
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Introduction

Peter A. Kemp

Most advanced welfare states have experienced substantial increases in the number of recipients of disability benefits in recent decades. By "disability benefits", we mean earnings replacement social security programmes for people who are unable to undertake paid employment because they are long-term sick or disabled. Depending on the country, these programmes are referred to as disability insurance, disability benefits, disability pensions, invalidity pensions or incapacity benefits. They are generally separate from the benefits that some welfare states provide to compensate people with impairments for the "extra costs" of disability. They also tend to be separate from industrial injury programmes and social security payments to war veterans. Many welfare states also have sickness benefits, or require employers to provide sick pay, for people who are temporarily unable to work because of ill-health. The focus of this book is on disability benefits as defined above.

The rise in disability benefit caseloads, and the resulting increase in programme costs, has become a major concern for policy makers in many advanced welfare states (Bloch and Prins, 2001). For example, in the Netherlands, where the number of disability benefit recipients peaked at one in ten of the working age population, the problem was referred to as "the Dutch disease" (Aarts et al., 1996). However, from a comparative perspective, it appears to be a condition that many other welfare states are experiencing, even if not quite so acutely. On average, OECD countries spend at least twice as much on disability related programmes as they spend on unemployment programmes (Asgeirsdottir, 2004).

Many welfare states have introduced reforms that aimed to reduce the number of disability benefit recipients or at least to cut the rate of growth in the caseload, but to date the success of these initiatives has been relatively modest. Rates of growth have declined in some countries, but caseloads remain high. Partly in response to this limited success, many welfare states have increased the emphasis on policies that aim to help disabled people find employment. However, having reviewed the income replacement and labour market programmes aimed at people with disabilities, the OECD report *Transforming Disability into Ability* concluded that no country had a particularly successful policy for disabled people (OECD, 2003). The high level of disability benefit recipients is proving to be an intractable problem for many welfare states.

For some commentators, the increase in the number of disability benefit recipients over the past two or three decades is something of a paradox in that population health has generally improved over this period. As Marin (2003: 46) puts it, "How is it to be explained that disability reciprocity rates for working age populations and costs expand in spite of improved health and increased life expectancy?" This is a question that policy makers concerned about the cost of disability benefit programmes have also asked. It is one that, for some commentators, leads directly onto the further question of whether, in fact, the rise in reciprocity rates is the result of claims by people who are "not really disabled" or who are in some way "undeserving" (Marin, 2003).

Their concern has been heightened by the finding from social surveys that some people who report being disabled do not receive disability benefits, while others who say they are not disabled are in receipt of disability benefits (Prinz, 2003; OECD, 2003). However, such comparisons are complicated by the fact that the test of incapacity to work in the context of disability benefit programmes is very different from survey questions asking whether the respondent has a disability. Moreover, disability is not the same as incapacity to work. As Spicker (2003: 31) puts it, "People can be disabled without being unable to work, and unable to work without being disabled."

Concerns about "inappropriate" or even "undeserving" claims for disability benefits may in part stem from the socially constructed nature of what is meant by "disability" and "work incapacity". These are not fixed or immutable concepts. Instead, social norms about what conditions count as being disabled may vary from one society to another and over time. Likewise, people's willingness to define themselves as disabled — and hence to submit a claim for disability benefits — may also vary (Spicker, 2003). And although some impairments are easy to identify, many others are less readily apparent. Marin (2003: 23) has argued that disability is an "inherently subjective" concept and de Jong (2003: 96) has called it "elusive". Likewise, incapacity to work is also, to some extent, a subjective concept and in practice it is often difficult to determine who is incapable of work and who is not (Burkhauser and Daly, 2002). Again, changing expectations may affect how work incapacity is perceived. Marin (2003) argues that, over time, the types of condition that are recognized as resulting in work incapacity have tended to broaden.

However, the fact that incapacity to work is to some extent subjective and not easy to determine in practice may account for the moral hazard concerns that often surround it. Two common features of disability benefit programmes exacerbate such concerns. The first is that the level of disability benefits is often higher than unemployment benefits or social assistance. In theory, this difference in benefit levels gives people with health problems a financial incentive to claim disability benefits rather than unemployment benefits (Bound and Burkhauser, 1999). The second is that disability benefit recipients are generally subject to less stringent work search requirements than unemployed people. Thus, in theory, people who have health problems and cannot find a job have an incentive to claim disability rather than unemployment benefits. In reality, the factors affecting decisions about whether to claim disability benefits are likely to be more complex than this. Nevertheless, it is because of these moral hazard

concerns that applicants are often required to undergo more or less strict medical testing in order to ensure that they really are incapable of work as defined by the disability benefit programme in their country.

The difficulty of determining whether applicants for disability benefits are incapable of work has arguably become more difficult with the rise of what some commentators refer to as the "new disabilities". Overbye (2005) has commented that, in the past, disability tended to refer to relatively easily observable, functional impairments such as being deaf, blind or needing to use a wheelchair. These were impairments that limited people's ability to work in a largely industrial (or agricultural) economy, where manual jobs were predominant, especially for people with relatively low educational attainment and few skills.

However, the main problem today, Overbye (2005) argues, is with less readily observable disabilities such as chronic muscular pain, stress and depression. Because these conditions are less easy to recognise, it is arguably more difficult to determine whether they affect work capacity. And because they are less visible, they may raise doubts about whether they really exist or are just imagined. Moreover, the incidence of these conditions appears to be increasing. In fact, as the OECD report (2003) points out, there has been a gradual increase in mental illness as a reason for work incapacity among disability benefit recipients. But whether the medical condition is easily visible or not, the qualifying criterion for disability benefit programmes is usually whether it renders the person incapable of work. As the nature of work changes over time, it is possible that conditions that are not incapacitating in one period become so in another, and vice versa.

To some extent, whether or not someone is incapable of work must depend upon the nature of the work. A long-term limiting condition may prevent someone from doing some types of work but not others. However, the types of work that someone can do may also be affected, not just by their health, but also by their education, skills and experience. These human capital factors may also influence whether or not people with limiting health conditions are able to successfully compete for jobs in the labour market, quite apart from whether or not they are capable of doing them. In addition, employer attitudes to people with limiting health conditions or disabilities are also important. If employers discriminate against them, or are unwilling to make work place adaptations that might enable someone with an impairment to do a particular job, that can make it more difficult for disabled people to find work. This may be especially the case when the economy is in recession and jobs are scarce.

Burkhauser and Daly (2002: 222) argue that a "downturn in the economy will boost disability applications and increase pressure to ease eligibility standards for disability transfers." Certainly, there is evidence that, in the 1970s and 1980s when unemployment was at relatively high levels, many welfare states used their disability benefit programmes as part of an early retirement strategy. This had "the dual aim of alleviating the labour market problems of older workers and (as it was hoped) of increasing the labour market chances of young labour force entrants" (OECD, 2003: 96). This was a period of rising unemployment often associated with economic restructuring,

including the decline of older manufacturing industries such as coalmining and steel production. Thus, to some extent disability benefits became a route out of unemployment for older, often less skilled men in poor health who were finding it difficult to secure jobs, particularly in areas of high unemployment (Alcock et al., 2003). A similar process seems to have occurred more recently as a result of the economic restructuring taking place in central and eastern European countries, such as Poland and Estonia (Szirko, 2005).

However, as Overbye (2005) has noted, many of the people that have these new disabilities are women. The OECD report (2003) likewise pointed out that women now account for a substantial and growing proportion of the new recipients of disability benefits. The new recipients are also younger than the typical disability benefit recipient in the 1970s and 1980s, less likely to have worked in manufacturing jobs and more likely to have worked in services. Given the very low exit rates from disability benefits (OECD, 2003), the increase in younger claimants may be one of the reasons why benefit durations have risen in many countries; and this in turn may be one of the factors behind the growth in caseloads. It also has implications for programme costs as well as for social exclusion among those affected.

Whatever the causes of the increasing disability benefit caseloads, many welfare states have taken steps to tackle the perceived problem. These initiatives have included reforms that aim to reduce inflow into, or increase outflow from, disability benefits. Measures to cut the "inflow" to disability benefits include tightening the definition of incapacity, making the medical test more stringent, and increasing the responsibility of employers to address long-term sickness. Measures to increase the "outflow" include introducing claim reviews and medical re-testing (or making them more regular or more stringent), new financial incentives to encourage recipients to return to work, enhancing measures for rehabilitation of disabled people and improving re-integration initiatives. Benefit reductions aim to both decrease the inflow *and* increase the outflow, but so far only Great Britain seems to have done this (OECD, 2003) and only in relation to new recipients.

Some of these measures are focused largely on tackling *structural* aspects of disability benefits, such as the rules governing eligibility to the programme or medical test procedures. Others are also focused on changing *behaviour*, for example, in-work tax credits are aimed at enticing disability recipients back into the labour market. In general, there appears to have been a shift away from passive to more active, work-based approaches (OECD, 2003), though much less so than is true of unemployment benefit regimes. This shift towards a more work-focused approach reflects a perceived need to cut programme costs (Gould and Laitinen-Kuikka, 2003) as well as the goal of reducing poverty and social exclusion among disabled people.

One of the problems for policy makers is that, while it appears to be easier to reduce inflows, the possibility exists that measures which have that goal may divert claimants onto other income support programmes such as unemployment benefits or social assistance. In other words, there may be substantial substitution effects arising from measures that seek to restrict inflow to disability benefit programmes. Some

measures aimed at reducing outflow, such as medical re-testing, may also have substitution effects. This is because some people who lose entitlement to benefit following a review of their case may move onto other social security benefits rather than into paid employment. Hence, measures that reduce disability benefit caseloads may result in increases in the numbers of people claiming other benefits. In fact, outflows into paid work appear to be more difficult to influence than inflows. Once on the disability benefit rolls, relatively few people leave to return to work. However, as the ISSA-sponsored WIR research project referred to in the Preface found, return to work rates vary significantly from one country to another (Bloch and Prins, 2001). In any event, the effectiveness of interventions aimed at helping people take up employment is unclear and may also vary across countries.

The aim of this volume is to examine trends in disability reciprocity rates and to explore possible reasons for the growth in caseloads over recent decades and the responses to this growth. The first three chapters examine three cross-cutting issues. In Chapter 2, Peter Kemp examines trends in disability benefit reciprocity among the six countries participating in the study. After comparing changes in caseloads, programme costs and the characteristics of recipients, he explores the factors that might explain these trends. In Chapter 3, Bernhard Bakker Tauritz reviews the evidence on the effectiveness of interventions aimed at tackling inflow to and outflow from disability benefit. In Chapter 4, Martin Rasmussen and Annika Sundén focus on the possible substitution effects that might result when attempts are made to reduce the number of people receiving disability benefits. Chapters 5 to 10 present detailed case studies of trends in disability benefits in six countries (Denmark, Great Britain, Israel, the Netherlands, Sweden and the United States). Finally, Chapter 11 sets out the conclusions of the study.

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Part I

Comparative perspectives

Comparing trends in disability benefit receipt

Peter A. Kemp

The six countries included in this book have all witnessed substantial increases in the number of people claiming disability benefits. It is something of a paradox that, while population health in these countries has generally improved, the number of people claiming benefit because of incapacity to work has increased. Governments in all six countries have sought to slow down or reverse this trend and in several of them the number of disability benefit recipients has stabilised or even fallen somewhat over the last decade. Yet in all six countries the caseload remains very high compared with the 1970s and 1980s. The aim of this chapter is to compare trends in the receipt of disability benefits across the six countries over the past two decades. It also seeks to explore factors that may account for these trends, but in doing so recognises that attempts at explaining such a complex phenomenon can only be tentative given the current state of knowledge on this subject.

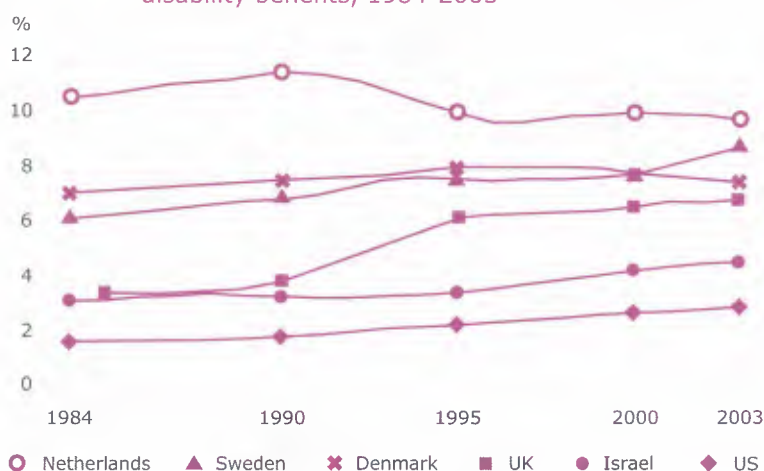
Comparing trends

Although all six countries have witnessed substantial increases in disability benefit receipt over time, in two of them — Denmark and the Netherlands — this occurred prior to the period covered by this book. Figure 2.1 shows trends in the percentage of the working age population collecting disability benefits over the past two decades for the six countries. Great Britain, Israel, Sweden and the United States all experienced significant increases throughout this period. Meanwhile, Denmark and the Netherlands witnessed an increase followed by a decline back to the level seen at the beginning of the period. Despite this fall in the rate of disability benefit receipt in Denmark and the Netherlands, the latter has the highest reciprocity rate and the former the third highest rate among the six countries in the study.

Table 2.1 shows the change in disability benefit caseloads over four periods of five years from 1980 to 1999. The size and pattern of change over the four periods varies across the six countries included in this study. However, with the exception of Israel, double figure increases had disappeared by 1990-95. Indeed, during the latter period

there was no increase at all in Sweden and a decline of five percent in Denmark. Even Great Britain, which witnessed very large increases in the first three periods, experienced a rise of only two percent in 1995-99.

Figure 2.1 Percentage of working age population collecting disability benefits, 1984-2003



Notes: UK data available only for every 5 years and 2002; US only DI beneficiaries.

Table 2.1 Growth in disability benefit receipt (percent), 1980-1999

	1980-85	1985-90	1990-95	1995-99
Denmark	32	10	6	-5
Israel	5 ¹	20	32	30
Netherlands	9	10	-6	5
Sweden	9	9	12	0
United Kingdom	36	22	54	2
United States	-8	15	34	7

¹ The Israel data are for 1983-85, not 1980-85.

Source: OECD (2003), Chart 4.2, panel B; Israel chapter in this volume.

It is not just the numbers of people claiming disability benefits that have risen, but also the cost of the programmes. In cash terms, all six countries have experienced substantial increases in outlays on disability benefits. For the five countries for which OECD data are available (that is, all except Israel) the cost increase between 1984 and 2001, at current (non-inflation adjusted) prices, ranged from 42 percent in the Netherlands to 416 percent in the United Kingdom. The increases were 172 percent, 196 percent and 218 percent for Denmark, the United States and Sweden respectively (OECD social expenditure database).

Figure 2.2 Share of GDP spent on disability benefits, 1984-2003



Notes: Netherlands based on Figure 7.2 (country report); US include both DI and SSI; Israel only general disability scheme.

However, these expenditure figures take no account of inflation or economic growth over this period. A different picture emerges when disability benefit expenditure is calculated as a percentage of GDP (Figure 2.2). The pattern of expenditure is very different from the caseload pattern shown in Figure 2.1. Expenditure on disability benefits as a percentage of GDP in the Netherlands has decreased quite substantially over the past twenty years. In Denmark, Great Britain and Sweden, disability benefit expenditure as a percentage of GDP increased noticeably in the early to mid 1990s, before falling back to about the same level toward the end of the period as they were at the beginning. However, expenditure in Sweden began to increase again after the

turn of the century. By contrast, expenditure increased throughout the two decades in the United States and particularly strongly in Israel.

Benefit reciprocity rates have generally increased across all age groups, though in some countries rates have fallen among the oldest age group (age 60-64). Apart from the Netherlands, disability benefit reciprocity rates increase with age. This is hardly surprising given that the prevalence of disability generally increases with age. Moreover, in some countries — principally Denmark, the Netherlands and Sweden — there is or has been what the OECD report refers to as a distinct “age profiling” to the disability benefit scheme that encourages take-up among older people. This age profiling includes such things as paying higher rates of benefit to older recipients and allowing them to receive disability benefits partly or even solely on the basis of labour market conditions (OECD, 2003).

There are significant differences between countries in age specific benefit reciprocity rates. For instance, as the OECD report pointed out, Britain and the Netherlands have unusually high reciprocity rates for people aged under 34 years and have high levels for those aged between 35 and 44 years. In both countries, disability benefit rates are not much lower among younger than among older people; in fact the Netherlands is the only country in the OECD study in which the likelihood of being awarded a disability benefit is not related to age (OECD, 2003).

There are other divergent trends in age between the six countries in the ISSA study. In Denmark, the percentage of new beneficiaries that are aged 50 or more years has decreased since the mid-1980s and they now account for about half of the total inflow. Conversely, the percentage aged under 40 and those aged between 40 and 49 has increased over this period. These trends are the same for both men and women. In Israel, reciprocity rates have increased across all age groups since the early 1980s. However, while inflow rates increased throughout the period for people aged under 50, for those aged 50 or more the increase came to a halt in the mid-1990s, after which inflow remained at about the same level. In the Netherlands, the trend in inflow rates fluctuated over time for all age groups, but especially for those aged 55 years or more. In Sweden, reciprocity rates have fallen since the early 1990s among people aged between 60 and 64, but for younger people they have been fairly constant. The share of inflow in Sweden that is accounted for by people aged 30 to 49 is currently higher than for those aged 60 to 64. In Britain, reciprocity rates have fallen among men aged 50 or more years, but have increased for other groups of men. Among British women, rates have increased since the mid-1990s among all age groups. In the United States, award rates for disability insurance among men fluctuated between 1975 and 2000, but for all age groups, they were lower at the end of this period than at the beginning, especially for men. Among American women, award rates also fluctuated between 1975 and 2000. However, comparing the start and end dates, the rate of awards increased for women aged up to 54 years, were the same for those aged between 55 and 59, and decreased among those aged from 60 to 64.

Across the OECD countries, disability benefit awards vary considerably by gender. However, in general, women tend to have lower inflow rates than men and this is especially true after the age of 55 (OECD, 2003). Three countries — Denmark,

Sweden and the Netherlands — are relatively unusual compared with other OECD nations in that, among people of working age, inflow rates are higher for women than for men (Table 2.2). Among the nations in the OECD study, the only other country with a higher female than male inflow rate is Norway. In Israel, the United Kingdom and the United States, inflow rates are lower among women than among men.

Table 2.2 Ratio of female over male inflow rates in 1999 by age group

	20-34	35-44	45-54	55-59	60-64	20-64
Denmark	0.78	1.21	1.38	1.18	1.67	1.26
Netherlands	2.25	1.31	0.96	0.52	0.49	1.19
Sweden	1.40	1.64	1.45	1.20	1.00	1.27
United Kingdom	0.88	0.81	0.74	0.62	*	0.63
United States	0.82	0.88	0.85	0.72	0.56	0.79

* = Not applicable — retirement age is 60 for women.

Source: OECD (2003), Table 4.7, p. 77.

The ratio of female to male inflow rates varies by age. As Table 2.2 indicates, Denmark is the only one of the six countries in the ISSA study where the female to male ratio does not decline with age; instead it increases with age. But the most noticeable feature in the table is what OECD (OECD, 2003: 77) describes as the “amazingly high inflow rates in the 20-34 age group” among women in the Netherlands, which are more than twice as high as the inflow rates for men of this age. However, the female to male inflow rate in the Netherlands falls quite quickly by age group; by age 60 to 64, women are only half as likely as men to be awarded disability benefit.

Over the period covered by this study, inflow rates have increased faster for women than for men in four of the countries: Britain, the Netherlands, Sweden and the United States. By contrast, in Israel there has been no change in the gender balance, while in Denmark inflow rates have increased faster for men.

The medical conditions for which disability benefits are awarded have also changed to a greater or lesser extent over the past years in all six countries. One common feature has been an increase in awards on the grounds of mental disorders. Although this diagnosis group covers a wide range of conditions, the largest component and the one that has particularly grown is depression, including anxiety and nerves. In all countries, mental disorders are now the largest or the second largest condition for

which disability benefits are awarded. While musculo-skeletal conditions are also either the first or the second largest group, this condition has not generally accounted for an increase in awards in recent years, but rather has tended to be stable or even fallen in importance.

Thus, mental disorders have been an important driver of the growth in disability awards. In Denmark mental impairments have increased from about a quarter to a third of all awards since 1985, while musculo-skeletal conditions have remained at about a quarter of awards. In Sweden, musculo-skeletal disease is still the most common diagnosis group for disability benefit awards, but has declined in importance over the last 20 years. In the Netherlands, the proportion of awards made on the grounds of mental disorders has increased in recent years and is now the largest single category. In Britain, musculo-skeletal conditions accounted for an increasing proportion of awards from 1975 to 1995, after which they became much less important. Awards made due to mental impairments increased in importance throughout this period in Britain and now represent two-fifths of all new awards. Likewise, in the United States the proportion of disability insurance awards that are due to mental disorders has increased rapidly, rising from 11 percent of the total in 1975 to 26 percent in 2001. Meanwhile, in Israel the disability benefit reciprocity rate for mental impairments increased by 46 percent between 1990 and 2002 and is now the largest single diagnosis group. Similar trends are found elsewhere among many of the OECD countries (OECD, 2003).

Accounting for trends

In summary, all six of the countries included in this study have disability reciprocity rates that are very high, at least compared with the 1970s and 1980s. With the exception of Israel, rates of growth have declined in recent years, but the numbers of recipients remain high. In general, there has been a growth in the relative importance of female recipients and in three of the countries women outnumber men in the disability benefit caseload. There has also been a relative growth in younger beneficiaries. Finally, there has been a marked shift towards mental disorders and particularly conditions such as depression as the medical condition for which disability benefit is granted. Thus, not only has the disability benefit caseload *increased* and remained at high levels, it has also *changed* somewhat in character.

How does one account for this growth and change in disability benefit reciprocity? One way to approach the problem is to examine changes in the demand for and supply of disability benefit. *Demand* side factors include trends in the incidence and nature of long-term health conditions and disability, population ageing, and developments in the labour market. *Supply* side factors include the coverage of disability benefits and disability insurance, eligibility conditions, medical screening and medical reviews, benefit generosity and the availability of other benefit programmes.

Demand side drivers

On the demand side, it is clear that trends in population health and disability can account for only a small share of the growth in disability benefit receipt over the past two decades (Lonsdale and Seddon, 1994; Marin, 2003). Thus, although trends vary between countries, in general many of the more objective measures of population health have improved (though obesity is one of the obvious exceptions). The incidence of subjective measures, such as self-reported limiting long-term conditions or disability, has increased though.

There is some debate about whether the modest overall growth in disability reflects an increase in the number of people with impairments, a greater willingness among doctors to recognise and diagnose impairments, or an increased willingness by people to report that they are disabled. There is also uncertainty about the nature of the growth in more subjective conditions such as mental illness and especially stress and depression (Moncrieff and Pomerleau, 2002). Because they are more subjective, there is arguably more ambiguity about whether or not someone's mental health problems are sufficiently severe as to render them incapable of work than is the case with more well-defined impairments such as deafness, blindness or heart problems. Indeed, Overbye (2005) refers to the rise of "the new disabilities" such as chronic muscular pain, persistent fatigue, anxiety, nerves and depression, which are less easily observable. These new disabilities "can be particularly debilitating in a modern work environment which increasingly focuses on teamwork and contact with customers/clients/users" (Overbye, 2005: 162).

Another potentially critical demand side factor behind the growth in disability benefit caseloads is trends in the labour market. The employment of disabled people appears to be more sensitive to the business cycle than employment among non-disabled people (Bound and Burkhauser, 1999). There is a growing body of evidence, much of it based on US data, to suggest that there may be a relationship between the economic cycle and disability benefit claims. Various econometric studies, for example, have attempted to estimate the effect of an increase in the unemployment rate on the number of people of working age claiming disability benefits. These studies covered different time periods, used various datasets and employed different estimation techniques. Some, but by no means all, of these studies suggest that increases in the unemployment rate are associated with increases in disability programme growth. However, an authoritative review of the research indicated that, in general, the degree of responsiveness of the US disability insurance caseload to changes in the level of unemployment is sufficient to account for only a minor share of the increases that have occurred (Bound and Burkhauser, 1999).

Evidence from Britain suggests that there may be a ratchet effect in terms of the relationship between unemployment and disability benefit; that increases in unemployment are associated with growth in the disability benefit caseload, but that the caseload does not fall commensurately when unemployment declines (Disney and Webb, 1991). Likewise, although not part of this study, in New Zealand a substantial growth

in invalidity and sickness benefit receipt occurred during the difficult labour market conditions experienced in the late 1980s and early 1990s, but the trend did not reverse when the labour market improved from 1993 onwards (Wilson et al., 2005). The same appears to be broadly true of Australia (Argyrous and Neale, 2003).

One possible reason for this ratchet effect is that long-term sick and disabled people who lose their jobs become "trapped" on disability benefit and are unable to leave even when unemployment declines. Lonsdale and Seddon (1994: 157) argued that, once people move onto disability benefit, other factors beside the unemployment rate can come into effect: "Recipients are likely to lose contact with, and knowledge about, the labour market. Their skills may be superseded by others. Their confidence in getting a job may dwindle. Employers will pay more attention to their past history, such as medical records, especially if there is surplus labour. The older they are, the more likely it is that these effects will be felt."

If people do become "trapped" on disability benefit, it will reduce the exit rate and hence will increase the duration of spells on benefit. This, in turn, will increase the size of the caseload. There is certainly evidence from Britain which suggests that one important reason for the growth of the number of incapacity benefit recipients between the late 1970s and early 1990s was the fact that people were staying on benefit for longer periods than had previously been the case (Berthoud, 1998; Lonsdale and Seddon, 1994). In the United States, exits from disability benefit due to medical recovery and return to work have fallen substantially over the past two decades and are now almost non-existent (Bound and Burkhauser, 1999). Autor and Duggan (2003) found that, between 1984 and 2000 in the United States, as younger people with lower mortality risk entered the disability rolls, the annual mortality rate of benefit recipients fell substantially (-35 percent), as did exits for retirement (-40 percent). The result was that the expected spell duration of newer cohorts of disability benefit recipients increased.

A number of researchers have argued that the growth of disability benefits is due to "disguised unemployment" (Argyrous and Neale, 2003). In Britain, for example, it has been claimed that the growth in incapacity benefit in the 1980s and early 1990s was in response to economic recession, especially in the coalfield areas and old industrial towns (Alcock et al., 2003). Lack of labour demand in the areas most badly affected by unemployment meant that, when the economy recovered, workers with health problems were unable to find suitable jobs. Consequently, in contrast to experience in earlier recessions, these workers found themselves stuck on incapacity benefit. In time, many became discouraged and gave up searching for work. In effect, they were forced to use disability benefits as a pathway to retirement. Using British data, Piachaud (1986) concluded that the experience of unemployment made older men more easily accept the definition of themselves as "disabled" when their job prospects were poor.

Another, to some extent competing, explanation has been described as "health selection effects" (Easterlow and Smith, 2003). The argument here is that, in the competition for work, people in poor health are among the first to be let go by employers

during downturns and find it more difficult than workers in good health to obtain employment during upturns in the economy. In effect, they are “selected out” of the labour market in the competition for jobs. Certainly, there is evidence from a number of countries including Britain and the United States that the employment rate among people with disabilities has been declining over recent decades (Burkhauser and Daly, 2002). This is related to a further argument, namely that there has been a rise in the “employability threshold” (Bartley and Owen, 1996), which has made it more difficult for workers with impairments or health problems to find and keep employment.

A further factor behind the growth in disability benefits has been the growth in female labour market participation. Because more women now have an employment record, they have built up an entitlement to disability benefits and hence are able to claim them when they experience health problems. Certainly, the countries in this study have witnessed a substantial growth in female labour market participation. This occurred earlier and to a greater extent in Denmark and Sweden than in the other countries in the study. Moreover, as noted above, there has been a substantial growth in the number of female disability benefit recipients and in several of the countries women recipients outnumber men. Hence, in post-industrial societies, high rates of disability benefit reciprocity cannot be regarded as something that mainly affects men.

Some authors have explained this growth in female disability benefit recipients by the “double burden” hypothesis. For example, Hvinden (2004: 176) has argued that many women in the Nordic countries were “simply exhausted from the double burden of being at the same time worker and main homemaker/care provider for their families.” The argument is that many women now have to cope with the dual burden of motherhood and paid employment, whereas previously they had only to deal with motherhood, while men did the breadwinning. In fact, since women are still responsible for the largest share of both domestic labour *and* childcare, those who are also in work face a triple burden rather than a double one. Coping with the varying demands of these tasks may create role conflict and overload, thereby leading to high levels of stress (Bratberg et al., 2002). Although the evidence is mixed, there is some empirical support for the double burden hypothesis (Einerhand and van der Stelt, 2005), though more research is required.

Supply side drivers

On the supply side, changes in the coverage of disability benefits, eligibility conditions, medical screening and reviews, benefit generosity and the availability of other benefit programmes could all influence the size of the caseload. The fact that disability benefit rates vary across countries, but not in line with self-reported disability rates (OECD, 2003), has led some experts to believe that variation in reciprocity is “largely due to the rules of disability and other transfer programmes and the incentive structures these rules induce” (de Jong, 2003: 83; cf. Aarts et al., 1996). Certainly, there is some evidence to support this view. For example, Einerhand and van der Stelt (2005) found that the stock and inflow into disability benefits in the then

15 countries of the European Union was correlated with the coverage and generosity of benefits. Thus, it is important to consider how changes in the supply side may have influenced trends in disability benefit receipt.

In general, taking recent decades as a whole, many countries have gradually widened the types and severity of health problems that are recognised as qualifying for disability benefit (Hvinden, 2004; Marin, 2003). Such changes almost by definition increase the proportion of the population eligible to apply for disability benefits and it is hardly surprising, therefore, that the number of recipients has tended to increase.

However, concerns about rising disability benefit caseloads and costs have prompted periodic attempts by governments to curb programme growth. Indeed, in some cases the retrenchment measures were taken in response to increases in caseloads prompted by previous reforms that widened the coverage or increased the generosity of disability benefits. For example, in the United States amendments passed in 1972 acted to increase the availability and the generosity of disability insurance and were followed by a rapid increase in the number of recipients. Then, in 1980, legislation was passed to tighten up administrative controls over the disability determination process, including the introduction of periodic "continuing disability reviews", which helped to reduce the number of new awards and increase the number of terminations. However, in 1984, the disability determination process was liberalized again (Autor and Duggan, 2003; Bound and Burkhauser, 1999).

In Sweden, there have been numerous changes to the rules governing disability benefit. In the 1970s and 1980s, these changes tended to increase eligibility, but in the 1990s they were more restrictive (Kruse, 2003). Dutch attempts to curb the very high number of disability benefit recipients have been described as the "battle against the numbers" (van Oorschot and Boos, 2000). This battle has involved both actions to reduce inflow to disability benefits and measures towards reintegrating disabled people into the labour market. Very few countries, according to the OECD (2003), have reduced the generosity of disability benefits directly. One such instance is the 1995 reform in Britain, which not only tightened up the medical test but also abolished the earnings-related element of the benefit. The principal aim of this reform was to cut the rapidly rising number of people claiming Invalidity Benefit (Walker and Howard, 2000).

Some critics have suggested that the generosity of benefit levels relative to earnings has distorted the labour supply decisions of older worker and helped to encourage early retirement. Econometric research has produced estimates of the extent to which the number of people claiming disability benefits is affected by levels of disability benefits. For example, using Canadian data, Gruber (2000) estimated that, among men aged from 45 to 59, the elasticity of labour force non-participation with respect to benefit levels was between 0.28 and 0.36. Meanwhile, using US data Haveman and Wolfe (1984: 64) concluded that "the responses of older males to increased disability transfers is statistically significant but quantitatively small. This response is concentrated among older, disabled men who have low expected earnings." Similarly, Haveman et al. (1991) found that the responsiveness of workers to

increasingly generous disability benefits in the United States could account for no more than 20 percent of the decrease in labour force participation among older men in the previous few decades. Men with poorer health or disability status were more responsive to the level of disability benefits than men with fewer functional limitations.

The impact of disability benefits on labour supply decisions is likely to be greater when the effective replacement rate is high. According to Hvinden (2004), in the Nordic countries the rate of income replacement for disability benefits has tended to increase over time, thereby making them more attractive when marginal decisions are taken about whether to apply. In the United States, the formula that determines the amount of disability insurance to which recipients are entitled yields a higher replacement rate for lower paid workers (Bound and Burkhauser, 1999). Hence low paid workers may have a greater incentive at the margin to claim disability benefit rather than to look for employment. This incentive may have increased in recent decades because there has been a secular decline across the most developed nations in the demand for low skilled work and the relative wages in this sector of the labour market (Nickell and Bell, 1995). In the United States, the formula for disability insurance is progressive and indexed to the mean wage. Consequently, increased dispersion of earnings during the 1980s and 1990s substantially raised the replacement rate (Autor and Duggan, 2003). Moreover, there was a downward trend in the ratio of disabled to non-disabled earnings from work between 1970 and 1992 (Bound and Burkhauser, 1999). Consequently, it is possible that declining relative earnings of lower paid and disabled workers may have been an important driver behind the growth in the disability benefit caseload in the United States.

As well as potentially affecting *inflow* to disability benefit, high replacement rates affect *outflow* by reducing the financial incentive for recipients to move off disability benefit and return to work. In the United States, disability insurance recipients face a substantial loss in benefits once they move beyond a modest level of earnings (Bound and Burkhauser, 1999). However, the OECD reported that low exit rates appear to be related less to financial incentives and more to limited opportunities to move into what it termed "quality employment". Meanwhile, poor programme design may also stifle attempts to exit from disability benefits. In particular, in some countries the disability benefit rules "may make it difficult for benefit recipients to try to work without having to go through the cumbersome award procedure again should their work experience turn out to be unsuccessful" (OECD, 2003: 63). Moreover, there is evidence from Britain that disability benefit recipients fear that, if they look for work or take up a job, they may lose their entitlement to benefit because they are in effect demonstrating that they are capable of work after all (Woodward et al., 2003).

Disability benefit levels also tend to be high relative to other social security programmes such as unemployment benefits (Lonsdale and Seddon, 1994). At the margin, the generosity of disability benefits relative to unemployment benefit is likely to encourage some people who are having difficulty finding a job to claim the former rather than the latter, especially as disability benefits also tend to have fewer or less stringent work search requirements. In fact, it has been claimed that the introduction of a stricter unemployment benefit regime in 1996 increased the incentive and will-

ingness of older unemployed people to claim disability benefit in Britain (Ritchie et al., 1993). This type of displacement effect is facilitated by the fact that, in practice, the distinction between the categories “unemployed”, “early retired” and “disabled” is frequently a fuzzy one (Marin, 2003). Chapter 4 discusses these potential displacement and substitution effects in more detail.

It has been claimed by some authors that becoming a disability benefit recipient has come to be seen as a socially acceptable exit route from the labour market, especially for older workers (Hvinden, 2004). Certainly, in Sweden “the path to retirement from the labour market is often via a disability pension, which in turn is often preceded by a spell of sickness or unemployment” (Kruse, 2003). The OECD (2003) reported that there was an apparent correlation between generous early retirement provision and age profiling in disability benefit rules, the combined effect of which was to help create an “early exit culture” in some countries.

Several of the countries in this study more or less institutionalised this use of disability benefits as a way to facilitate restructuring from an industrial to a service-led economy. For example, in the Denmark, the Netherlands and Sweden it was for a period possible for older workers — and in the Netherlands, even for those under age 45 (Aarts et al., 1996) — to receive disability benefits for labour market reasons rather than because of a health diagnosis. In Britain, although it was not formal policy, in practice Employment Office staff were encouraged to steer older workers in poor health towards invalidity benefit as a way of keeping down the number of people on the unemployment register (Walker and Howard, 2000). Marin (2003) has argued that disability benefits are prone to abuse by employers, unions and politicians as a way of facilitating industrial restructuring.

The transition to post-industrial society

It is clear that there has been a range of demand and supply side factors behind the growth in disability benefit recipients, the importance of which has varied between countries and over time. In any event, much of the existing literature has focused on the *growth* rather than the *change* in the composition of disability benefit caseloads over recent decades, but both need to be explained.

One can speculate that many of the demand side factors appear to be associated with the economic restructuring that has taken place from approximately the mid-1970s in the transition to post-industrial societies. This economic restructuring has involved secular decline in manufacturing industry and growth in service sector employment. De-industrialisation was accompanied by a shake-out of workers, especially those who were older or deemed less productive, such as some people with limiting health problems and impairments. The higher levels of unemployment that characterised many economies in the 1980s and 1990s made it more difficult for older, less educated and sick or disabled people to find work. Meanwhile, the demand for unskilled work declined across the developed world (Nickell and Bell, 1995). Consequently, the growth in disability benefit caseload was associated especially with older men with

musculo-skeletal complaints, who previously might have been able to find new work but were unable to do so in the new post-industrial economy.

On the supply side, governments, unions and employers have acquiesced in the use of disability benefits as an early retirement mechanism to mitigate the worst effects of this industrial restructuring and to shift the supply of older workers out of the labour market to make way for younger and more productive workers.

Thus, to an extent, the surge in disability benefit receipt in the twenty years from the 1970s-1980s may be a cohort effect associated with economic restructuring in the transition to a post-industrial society. However, that does not mean that disability benefit caseloads will therefore decrease once this wave of older men has worked its way through the system. This is because the transformation of work in the post-industrial economy is creating new health risks of its own (Esping-Andersen, 2002; Gallie, 2002) which will fuel the inflow into disability benefits. These new health risks are not just affecting older men. As we have seen, in recent years the biggest growth in disability benefit recipiency has been among women and middle aged (and in the Netherlands, younger) people. Meanwhile, the share of recipients with cardio-vascular and (to a lesser extent) musculo-skeletal complaints has decreased and the share with mental disorders — particularly depression and complaints associated with stress — has increased.

The growth in female beneficiaries has been associated with the rise in labour force participation among women. Much of this female employment has been in the distributive and personal services sectors, in which the labour process is characterised by low control, low social support and high levels of psychological demands. Associated with the growth of service sector employment has been an increase in more “flexible” jobs, including ones that are precarious or low paid. Moreover, increased work intensity and organizational restructuring (such as downsizing) are common features of the post-industrial economy. Although the exact pathways and causal mechanisms are yet to be firmly established, there is growing evidence that these structural changes in the labour market have a negative impact upon health (Mustard et al., no date; Quinlan et al., 2001) and are associated with increased disability benefit receipt (Vahtera et al., 2005).

It is unclear whether or not the growth in younger and female recipients is related to the so-called “double burden” that women face in managing the majority of domestic labour and childcare, while simultaneously holding down a (stressful) job. Overbye (2005: 167) has suggested the “The old disability stereotype of an industrial or agricultural male with a worn-out back is in the process of being replaced by another kind: A woman from a mixed social and occupational background with psychological or psychosomatic problems.” This is inevitably an over-simplification of a more complex process, not least because the growth in mental disorders has occurred among men as well as women. Nevertheless, it is apparent that the shift from an industrial (and in Denmark, an agricultural) to a post-industrial society has brought with it a change in the nature of the health conditions and impairments associated with disability benefit and in the gender and age composition of those who receive it.

Conclusion

This chapter has shown that the disability benefit caseloads in the six countries in this study have not just increased, but have also changed in composition. In general, there are more women and younger people on the rolls than was the case twenty years ago. Meanwhile, an increasing proportion of disability benefits are now awarded because of mental disorders and particularly mental ill health, while cardiovascular and musculo-skeletal conditions have become less important. The chapter also reviewed a range of demand and supply side factors that appear to have been important drivers of caseload growth and change. Finally, it was argued that the surge in disability benefit recipients in the 1970s and 1980s was associated with the process of de-industrialisation and, consequently, may to some extent be a one-off or cohort effect. Nonetheless, the inflow to disability benefits will continue to be fuelled by the stress and other mental health effects associated with the increased work intensity and organizational restructuring of the post-industrial economy.

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Retention and rehabilitation: Interventions in their settings

Bernhard Bakker Tauritz

This chapter asks the question we all want answered: which interventions into disability arrangements work? Any answer needs to consider that interventions are embedded in national settings and programmes, connected to a variety of target populations, and depend on the goals and timing of actions. Ultimately, an effective intervention is one that alters individual choices or labour market possibilities in such a way that workers do not enter the benefit scheme, or (when they have already entered) facilitates work resumption.

What can be surmised from the available information is that the goal of the work-related interventions described in this volume is to maximize labour market participation or potential, rather than to improve the affordability of the scheme. Two propositions follow from this analysis: first, interventions linked to work-related disability may not necessarily be cost-cutting measures and thus should not be appraised on such grounds; and second, the effectiveness of interventions should be evaluated within their context (institutional, social and political) and not separately from it.

When trying to answer the question regarding the effectiveness of interventions, one quickly discovers that reliable information on this subject is scarce. We have to rely mostly on qualitative evidence regarding the interventions and the schemes in which they operate. Specific interventions may seem to work in one situation, but can be completely ineffective in a different context. This chapter aims to investigate ways in which the intervention and its context interact.

To do this it provides a broad overview of the intervention strategies used by the six countries under study. We reflect on the ways in which these interventions are linked to institutional frameworks and the consequences of choices made within these frameworks for the potential effectiveness of interventions. We will focus on the specific interventions used and the consequences of structural elements of the disability arrangements for these intervention strategies.

Comparing interventions: Schemes, goals and mechanisms

All countries in this study have been confronted with a rising number of people on disability benefits in recent decades. In some countries, this growth has flattened out in the past few years, while others continue to be confronted with rising numbers of disability benefit recipients. Many observers feel that the labour market participation rates of people with disabilities are unsatisfactory. The OECD examined these problems in its study "Transforming disability into ability" (OECD, 2003), putting the emphasis in the disability debate on prevention of disability and the rehabilitation of sick or disabled workers.

Setting up national strategies for improving the participation of disabled workers in the labour market has meant making choices. Constrained by national institutional arrangements, interventions are used to improve the functioning of national labour markets and disability arrangements or may be aimed at adjusting the balance between the two.

Three aspects of interventions are distinguished in this chapter: the scheme (meaning the larger institutional benefits system and its administration); the goal the national strategy attempts to reach; and the mechanism of the interventions, or the way the strategy attempts to reach its goals.

Firstly, the benefit schemes of the different nations differ substantially in their definition of disability, the strictness of eligibility criteria (medical or otherwise) and the emphasis put on outflow to work. Secondly, the intervention strategies themselves differ in terms of their goals and their mechanisms. Interventions may target people that are at risk of becoming disabled, people who already receive benefits, or both. Maximizing existing capacities or strengthening individual capacity is another aspect. A third question is whether an intervention targets the structural aspects concerning disability — such as trying to influence the choices of the disability population by changing incentive structures — or has a more tailored individual approach, for instance rehabilitation of the individual faced with disability.

All of these aspects should be taken into account when looking into the question of how to intervene most successfully in a given policy setting. There is, for instance, a connection between the intended goal of an intervention and the way the intervention is set up.

There are two reasons why any given country may choose to intervene in the processes connected to disability and work. Financial considerations may force a scheme to improve its sustainability by limiting inflow, or stimulating outflow. Alternatively, interventions can be employed to create a situation in which everybody who can work, does work. Where this is the case, the interventions may be implemented for social, emancipative reasons. In practice, these two considerations will often be used simultaneously as grounds for intervention. The considerations are not mutually exclusive as both may be gained within one intervention, but as one or the other

political goal gains in importance, shifts can be seen in the nature of intervention strategies.

To be effective in financial terms, an intervention will have to be applicable to a large number of people. Of the three types of interventions that will be described in this chapter — rehabilitation, incentives and special employment programmes — only the adjustment of incentives applies to all benefit recipients or applicants. Adjusting incentives means altering the considerations in which individuals make their choices in such a way that they will more readily retain their work, or look for new employment opportunities rather than enter the benefits scheme.

Improving individual labour market opportunities for benefit recipients requires interventions that are attuned to individual needs. Rehabilitation efforts attempt to alter the competencies of people in relation to the labour market, and supported employment alters the financial or organizational considerations affecting disabled people in a work situation. These two types of intervention share the fact that they do not target the choices made by groups of people on the boundaries of the benefit scheme, but rather target the work itself through either the structural conditions under which it takes place or the individual capabilities of the person that performs the work.

Dimensions of difference

Both the scope of the scheme and the specific intervention matter when we try to determine why an intervention is successful. For the purpose of this study three dimensions of difference are used. The first concerns the definition of disability, or way a particular benefits scheme is set up; the second exemplifies the goals (and timing) of the intervention; the third and last dimension is the nature of the intervention itself and looks at three aspects, namely the mechanism of the intervention, the level of selectiveness of the intervention and the parties that are involved in, or targeted by, the intervention.

Broadly, two groups of schemes may be distinguished. In the first group, benefits are distributed to people who are not expected to be able to resume work and last largely until retirement age. The second group of benefit schemes regard disability as temporary and attempt actively to stimulate outflow to the labour market. The distinction between the two is the expectancy that benefit recipients will, or will not, flow out of the scheme onto the labour market.

This matters because this definition has consequences for the characteristics of the population on benefits. Where disability is expected to last until retirement, the labour market opportunities of benefit recipients are likely to be fewer. The scheme will allow entrance into the benefit, only on the condition that the disability is such that labour market participation is not expected. If work resumption is expected to occur, the scheme is likely to be less selective and allow more people to flow into benefits.

For instance, in Sweden many interventions are focused on the period of sickness benefits that leads up to award of disability benefit with the aim of reducing inflow. Once disability is a fact, work resumption is scarce. As in Sweden, in the United States a disability benefit is also more likely to continue until retirement. The United States combines a scheme that is not easy to get into with a low outflow to work (OECD, 2003). Traditionally, the United States' intervention strategy has shown a strong focus on incentives, but rehabilitation services are now also offered to people on benefits through the Ticket to Work Programme, and early intervention strategies (including cash and medical care for those who would be eligible for disability benefit but are able to continue work) are being tried in a demonstration project.

In schemes where outflow to work is embedded in the scheme, more is invested in interventions after the disability has been determined. The Netherlands is a strong example of this principle, but it also applies to other countries who invest in people on benefits whose disability has been determined.

The goal of the intervention is a second distinguishing dimension. Interventions may be used to prevent benefit dependency (before entry to benefits) or to stimulate resumption of work (after a benefit has been awarded). This is really a question about the timing of interventions. Generally speaking, early interventions are regarded as more successful than later ones. This would mean that prevention is easier to attain than work resumption. In some countries, however, disabled employees flow into the scheme earlier and more easily than in others and more potential for work resumption may be expected.

Finally, the nature of the intervention itself differs among national schemes. For the purpose of this study we look at the mechanisms involved in the intervention: how it works, the level of selectiveness of the intervention, for whom it works, and the actors involved.

The dimensions of difference used in this chapter have been organised schematically below.

<i>Level</i>	<i>Dimension</i>
Scheme	<i>Definition:</i> Is disability expected to be permanent or temporary?
Intervention	<i>Goal:</i> Is the intervention aimed at work resumption (after award of benefits) or prevention of benefit dependency (before award of benefits)?
Intervention	<i>Selectiveness:</i> Is the intervention targeted or generic? <i>Target groups:</i> What is the moment of intervention? What is the mechanism of the intervention? <i>Actors:</i> Who is involved in the intervention?

In answering these questions we try to develop some notions about the way the effectiveness of an intervention is constructed. We focus on three types of intervention: rehabilitation, incentives and disincentives, and sheltered or supported employment.

Improving labour market participation: Three types of intervention

Though strategies dealing with work-related disability can differ on all of the dimensions described in the previous section, it remains possible to group the implemented interventions into three broad types: rehabilitation methods, incentive structures, and sheltered/supported employment. On the basis of this typology, the following three sections provide an overview of the various activities that can be distinguished within the six countries involved in this study. The descriptions provided here are based largely on the individual country chapters found elsewhere in this volume.

Rehabilitation

Rehabilitation focuses on getting people back to work. In the case of disability, two strategies may be employed that can be termed rehabilitation. Either an intervention tries to improve the health situation of a disabled person, thereby removing limitations that inhibit participation. Or the intervention targets the joblessness by improving persons' vocational skills (job-seeking skills, schooling, social skills, etc.). Typically, rehabilitation caters to people on disability or sickness benefits. All countries included in this study have some form of rehabilitation, although both the uptake and selectivity of rehabilitation programmes vary.

Denmark, Sweden and the Netherlands have relatively extensive rehabilitation programmes, in which many (future) benefit recipients participate at some point during their period of sickness or disability. Rehabilitation in Israel is a right for those who need and are deemed likely to benefit from it. If a person is medically disabled by at least twenty percent, and a rehabilitation officer decides that rehabilitation can offer some positive effects for the disabled person, the intervention is implemented.

Great Britain and the United States have less experience with rehabilitation programmes as an intervention to facilitate work resumption, but in both countries rehabilitation is now offered to benefit recipients who request it. In Great Britain, this concerns a number of pilot and national programmes: the New Deal for Disabled People, the creation of Job Centre Plus to deal with benefits and employment in an integrated way, and the Job Retention and Rehabilitation Pilot (JRRP), which is one of the relatively few programmes being evaluated in an experimental setting. Great Britain also offers benefit claimants "work-focused interviews" that serve to identify remaining work opportunities and keep the disabled person's mindset focused on work. The

United States offers benefit recipients the "Ticket to Work" programme¹. Through this programme, the disabled person receives a voucher (the ticket) that can be used to acquire rehabilitation services.

Target groups: Selectivity in rehabilitation

One of the important choices to make in setting up a rehabilitation scheme is the decision who to target with the intervention. Using rehabilitation for all people on sickness or disability benefits ensures that all who may benefit by the intervention receive it. However, it implies a high risk of deadweight loss (using the intervention on those that would find work without the intervention).

The desire for interventions to be effective and for deadweight loss to be reduced to a minimum has led all of the countries studied to use some form of selection mechanism. Rehabilitation is most generically applied in Sweden, Denmark and the Netherlands, where rehabilitation programmes are offered to all people with the goal of maximizing the use they make of their remaining working capacity.

The Scandinavian states in this study make the exhaustion of rehabilitation possibilities a necessary condition for entering the disability benefits programme. In the Netherlands, rehabilitation is offered to people who are not fully disabled, but are already receiving benefits. In Israel rehabilitation is not necessarily linked to benefit dependency, but available to all who could benefit from it and request it.

The Ticket to Work scheme offers rehabilitation to benefit recipients in the United States. In Great Britain, vocational rehabilitation is also available. Both intervention strategies can be described as more selective since, to a large extent, they require the eligible person to request the intervention before it starts. However, the British work-focused interviews, which are used to increase the commitment of a (new) benefit recipient to resuming work, target all benefit claimants and are as such a generic measure.

The goals of rehabilitation

Rehabilitation aims to assist sick or disabled people in their return to work efforts. This is true for all rehabilitation efforts exerted by the six countries in this study. Yet different schemes apply rehabilitation in different ways. These differences influence the functioning of the intervention and are therefore relevant when discussing its effectiveness.

Some schemes in this study require that substantial rehabilitation efforts have been undertaken before a person becomes eligible for disability benefits. This means that rehabilitation mostly takes place before benefits are granted, during the phase in which a person is on sickness benefits. Strong examples of this are found in Sweden, Denmark and also in the Netherlands, where employers are responsible for the rehabilitation of sick employees. Conversely, rehabilitation of disabled people on benefits

1. Prior to the Ticket to Work programme, disabled workers who were likely to benefit from vocational rehabilitation were referred to State agencies.

is a public responsibility. In Great Britain and the United States, rehabilitation is mostly offered to people on benefits (with the exception of a British pilot programme that caters to sick-listed employees). Finally, Israel offers rehabilitation services that are not connected to benefit reciprocity, but rather target people that may benefit from the services in the view of a rehabilitation officer.

Rehabilitation services that are offered before a disability benefit is awarded are aimed at preventing inflow of people that have remaining working capacity. Such strategies are essentially "diversion policies", as they attempt to divert threatening inflow to other parts of society, most preferably into work. Rehabilitation that is offered during benefit dependency aims to maximize the labour market participation of people on benefits, or even to stimulate outflow from the benefit scheme.

Employers' participation

A third defining characteristic of the way a country employs rehabilitation efforts can be found in the distribution of responsibilities among the involved actors. Rehabilitation activities necessarily include a client, a public administrator and a service provider (public or private). There is, however, one other party that is involved in the process in some countries, but not in others. Employers play a major part in the Dutch benefit arrangement, and are also involved in the Swedish and Danish schemes.

This is not to say that the employer has no obligations towards sick and disabled employees in the other countries. The United States and Great Britain have significant anti-discrimination legislation through which employers are obligated to facilitate employment for disabled people, for example providing work place adjustments to sick and disabled employees. These adjustments can be described as a form of rehabilitation aimed at job retention, thereby preventing inflow into the benefit scheme.

This rehabilitation of work opportunities is one form. Rehabilitation of the individual person faced with sickness or disability is another. In Sweden and the Netherlands, the employer is responsible for offering rehabilitation services to sick-listed employees. The Danish policy aims to inform employers about their responsibilities and thereby convince them of the necessity of taking action. The Danish policy does not strictly require the employer to take action, but does include the employer among the group of actors involved in the processes surrounding disability and rehabilitation.

Differences and similarities in rehabilitation

Rehabilitation can be aimed at job retention and try to keep people from becoming (fully) benefit dependant; alternatively it can be aimed at activation and try to get people back to work. The intervention may be more selective and target specifically the people who may benefit from it, or focus more generally on utilizing people's labour market potential to the fullest. The nature of rehabilitation efforts in any specific country depends on making choices about who the intervention should reach and what the intervention should achieve for these people.

The main differences between the ways in which different countries use rehabilitation programmes seem to arise from the goal they are trying to achieve. The countries that use rehabilitation as a way of reducing inflow into the benefit scheme, such as Denmark, the Netherlands and Sweden, have less selective systems for targeting rehabilitation.² Two other countries, Great Britain and the United States, use rehabilitation mainly as a way of promoting outflow and activating people on benefits. These two countries offer rehabilitation type interventions that are more selectively targeted to people who are highly motivated and request the intervention themselves. In Great Britain, a move towards a more generic type of rehabilitation can be seen in the introduction of mandatory work-focused interviews for new cases, which indicates a further change towards a policy that actively tries to influence the number of people on benefits.

Attempts to actively influence the behavior of employers take place in countries that focus on inflow into benefits. Involving employers in the rehabilitation process serves to make the interventions more effective by intervening early and preventing job loss of sick or disabled employees. Sweden and the Netherlands have the most active policies towards employers. In Denmark, the subject is also under discussion. In countries that do not use employer responsibility as a way of stemming inflow, interventions for people before they enter the benefit arrangement are often covered by anti-discrimination legislation.

Incentives and disincentives

The notion that people actively attempt to reach those outcomes that are most beneficial to them in a given situation has given rise to debate on incentive structures in social security arrangements. This notion of "incentives guiding actions" has led to a number of reforms and policy measures in the countries under study here.

This line of reasoning can be described as essentially a micro-economic discourse where benefit dependency is not only the result of an employee's health status, but also (to some extent) a choice (Aarts et al., 2002). The equilibrium between work and benefits may be influenced by adjusting replacement rates and entrance barriers to the disability benefits scheme. Incentives exist through the structural characteristics of a scheme, but their effects need to be looked for in the actions of individual actors.

Broadly, two types of incentive-oriented policies can be distinguished. One aims to improve the incentive structure in such a way that benefit reciprocity is less desirable or more difficult to obtain. The other is aimed at removing disincentives that inhibit people from resuming work. The two types are complementary. Where the one aims to reduce the likelihood that people will become benefit dependent, the other aims to increase the chance that people will work.

2. Israel might also be counted among this group, as rehabilitation is offered to all who need it and may benefit from it. The goal of rehabilitation in Israel is however not explicitly linked to the benefit arrangement.

More so than rehabilitation programmes, incentive-based measures are intended to change individual choices by restructuring the conditions that form the context of the choice. While rehabilitation targets the individual benefit recipient that needs to find work, incentive measures target a number of different groups of actors. Employees or benefit recipients, employers and administrators have all been subjected to adjustments in the structural characteristics under which they operate in one or more of the countries included in this study.

Incentives and disincentives for employees and benefit recipients

Different incentives have different goals and different delivery mechanisms. They may target employers or employees, by making it more difficult (or less desirable) for individuals to enter the benefits scheme, or make it easier (more desirable) for individuals to leave it. The easiest way of adjusting the incentive structure embedded in a benefit scheme is to change the replacement rate of the benefits. Shifting the balance between the wages a person can make through paid labour and the level of benefits available to the same person can make people more likely to want to utilize their remaining working capacities.

Lowering benefits is one way to attempt this structural change. In Great Britain, benefit levels have been lowered through a number of policy changes with the aim of reducing the number of benefit claimants. In the Netherlands, benefit recipients saw their purchasing power drop by 25 percent during the 1980s. These policy interventions were at that time not aimed at cutting back the number of benefit claimants, but intended to improve the affordability of the scheme. Sweden adjusted the level of benefits to make obtaining sickness benefits less desirable than entering a rehabilitation programme. In this last instance, incentives have been used to adjust the scheme in such a way that people flow into the more desirable programme in terms of work focus.

When the employee has entered the benefits scheme, incentives are aimed at stimulating outflow. There are two strategies available: changes in the incentive structure can be aimed at making work resumption more desirable (for instance through tax credits, or other entitlements aimed at making work pay) or at removing barriers that can make it difficult to resume work. These barriers can be seen as disincentives, characteristics of the scheme that make people less willing to resume work.

Work incentives may take the form of tax credits or wage subsidies. While tax credits lower the taxation of wages, wage subsidies supplement the wages made through work. Both interventions improve the balance between work and benefit dependency by making work more desirable in terms of income. Tax credits for disabled people resuming work are used in England, where the Working Tax Credit offers additional payments for people faced with disability. Tax credits are also a topic under discussion in Israel.

The frozen pension is a measure that aims to remove one particular form of disincentive. The choice actively to seek work resumption can be influenced by uncertainty. Disabled people might not be completely sure about their ability to keep up work in

the long run. For those disabled people who fear they may lack the ability to work for an extended period of time, work resumption carries the risk of having to go through the disability application procedure all over again, should they become unable to work. The frozen pension (and related measures) removes such uncertainty by giving benefit recipients the right to return to their benefits should work resumption fail. Some form of frozen pension can be found in most, if not all, countries participating in this study.

The disincentive caused by fear of losing benefit entitlement has been a subject for discussion in all of the countries included in this study, and all countries have some form of policy measure to counteract it. In most countries, the benefit can be reinstated for a period after a failed attempt to resume work. In the United States, medical coverage through the programme continues after work resumption has taken place. In Israel, the possibility of combining partial benefit with earnings (which is also possible in the Netherlands) removes much of this disincentive.

Incentives and disincentives for employers

If the incentives are not aimed at employees or benefit recipients, they may be aimed at employers or even at the administrators of a given programme. To enlist the support of employers in preventing benefit dependency, some countries have chosen to make them financially responsible for either the number of employees that flow into disability or for the rehabilitation of sick employees.

Making employers financially accountable for a higher disability risk can involve either having the employer pay for the period of sickness absenteeism that leads up to disability, or linking a higher disability risk to a higher level of social security contributions paid by the employer. In countries where no public sickness benefit exists (such as the Netherlands, Great Britain and the United States), the employer is responsible for the payment of all sick pay to the absent employee. Countries with a public sickness benefit scheme, such as Sweden, do not place such an obligation on employers, although some contribution towards sick pay may still be expected (in the case of Sweden, employers must cover the first 14 days of sick leave and 15 percent of benefit for the full term of sickness). Employers that offer rehabilitation services to the employee are not obliged to pay this amount and as such the Swedish scheme contains a positive incentive for employers that offer vocational rehabilitation to sick employees.

A system where employers' contributions vary with the amount of disabled people that flow into the scheme from their organization(s) is found only in the Netherlands. The policy in this form attempts to maximize the efforts of the employer in preventing illness and facilitating recovery of his employees before they become benefit-dependent. Higher disability inflow rates from an organization are "punished" with higher contributions, while lower rates of disability lead to lower social security premiums.

Another incentive based measure is aimed at the employer and tries to facilitate the hiring of disabled employees into the mainstream labour force. Such measures either reduce the risk for employers connected to hiring people with (possibly) lower pro-

ductivity due to disability (for example through wage subsidies or premiums), or facilitate necessary workplace adjustments.

In the United States, tax credits are used to stimulate the hiring of people with disabilities. One tax credit (The Work Opportunity Tax Credit (WOTC)) allows businesses a tax credit for employing individuals that fall within specific disadvantaged categories. The Disabled Access Credit allows small businesses a credit for certain expenditure related to furthering access for people with disabilities (including both employees and the public).

Additional “special employment” programmes

Subsidized labour, supported employment and sheltered employment are three examples of interventions that attempt to change the functional characteristics of the work a disabled employee might do. Wage subsidies and tax credits have been added under the heading of incentive based measures in this chapter because they do not alter the working conditions for disabled workers, but target the decision-making processes of employers or employees. Improving incentive structures is an important policy goal for most, if not all, countries faced with growing numbers of disabled workers.

Where funds are allocated to make work possible, rather than to make work desirable, it is more appropriate to speak of supported employment. Such schemes support the disabled worker in his work environment, thereby making active labour market participation possible where that otherwise would not have been the case. In the form of subsidized employment, such subsidies target the willingness of employers to hire disabled workers. The subsidy restores the economic feasibility of such a work relationship.

Supported employment changes not only the financial considerations, but also the practical problems that employers and employees may face. This type of programme, such as on-the-job support by job coaches, has recently become more popular among a number of OECD countries (OECD, 2003). The United States, Great Britain and Denmark (among others) now offer support in the workplace in varying forms and for varying periods of time. The flex job scheme that is described in the Danish chapter is a good example of how a supported employment programme might work. Flex jobs are permanently subsidized jobs, in contrast to supported employment in most other countries, which only lasts for a fixed period of time before being reduced and finally ended.

Sheltered employment programmes actively create jobs in an environment where the employee will be able to function. Most countries have some form of sheltered workplace for those disabled people with severe limitations that are not deemed able to find other work. A sheltered labour programme may aim to stimulate and rehabilitate disabled workers in a working environment that is adapted to their needs. Alternatively, it may create such an environment on a more permanent basis and as such replace the regular working environment for disabled people taking part in the intervention.

"Additional work" or "special employment programmes" are often legitimized by the notion that this type of employment should generate the experience, skills and motivation that the "disabled" worker needs to obtain a regular job at some point in the future. Achieving a substantial flow from "supported" or "sheltered" employment to "normal" employment proves to be difficult in many cases, however. Where sheltered employment is subject to political decision-making, the programmes are often altered to become more temporary, more business-like and more likely to establish the move to regular employment (OECD, 2003).

Understanding interventions

The three different types of intervention described above target three different aspects of the processes connecting disability to the labour market. Choices (incentives), capabilities (rehabilitation) and the organizational or financial conditions surrounding work (supported employment) may be targeted. The effectiveness of any given intervention is determined by the intervention itself within its context. In other words, an intervention is effective when it successfully links up characteristics of the scheme with qualities of the intervention and the actors involved in the intervention.

Framed in this way, the effectiveness of interventions does not exist outside of its context. Comparisons between national schemes and interventions can only serve to create a better understanding of the processes that determine the contextual effectiveness. Such understanding can then be used to formulate policy measures or interventions with which to optimize the effectiveness of one's own interventions.

This chapter does not provide such an extensive evaluation of all countries participating in the study, but serves to inspire ways in which an evaluation of the intervention programmes of a nation can take place and draw some tentative conclusions about the material available to us at this time. To show how the dimensions of difference mentioned earlier can be used to understand the workings of an intervention strategy, an example is provided of how the intervention and the context interact in the Netherlands. We will look at the way the scheme is set up, the way in which rehabilitation is offered in the scheme and the results of a change in policy regarding the actors involved in rehabilitation.

Understanding success: The Dutch Gatekeeper Act

In the Netherlands, the Gatekeeper Act (see Chapter 7) is regarded as a successful intervention. In this section we look at the way this success can be analyzed by looking at the intervention itself and the institutional framework in which it took place. We examine the characteristics of the Dutch disability scheme, the way the intervention is set up, and develop insights on the contextual effectiveness of this specific intervention.

Scheme and intervention goals

Broadly, the Gatekeeper Act consists of two changes in intervention strategy. Both mainly target employers and (sick) employees. First, employers are obligated to maintain wage payments for a period of two years. Second, employers are responsible for offering rehabilitation services to sick employees, and employees have a responsibility to do the utmost to make use of these services.

Intervention characteristics

By extending employer responsibility, the Dutch scheme significantly changed the moment of intervention for rehabilitation efforts. Previously, if rehabilitation was offered, it was offered to people on benefits and therefore long after the moment their sickness or disability originated. Furthermore, the employers' obligation to maintain wage payments for one year at first and now for two years gave the employer an incentive to get people back to work rather than let them move into the benefits scheme. The Dutch scheme was always easy to get into and has historically been used to ease transitions on the labour market, thus resulting in a large and diverse population on benefits. By extending the period of continued wage payments, employers were faced with a substantial incentive to prevent disability and long-term illness. Once an employee has entered the disability scheme it has historically proven difficult for him or her to resume work. By intervening before disability is determined, this problem was largely overcome.

Contextual success

The Gatekeeper Act improved the moment of intervention in the Dutch scheme and is likely to have altered the individual behavior of both employees and employers. It connects concrete activities and incentives to structurally weaker points in the Dutch disability scheme. It is a relatively new policy, so some questions remain as to whether positive developments in the scheme (mostly a substantially lower inflow) may be attributed directly to this Act. However, early results seem to indicate a positive break in a long trend of rising disability numbers.

Still, this change in interventions would not necessarily work in the same way for all schemes. In schemes with higher entrance barriers, where work resumption is not expected, the available interventions will probably already be placed in the early phases of the process leading up to disability. If this is the case, a change like that in the Dutch scheme would have less effect. It is important to analyze the goals a scheme attempts to reach through an intervention and the ways in which this may be done most successfully. In the next section we offer some suggestions on the ways in which schemes and interventions interact, as can be surmised on the basis of the available material.

Conclusion: Interventions in their settings

An intervention is effective when it reaches one of two goals: either it helps an individual benefit recipient to attain work (maximising outflow from benefit), or it helps employees on sick leave to avoid benefit dependency (minimising inflow). To do this, an intervention needs to find a way to match individual needs or actions to the labour market. The characteristics of the national labour market and the disability scheme form the context for the interventions aimed to create such a match. Interventions work within and because of their contexts. The effectiveness of an intervention can not be defined, much less compared, without information on its context.

This chapter shows ways in which comparisons can be made in such a way that they incorporate both the qualities of the context and the qualities of the intervention. Such context sensitive lessons may be used to improve the functioning of a national system, but more importantly can be used to inspire more understanding of the inner workings of social security schemes and their effects. A number of such insights have been sketched here:

1. Difficult access to a scheme means less potential for rehabilitation; easy access to a scheme means greater potential for rehabilitation.

Generally speaking, a scheme that shows relatively low inflow should not expect great results from the rehabilitation of their benefit recipients. Low inflow normally means that the scheme is more selective and as such the benefit recipients that have entered the scheme are most probably faced with fewer labour market chances. Rehabilitation is not without merit in such a scheme, but should not be used as a measure to cut disability volume, but to maximize an individual's participation in society. Work resumption may still be possible but on a more limited basis, or underpinned by continued support. The opposite then is also true: "easy come, easy go". If a scheme is less selective, it is easier to get into. As a result, the population of benefit recipients is probably more varied. In this case the labour market potential in the scheme will be (much) larger and stimulating outflow has a greater potential impact on the number of benefit recipients.

2. Incentives can prevent benefit dependency, provided that they encourage work resumption over *all* forms of social security support (not just disability).

Requesting benefits can be described as an individual choice. Choices are made with regards to the options available to the individual and the expected results. Lowering benefit levels, or increasing the demands made of benefit recipients can alter the behaviour of potential benefit recipients by making it less desirable or harder to gain benefits. Using incentives in this way results in fewer applications and lower inflow numbers. It is however important to realize that the choice an individual worker makes usually is not confined to work or disability benefits. Implementing a strict incentive structure for disability benefits increases the risk of substitution effects between disability and other welfare programmes. To be able to in-

clude incentives as an intervention strategy for limiting inflow, a country needs to find a way to alter choices in favor of work resumption.

3. Strengthening individual capacities can promote work resumption.

Rehabilitation forms the backbone of intervention strategies in many countries. By addressing the medical or occupational inabilities of the sick or disabled worker, rehabilitation aims to get people back to work — either to reduce the number of beneficiaries in the scheme, or to promote social inclusion. If rehabilitation takes place before entrance to the scheme, it is used to lower inflow; used after a benefit is distributed, it promotes outflow. Among others, a previous ISSA study shows that early intervention is important for an effective rehabilitation attempt (Bloch and Prins, 2001). The scale to which rehabilitation is used differs between countries, largely due to variation in the relative ease of access to the disability programme.

4. Involving employers can promote work resumption before inflow.

Work resumption is encouraged if the employer remains involved in the rehabilitation of sick or disabled employees. Countries differ greatly in the ways and intensity in which employers are involved. These differences can be accounted for by looking at the culture and tradition of a country. Some promising results are reported in the schemes in which employer participation has increased. Financial incentives are used with employers to stimulate the hiring of disabled workers and, in one country, to make it harder to end the working relationship when the employee becomes sick or disabled. Intervening early, intervening on the right group of people and enlisting the help of employers may well be a way to maximize the results gained through rehabilitation.

Ultimately, an effective intervention is one that alters individual choices or labour market possibilities in such a way that workers do not enter the benefit scheme, or (when they have already entered) facilitates work resumption. A definitive answer to the question of what intervention works best does not exist. The main point made in this chapter is that an evaluation of the effectiveness of interventions needs to take into account the way the intervention works and the setting in which it works. A comparison of interventions then becomes more than a comparison of placement rates or deadweight loss. It becomes an understanding of the intervention in its setting.

Nevertheless, some tentative conclusions may be drawn. Early intervention (encouraging retention and rehabilitation of sick staff by employers as far as possible), and adjusting the overall balance of incentives away from welfare programmes towards work, can both be used to reduce the numbers in, or entering, a disability programme, often *before* any award of benefits. Incentives and strengthening individual capacity through rehabilitation *after* benefits have been awarded can also be used. Where a relatively high degree of work capacity remains amongst the disability benefit population (where access to the programme is relatively easy), rehabilitation and other incentives have more potential to reduce the overall numbers in the programme. Where access to the programme is more selective, and less work capacity

exists, rehabilitation may still be effective, but probably more in terms of improving the individual's participation in society. In the latter case, the need for some continued support alongside employment may remain.

Acknowledgement

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The disability benefit programme and its alternatives

Martin Rasmussen,
with contributions from Richard Balkus,
Michael Wiseman, Annika Sundén
and Ingemar Svensson

The country reports indicate that the share of the population collecting disability insurance is increasing in several countries. The purpose of this chapter is to examine the possible substitution between disability insurance and other social insurance programmes such as unemployment insurance and sickness insurance.

The question is what would individuals do if they were not collecting disability benefits? Would they work, receive some other public benefit, or live from savings, spouse's income or the like? Stated in another way, we ask whether disability benefits act as "substitutes" for other public benefit programmes, or rather for employment. If the first hypothesis is correct, that is if disability beneficiaries are drawn from other public programmes, a growing number of disability beneficiaries would be a different kind of problem in relation to public expenditure and the economy in general than if the second hypothesis were true and the inflow came mainly from employment.

A comprehensive answer to the "substitution" question raised above is a complex task and too ambitious for this chapter. Whether a person participates in the disability benefit programme, works, or receives assistance through another social benefit programme, depends on a long list of personal characteristics, general economic conditions, and country-specific design of social programmes. Hence there is no single factor that determines choice by persons with disabilities of one state over another.

Rather than offer a comprehensive answer, the purpose of the chapter is therefore to give a few simple examples of the relationship between disability benefit and other forms of financial support or work. Our aim is not to provide a detailed analysis of the relationships but simply to measure and explore the relationships. For example, we do not estimate the effect of personal economic incentives (i.e. benefit rates and wages), which is perhaps the most studied issue in disability benefit literature.¹ Even

1. See Gruber (2000) for an example.

simple statistical measurements are difficult to make because participation is affected by many factors. Consider, for example, time series of participants in an unemployment benefit programme and a disability benefit programme. If the generosity of (say) the disability benefit programme is reduced, some unemployed people might hesitate to apply for disability benefit even if they have some limitations on their working capacity. In this case we would find a negative time-series correlation between unemployment and disability benefit. On the other hand, if the general economic conditions become worse and reduce job prospects, it is likely that the unemployment rate as well as applications for disability benefit will increase. Finally, in many countries the employment rate for women has increased in the long term. Since disability benefit programmes are meant to replace loss of income from work in case of reduced working capacity, employment rates and disability benefit participation rates might move together in the long run.

Below, we consider three examples of the relationship between disability insurance and other programmes. We explore the relationship between the early retirement programme and disability benefit programme by examining the early retirement scheme in Denmark. We use the Netherlands as an example to discuss whether the disability programme "hides" unemployment. And finally we look at long-term trends, especially for women, by discussing the situation in the United States.

The early retirement programme as an alternative to disability benefit

Early retirement programmes have in many cases been closely linked to disability insurance programmes. In this section we use Denmark as an example to discuss how early retirement programmes can be used as a substitute for disability insurance.

The early retirement scheme in Denmark (*efterløn* in Danish) was introduced 1979 in a period with high unemployment. The political motivation for the scheme was twofold: to give elderly, employed people an opportunity to retire and thereby to open labour market positions for younger, unemployed people. In debate, advocates of the programme often argue that the programme gives opportunities to worn-out workers. Eligibility does not depend on health, however, but on age and contributions to the unemployment insurance fund (and since 1999 also on contributions to the particular early retirement scheme). The level of early retirement benefit is approximately equal to the maximum level of disability benefit and above the level of the disability benefit for partly disabled. Hence, since there is no economic incentive to choose disability benefit rather than early retirement and eligibility for early retirement is much less complicated, it is no surprise if the scheme offers an alternative to disability benefit for some individuals.

Similar arguments can be made for early retirement programmes in other countries, and this line of reasoning is acknowledged in several other studies. For example, in

the comprehensive study of retirement around the world organized by the National Bureau of Economic Research, edited by Jonathan Gruber and David A. Wise, it is recognized that various routes to retirement occur (and thus may compete or substitute with each other).² If, hypothetically, old-age pension programmes did not exist, presumably the number of applicants for disability benefit would be much greater. Hence the hypothesis of substitution between retirement programmes and disability benefit is certainly not controversial.

Before we return to the case of Denmark, consider Figure 4.1, which shows the proportion collecting disability benefit and early retirement benefit in ten European countries (i.e. not including all of the countries participating in this study).

Figure 4.1 Proportion of people aged 50-65 years collecting disability benefits or early retirement benefits, 1995-2000 (average)



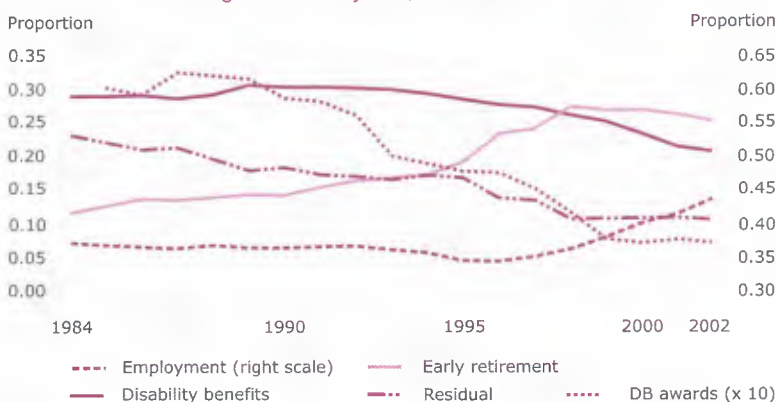
Source: The European Community Household Panel. Own calculations.

The countries with the largest proportion of disability beneficiaries (the Netherlands and Denmark) have a relatively low proportion of early retirees, whereas in the two countries with the lowest proportion of disability beneficiaries, there is a relatively large share of early retirees (in Greece and especially Italy). On the other hand, the figure does not present a perfect correlation between the share of people in the two programmes.

2. See Gruber and Wise (2004). See also Blöndal and Scarpetta (1999) for another example of this type of research.

Returning to the Danish case, the time series plot for women aged 55 to 66 years in Figure 4.2 shows the distribution across four categories, namely disability benefit, early retirement, employment and a residual category (including unemployment benefit, social assistance and sickness benefit, amongst others). Each person is classified in exactly one category. An increase of disability beneficiaries therefore does "substitute" with some other categories simply by statistical definition. The figure also shows inflow into disability benefit, because trends in inflow are more dynamic than changes in the stock of disability beneficiaries.

Figure 4.2 Population distribution according to social "states" in Denmark, women aged 55 to 66 years, 1984-2002



Source: Statistics Denmark, *Statistikbanken* (www.statistikbank.dk), *Statistisk Årbog* (various years), and *Den sociale Ankestyrelse, Førtidspensioner, Årstatistik* (various years) (www.dsa.dk/analyse).

Note: The residual is defined as population minus employment, disability benefit and early retirement.

The figure suggests that increasing participation in the early retirement programme has reduced inflow into the disability benefit programme. It also suggests that growth in employment in the later part of the period lowered inflow into all other forms of financial support. For men, and for other age groups, such figures do not suggest any relationship between disability benefits and early retirement. However, the figures do show an expected and strong relationship between employment and the residual category (including unemployment benefit).

Next, we expand the analysis by using more detailed data, namely information about individuals during the 1990s.

Firstly, for most of the period since introduction of the early retirement scheme in 1979, people aged 60 and older have been eligible (if they have been members of an unemployment fund). It is easy to compare awards of disability benefit for people above 60 years with awards for people aged 55-59 years. Under the (realistic) assumption that health deteriorates with age, we would expect more people to obtain

disability benefit among the older group, unless the early retirement scheme is an alternative. Secondly, a policy "experiment" was carried out in the 1990s: the early retirement scheme was opened up to long-term unemployed people aged 50-59. If the two programmes are alternatives, we should expect disability benefit awards to drop for this group during the period.

We have statistically estimated the increase in the probability of becoming disability beneficiaries as a function of becoming eligible for early retirement (i.e. of reaching the age of 60 years, or becoming long term-unemployed if the person is 50-59 years of age). Table 4.1 shows the result from the estimation of a logit-model³.

Table 4.1 Effect on the probability of award of disability benefit¹
as a function of eligibility for the early retirement scheme

<i>Explanatory variable</i>	<i>Effect on probability of award</i>
Eligible for "normal" early retirement scheme? (i.e. reached age 60?)	0.602
Eligible for "special" early retirement scheme? (i.e. aged 50-59 years during 94-96 and unemployed previous year?)	0.578

Source: Statistics Denmark, administrative registers. See footnote 1. Estimates are significantly different from 0.

¹ The odds ratio is the ratio between those eligible and those not eligible of the probability of award of disability benefit relative to no award.

To interpret the numbers in the table, suppose the probability that a randomly drawn person is awarded disability benefit in a certain year is 1 percent, then this probability decreases to approximately 0.6 percent if he or she becomes eligible for early retirement. This is a strong effect. Furthermore, the effects are approximately equal for each type of entry to the early retirement programme. The result indicates that had it not been for the special opening of the early retirement programme to older unemployed people in mid 1990s, the number of disability beneficiaries would have been higher.

As for the future, it is a constant debate whether the early retirement programme should be closed or made less favourable in order to reduce the economic burdens of

3. The dependent variable is award of disability benefit. The sample consists of people not awarded disability benefit and not on the early retirement scheme previous year. The estimation includes the following explanatory variables not mentioned in the table: age, education (four groups), demographics (four groups combining gender and single/couple), health (two groups), and previous labour market attachment (three groups). Estimated coefficients for all these variables are significant.

an aging population. The effectiveness of such a reform in relation to economic burdens from aging is reduced if many people simply choose disability benefit rather than early retirement.

"Hidden unemployment"

The Netherlands provide a useful example for discussing whether the disability programme hides unemployment. Figures of disability benefit recipients for the Netherlands stand out for at least two reasons: compared to other countries, the share of the population receiving the benefit is high, and over time the development of recipients seems to parallel the development of unemployment rates in many other European countries (see figures in the Netherlands chapter). In this section, we examine whether the group of disability benefit recipients in the Netherlands "hides" unemployment.

The issue has been discussed frequently. For example, de Mooij (1999) studies the issue of hidden unemployment by estimating the number of disability benefit awards as a function of the level of disability benefit, compared to the level unemployment benefit and the number of unemployed. De Mooij finds statistically significant evidence that the unemployment benefit rate and the unemployment rate affect disability benefit awards. In an analysis of a more theoretical nature, Westerhout (2001) finds important flows between disability benefit and unemployment insurance in response to changes in benefit levels. On the other hand, Lindeboom (1998) studies exit from employment into early retirement, disability benefit or unemployment benefit as a function of the benefit rates in each of the three programmes. If the unemployment benefit rate had affected the transition from employment to the disability benefit programme, this would indicate a strong relation between the unemployment and disability programmes. Lindeboom does not find such a relationship, however; rather, he finds a relationship between the benefit rate in early retirement and disability benefit programmes.

The issue is not only related to the Netherlands. Chapter 7, for example, discusses the "disguised unemployment" thesis for the United Kingdom. Here, the discussion relates the closing of heavy industries such as coal mines and whether laid-off coal miners with some but not severe work limitation have been collecting incapacity benefit rather than unemployment benefit. For Sweden, it appears that hidden unemployment is discussed in relation to sickness benefits rather than to disability benefit.⁴ In recent years, the number of sickness beneficiaries as well as disability beneficiaries has increased in Sweden (see the country chapter), whereas the unemployment rate has decreased. (See Figure 4.3)

Many studies (such as Høgelund, 2003), as well as the chapter about the Netherlands in this volume, indicate that the large increase in awards since the early 1970s has happened partly because the disability benefit programme has been deliberately

4. See Larsson (2003), for example.

used as a labour market tool to mitigate the consequences of economic crisis. Hence, the unemployment element of disability awards might not be entirely “hidden”.⁵ A cross-country comparison of data on unemployment (and employment) rates suggests that the issue of hidden unemployment is interesting to study closer: unemployment rates are low in the Netherlands compared to other EU-countries. In contrast, employment rates are at least level with the EU15-average (which indicates that the high proportion on disability benefit is not directly mirrored in low employment).⁶

Figure 4.3 Percentage of working age population in Sweden collecting various benefits or in labour market programmes, 1990-2002



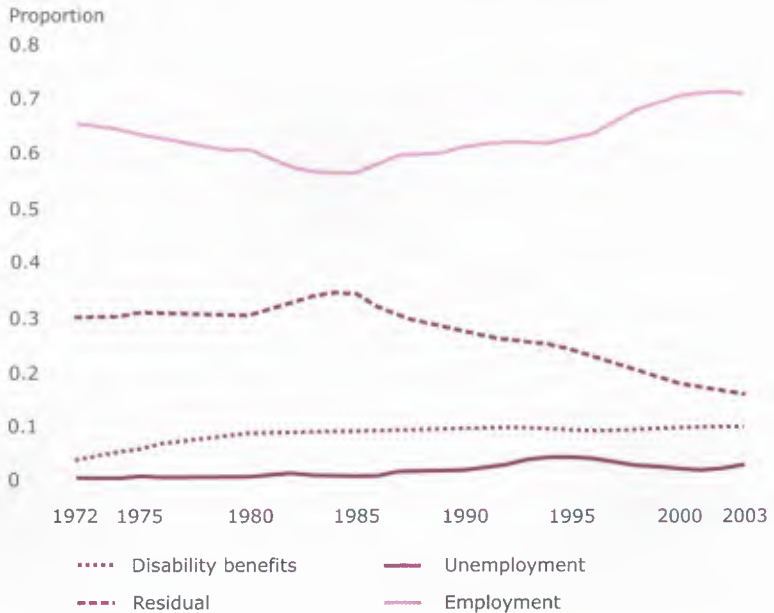
Source: Statistics Sweden.

5. These kinds of policies are of course not exclusively used in the Netherlands — for example, the resemblance to the policy in Denmark appears clear (see the section above on early retirement programmes in Denmark). The name of the programme was different and the eligible group different, but the policies have strong similarities.

6. See for example European Commission (2003). Dutch employment rates for age group 15-64 years are highest amongst EU countries, while rates for 55-64 years are at an average level (p. 26). Long-term unemployment rates are very low compared to most other EU15-countries (p. 28).

Figure 4.4 shows the proportion of the Netherlands population aged 20-65 years that collect disability benefits, are employed, receive unemployment benefits, or none of the three. The "residual group" includes a large group of individuals (mostly women) involved in home production.

Figure 4.4 Proportion of the Dutch population employed, unemployed, receiving disability benefits, or non of the above (residual category), 1972-2003



Sources: See figures in Chapter 7 and Central Bureau of Statistics, 'statline' on www.cbs.nl. Own calculations.

The employment rate is u-shaped with a trough in the mid 1980s. The early decrease in the employment rate coincides with an increase in disability beneficiaries, while the later increase in the employment rate coincides with a reduction in the size of the residual group (in effect, women working at home) but no corresponding decrease in the proportion receiving disability benefit.

The figures above may fit well into the interpretation given by Høgelund (2003) in a comparative study of the Netherlands and Denmark. According to Høgelund, awarding disability benefits was one of several possible exit routes from employment during the economic crisis of the 1980s. The administrative organization of the various types of benefits was presumably one of several explanations for the particularly large growth of disability beneficiaries in the Netherlands. Høgelund suggests that return to

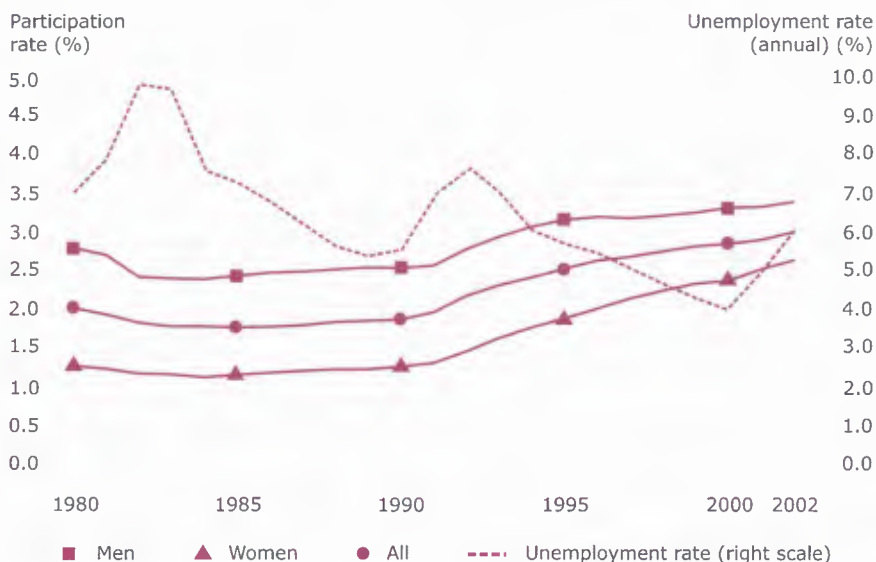
work from the disability benefit scheme appears to be more difficult than return to work from other social programmes.

Nevertheless, simple graphs as shown above give at best vague indications of the relationship between disability benefit awards and employment or unemployment. This might be because many factors and variables affect each other simultaneously: trends in population growth, population aging and women's employment all affect participation in the disability benefit programme, while short-term business cycle fluctuations are also important.

Long-term substitution trends

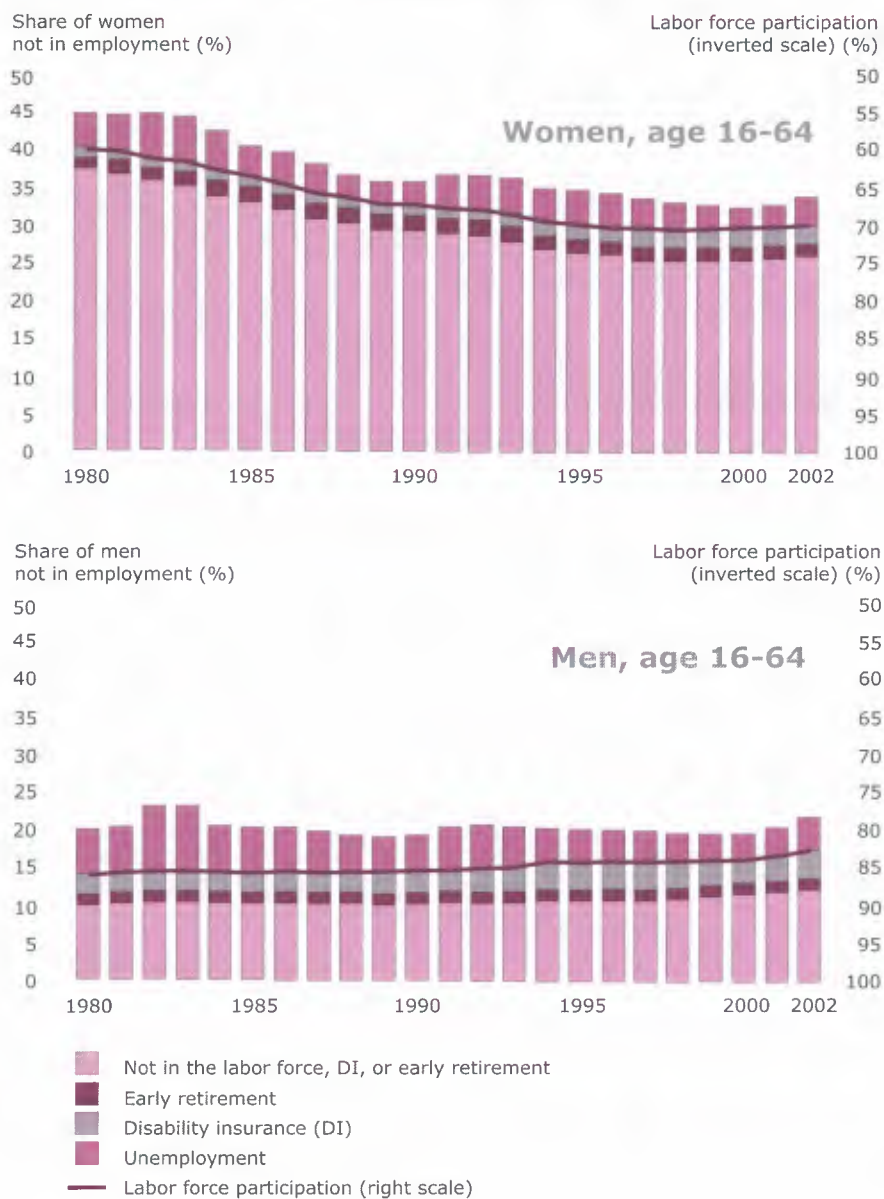
Long-term trends may disclose patterns different from those revealed by short-term analysis. Taking the United States as an example, we show how employment rates are differently related to disability benefit participation rates for men and women in the long run. The U.S. federal disability benefit programme was initiated in 1957, with first full-year benefits in 1958. Over the following 20 years, participation rates increased steadily, to approximately 2.8 percent for working age (16-64) males and 1.3 percent for women in 1980.

Figure 4.5 Disability benefit participation rates, United States, 1980-2002



Sources: US Bureau of Labor Statistics and *Annual Statistical Supplement to the Social Security Bulletin* (various years).

Figure 4.6 Trends in US employment, disability and retirement status, 1980-2002



Source: Annual Statistical Supplement to the Social Security Bulletin (various years).

While the rate of growth in participation was more rapid for men than women during the early years, the pattern of growth was similar. As shown in Figure 4.5, after a policy adjustment in the early 1980s (discussed in the chapter of the United States), the rate of increase in women's programme participation accelerated, so that the difference between men and women in the prevalence of benefit receipt has steadily diminished. The response of men's rates to policy changes in the early 1980s and to the two most recent recessions is more marked than for women, but the long-term trend in prevalence of disability benefit receipt is toward convergence.

While trends in Disability Insurance take-up in the U.S. may be similar for men and women, the association over time between employment and disability benefit participation rates is much different. Figure 4.6 illustrates this difference by comparing trends in the employment, retirement or disability status of women and men age 16-64 since 1980 (the early retirement status is available only for adults age 62-64). Each year's bar in the figure identifies the distribution of persons who are not employed; the complement of the height of the bar is the employment rate. Working down from the top, the bars identify the proportions of women or men who are unemployed, receiving disability insurance payments, in early retirement, or in a residual category constituted of those out of the labour force but neither in early retirement or receiving disability insurance benefits. The labour force participation rate, the sum of the employment rate and the unemployment rate, is plotted as a line and measured on the right axis using an inverse scale: when the line goes up, labour force participation is going down. The charts for women and men are drawn to the same scale; the greater prevalence and cyclical sensitivity of unemployment among men is reflected in the greater size and variation over time in the share of each year's column in the men's panel that is attributed to unemployment.

Over the period 1980-2000, labour force participation for women increased, while men's participation declined. While the rate of disability benefit receipt increased over the interval, for men the decline in employment rates principally reflects growth in the proportion not working. Conversely, women's increased labour force participation reflects a decline in the proportion in the residual category of persons out of the labour force that is only partially offset by growth in disability benefit receipt. During the recession of 2001-2002, women's labour force participation also fell, but convergence of employment rates continued, for the decline in women's employment and labour force participation was less than that for men. Thus while the long-term trend is for convergence in rates of disability benefit receipt for men and women, this convergence has occurred against a backdrop of differing long-term trends in labour force participation and levels and short-term fluctuations in joblessness.

Conclusion

The purpose of this chapter has been to examine the possible substitution between disability insurance and other social programmes by examining three examples drawn from Denmark, the Netherlands, and the United States. The objective has not

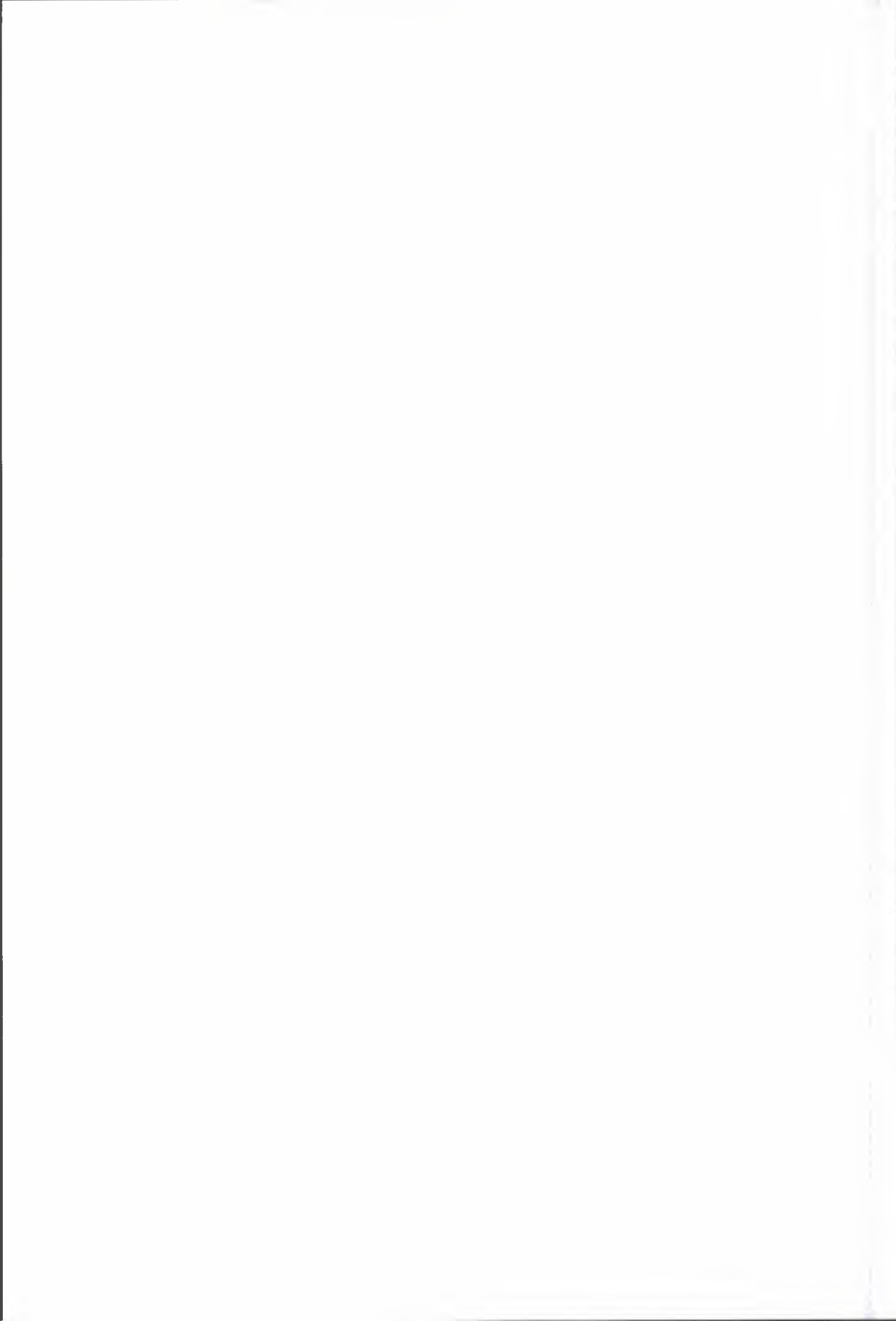
been to provide a comprehensive answer to the question, merely to illustrate possible substitution. The results from the overview clearly show that participation in disability benefit programmes is related to the alternatives in several different ways. For example in Denmark, the analysis showed how early retirement and disability benefit are related in a straightforward way. This is directly relevant for policy reforms and suggests that the overall social insurance system has to be considered when reforms of the social insurance system are being discussed. The results also show that disability programmes sometimes "hide" unemployment or at least have done so in the past, as in the example of the Netherlands. If a disability benefit programme includes people who in other circumstances would be on unemployment benefit, it means that individuals are likely to have a more difficult time returning to work since outflow from disability insurance in general is very low. In that sense, a person is much "closer" to the labour market if he or she is considered unemployed rather than disabled. Thus, for public policy to be successful, individuals have to be in the appropriate insurance scheme. In terms of the possibility of returning to the labour market, the example of the United States for women indicates how, in the long-run, a typical disability benefit programme is related to loss of income from employment and hence related to employment rates. This is noteworthy when comparing the number of disability benefit recipients in various countries with different labour market participation rates for women.

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Part II

Country case studies – Programmes, trends and influences



Work first: Explaining the drop in disability claims in Denmark

Martin Rasmussen

This chapter describes trends in receipt of public disability benefit in Denmark since 1984.

In Denmark, the number of awards of disability benefit decreased through most of the 1990s. The reason for this change is not fully understood, but policies affecting the incentives of the awarding authorities (municipalities), as well as good general economic development in Denmark might have had an influence. Since the late 1990s, more emphasis has been put on providing subsidized jobs for disabled people.

Part I describes the public disability benefit programme in Denmark, its relationship to other welfare programmes, and finally recent changes in the programme. Part II provides simple statistics on the increase in the number of disability beneficiaries. Part III seeks to explain this increase and describes the development in more detail. In part IV, a short summary is given on the effect of social programmes that might prevent entry into disability benefit.

Policy background and description of disability programme

Policy background

The purpose of the public disability benefit insurance programme in Denmark is to give people with permanently low work capacity a source of income. According to the law introduced in 2003, an individual is eligible if

“... the work capacity is permanently reduced and the extent of the reduction is such that the individual is not able to become self-supporting through income generating work”.

The coverage of the scheme is “universal” (not dependant on contributions) and “work capacity” relates to physical as well as mental health and to social conditions.

The disability benefit programme and the social assistance programme are “last resorts” to support people. While the social assistance programme covers people with a wide range of problems, disability benefit is meant for people with permanently poor work capacity. Over the course of time, the political principles for disability benefit in Denmark have moved together with the principles guiding social security in general. Principles have shifted from helping people with “deserving needs” to a “principle of rights” (reforms in the 1930s), to social programmes that cover more than a minimum level of existence (reforms in the 1970s). From the early 1990s, “back-to-work” principles have become increasingly used in Danish social policy and labour market policy. However, “back-to-work” principles have hardly affected the disability programme in itself — those people already receiving disability benefit. Rather, the principles have guided policies to prevent people from entering disability benefit. Few people leave the disability benefit scheme once they have entered it (except for transition to old-age pension) — the Danish word for the programme is *førtidspension*. The back-to-work policies in Denmark are therefore of relevance to the discussion of the historical inflow into disability benefit.

This study covers the period from 1984, when the disability scheme was substantially reformed, to the present. The scheme was reformed again in 2003.

Disability programme in Denmark

There is only one public programme for “disability benefit” in Denmark, which is described in this section. The distinctions and delineations between disability benefit and other programmes are described in the following section.

A reform of the rules for disability benefit came into force at the beginning of 2003. This study focuses on the scheme prior to 2003, and only few data relate to 2003. As many elements of the pre-2003 scheme are still in force now, only a short section on the 2003-reform has been added.

The disability benefit scheme (2002)

Eligibility

Eligibility does not formally depend on prior work history. In practice, however, a long period without work but on another benefit, such as sickness benefit, precedes award of disability benefit for most beneficiaries.

Disability benefit is almost always granted with no time limits. On the other hand, authorities may test beneficiaries’ work capacity to reassess eligibility. In practice, this rarely happens (see the later section on exits).

The disability benefit scheme covers many people: Danish citizens who live in Denmark or have lived in Denmark for some years, other people who have lived in Denmark for a number of years, and foreigners with a residence permit. The benefit is available to people aged 18 to 64 years. The lower age limit for old-age pensions is 65 years.

Benefit levels

The coverage of the scheme and the general political motivations were quite similar before and after the reform of 2003, but the scheme was more complicated prior to 2003.

The benefit level was related to ability and age in a rather complicated way. It also depended on income from other sources, whether the individual was married or single, and the presence of dependent children. Table 5.1 summarizes the four types of benefit according to age and ability requirements, and the maximum level of benefit available per annum (i.e. prior to means-testing and tax).

The level of benefit decreased with greater ability and age. Individuals younger than 49 years of age could not claim disability for purely social reasons even if their ability was below half the standard level.

Table 5.1 Level of disability benefit according to age and ability to work

Type	Age	Vocational ability		Maximum benefit, index, "High=1" (2002)
		Reduction	Reason	
High	18-59	100%	Health	1.00 ¹
Medium	18-59	2/3	Health	0.79
	60-64	100%	Health	
Low 2	18-59	1/2	Health	0.71
	18-59	1/2	Health and social	
	50-59	Not specified	Health or social	
Low 1	60-64	1/2	Health	0.63
		1/2	Health and social	
		Not specified	Health or social	
Annual wage-income ²				1.52

Source: Forsikringsoplysningen (2002), Statistics Denmark (Statistikbanken, ADAMs databank).

¹ The annual "high" benefit level is €22,376.

² First quartile of wage rate per hour multiplied by formal number of hours per year of a full-time job. Wage for privately employed without management tasks.

Taxation and means-testing

The benefits in Table 5.1 were the sum of various components, most of which were taxable. The benefits did not depend on the level of income the recipient had earned previously.

A benefit recipient living in a couple received up to approximately €3,400 less than a single person. Part of the benefit¹ was reduced with income from other sources. Other income in excess of approximately €6,700 reduced disability benefit at a 30 percent rate. The reduction was increased to 60 percent for other income above a second level. Means-testing for participants awarded benefit for purely social reasons was stricter.

Administration

In Denmark, the municipality assesses the individual case. To determine whether an individual is eligible for disability benefit, the municipality first estimates whether reintegration (through vocational rehabilitation or jobs on special terms, for example) is likely to improve the individual's case. If so, the individual begins such a programme. If not, disability benefit is considered. Decisions on awarding benefit due to state of health are based (in part) on a medical judgment. A commonly mentioned reason for obtaining benefit on the basis of purely social reasons is loss of breadwinner for an elderly woman with no work experience.

In many cases, the municipality is the authority to assess the circumstances if an individual needs some kind of social income support. For example, the municipality manages eligibility for various types of income support, and determines the best-suited reintegration scheme. Unemployment insurance benefit and the early retirement scheme (see below) are not administered by the municipality but by (subsidised) private funds.

Related benefits and work schemes for disability beneficiaries and other disabled people

Disabled people (whether in receipt of disability benefit or not) may obtain benefits to cover the costs of personal assistance and disability aids.

People who are eligible for disability benefit but nevertheless work may obtain a "specific disability benefit" (*invaliditetsydelse*). A disability benefit recipient may try to become self-supporting without losing the option of returning to the disability scheme.

"Light jobs" (*skåne-jobs*) are jobs on special terms for disability beneficiaries. The participant obtains the disability benefit plus wage. The employer is subsidised. The subsidy is 1/2 of the wage paid, but no more than 1/6 of the minimum wage for jobs on ordinary terms. The success criterion of the scheme is not (necessarily) return to ordinary work, but rather to improve the every day life of the participant and to exploit the remaining work capacity.

1. A part of the benefit equal to €14,189 or the "low1"-benefit, see Table 2.1, is means-tested.

The same success criterion holds for "flex jobs". This is a work scheme for people who do not obtain disability benefit but have permanently reduced work capacity. The wage subsidy is 1/2 or 2/3 of the minimum wage, depending on work capacity. In recent years, flex jobs have been used more frequently. A main political motivation for the scheme is to prevent inflow into disability benefit.

Employees are covered by work injury insurance. If a work related accident happens, compensation is paid to the victim (in addition to possible disability benefit).

Many people have a personal accident insurance and/or insurance against loss of economic capacity. Compared to public disability benefit, the eligibility criterion for payouts under most of these insurance schemes puts more weight on medical health judgments.

Other social programmes and their relationship to the disability programme

Some social programmes may be alternatives to disability benefit. For example, if eligibility rules became stricter for an alternative programme, some people might claim and obtain disability benefit rather than the alternative benefit. We describe such alternative programmes, since changes to them may affect historic fluctuations in the number of disability benefit recipients. (On the other hand, of course, it is not obvious exactly what other schemes are "alternatives" to disability benefit). Table 5.2 lists the most important schemes.

Table 5.2 **Public income support**

<i>Scheme</i>	<i>Eligibility</i>	<i>Duration/purpose</i>
Sickness benefit	Sickness	2 years
Vocational rehabilitation	Limited work capability	Temporary/regain capability
Flex job	Limited work capability	Permanent subsidized job
Early retirement	Contributed to scheme	Retirement for people who have reached the age of 60
Social assistance	A "social event" e.g. unemployment	Infinite duration
Unemployment insurance benefit	Unemployment and member of fund	3 years including periods with activation
Old-age pension	Reached the age of 65	Retirement

The regulation and practice of these schemes could affect the number of disability beneficiaries. In recent years, for instance:

- The use of flex jobs has become much more widespread since 1999. This may directly influence the number of disability beneficiaries, since the scheme pertains to people with limited work capability.
- The early retirement scheme was reformed significantly in 1999. If — hypothetically — fewer are covered by the scheme, more people aged 60 with disabilities may now apply for disability benefit rather than early retirement.
- The age limit for old-age pension was lowered in 1999 (with the early retirement reform) from 67 to 65 years. Hence, from 1999, no-one aged 65 or 66 will be eligible for disability benefit.
- Workfare policy (activation policy) for unemployment insurance beneficiaries and social assistance recipients became more prominent during the 1990s. If long periods of temporary income support “produce” applicants for disability benefit, the widespread use of activation programmes will lower the number of disability benefit awards (of course depending on efficiency and duration of the activation).

Economic incentives for individuals and municipalities may affect the number of people on various schemes. Individuals may, *ceteris paribus*, prefer one scheme to another depending on the level of support. (Obviously, the way that the generosity of the welfare system affects incentives for employment is much more important. We will discuss that later.) Municipalities manage most schemes but pay only part of the costs (the state reimburses the remaining part). Cost sharing has been a tool for the state to seek to influence municipal awarding behaviour for the last 10 years at least. Table 5.3 summarizes benefit levels and municipality costs.

According to the table, the level of benefit for many schemes is approximately equal to unemployment insurance benefit. Important exceptions are social assistance and the lowest level of disability benefit.

The proportion of costs paid by municipalities is high for disability benefit compared to other types of support, especially flex jobs. As the last column shows, the proportion has been revised in recent years to “disfavour” disability benefit compared to vocational rehabilitation, social assistance and flex jobs.

Employer responsibility

In broad terms, the Danish legislation towards employer responsibility is probably best characterised as liberal and based on voluntary involvement from employers. For instance, firms have no obligation to hire people with disabilities.

There is no general legislation permitting an employer to lay off a disabled employee or an employee on sickness benefit. In parts of the labour market, agreements prevent dismissal on grounds of long-term sick leave alone. When hiring an employee, the employer must not ask for health information if the applicant’s health is not relevant for the job.

Table 5.3 Level of benefits for various schemes, received by individual and paid by municipality, 2002

<i>Scheme</i>			<i>Benefit received by an individual¹</i>		<i>Proportion of cost paid by municipality³</i>	
<i>Name</i>	<i>Version</i>	<i>Group of individuals</i>	<i>Level</i>	<i>Means-tested²</i>	<i>2002</i>	<i>Other periods</i>
Disability benefit	Old (-2002)		0.5-1.6	Partly		-1991: 0% 1992-98:50%
	New (2003-)		1	Partly	65%	
Sickness benefit			1	None	50%	
Social assistance		Dependent children	0.8	Strongly	50%	
		No dependent children	0.6	Strongly		
Rehabilitation			1	None	50%	
Flex job			Market wage	None	0%	-1997: 50%
Early retirement	New (1999-)	Retired before the age of 62	0.91	Partly		
		Retired at age 63-65	1	Weakly		
Unemployment insurance benefit			1	None		

Source: Forsikringsoplysningen (2000, 2002).

¹ Index: unemployment insurance benefit=1.

² The column indicates if the benefit is reduced due to the individual's other economic resources. The values (partly, none ...) only indicates an assessment of how severe the means-testing is.

³ No values given for early retirement and unemployment insurance benefit. These schemes are managed by unemployment insurance funds.

In recent years, under the banner of a "commodious" labour market, a series of political initiatives have been taken. These have included many types of campaigns, and it is very likely that the general awareness of employers' responsibility has increased as a result.

Changes in the disability programme

Reforms at administrative level

In particular, reforms have changed the granting authorities' economic incentives to award disability benefit compared to other types of benefits, as the division of costs between the state and municipalities has been altered. During the period we study, two administrative levels have been involved in awards of disability benefit. These are the municipalities and county boards (there are 275 municipalities and 15 counties in Denmark).

The change in cost-sharing is presented in Table 5.3. County boards were the responsible authorities for awards between 1976 and 1991. From 1992 until 1997, authority was mixed. Municipalities granted low-level benefits (cf. Table 5.3) and prepared all cases. Since 1999, municipalities have been the sole administrators.² These reforms have decentralized and "monopolized" authority for awarding disability benefit, with awarding authorities now bearing a greater part of the economic burden of awards. It is a reasonable hypothesis that this has led to stricter screening of individuals who apply for disability benefit.

The 2003-reform

The most important parts of the reform are:

- A unified system with one level of benefit (rather than four). The level of benefit is now approximately €21,100 (Dkr157,000) per year. This is slightly lower than the maximum 2002 level, but significantly higher than the minimum 2002 level (cf. Table 5.1).
- To be eligible, "work capacity" (rather than "vocational capacity") should be permanently reduced.
- Individuals are not eligible if work capacity can be improved, for example through activation, or if they can carry out a flex job (a subsidised work scheme, see above).
- A procedure will be introduced in order to secure uniform case management.

The most tangible change is the single benefit level. Individuals' economic incentives to apply for disability benefit will on average increase due to this change. The changes to eligibility may underline the need for screening related to capacity (rather than social need) and hence flex jobs may become a more important alternative to dis-

2. Furthermore, from 1998 individuals became formally unable to apply for disability benefit. It is thus unsurprising that the number of (formally) rejected cases dropped sharply after 1998 (623 rejected cases in 2002 compared to 6,716 in 1997).

ability benefit. On the other hand, both "activation policies" and flex jobs have been in use for years. The uniform management procedure is presumably being introduced in order to reduce the large variation in municipal practice. The role of medical judgment will also apparently be reduced. Finally, the reduction of benefits as a function of other income is now to be made at a 30 percent rate rather than a mix of 30 and 60 percent rates.

Other changes

From 1994, a tax reform made many previously non-taxable public benefits taxable, including disability benefit. The intention was not to change the after-tax value of the benefits (gross levels were raised). Nevertheless some households might have been affected.

In 1999, a high court verdict implied that more beneficiaries could obtain the medium benefit rather than a lower one. As a result, many beneficiaries' cases were redone. One can imagine that the verdict increased incentives to apply for disability benefit, since expected level of benefits increased. (Although one should remember that since 2003 there has been only one level of benefit anyway.)

Growth in the disability programme

In this section we describe the development of the number of disability benefit recipients.

From a long-term perspective, the number of disability benefit recipients has increased a lot in Denmark. This is obviously a sign of growth of wealth: society can afford better insurance for its members. The major reform in 1984 merged several schemes (including widow's pension and early old-age retirement) into "disability benefit". As a result, the number of disability beneficiaries formally rose by approximately 80,000, or 50 percent.

Prevalence-rate and entry

Figure 5.1a-b shows the number of awards of disability benefits and the total number of beneficiaries, both in total and as a proportion of the working age population (18-66).

The number of awards significantly decreased from the late 1980s. Control of distribution by age, gender and education (not shown) reinforces the impression of a lower tendency to apply for or award disability benefit, since this control makes the drop even larger.³ A number of explanations are possible: throughout the period, the state made it more costly for municipalities to grant disability benefit compared to other types of social support. In the same period, various types of active labour market pol-

3. The fact that the population has become older and hence more likely to apply for disability benefit is almost, but not completely, counter-balanced by the fact that more are better educated.

icies (or active social policies) became more commonly used in Denmark, as in other countries. From 1999, flex jobs replaced other job schemes with special conditions for potential disability benefit applicants. Finally, since the mid 1990s, the general economic situation in Denmark has been good. Nevertheless, since the year 2000, the number of awards has started to increase again.⁴

Figure 5.1a Number of disability benefit awards, 1985-2003

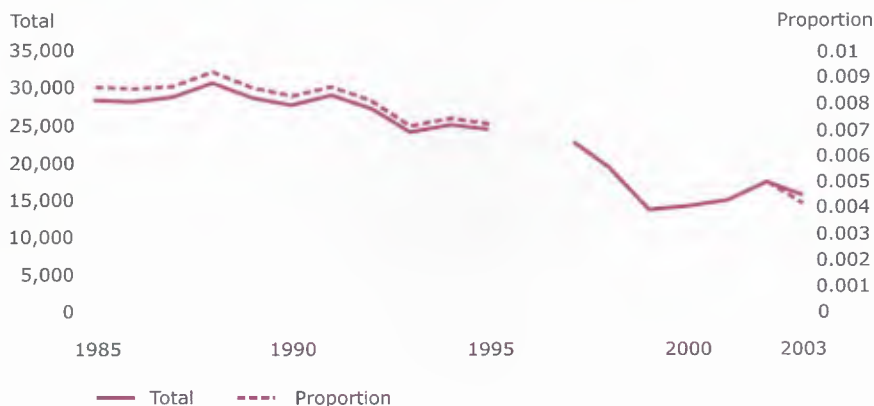
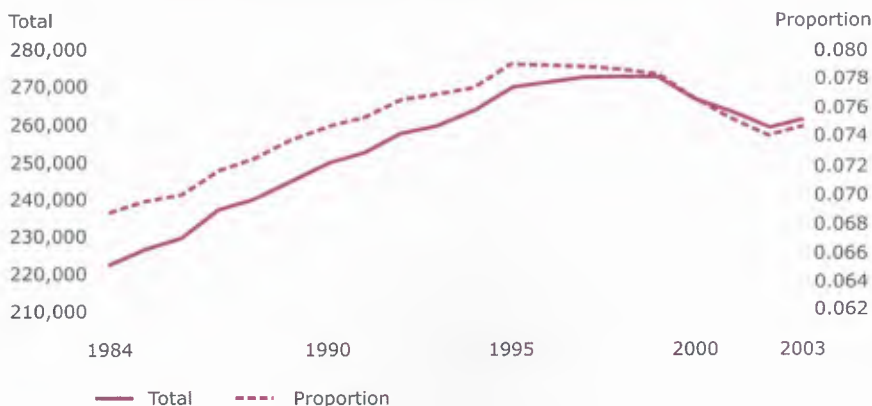


Figure 5.1b Number of disability benefit recipients, 1984-2003



Sources: Statistics Denmark, *Statistisk Årbog* (several years, Statistikbanken). Den sociale Ankestyrelse (2003).

Note: Proportion of the population aged 18-66.

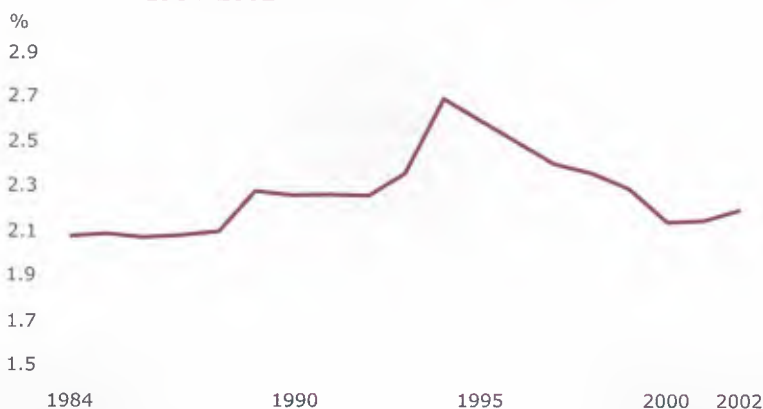
4. The number of awards in 2002 and 2003 may have been affected by the reform of 2003: it is likely that extra effort was made to end many cases in 2002.

In terms of the total number of beneficiaries (Figure 5.1b), the significant drop after 1999 resulted from a reform that lowered the age for old-age pension from 67 to 65 years.

The costs of the programme

The development of the costs of the disability programme is shown in Figure 5.2.

Figure 5.2 Share of GDP spent on disability benefits, 1984-2002



Source: Statistics Denmark, *Statistikbanken*.

Note: The increase in 1994 is effected by a tax reform making parts of disability benefits taxable and raising gross levels of benefits.

Costs grew slightly faster than GDP in the first part of the period, while the reverse was the case in the latter part. The leap in the mid-1990s was due to the fact that some benefits became taxable and gross benefit levels were raised. Costs relative to the GDP are a function of prevalence rate and benefit level compared to wage rates. The prevalence rate in Figure 5.1b has the same "inverse-U"-shape as costs compared to GDP in Figure 5.2, and the benefit/wage-ratio in figure 5.6 below has a decreasing trend.

Exits

Exits from disability benefit to employment are low in many countries, but seem particularly low in Denmark. In 1998, the number of people leaving disability benefit was 130. Many of these people voluntarily left the benefit, presumably in order to find regular jobs. Others left the benefit because authorities reassessed their conditions. A reassessment rarely happens, and when it does, it is decided by the time disability benefit is awarded. Hence benefits may actually be awarded temporarily. Apparently

the practice has been relaxed, so the comparable number in 2002 was only 13. These low figures could reflect stricter screening for lack of ability to work. This hypothesis is supported by the study of Weatherall (2002). He describes the labour market record for people who were rejected for disability benefit. Only about 20 percent are employed a year after rejection of application for benefit.

Not included in these very low numbers are people who receive the special disability benefit (*invaliditetsydelse*). This benefit is for people who are entitled to disability benefit but nevertheless work, and is awarded to 500-600 individuals each year (0.2 percent of the total number of disability beneficiaries). The benefit level is approximately 15 percent of maximum benefits. Finally, some disability beneficiaries work in sheltered jobs (light jobs); these numbered 6,007 in the first quarter of 2003.

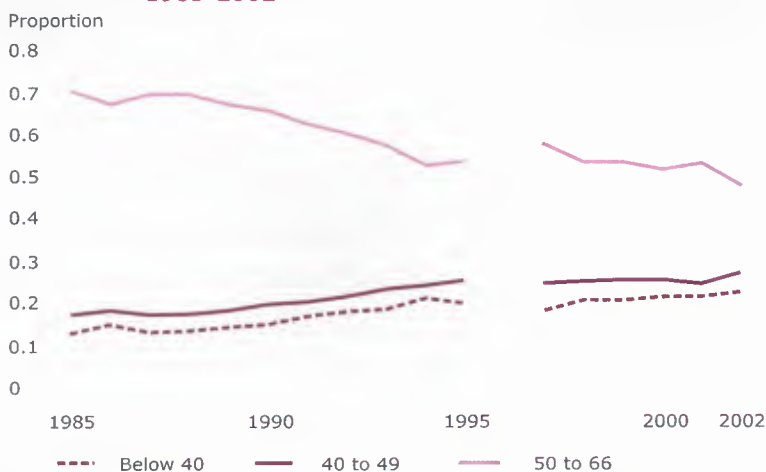
Summing up, exits from disability benefits are extremely low. Since award requires permanent health reduction, this may be no surprise. On the other hand, it might be surprising that almost no-one experiences a health improvement and tries to work again.

Details and causes of the trends

Age and gender

Figure 5.3 shows the age composition of new beneficiaries.

Figure 5.3 Age distribution of disability benefit awards, 1985-2002

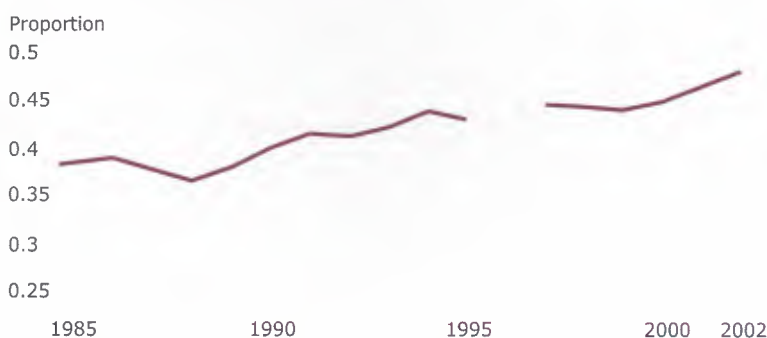


Sources: Statistics Denmark, *Statistisk Årbog* (several years); Den sociale Ankestyrelse (several years).

People over the age of 50 gradually comprise a lower fraction of new beneficiaries for both men and women. Award rates decreased for all age groups⁵ during the 1990s, but most of all for the older group. If screening became stricter over the period in question, and if age *per se* previously carried weight in the award procedure, a possible explanation for the development is that age is of diminishing importance in the screening process.

Figure 5.4 shows the gender composition of new beneficiaries.

Figure 5.4 Proportion of disability benefit awards received by men, 1985-2002



Source: Statistics Denmark, *Statistisk Årbog* (several years).

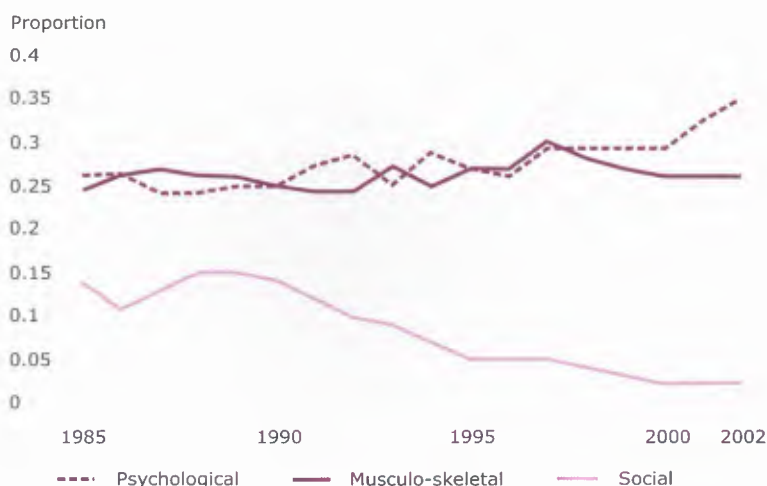
The proportion of men among new beneficiaries increased from below 40 percent to slightly less than 50 percent during the 1990s. This change seems rather drastic. We might suggest the same type of explanation as for age composition: if screening became stricter over the period, and if gender *per se* previously carried weight in the award procedure, a possible explanation for the development is that gender is of diminishing importance in the screening process. Weatherall (2002) shows that women obtain benefit more frequently than men, even with statistical control for other explanatory factors. Hence the gender differences in Figure 5.4 appear not to be a mere “cover” for other factors (e.g. health and income). More detailed figures reveal that women make up a large proportion of recipients, especially among the older beneficiaries and beneficiaries with a low level of benefit (that is, benefit awarded to people with less severe impairments or awarded on social grounds).

5. Except for men and women below 20 years and women aged 20-29 years — the award rate of the first group increases and it is constant for the second group.

Diagnoses of beneficiaries

The diagnoses made for new beneficiaries are illustrated in Figure 5.5.

Figure 5.5 Diagnoses for individuals awarded disability benefits, 1985-2002



Sources: Statistics Denmark, *Statistisk Årbog* (several years); Den sociale Ankestyrelse (several years).

Musculo-skeletal impairments consistently represent about a quarter of total awards. Mental impairments represent about the same proportion, but with a slightly increasing trend, especially for the last few years. Awards on the basis of social problems fall during the 1990s to almost nothing.

Hence, if screening has become stricter in recent years and reintegration (e.g. flex jobs) has become more commonly used, a reason for the development could be that these policies have had relatively little effect on people with mental illness. Of course, it may also be the case that the state of health of the population and the distribution of diagnoses in the population have changed from 1998 to 2001.

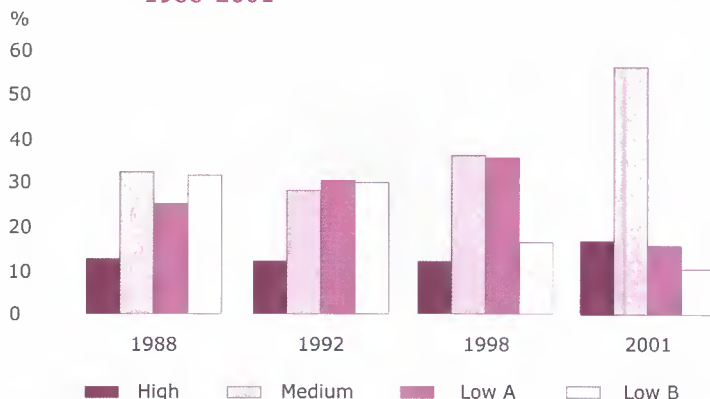
Partial and full disability benefit

Until the 2003 reform, awards of benefits at a level lower than the maximum (i.e. partial benefits) were very frequent. The motivation for partial benefit was partial disability (Table 5.1). Nevertheless, people on partial disability benefit rarely work part-time.⁶

6. The specific question has not been studied. But studies show that beneficiaries in general (irrespective of benefit status) rarely work. Hence, work must also be infrequent among partial beneficiaries.

As discussed previously, an important change of practice in municipality decision-making occurred from 1999, following a high court verdict on benefit levels. Figure 5.6 illustrates the distribution of types of benefit for *new* beneficiaries before and after this date. In addition, many beneficiaries had their case reassessed following the verdict.

Figure 5.6 Distribution of partial and full benefit awards, 1988-2001



Source: Statistics Denmark, *Statistisk Årbog*.

Note: The distinction between "Low A" and "Low B" is not exactly the same as the distinction between "Low 1" and "Low 2" in Table 5.2.

Clearly, such a change of distribution increases average benefit and hence affects individuals' economic incentives to seek disability benefit.

Changes associated with major programme or policy changes

Even though few changes to the scheme have taken place since 1985, it is surprising how few studies have dealt with disability policy in Denmark. As mentioned, the most important changes of policy in the period studied relate to the incentives of municipalities. Christiansen (2000) studies these changes. Based on aggregate data, Christiansen (2000) argues that cost-sharing matters. That is, the greater the proportion of the benefit that is paid by municipalities, the lower the number of awards. It is argued that the fact that municipalities became sole decision-makers lowered the number of awards. Presumably, one could also argue that the reforms to decision making and cost-sharing amplify each other: the effects on the costs for municipalities are more profound if municipalities are monopoly decision-makers.

The relationship to general economic conditions

It is a very reasonable hypothesis that economic conditions in general may affect the number of disability beneficiaries. Firstly, "social conditions" is a formal criterion for award in Denmark. Secondly, it is possible that economic conditions, such as long-term unemployment, lead to poor health. Thirdly, individual economic incentives to apply for disability benefit may increase if the alternative is another social benefit rather than income from work.

Figures on income source prior to disability benefit shows that many obtain other types of public benefit prior to award of disability benefit. Rather than a causal effect, such figures could reflect that a long period out of work is a normal "route" to disability benefit. We present such figures in Table 5.4. The table shows the distribution of disability beneficiaries' source of income prior to receiving disability benefit.

Table 5.4 Primary income source three years before award of disability benefit, 1995-1998

<i>Source of income</i>	<i>Distribution</i>
Wage income	48.2
Social assistance	15.2
Unemployment insurance benefit	11.3
Sickness benefit	5.8
Self-employed	5.6
Other or no income	13.8
All	100

Source: Det økonomiske Råd (2000), Table III.27.

At least one third of recipients lived off other public income support for as long as three years before receiving disability benefit

Aggregate time series in Figure 5.7 do not reveal a correlation between general economic growth and award of disability benefit, however.

It is tempting to relate the low growth of disability awards in the late 1990s to the good economic situation in that period. But awards started to decline from the late 1980s — a period with low growth. To clarify the relationship, multivariate analysis is needed.

The composition of employment in sectors of an economy could affect the number of awards. The most obvious example of such development might be the closing of heavy industries, but such developments do not seem to have been significant in

Denmark in the period we study. Furthermore, evidence about which sectors or trades “produce” relatively more disability awards is mixed (see Det økonomiske Råd, 2000 and Den sociale Ankestyrelse, 2001). Results depend on the duration between recording an individual’s trade to their receipt of disability benefit, and on the level of aggregation. No particular trade can be singled out as producing an overwhelming number of disabled people.

Figure 5.7 Disability benefit awards, employment/capita (index 1984=1) and annual growth of GDP/capita, 1985-2002



Source: Statistics Denmark, *Databanken* and *Statistisk Årbog*.

Public health

In this section we take a brief look at the development of some indicators of public health and mortality.

We do not perform any analysis of the relationship between award of disability benefit and health. Lund et al. (2001a) find that health (chronic bronchitis and musculo-skeletal disorder) correlates with award of disability benefit for physically strenuous occupations. This holds true even after control for lifestyle and work environment (body mass index, smoking and skill discretion). Lund (2001b) also finds some correlation between health (musculo-skeletal disorder) and the decision to join the early retirement scheme.

Table 5.5 presents self-reported indicators of health, and Figure 5.8 illustrates the development of mortality rates for men and women aged 40-59 — that is, the range for most awards of disability benefit.

Table 5.5 Classification of various self-reported health indicators by change of incidence from 1987 or 1994 to 2000

<i>Direction of change</i>	<i>Statistically significant</i>	<i>Type of self-reported health indicator</i>	
		<i>General</i>	<i>Specific</i>
Improvement of health	No	Good mental health High vitality	Chronic bronchitis Much bothered by general symptoms etc. within last 14 days
	Yes	No activity limitations due to mental problems Very restrictive long-standing illness	Low back pain Nervousness
Deterioration of health	No	Self-reported health (good or very good)	Cardio-vascular Disease of nervous system High blood pressure Diabetes
	Yes		Musculo-skeletal Respiratory disease Asthma within past years Body mass index above 30

Source: Statens Institut for Folkesundhed (2002), own calculations, see Rasmussen (2004).

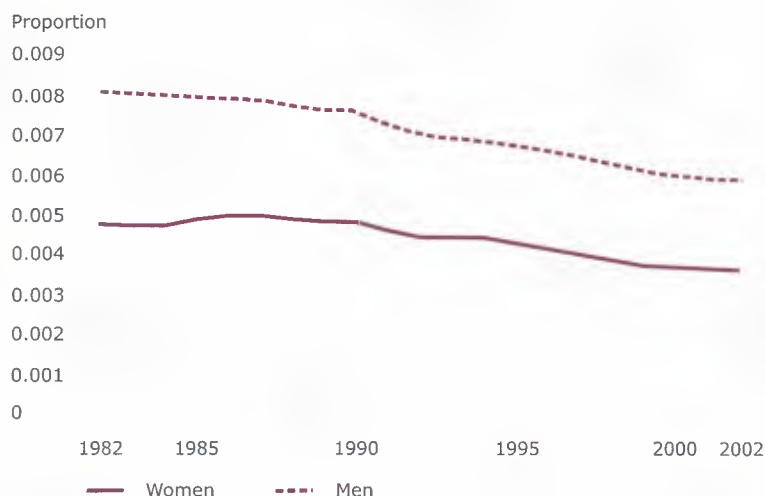
Put together, the evidence of public health from the table and the figure is mixed. Mortality rates indicate improvement of health while the incidence of many specific diseases points in the other direction. Most measures of general health indicate improvement of public health. It is possible that the increased incidence of specific diseases reported reflects greater public awareness of health rather a "true" medical deterioration of health. This might explain why more people suffer from specific diseases, while at the same time more people report good general health.

The decrease in mortality rates is most pronounced for men. The changes seem significant: for example, the chances of reaching the age of 59 for a 40-year-old man increase by almost 5 percent using the age-specific mortality rates from the beginning of the period compared to the end of the period. The figure is about half the size for women.

A gloomy interpretation of the data on public health in relation to disability benefit awards is as follows: the decrease in mortality rates might result from the health

system having become better able to keep people with poor health alive. The health of the “extra survivors” might still leave them incapable of working. If this is really the case, the development contributes to increasing the number of beneficiaries.

Figure 5.8 Mortality rates for men and women aged 40-59 years, 1982-2002



Source: Statistics Denmark, *Statistikbanken* (various tables). Own calculations.

Note: Average rates calculated as rates for each age using the age distribution from 1984 as weights.

Employment and health in the population

In previous sections we described diagnoses of beneficiaries and the health of the population in general. Information on the extent to which the proportion of the population with disabilities is employed is also important. Unfortunately, we can only describe the issue for a short period, using survey data.

In Table 5.6 we show self-reported health by employment and disability status.

As the table shows, the proportion in employment increased for all groups over the period. The increase was largest for people with poor health. Hence there might be a tendency for people with disabilities to work more. Alternatively, people might answer the questions differently in the latter period — that is, have a greater tendency to report a given state of health as poor.

Table 5.6 Employment and disability benefit by subjective health measures, 1995 and 2000 (proportions)

		Chronic disease?		General health?		
		Yes	No	Very good or good	Fair	Bad or very bad
1995	Disability benefit	0.21	0.01	0.01	0.17	0.49
	Employment	0.59	0.88	0.88	0.60	0.21
2000	Disability benefit	0.17	0.00	0.01	0.14	0.45
	Employment	0.69	0.91	0.91	0.69	0.27

Source: European Community Household Survey, own calculations.

Note: Data are read as follows: 21 percent of those with chronic disease in 1995 obtain disability benefit, 59 percent are employed and the remaining 20 percent ($100-21-59=20$) either obtain other types of public benefit, or neither work nor obtain benefits. The questions are: "Do you have a chronic physical or mental health problem, illness or disability?" (two categories). "How is your health in general?" (five categories).

Other programmes as substitutes for disability benefit

Retirement schemes and age

From the age of 60, an early retirement scheme is open to most people — until 1998 to members of unemployment funds, and from 1999 to contributors to the particular programme. It is very likely that some people prefer the early retirement scheme to the disability benefit scheme. The annual inflow rate into disability benefit is 1.6 percent for people aged 55-59 years but only 1.2 percent for people aged 60-66 years (calculated during the years 1994-1996). Since health decreases with age, one would expect inflow rate to disability benefit to increase in the absence of the early retirement scheme. The schemes therefore appear to be substitutes for some people.

On the other hand, the substitution is not perfect. During 1994-96, the scheme was also open to long-term unemployed persons aged 50-59 years. We should expect inflow into disability benefit for this group to be especially low in this period, but this does not appear to be the case. Of course, other things were not equal during the period. For example, the business cycle improved and left fewer people long-term unemployed. Also, more weight may have been put on reintegration policies. Hence, the issue is worth further study.

Flex jobs

As with the early retirement scheme, a number of other schemes might be alternatives for people who consider applying for disability benefit. In this section we focus

on the flex job scheme. By design, the scheme is regarded by many people as a "last stop" before disability benefit.

The number of flex job participants has risen steadily since the introduction of the scheme in 1999, and the increase may very well have influenced disability awards. The annual net increase (inflow minus outflow) of participants increased from 669 individuals in 1999 to 6,583 in 2002. This is not a negligible number compared to awards of disability benefit, which numbered 12,975 in 1999 (record low) and 17,047 in 2002. If the decrease in disability awards really has been affected by the flex job policy, a continued low level of disability awards requires continued expansion of the stock of flex jobs (or a high exit rate from flex job to self-dependency). It is a current debate in Denmark whether a sufficient number of flex job positions will be supplied.

The recent increase in disability benefit awards is all the more worrying if a flex job is considered simply as another type of disability benefit, because in recent years the increase in the number of beneficiaries of both schemes is high. Fortunately, evidence shows that flex job participants' experience in flex jobs is good (at least in part, see Hohnen, 1999) and that the work that participants do is useful in the production process, that is they relieve ordinary employees of some of the work and, to a lesser extent, replace ordinary employees (Holt et al., 2003).

Data on other schemes available "prior" to disability benefit reveal mixed developments. The number of people obtaining sickness benefit for more than two years has increased, especially from 1996 to 1997, and does not seem to be closely related to disability awards. The number of participants in vocational rehabilitation programmes increased in the later part of the 1990s, but decreased from 2000 to 2002.

Individual economic incentives

The effect of the level of disability benefits on awards is one of the issues most relevant for policy (another is the effect of reintegration programmes). In Denmark, the levels of most public benefits (including disability benefits) are regulated according to the growth of a specific wage index for the private sector. A small fraction of the cost of this regulation is, however, used for various policy programmes, so benefits should grow a little less than wages.

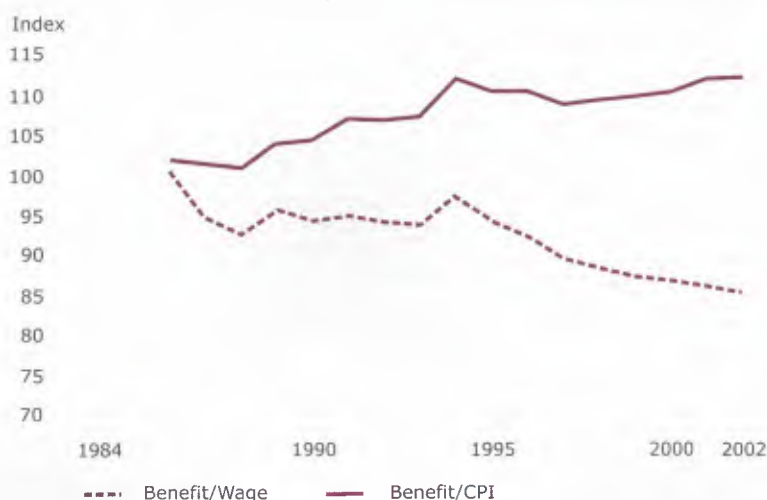
Figure 5.9 illustrates the development of disability benefits compared to consumer prices and an average wage.

The above figure shows a nice symmetrical development with a gradual increase in real benefits by 15 percent since 1984 and a decrease in relative benefits of the same size. Whether economic incentives for disability benefit have become stronger or weaker is therefore not clear. If the living standard on benefits relative to employment is important, incentives have become weaker. If the absolute level of living standard is important, incentives have increased.

There is a strong correlation between individuals' "value" on the labour market and the likelihood of obtaining disability benefit (see Weatherall, 2002). The correlation

might be due to many (unobserved) factors rather than being a causal effect. However, studies of international (e.g. United States and Canadian) data find evidence of a causal effect (see Gruber, 2000, amongst others).

Figure 5.9 Level of benefits relative to average wages and consumer prices, index 1984=100, 1984-2002



Source: Statistics Denmark, *Statistikbanken* and *Statistisk Årbog*.

Note: The leap in 1994 is due to the fact that benefits were partly made taxable.

Efficiency of reintegration programmes

Most reintegration programmes are not specifically meant to stop entry into disability benefit, but since most entrants to disability benefits enter from other types of social programmes (see Table 5.4), keeping people off these programmes might reduce entry to disability benefit. We begin the description of programme evaluations with those most directly pertaining to people who might otherwise obtain disability benefit (vocational rehabilitation) and proceed with activation programmes for social assistance recipients and unemployment insurance benefit recipients. There have been no evaluations of the flex job programme as yet.

Vocational rehabilitation

Filges (2001) estimates the effect that vocational rehabilitation has on "social dependency". Social dependency is measured as the fraction of a year an individual receives one of several kinds of social benefit. The effect of the programmes is mea-

sured as social dependency *ex-post* minus *ex-ante* programme participation. With this fixed-effect or "difference" method, the control group comprises the participants prior to activation. In order to claim that a change of social dependency is an effect of the rehabilitation, the necessary assumption is that no change in social dependency would occur without programme participation (this assumption can be relaxed in duration models described below).

Filges (2001) separates participants by degree of social dependence prior to rehabilitation. Table 5.7 shows some results.

Table 5.7 Effects of vocational rehabilitation programmes, change in social dependency (percentage point)

	<i>Social dependency prior to rehabilitation</i>		
	0-30	30-70	70-100
Rehabilitation completed	20	-1.8	-20.2

Source: Filges (2001), Table 4.3.a.

Note: Social dependency is measured as the fraction of a year an individual receives some kind of social benefit. The effect of the programmes is measured as social dependency *ex-post* minus *ex-ante* programme participation.

According to the study, rehabilitation lowers social dependency only for participants with significant dependency prior to rehabilitation and only after the end of rehabilitation. For this group, the programmes are estimated to reduce social dependency by 20 percent.

Weatherall (2002) finds that rehabilitation lowers the probability of obtaining disability benefit the following year. He controls for various other explanatory factors.

Høgelund and Holm (2002) estimate the effect of rehabilitation programmes on the probability of returning to work for sickness beneficiaries with a specific diagnosis (low back pain) and a specific type of programmes (educational programmes). They use a so-called duration model to separate duration effects from programme effects. The duration effect is the "natural" effect of the length of sickness on the probability of returning to work (for example, the longer the sickness spell, the lower the probability of returning to work, *ceteris paribus*). Education programmes are found to affect the probability of returning to work. However, the effects are ambiguous; education does not significantly affect the probability of returning to the old employer (which is the route back to work for many sickness beneficiaries), and in terms of a new employer, the probability of employment is reduced as long as the education programme is ongoing. After completing the programme, the probability of employment increases to a level slightly above the non-participation level.

Social assistance recipients

Within a year, social assistance recipients should start to participate in some kind of activation programme. As Filges (2001), Bach (2002) uses the fixed-effect method for estimating the effect on social dependency. Selected results are shown in Table 5.8.

Table 5.8 **Effects of activation programmes on social assistance beneficiaries, changes in social dependency (percentage points)**

<i>Variable</i>	<i>Effect</i>
Type of activation	
Job training, private	-16.3
Job training, public	-10.4
Employment project	-3.3
Folk high school (further education)	2.4

Source: Bach (2002), Table 5.7.

Note: See Table IV.1

Most programmes are estimated to lower social dependency. The effect of programmes varies. This could reflect the quality of the programmes or it could be that participants are different with respect to abilities to gain from activation. For example, it might be that those who gain a lot from activation choose job training rather than employment projects.

Conceivably, the mere prospect of having to participate in activation programmes may motivate some social assistance beneficiaries to do more to find a job or in other ways avoid activation programmes. In Bach (2002), beneficiaries are simply asked what they did to avoid activation. Most (approx. 80 percent) had not done anything. The remainder had found a job (7 percent), started a job-search (2 percent), started education (1 percent) or refused activation (7 percent). According to this evidence, the motivation effect is approximately as large as the direct programme effects reported above.

Graversen (2002) uses a duration model to estimate pre-programme motivation effects, "locking-in" effects (prevention of resuming a regular job during programme participation) and programme effects for activation of social assistance beneficiaries. To identify the mentioned effects as well as the basic duration effect, municipal variation in typical starting time of activation is used. Also, survey information on municipal activation practice is used. The overall impressions of the estimation results are (1) low motivation effects, (2) clear locking-in effects for most programmes other

than private job training, and (3) significant programme effects for most types of activation, especially for private job training. Regarding municipalities' practice, there is some, though limited, evidence that "active" and "tough" use of workfare policy increase beneficiaries' job search and exit rate out of social assistance. Another result is that the unemployment rate in society has a clear influence on the exit rate — that is, demand for labour matters.

Unemployment insurance beneficiaries

Since 1994, workfare has been an important part of the policy to bring unemployment insurance beneficiaries back to work. Several authors use duration models to estimate the motivation effects, the locking-in effects, and the employment effects of activation (as in Graversen, 2002, for social assistance-workfare). Overall, employment and locking-in effects are at best poor, while motivation effects are positive.

Det økonomiske Råd (2002) studies the employment and locking-in effects of four types of activation. Positive effects on employment are found only for private job training. The probability of having a job as well as the expected duration of employment is estimated to increase for this type of activation.

Geerdsen (2002) and Kyhl (2001) study motivation effects. In both papers, clear evidence is found of the motivation effects of activation. Kyhl (2001) also finds business cycle effects to be important.

Summing up the effect of reintegration programmes in general, evidence seems to be mixed. Apparently there is a locking-in effect in many programmes, keeping people off the labour market simply as a result of the time they spend in programmes. Motivation effects are found for unemployment insurance beneficiaries, but not as clearly for social assistance recipients. On the contrary, employment effects are found for social assistance recipients, but not for unemployment insurance beneficiaries.

The evidence of participants' personal experiences with various programmes has not been reviewed here.

Conclusions

The number of awards of disability benefit in Denmark decreased during the 1990s.

Two policy changes intended to reduce awards might have been important. First, the proportion of the costs for the disability benefit programme paid by the awarding agencies (municipalities) has increased. Now, the municipality pays two thirds of a recipient's benefit and the state pays one third. In the early 1990s, the state paid 100 percent of the benefit. Second, since the late 1990s, more emphasis has been put on providing jobs on special conditions and with wage subsidies for people with disabilities.

Whereas it is theoretically very likely that these policies have reduced awards of disability benefit, only little empirical research evidence on the effect of the policies

is available. Other possible explanations are the increased emphasis on various "workfare" or "back-to-work" policies and the generally good economic development in Denmark in the late 1990s. This might have affected the number of awards, if periods without work deteriorates the health of some people and/or makes it more likely that a partly disabled person will apply for disability benefit. Evidence on the effects of various types of workfare policies is mixed, however.

A reform of the disability benefit programme came into force in 2003. The average benefit level for people awarded disability benefit increased, so if personal economic incentives matter, this could increase benefit claims. To prevent inflow, it is now made explicit that an applicant for disability benefit is not eligible if he or she is able to undertake a job on special conditions — a "flex job". However, even if the flex job policy prevents inflow, it might be that the sum of awards of disability benefit and flex jobs increases. Hence the success of the flex job policy or similar types of policies also depends on factors such as the usefulness of the work performed in these jobs and the everyday welfare of the people who carry them out.

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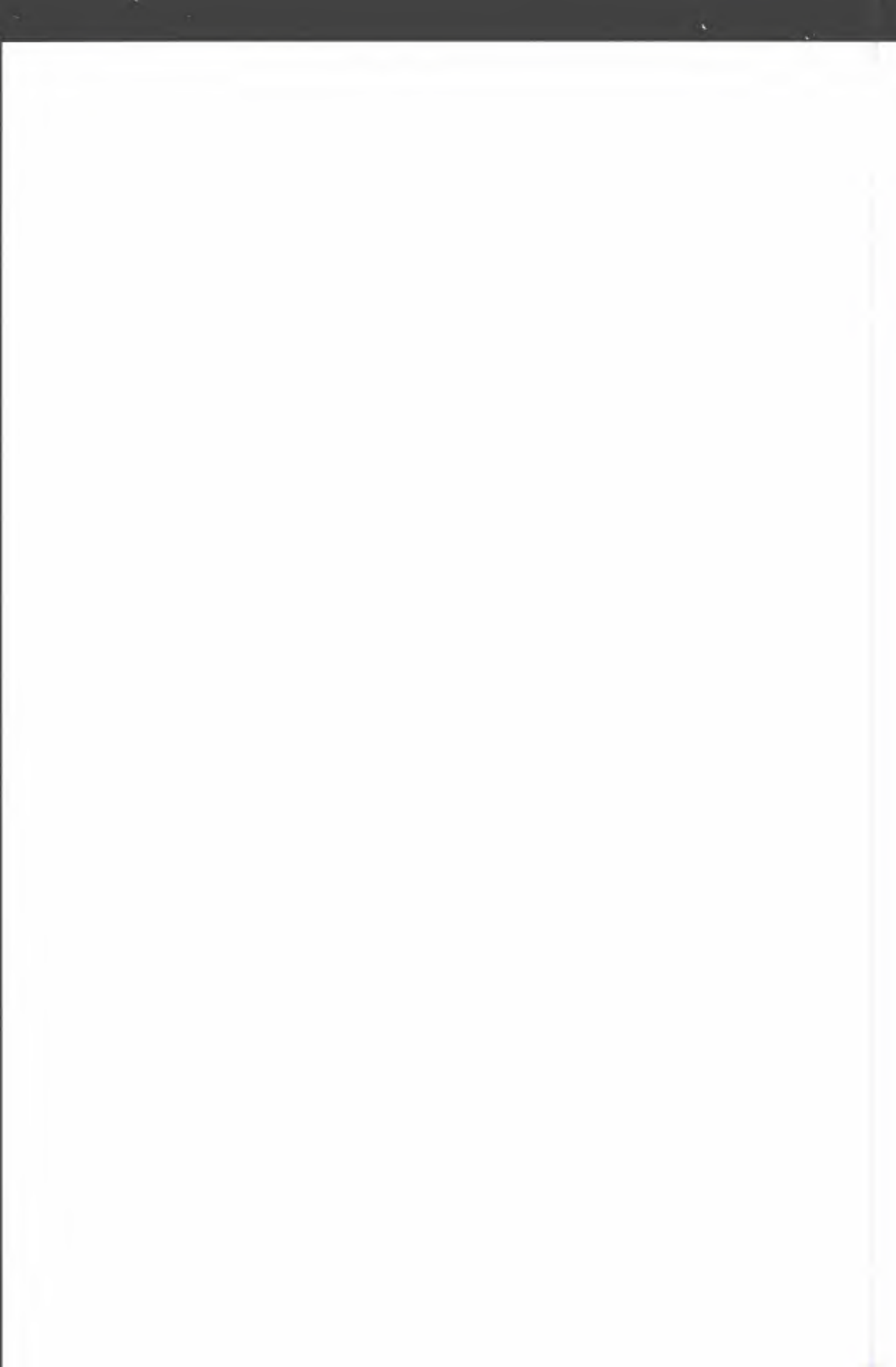
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Integrated policies: Disability insurance and rehabilitation in Sweden

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Disability policy and programmes

In Sweden, the main programme for individuals whose capacity to work has been permanently reduced is disability insurance. Labour market policy in Sweden is characterized by a "principle of work" — that is, the goal is to help individuals remain in the work force to the extent it is possible, even in the event of illness. As a result, many of the social insurance programmes allow for a combination of benefits and work. In the case of disability insurance, it means that individuals can collect benefits fully or partially in 25 percent increments. It also means that disability insurance benefits should only be awarded once all rehabilitation efforts have been exhausted or it has been deemed that insufficient work capacity is present. These features make rehabilitation an important component of sickness and disability insurance programmes in Sweden.

However, for much of the period since 1970, disability insurance has also been used as a labour market tool for workers approaching retirement and the disability programme has been closely linked with old-age benefits. For workers aged 60 and older, labour market conditions have been considered either by themselves or in combination with medical reasons when evaluating workers for benefits. Following the 1998 reform of the pension system, disability insurance was separated from old-age benefits, and the new disability programme that came into effect in 2003 has closer ties with the sickness insurance programme.

Today, almost 500,000 individuals in Sweden collect disability insurance. The group represents approximately 8 percent of the population age 16-64, and overall expenditure on the programme was Sk48 billion, or 2 percent of GDP, in 2002. This means that a considerable share of the population has left the work force either completely or partially.

In addition to disability insurance, sickness insurance provides benefits to individuals who are temporarily unable to work due to illness. During the last five years, Sweden has experienced a sharp increase in the number of individuals collecting sickness insurance benefits for extended periods of time. As a result, the share of individuals who are not working due to illness is even higher. Reducing the number of individuals collecting sickness and disability benefits is currently at the top of the political agenda in Sweden.

The purpose of this chapter is to present an overview of disability insurance in Sweden. Although the focus is on disability insurance, we will also discuss the role sickness insurance plays in providing benefits to individuals with reduced work capacity. The chapter is organized as follows: it begins with an overview of the disability insurance programme in Sweden, providing a brief history and describing the major changes in the programme since its introduction. This section also discusses how eligibility is determined, the benefit structure and major changes in the programme. The next section presents data on the composition of the population collecting disability insurance and the inflow of individuals to the programme. This is followed by a detailed discussion of the background of individuals collecting disability insurance and the different pathways to disability. The final section discusses the role of rehabilitation and reintegration programmes in helping individuals return to work or preventing disability. The section will document the type of rehabilitation and reintegration programmes available in Sweden and to what extent beneficiaries participate in such programmes. A concluding section provides a summary and points to further areas of research.

A brief history

The main social insurance programme for individuals with permanently reduced work capacity in Sweden is disability insurance. The programme was introduced in 1913 when Sweden enacted legislation that provided old age insurance to all citizens. Prior to the 1913 legislation, voluntary insurance arrangements had existed among certain occupations but a large share of the population lacked any provision for sickness or old age. In addition to old-age benefits, the legislation of 1913 provided benefits to individuals whose work capacity was severely reduced. Benefits were tested against earnings and only partial benefits were paid to individuals who had partial earnings capacity.

The provisions in the disability programme remained more or less unchanged until 1963 when Sweden enacted general social insurance legislation, the National Insurance Act. The National Insurance Act contains two principles that have governed social insurance policy in Sweden since then. First, all social insurance programmes should be mandatory and cover all residents. Second, social insurance benefits should be related to income. The 1963 legislation also included changes to the disability programme. Eligibility for benefits was to be determined only on medical grounds and benefits should no longer be dependent on other sources of income.

In 1998, Sweden's pension system was reformed. The reform transformed the old age pension scheme and also established it as an independent entity within the social insurance system. Prior to the pension reform, the disability insurance programme had been closely linked to the old age system. Because of the changes made to old age benefits, the disability programme also needed to be changed. The new disability programme came into effect in January 2003. The new disability insurance has closer ties to sickness insurance than to old-age benefits. Another change is that disability insurance benefits in general should be temporary and the need to collect benefits should be re-evaluated periodically. Because the new programme has just come into effect, few people have started collecting benefits under the new scheme. The main focus of this paper will therefore be on the disability programme prior to 2003.

Programmes for sickness and disability

In the event of illness, workers in Sweden are covered by sickness insurance. These benefits are paid when work capacity is reduced by at least 25 percent and the benefit is 80 percent of covered earnings up to a ceiling.¹ Sickness benefits are temporary and the intention has been that they should not be paid for periods longer than one year. However, no time limit exists in the programme and increasingly sickness benefits are paid out for periods longer than one year.

An individual who collects sickness insurance benefits should be evaluated for rehabilitation programmes by the Social Insurance Office if rehabilitation is appropriate. If an individual's work capacity is determined to be reduced for an extended period of time, he or she could be granted temporary disability benefits. It is only when rehabilitation efforts have been exhausted or it has been deemed that the individuals' illness is such that sufficient work capacity is not present that disability insurance benefits should be awarded.

A measure aimed at work resumption for disability recipients was introduced in 2000 for those collecting either temporary or permanent disability benefit. Recipients may return to work and collect disability benefits for three months, while working. The goal of this reform is to promote work resumption, without jeopardizing eligibility for disability benefits. So far only a limited number, about 1 percent of the recipients, have returned to work on these conditions.

For much of the period since 1970, disability insurance has also been used as a labour market tool in Sweden. Beginning in 1970, labour market conditions were considered in combination with medical reasons when granting disability insurance for workers approaching retirement age (Table 6.1). This meant that the medical testing was more lenient if a worker age 63 or older faced poor labour market conditions and risked becoming unemployed. In 1972, a provision was introduced that allowed workers aged 63 to 66 to be awarded disability insurance purely for labour market reasons. This meant that workers who had exhausted their unemployment insurance

1. In 2003, the ceiling was Sk 276,000 SEK. The first 15 days of benefits were paid by the employer, but it was suggested that this be increased to 21 days starting from 1 July 2003.

benefits could be granted disability insurance without any medical testing. In 1974, the age for this provision was lowered to age 60. As a result, workers could leave the labour force permanently at age 58 and 3 months, first claiming unemployment insurance benefits, and then disability insurance until age 65 when becoming eligible for old age benefits. This provision was abolished in 1991, but for most of the remainder of the 1990s, labour market conditions still entered the decision to grant disability insurance to some degree.

Table 6.1 Use of labour market reasons as eligibility criteria for disability insurance

Time period	Labour market reasons	Health and labour market reasons combined
Before 1970	No	No
1970-1972 (July)	No	Yes, age 63-66
1972-1974 (July)	Yes, age 63-66	Yes, age 63-66
1974-1976 (January)	Yes, age 60-66	Yes, age 63-66
1976-1991 (July)	Yes, age 60-64	Yes, age 60-64
1991-1997 (October)	No	Yes, age 60-64
1997-current	No	No

Source: Skogman Thoursie (1999).

Characteristics of the disability programme

Level of benefits

Until January 2003, disability insurance benefits consisted of a flat rate benefit (FP) that was paid out independently of previous labour market experience and an earnings-related benefit (ATP). (These were the same types of benefits as in the old age scheme). In addition, a pension supplement provided additional benefits for workers without or with very low earnings. The FP and pension supplement established a minimum level benefits. In 2002, the flat rate benefit together with the pension supplement provided an annual benefit of Sk76,368 for a single individual and Sk69,736 for a married individual. This minimum amount is approximately 30 percent of the average wage.

The earnings-related benefit, the ATP-benefit, was also determined according to the same principles as in the old age system. The benefit was calculated as 60 percent of the average of the best 15 years' earnings up to a ceiling, and 30 years' earnings

were required for a full benefit. This method of calculating benefits implied that the disability benefit should be equal to the old age benefit a worker would have collected had he worked until the age of 65, the normal retirement age. Thus, in calculating benefits, an assumption was made about what an individual would have earned if he or she had not become disabled. In order to determine the benefit, a worker's actual earnings until the time of the disability were used, and for years following the disability until age 65, assumed earnings were used. Depending on the degree of disability, disability benefits could be full or partial. Partial benefits were paid out in increments of 25 percent – that is, it was possible to receive a 25-percent, 50-percent or 75-percent benefit. If the disability was deemed to be permanent, disability benefits were paid out from the age of disability until age 65. If a worker's capacity to work was reduced for an extended period of time but the illness was deemed to be temporary, temporary disability benefits were paid out.

In January 2003, the disability programme was reformed and the programme changed names to reflect its closer ties to sickness insurance. The guiding principle of the new disability programme is that workers, if possible, should return to work.² The formula for calculating benefits has been changed and benefits are no longer tied to what a worker would receive in the old age system. However, benefits are still based on earnings prior to disability, and similar to the old system, assumptions are made about the earnings a worker would have made in the absence of the disability. The insurance also provides for a minimum benefit for workers with no or low earnings. The replacement rates in the old and new system are similar.

In addition to the national disability insurance programme most workers are covered by negotiated or occupational pensions.³ All the occupational pension schemes include supplementary disability insurance. Because the national disability insurance programme only covers earnings up to a ceiling, these occupational schemes are very important for high-income earners. The supplementary schemes are often very generous, in particular for workers with earnings above the social insurance ceiling. For these workers, the replacement rate can be close to 100 percent. However, it is important to note that these workers are less likely to collect disability insurance compared to workers with lower earnings.

Changes in eligibility

All residents in Sweden are covered by disability insurance and benefits can also be awarded to individuals without labour market experience. Eligibility for disability insurance benefits is determined by an individual's ability to support him- or herself through work. Disability insurance can be granted to individuals whose work capacity has been reduced by at least 25 percent and where the decreased ability to work is permanent. Thus a clear link between the ability to work and the medical problem

2. Individuals with disabilities where it is clear that they will not be able to work are exempted from re-evaluation.

3. There are four main schemes: for blue-collar workers in private industry, for white-collar workers in private industry, for workers in local government, and for workers in central government.

must be present. In evaluating the ability to work, all types of jobs should be considered, that is individuals cannot be awarded disability benefits because they are no longer able to work in their current occupation.

The time period since 1970 can be divided in two distinct periods with respect to conditions for eligibility: the period from 1970 until the early 1990s, when the criteria for awarding disability benefits became more lenient; and the period since the early 1990s, when the criteria have become more stringent.

Beginning in 1970, labour market conditions became a factor in determining older individuals' ability to work. One reason behind the decision to introduce labour market reasons as a criterion in determining eligibility was that older workers were affected to a greater extent by the economic downturn and by the reduction in employment that occurred as a result (Höög and Stattin, 2001). In addition, the requirements on rehabilitation and relocation in order to find a new job were more lenient for older workers. For part of the period from 1970 to 1991, it was enough for workers age 60 and older to have exhausted their unemployment benefits in order to be granted disability insurance.

Beginning in 1991, the eligibility criteria became more stringent. First, the rule that disability insurance could be awarded on the basis of labour market reasons only was abolished. For part of the decade, labour market conditions still entered the decision-making process for workers approaching retirement, but labour market conditions had to be evaluated in combination with medical reasons. However, an explicit policy since the 1990s has been to ensure that disability insurance is used to replace income in the event of reduced work capacity due to illness and not as a general labour market tool. As a result, reasons other than purely medical ones are playing a less important role in the decision-making process, although the age of the insured, where they live and education can be considered in certain cases.

Administration

Applications for disability insurance are handled by the regional Social Insurance Offices. These are independent entities, and each regional office makes its own determination. This means that the probability of being awarded benefits can vary between different regions of the country. The application for disability insurance can be initiated by a physician, the individual, or by the Social Insurance Office. When an individual applies for disability insurance, the Social Insurance Office requires that the applicant goes through a medical examination, and that the scope for rehabilitation is evaluated. If necessary, the Social Insurance Office can also request an evaluation from a second physician, interview the insured individual's employer and make home visits. An individual cannot be awarded permanent disability insurance until the Social Insurance Office has deemed that no further rehabilitation will help the individual to regain their work capacity.

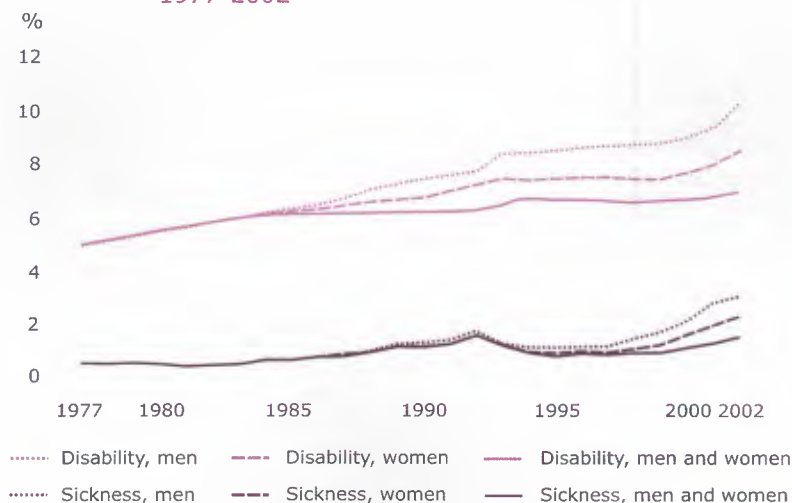
Growth in disability programmes

This section will examine trends in disability benefit receipt. We will begin by presenting information on the population of disability beneficiaries. We will then look at how annual flows into disability insurance have changed over time, and what characterizes the individuals collecting disability insurance.

The population of disability beneficiaries

Figure 6.1 presents the share of the working-age population (16-64) that collected disability benefits and sickness benefits between 1977 and 2002. Over this period, the share increased from approximately 5 percent in 1977 to 8.6 percent in 2002. For most of the 1990s, the share held fairly steady at just below 8 percent, but it has increased at a faster rate since 2000. The vast majority of disability benefits awarded are full benefits. The number of men and women collecting full and partial benefits is shown in Appendix 6.1.

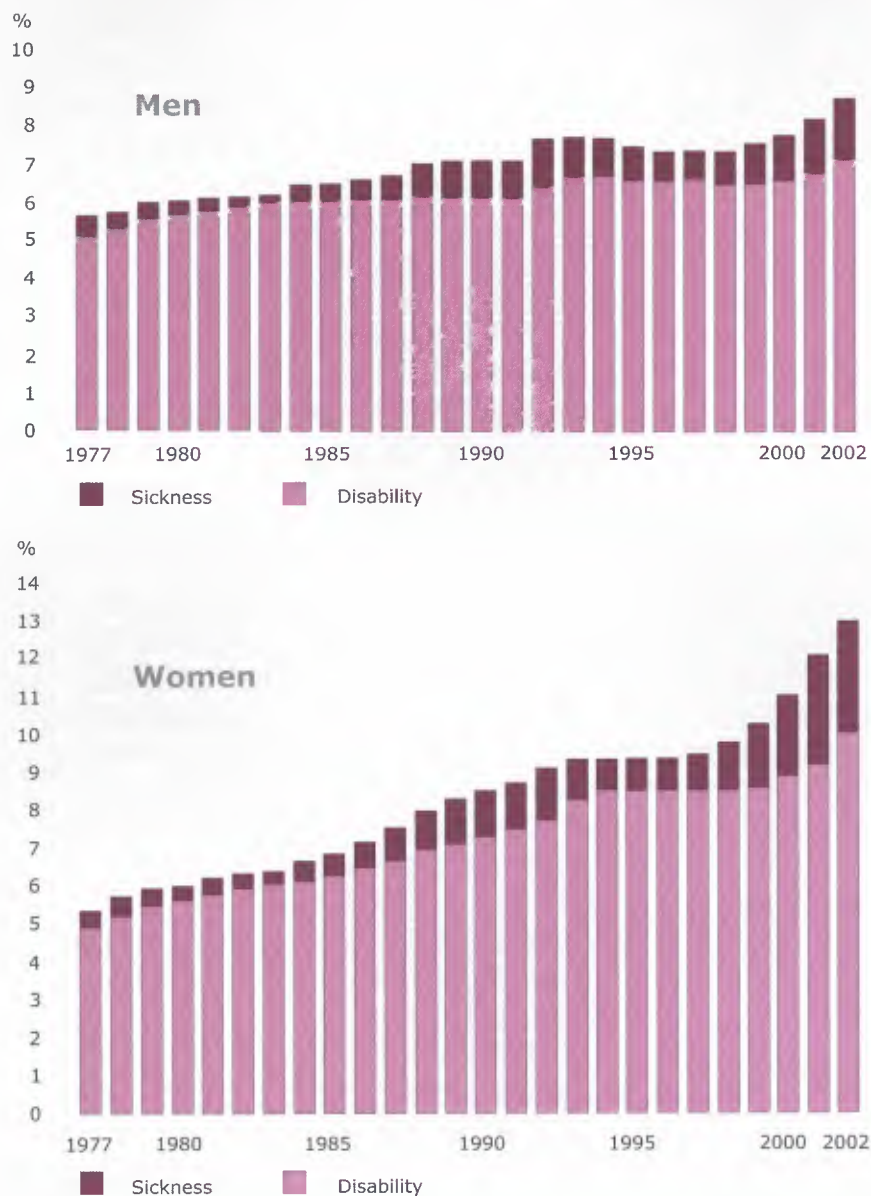
Figure 6.1 Share of population aged 16-64 with disability benefits or sickness periods longer than one year, 1977-2002



Source: National Social Insurance Board.

At the beginning of the period, the share of men and women collecting disability insurance was approximately the same. But since 1985, the share of women collecting benefits has been larger than the share of men. In 2002, the difference was 3 percentage points.

Figure 6.2 Share of population aged 16-64 collecting sickness benefits for longer than one year and disability benefits respectively, 1977-2002

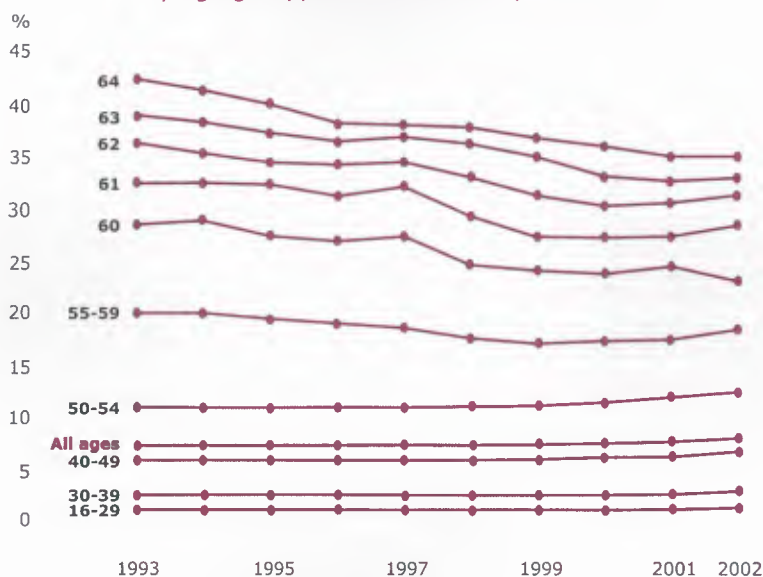


Source: National Insurance Board.

Figure 6.1 also shows the trend in sickness benefits. The share of the population with sickness periods of longer than one year held steady during the 1970s but then increased until the early 1990s, when it fell again quite sharply. The reason for the decrease was a policy by the Social Insurance Offices to grant disability insurance to individuals who had collected sickness benefit for an extended period of time. This is evident from the increase in the share of the population with disability benefit that occurred at the same time. The share of the population collecting sickness benefit then held fairly steady until 1997, when it started to increase dramatically.

Although the share of the population collecting disability insurance benefits has increased, expenditure on the programme has held relatively steady at around 2 per cent of GDP since the early 1980s (see Appendix 6.2).

Figure 6.3 Disability benefit recipients as a share of population by age group, men and women, 1993-2002



Source: National Social Insurance Board.

In order to get a full picture of the share of individuals who are not working due to long-term illness or disability, it is necessary to examine disability insurance and sickness insurance together. In particular, it is interesting to investigate the share of individuals that has collected sickness insurance for more than one year together with the share of those collecting disability benefits. Figure 6.2 presents the share of men and women with disability insurance and the share collecting sickness benefits for more than one year as a percent of the working-age population (16-64). When we

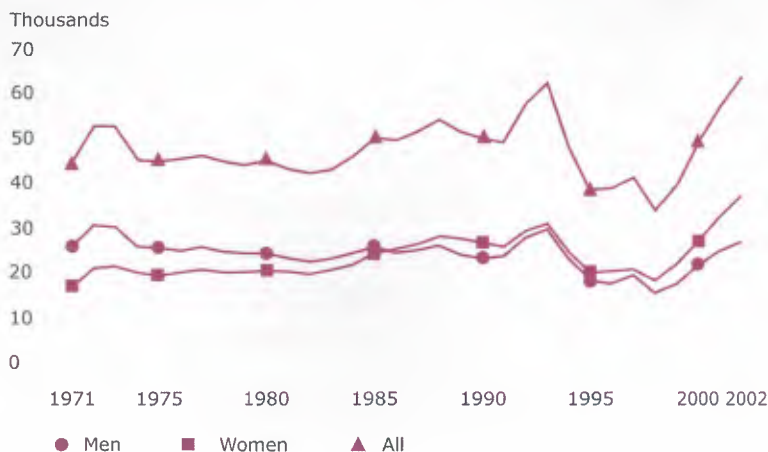
consider disability insurance and long-term sickness benefits together, 9 percent of men in the population age 16-64 and 13 percent of women are collecting some kind of benefit. It is also clear that long-term sickness benefits have increased as a share of total benefits for both men and women.

Next, we examine disability benefit recipients by age. Figure 6.3 shows the share of individuals collecting disability benefits by population age group between 1993 and 2002. In Appendix 6.3, the share is presented for men and women respectively. Disability insurance is most common among individuals approaching retirement. In the groups age 60 and older, 25 percent or more collect disability insurance. This clearly shows that disability insurance is an important pathway to retirement in Sweden. However, the share collecting disability benefits in the age group 60 to 64 has decreased over time, most likely reflecting the more stringent eligibility requirements. For most other age groups, the share collecting disability insurance was fairly constant during the 1990s. But the last two years have seen a slight increase in the share of individuals between the ages 40 and 59.

The inflow to disability insurance

The number of individuals awarded disability insurance benefits each year varied considerably during the time period 1971 to 2002. Figure 6.4 presents the number of individuals granted disability benefits between 1971 and 2002.

Figure 6.4 Total number of newly granted disability benefits, 1971-2002



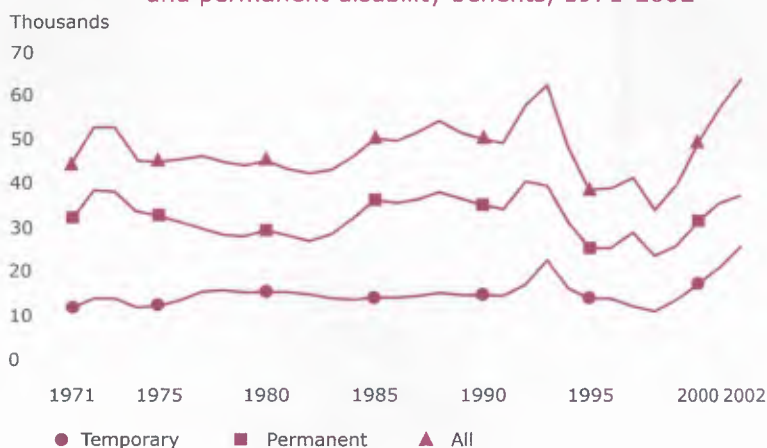
Source: National Social Insurance Board.

With the exception of the very beginning of the period, the number of individuals granted disability insurance held fairly steady at around 45,000 until the early 1980s, when the total number (men and women) increased to more than 50,000 individuals. The next increase occurred between 1991 and 1993, when the number of benefits rose dramatically. In 1993, the number of newly granted disability benefits reached 62,465. The sharp increase was the result of an effort by the Social Insurance Offices to lower the number of individuals collecting long-term sickness insurance.

After the peak in 1993, the number of newly granted benefits fell to a record low in 1998, when only 34,487 were granted benefits. This coincided with the economic boom of the late 1990s, and it is worth noting that the unemployment rate was decreasing. However, since 1998 disability benefits have once again increased sharply. In 2002, 63,738 individuals were granted disability insurance, an increase of 12 percent on the previous year and the highest number of individuals for the period 1970-2002.

Until 1985, more men than women were granted disability insurance, but since the mid 1980s women have constituted a larger share of the total number of beneficiaries (although the difference between the groups was fairly small until 1998). However, during the last five years the number of women granted disability insurance benefits has increased considerably faster than the number of men.

Figure 6.5 Number of individuals awarded temporary and permanent disability benefits, 1971-2002



Source: National Social Insurance Board.

Figure 6.5 presents the annual number of permanent and temporary disability insurance benefits awarded between 1971 and 2002. Permanent awards were most common until the early 1990s. Since then, the number of permanent and temporary

awards have developed in lock step. However, there is some indication that temporary benefits have become more common in the last few years. This could be a reflection of the explicit policy that individuals should return to work as much as possible. On the other hand, it could also reflect the fact that the Social Insurance Offices have a back-log of applications for permanent insurance. Individuals also have an incentive to continue collecting temporary benefits for as long as possible because the level of benefits is a bit more generous.

The age distribution of individuals awarded disability insurance in 2002 is shown in Table 6.2. Almost two-thirds of benefits were granted to individuals age 50 and older. The distribution among men and women is fairly similar, although a higher share of women age 30-49 were awarded benefits compared to men in the same age group. It is also interesting to note that the share awarded disability benefits in the 30-49 age range is higher than for those age 60-64. In fact, data show that the receipt of disability insurance benefits is increasing fastest among women age 30-44 (National Social Insurance Board, 2003). This trend is of some concern, since these are individuals who are in the middle of their careers and could have many productive years left on the labour market.

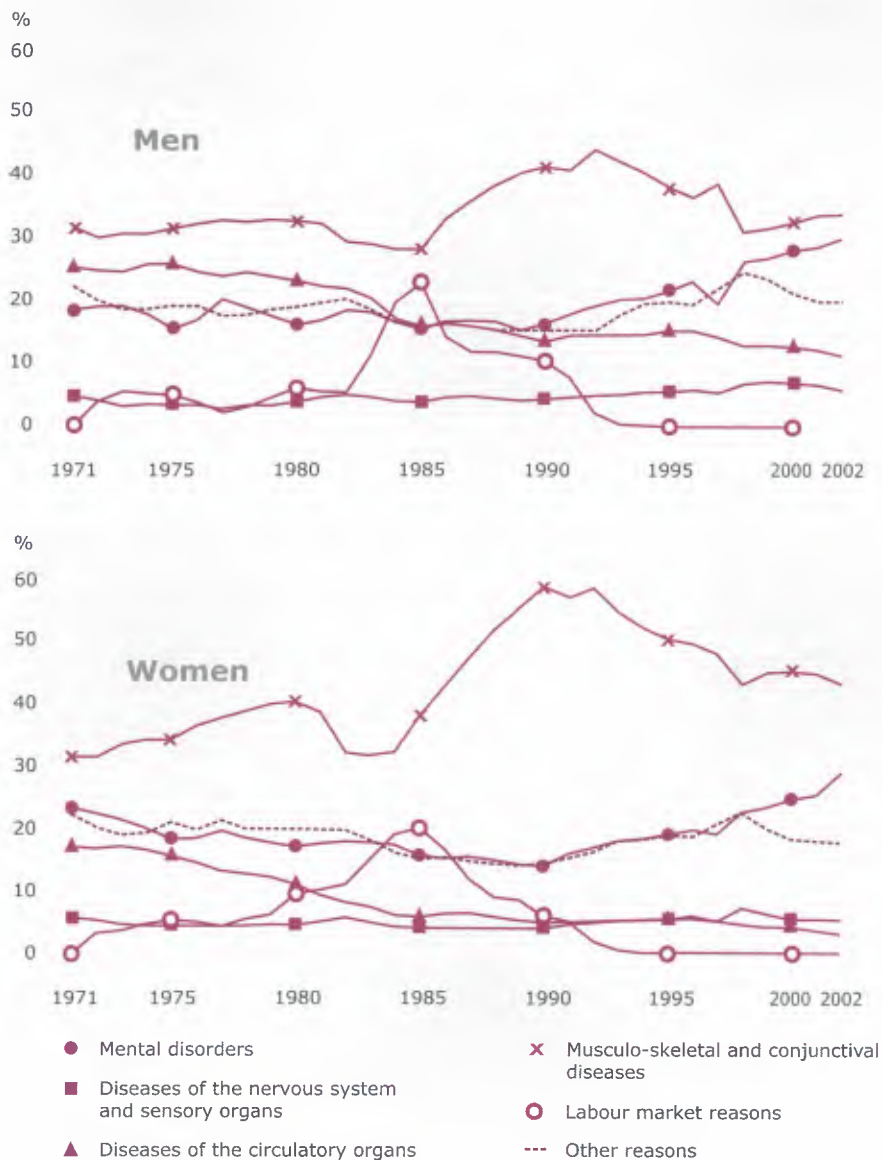
Table 6.2 Age distribution of disability benefits granted in 2002 (percent)

<i>Age</i>	<i>Men</i>	<i>Women</i>	<i>All</i>
16-29	7.6	5.5	6.4
30-49	27.2	33.3	30.8
50-59	39.1	39.3	39.2
60-64	26.0	21.9	23.6
All	100	100	100

Source: National Social Insurance Board (2003).

Next we examine the share of individuals awarded disability insurance in a given year by the reason for disability. As illustrated in Figure 6.6, by far the most common reason among individuals who are granted disability insurance is musculo-skeletal disease, in particular for women. Since 1971, between 30 and 60 percent of disability benefit awards in a given year have been made due to musculo-skeletal disease. For both men and women, the share increased sharply during the late 1980s and early 1990s and reached its peak in 1992. Although musculo-skeletal disease is still the most common reason for being awarded disability insurance, it has decreased for both men and women.

Figure 6.6 Share of disability benefits awarded by diagnosis, 1971-2002



Source: National Social Insurance Board.

Table 6.3 Distribution of diagnosis by age group for disability benefits awarded in 2002

Diagnosis	Age				
	16-29	30-49	50-59	60-64	All
Men					
Mental disorders	69.5	43.4	22.0	11.6	28.7
Musculo-skeletal diseases	2.5	27.0	37.1	41.7	33.0
Circulatory diseases	0.2	4.0	13.5	18.8	11.3
Diseases of the nervous system	10.4	5.7	6.5	6.9	6.7
Injuries	6.2	8.9	5.6	4.2	6.2
Other reasons	11.3	11.0	15.3	16.8	14.2
All	100.0	100.0	100.0	100.0	100.0
Women					
Mental disorders	61.8	34.4	22.7	16.0	27.2
Musculo-skeletal diseases	7.8	39.8	46.6	49.9	43.0
Circulatory diseases	0.5	1.8	5.5	7.2	4.4
Diseases of the nervous system	10.6	5.5	5.8	5.7	5.9
Injuries	6.5	6.4	3.9	3.5	4.8
Other reasons	12.8	12.1	15.6	17.7	14.7
All	100.0	100.0	100.0	100.0	100.0
All					
Mental disorders	63.5	37.7	22.4	14.0	27.7
Musculo-skeletal diseases	6.6	35.1	42.6	46.1	38.9
Circulatory diseases	0.7	2.6	8.8	12.5	7.3
Diseases of the nervous system	10.4	5.6	6.1	6.2	6.2
Injuries	6.1	7.3	4.6	3.8	5.4
Other reasons	12.7	11.7	15.5	17.3	14.6
All	100.0	100.0	100.0	100.0	100.0

Source: National Social Insurance Board (2003).

The second most common reason for collecting disability benefits is mental disorders, and its share of total awards increased sharply during the 1990s. In fact, at 30 per cent of all awards, it is almost as common for men as musculo-skeletal disease. Among women, almost 30 percent of awards in 2002 were made because of mental disorders. Among the individuals with mental disorders, the most common diagnosis is depression and anxiety. It should also be noted that these types of disorders have become more common among individuals who are collecting sickness insurance.

Several studies have examined the reason for this increase, and increased stress and pressure in the work place has been offered as an important explanation. Researchers are also discussing how absence from work and collection of sickness benefit for an extended period of time can affect individuals' general health status. One hypothesis is that it leads to deteriorating mental health and that this is one reason behind the increase in disability awards due to mental disorders.

Figure 6.6 also shows the importance of labour market reasons for disability awards. During the mid-1980s, labour market reasons were the second most common reason for awarding disability benefits for both men and women — in 1985 almost 20 percent of all awards were made for labour market reasons. This shows an explicit policy of trying to create jobs for younger workers by allowing older workers to exit the labour force early. Although the possibility to grant disability benefits on labour market grounds only was not abolished until 1991, the share of awards decreased steadily during the late 1980s.

The results so far show that disability awards are increasing among younger individuals (age 30-44) and that mental disorders are becoming more important as a reason for collecting disability benefits. Table 6.3 presents the distribution of diagnoses by age group in 2002. For the very young (age 16-29), mental disorders are the most common reasons, and this group consists mostly of individuals with developmental disorders. With respect to the older age groups (age 50-59 and age 60-64), musculo-skeletal diseases constitute almost half of all awards. However, mental disorders are most common for individuals between age 30 and 49.

Who is collecting disability insurance?

The data presented in the previous section indicate that age and gender are important determinants of the probability of collecting disability insurance. But other characteristics also affect the likelihood that an individual will collect disability benefits. Table 6.4 presents a set of demographic characteristics of individuals who were granted disability benefits in 2002.

In addition to age and gender, education and industry differ for individuals collecting disability insurance compared to the general population. Individuals with lower levels of education are more likely to collect disability benefits compared to individuals with college education. With respect to industry, individuals who have worked in health care, education and government are more likely to be granted disability insurance while workers in trade and manufacturing are less likely.

Figure 6.7 shows the age-specific probability of collecting disability insurance for men and women between 1978 and 2002. The results show that the likelihood of collecting disability insurance decreased for men and women approaching retirement in the early 1990s. For the second half of the 1990s the picture is more mixed, and among women aged 50 and older, the probability of collecting disability insurance has increased since the mid 1990s.

Table 6.4 Characteristics of individuals awarded disability benefits in 2002 compared with characteristics of general population age 16-64 in 2000 (percent)

	<i>Disability recipients</i>	<i>General population</i>
Age		
16-29	8	29
30-39	10	23
40-49	18	21
50-59	38	21
60-64	27	6
Gender		
Men	42	51
Women	58	49
Marital Status		
Married	49	41
Single	51	59
Education		
No high school	35	22
High school	50	54
College	16	23
Industry		
Agriculture and related industry	13	15
Manufacturing	14	15
Trade	8	11
Service	9	14
Finance and Insurance	5	4
Education and government	8	6
Health Care	32	27
Not classified	11	8

Source: Cohen-Birman et al. (2003).

A recent study has examined the likelihood of collecting disability benefits using data from a large longitudinal data set, the Longitudinal Individual Data panel (LINDA) for the period 1990-2000 (Cohen-Birman et al., 2003). LINDA is constructed by matching several administrative records in Sweden and contains, among other things, detailed information on income from labour for each year back to 1960, education level, occupation as well as sector of work for about 350,000 individuals. In

Figure 6.7 Age-specific probability of collecting disability insurance, 1978-2002



Source: National Social Insurance Board.

order to analyze the probability of collecting disability insurance, LINDA was matched to the database for newly-granted disability recipients. In the study, the probability of being granted disability benefits is estimated as a function of age, gender, marital status, education, country of origin, region and industry.

The results confirm the descriptive analysis. The probability of collecting disability benefits increases by age for both men and women. However, workers in the age groups 50-59 and 60-64 became less likely to collect disability insurance during the first half of the 1990s relative to younger workers. One reason for this may be that workers could no longer be granted disability benefits purely for labour market reasons. The results also show that women between ages 30 and 40 became more likely to collect disability insurance during the time period, confirming the descriptive results.

Education has a negative effect on the probability of collecting disability insurance. Because education is related to income and type of occupation this result implies something about different risks for different types of occupation. Workers with low education and income are more likely to be in occupations that are physically strenuous and may have worse working conditions than in general. As a result, this group is more likely to be in poor health and run a higher risk of collecting disability insurance during some part of their lives (Palme and Lundberg, 1997).

Individuals who live in rural areas and in particular in the north of Sweden are more likely to collect disability benefits. These are areas where unemployment has been high. When looking at the likelihood of collecting disability benefit by industry, the multivariate analysis shows that the probability has increased among workers in health care professions.

For individuals approaching retirement age, disability insurance is an important pathway to retirement. Between 1972 and 1991, many in this group collected unemployment insurance benefits prior to disability insurance. Swedish labour laws promote seniority and make it difficult to lay off older workers even if they are low productivity workers. To be able to keep younger workers in the work force it may be in the joint interest of firms and local labour unions to encourage older workers to seek disability insurance. As a result, older workers have been encouraged to apply for disability benefits during economic downturns, and disability insurance has been used explicitly as a means of creating a more flexible retirement age (Sundén, 1994). Economic incentives are such that for a worker who would like to leave the labour force early, it is advantageous to collect disability benefits instead of withdrawing old age benefits early. Palme and Svensson (2003) estimate pension wealth for early pathways to retirement and show that the pension wealth associated with early retirement through disability is substantially larger than if a worker leaves the labour force by withdrawing old age benefits early.

Rehabilitation and reintegration

Background: Changes in policy

Retention and rehabilitation in Sweden today have to be seen in the context of rapidly increasing sickness cash benefits and disability pension costs in the late 1980s and the subsequent rehabilitation reform of 1992. After the reform, during the recession of the early and mid-1990s, sickness absence rates and disability pension rates became historically low. However, this positive trend was broken at the onset of another economic boom in 1997, and Sweden is now facing a similar increase of costs as in the late 1980s. Rehabilitation and retention are therefore back on the social insurance agenda again.

Before 1985, the focus of the legislation was on enhancing job security of older workers and workers suffering from disabilities or increasing work incapacity. A series of reforms of great importance started in 1985, successively putting increased responsibility for rehabilitation on employers and involving employees in efforts to improve their work environment. The Work Environment Act was then reformed and supplemented by regulations in collective agreements concluded by social partners. Safety committees, including representatives of both employers and workers, were invited to participate in the organization of vocational rehabilitation and adaptation of the workplace. Special attention was paid to the rehabilitation needs of older workers and employees suffering from gradually increasing work incapacity (SOU, 1988: 41).

A revision of the rehabilitation legislation was necessitated by a rapid increase in sickness cash benefit and disability pension costs in the late 1980s. In 1988, a commission report brought forward several strong arguments for putting greater responsibility for rehabilitation on employers. Employers could then be convinced about the necessity of investing in rehabilitation in order to solve the prevailing problem of labour shortage. The commission report regarded vocational rehabilitation as the responsibility of employers, independent of the cause of rehabilitation needs. Work incapacity might be work related or be caused by other health problems. Furthermore, the report indicated that people suffering from health impairments or disability could have better opportunities to gain employment if employers were required to improve working conditions (SOU, 1988: 41). Consequently, comprehensive changes were introduced in the Work Environment Act in 1991, requiring employers to set up an organization for vocational rehabilitation and adaptation of workplaces. Employee influence on work environment, job adaptation and rehabilitation was introduced in safety committees and among safety delegates as well.

The rehabilitation reform of 1992 supplemented the Work Environment Act. According to the revision of the National Insurance Act, employers are required to assess the rehabilitation needs of employees in all cases in which the assessment is not definitely regarded as unnecessary. Employers are also obliged to take necessary vocational rehabilitation measures and adapt the workplace to individual needs. Furthermore, employers are required to finance vocational rehabilitation unless it is determined that the employee is unable to return to any work with the employer.

The revised legislation of 1992 also governed that if several rehabilitation measures, medical and work related, are required for individuals on sick leave, then Social Insurance Offices are responsible for the co-ordination of necessary measures. The law also stipulated that Social Insurance Offices are obliged to make a plan for rehabilitation, to follow up and supervise rehabilitation provided by other authorities and agencies, to provide allowances for working aids, to organize job training and to finance vocational education as well as tests of vocational and work capacity. Furthermore, reimbursement of the cost of transport from home to work by taxi was introduced to the health insurance for those who otherwise would not be able to commute to the workplace and would therefore collect sickness cash benefits. Social Insurance Offices are now also required to assess the rehabilitation needs of unemployed individuals. The objective of all these rehabilitation measures is to enhance opportunities for the long-term sick to return to work instead of being reliant on social insurance and eventually applying for disability pension.

The 1992 rehabilitation reform was not considered powerful enough alone to decrease sickness cash benefit and disability pension costs. Several supplementary measures were taken to promote the efficiency of rehabilitation and increase work resumption:

- Starting in 1991, considerable extra funds were made available annually for vocational rehabilitation by Social Insurance Offices and for medical rehabilitation by County Councils, responsible for health care services.
- Since 1992, contrary to earlier practice, vocational rehabilitation has been regarded as an adequate and necessary intervention for those who are collecting temporary disability pension.
- In 1991-1992, regional experiments were carried out on vocational rehabilitation and development of new sickness benefit and rehabilitation management procedures at Social Insurance Offices.
- The Working Life Fund was established to provide temporary co-financing of employer projects aimed at improving work organization and environment as well as vocational rehabilitation. The fund was financed by extraordinary employer contributions. Some 25,000 projects were financed, 75 percent in the private sector and 25 percent in the public sector, in 1990-1995.
- In 1991-1997, the compensation rate of sickness cash benefit was reduced several times. Provision of a higher compensation rate for rehabilitation than for sickness absence was introduced over a couple of years as a positive incentive for entering rehabilitation programmes.
- In 1991-1994, regional experiments were carried out on co-financing of rehabilitation by Social Insurance Offices and County Councils in order to increase work resumption.
- In 1994-2002, regional experiments were carried out on co-financing of rehabilitation by Social Insurance Offices, County Councils, County Labour Boards and municipalities in order to increase work resumption.

- In 2003, co-operation was established between the National Labour Market Administration and National Social Insurance Board in order to improve the rehabilitation of unemployed individuals collecting sickness cash benefits.

To sum up, all rehabilitation policy changes in Sweden since the 1980s have aimed to stimulate outflow from sickness cash benefits to work and thereby reduce inflow from sickness cash benefits to disability pension. Recently, stimulation of outflow from disability pension to work has been adopted as a policy as well.

Putting responsibility for assessment of rehabilitation needs and vocational rehabilitation on employers and responsibility for the co-ordination and supervision of rehabilitation measures on Social Insurance Offices are the most prominent policy changes.

In addition to policy changes, considerable extra funds have been provided for rehabilitation and for experiments in co-operation between several authorities on the prevention of long-term sickness spells and permanent work incapacity. The experiments have aimed at finding effective interventions.

Moment of intervention

Interventions are mainly made during sickness spells in Sweden. Rehabilitation measures should also be taken after entering temporary disability pension to avoid permanent work incapacity. There are only few definite requirements for the timing of intervention in the legislation. Employers are now required to assess rehabilitation needs of *all* employees on sick-leave after four weeks of sickness absence or after recurrent sickness spells, and to deliver their assessment to the Social Insurance Office within eight weeks from the onset of the sickness spell. The assessment is one of the main bases of the rehabilitation plan made by Social Insurance Offices in cases in which a co-ordination of rehabilitation measures is required. The regulations were not unequivocal until 2003. The obligation "to assess rehabilitation needs in all cases in which the assessment is not definitely regarded as unnecessary", included in the legislation in 1992, caused some confusion and has not been interpreted in the same manner by all employers. Consequently, rehabilitation planning and co-ordination by Social Insurance Offices has often been delayed due to the omission of employers to deliver their assessment, or due to their late delivery.

The legislation does not, however, impose any time limits on rehabilitation plans or follow-ups made by Social Insurance Offices. Individual needs for a rehabilitation plan have to be assessed "at the earliest possible opportunity". As a consequence, many plans are made after a long period of sickness absence which may not be optimal for the recovery and work resumption of the individual. For example, rehabilitation has been planned by Social Insurance Offices as late as after six months of sickness absence, on average, for those suffering from low back and neck pain and in need of both medical and vocational rehabilitation (Bergendorff et al., 2001).

Involved actors and their responsibilities

Several types of rehabilitation are available in Sweden. Medical rehabilitation is offered as a supplement to medical treatments through the National Health Services. The objective of medical rehabilitation is to restore the patient's functional capacity, decrease the functional impairment and to train compensatory functions. Work-related rehabilitation is offered in order to enhance the opportunities of the long-term sick to earn their own living, instead of being dependent on social insurance benefits. Social Services provide social rehabilitation, mainly of alcohol and drug addicts and patients in need of long-term psychiatric care.

The Work Environment Authority supervises the compliance of employers with their rehabilitation responsibilities under the Work Environment Act and can take legal actions, such as imposing fines, if employers do not set up a rehabilitation organization. In contrast to the powers of the Work Environment Authority, no sanctions are available for Social Insurance Offices if employers do not comply with the National Insurance Act. Therefore, the omission of employers to assess rehabilitation needs or take vocational rehabilitation measures has no legal consequences.

Individuals themselves are another important actor in rehabilitation. Employees are required to co-operate with their employer in assessments of rehabilitation needs. Individuals are also obliged to co-operate with their Social Insurance Office in rehabilitation planning.

The Social Insurance Offices are required to assess the rehabilitation needs of unemployed individuals on sick-leave and of employees who experience a conflict with their employer. They are also responsible for coordinating and supervising necessary measures to be taken by other authorities and agencies. If co-ordination is required, Social Insurance Offices also plan rehabilitation in co-operation with the individual, taking individual needs and conditions into account. Social Insurance Offices provide allowances for working aids, organize job training and finance vocational education, tests of vocational and work capacity as well as commuting from home to work by taxi, if necessary.

The Public Employment Service is responsible for vocational rehabilitation of unemployed individuals whose working capacity is reduced. The goal is to find suitable jobs in the regular labour market. The Public Employment Service provides tests of vocational and work capacity, vocational education, job training and job counseling.

Provision of rehabilitation and reintegration programmes

Assessments of working capacity as well as vocational rehabilitation measures, including vocational education, are financed by employers, Social Insurance Offices or, for unemployed individuals, by the Public Employment Service. Social Insurance Offices finance a diverse range of measures in the private rehabilitation market using funds provided annually since 1991. Private producers provide a great variety of rehabilitation programmes, including vocational and often also medical, or multi-

disciplinary rehabilitation. A large vocational rehabilitation provider or sheltered workshop, the Samhall Group, which is a limited liability company owned by the state, offers employment in varying working environments for individuals who have one or more functional impairments. It provides an opportunity for personal and work-related development and learning, increasing employees' prospects in the ordinary labour market.

Several studies by the National Social Insurance Board show that participation among long-term sick individuals (sick leave lasting more than 60 days) in either medical, vocational or social rehabilitation, or any combination of them, increased from about 10 percent in the late 1980s to 18 percent by the mid-1990s. However, overall only about 20 percent of long-term sick individuals have participated in vocational rehabilitation programmes (National Insurance Board, 1994, 1995; SOU, 1998: 104). Individuals who were suffering from low back pain or neck pain and had collected sickness benefits for at least four weeks had somewhat higher participation rates (Bergendorff et al., 2001).

The most common work-related rehabilitation measure is job training in an individual's regular job, in particular for women. If job training at alternative jobs is included, these two types of rehabilitation measures correspond to two thirds of all vocational rehabilitation of the long-term sick. Approximately 5 percent of the long-term sick are provided with vocational education (National Insurance Board, 1994, 1995).

A follow-up study of individuals on long-term sick leave (at least 4 weeks) due to low back pain or neck pain showed that rehabilitation measures such as job adaptation at the workplace, job training and vocational education, were started with 3 months in 10 percent of cases, within one year in 27 percent of cases and within 2 years in 32 percent of cases. The average number of interventions for those subject to one was 2.3, indicating either a combination of parallel measures or "trial and error" (Goede, 1999). The respondents were also asked to indicate their degree of satisfaction with the provision of vocational rehabilitation and other reintegration measures during the first year. The results indicated that about 25 percent were unsatisfied, reporting that they were not offered necessary rehabilitation (SOU, 2000: 78).

Efficiency of rehabilitation and reintegration programmes

When discussing how effective rehabilitation and reintegration programmes are in preventing individuals from entering the disability programme in Sweden, a few things have to be kept in mind.

First, the focus of studies on rehabilitation has not been on the efficiency of rehabilitation programmes in preventing receipt of permanent disability benefits. Instead, they have examined how successful programmes are in returning people to work after a long-term sickness absence. Resuming work and becoming a disability beneficiary are not, however, exact opposites of each other because other outcomes, such as unemployment, recurring sickness benefit periods or becoming a parental benefit

recipient, are also possible after long-term sickness. Therefore no reliable conclusions about the efficiency of rehabilitation can be drawn by reversing the effects shown for work resumption.

Second, follow-up periods of the long-term sick are usually short, often less than two years. This is a rather short time frame to study disability insurance outcomes in Sweden. As the duration of sickness benefit periods preceding the disability pension is not fixed, some long-term sick people leave may have been granted a disability pension within the follow-up period while others, *ceteris paribus*, continue to receive sickness benefit. The lack of uniformity in granting disability benefits in different regions of the country adds to the difficulty.

Third, the National Insurance Act requires that all reasonable rehabilitation measures have to be taken to prevent disability before disability benefits can be granted. The law also stipulates that vocational rehabilitation measures should be based on individual conditions and needs. Furthermore, rehabilitation has to be planned in close co-operation with the individual. This means that individuals are selected to programmes on the basis of a wide set of individual characteristics and needs. Because individual characteristics are important for being offered rehabilitation, selection bias is therefore a problem in most studies of efficiency of vocational rehabilitation. Participating in a vocational rehabilitation programme seems, paradoxically enough, to increase the likelihood of collecting disability benefits. Because individuals who are likely to experience a spontaneous improvement of working capacity are not selected for vocational rehabilitation programmes, no relevant measure of success can be obtained from comparing those who are selected with those who are not. These methodological problems hamper research on the efficiency of rehabilitation. Few studies, mainly those where multidisciplinary measures have been evaluated for a small number of participants, apply an experimental randomized design.

Finally, labour market conditions and structures influence the outcomes of vocational rehabilitation. The success of vocational rehabilitation, defined as the prevention of a permanent disability pension, depends to a large degree on the availability of employment for persons with limited work capacity.

Between 1993 and 1994, temporary or permanent disability benefits were awarded to 12 percent of participants in vocational rehabilitation programmes, to 18 percent of participants in medical rehabilitation, and to 21 percent of participants in both medical and vocational rehabilitation. In particular, vocational education provided to young individuals appears to be successful in preventing disability insurance payments, since disability benefits were awarded only in approximately 5 percent of cases. However, because these results are influenced by selection bias, they should be interpreted only as tentative conclusions about the effects of vocational rehabilitation. On the other hand, the results are stable in the sense that vocational rehabilitation seems to reduce the risk of a new spell of long-term sickness within 6 months after the work resumption. Needless to say, a longer follow-up period would allow more precise conclusions (Riksförsäkringsverket, 1995; Bergendorff et al., 1997a, 1997b).

Results from an evaluation of vocational rehabilitation programmes among different providers indicate large differences in the share of individuals who were granted temporary or permanent disability pension within a follow-up period of 2 years after entering the rehabilitation programme. The risk of becoming a disability recipient after vocational rehabilitation provided by sheltered workshops (Samhall) was 50 percent higher than the average of other providers of rehabilitation. On the other hand, persons participating in vocational education or in multidisciplinary rehabilitation for back pain had a 50 percent lower risk than the average (Bergendorff et al., 1997a). Hence the outcome seems to depend on the choice of provider, but again, selection problems make it difficult to draw that conclusion. In this case, the selection bias was not caused by an unfavorable age or gender distribution of participants but by other factors which could not be controlled, such as diagnosis, health status, psycho-social problems and status on the labour market. For example, sheltered workshops such as Samhall provide vocational rehabilitation in a protected work environment for those suffering from various functional and mental disabilities that make it difficult for them to work in regular jobs. Due to the characteristics of participants, sheltered workshops cannot be expected to show very good rehabilitation results.

A cost-benefit analysis of the regional experiments in providing extra funds for vocational rehabilitation and improvement of sickness benefit and rehabilitation management procedures at Social Insurance Offices in 1991-1992 showed that the return rate of investment in the experiment was 1:6 (Olkiewicz, 1992). Experiments on co-financing that involve County Councils providing health care, County Labour Boards and municipalities, have also been successful. The Government has therefore passed a law on co-financing. From the 1 January 2004, co-financing corresponding to up to 5 percent of the appropriation granted for sickness cash benefits may be used for any type of rehabilitation that all four partners agree upon unanimously. Costs of County Labour Boards are to be covered by this appropriation. However, County Councils and municipalities are required to put up the same amount in co-operation for rehabilitation.

In summary, rehabilitation appears to have an effect in preventing the collection of disability benefits. However, because of selection problems the effect has been difficult to evaluate and additional research is needed in the area

Conclusion

The purpose of this chapter has been to provide an overview of disability insurance in Sweden. Today, almost 500,000 individuals are collecting disability insurance benefit and the cost of the programme is about 2 percent of GDP. In addition to disability insurance, sickness insurance provides benefits to individuals who are temporarily are unable to work due to illness. During the last five years, the number of individuals with disability and sickness insurance benefits has increased dramatically, and the issue is now at the top of the national agenda.

In 2002, almost 64,000 individuals were awarded disability benefits, an increase of 12 percent on the previous year and the highest number of individuals for the period 1970-2002. In particular, the share of individuals between age 30 and 44 is increasing. The most common reason for being awarded disability insurance for both men and women is musculo-skeletal disease. However, this share is decreasing, and during the mid-1990s the share with mental disorders increased.

Workers approaching retirement constitute the largest group among disability beneficiaries and disability insurance has been an important pathway to retirement in Sweden. This is evidenced by the fact that labour market conditions have been part of the eligibility criteria for most of the period since the 1970s. However, during the 1990s an explicit policy has been to ensure that disability insurance is used to replace income in the event of reduced work capacity because of illness, and not as a general labour market tool. The reform of the programme in January 2003 reflects this policy.

The results in this study indicate that in order to get the full picture of disability beneficiaries, it is important to examine disability insurance in combination with sickness insurance. The number of individuals who have collected sickness insurance for more than one year has increased and some of these individuals will move into disability insurance. More information is needed on the extent to which this transition into disability occurs, and the demographic and economic characteristics of the individuals in this group.

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Appendix 6.1 Number of men and women collecting full and partial disability insurance, 1993-2002

Thousands

180

Men

Women

160

140

120



60

40

20

0

1993 1997 2000 2002

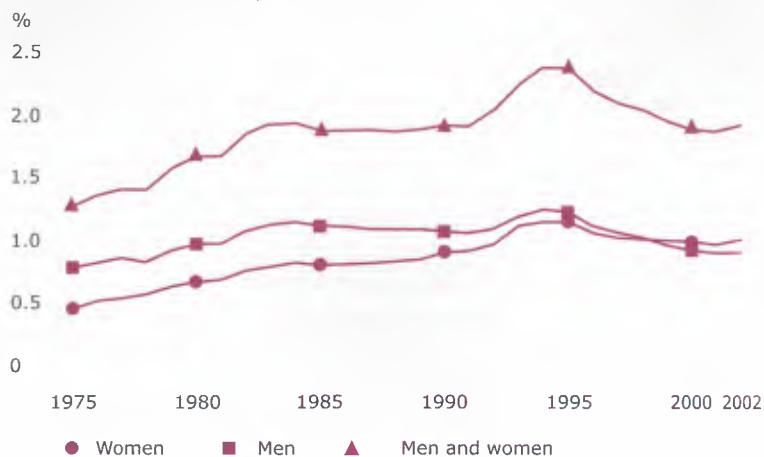
1993 1997 2000 2002

..... Disability 1/1
 -.-.- Disability 3/4
 -.-.- Disability 2/3
 -.-.- Disability 1/2
 -.-.- Disability 1/4

..... Temporary disability 1/1
 -.-.- Temporary disability 3/4
 -.-.- Temporary disability 2/3
 -.-.- Temporary disability 1/2
 -.-.- Temporary disability 1/4

Source: National Social Insurance Board.

Appendix 6.2 Disability insurance expenditure as a share of GDP, 1975-2002



Source: National Insurance Board.

Appendix 6.3 Disability benefit recipients as a share of population by age group, 1993-2002



Source: National Social Insurance Board.

Curing the Dutch disease? Employers' role in reducing disability receipt in the Netherlands

Bernhard Bakker Tauritz and Wim Landheer

Policy context and description of disability programmes

Occupational disability benefits in the Netherlands date back to around 1900, with the introduction of insurance for industrial accidents in several branches of industry. Since then the disability benefit scheme has changed significantly, and it now provides benefits to all citizens unable to work through disability, even if non-work related. The expansion from covering only the *risque professionnel* to including the *risque sociale* characterized most of the developments related to disability benefits in the Netherlands up to the 1970s. The objective was to cover all major social risks through the social security system, and to protect Dutch citizens against the consequences of these risks.

When the Disability Benefits Act (WAO) was introduced in 1967, it was assumed that the number of benefits would not exceed 200,000. However, this level was reached only three years after the Act's introduction in 1970. Four years later, over 300,000 citizens relied on disability benefits. The financial cost increased proportionately (Trommel and van der Veen, 1999).

By 1984 the number of disability beneficiaries had increased to 736,000, partly as a result of the oil crisis in the 1970s and the related economic downfall. The assessment procedures meant that to determine the extent of a person's inability to work, his or her individual opportunities on the labour market were also taken into account. Someone with a partial disability and therefore few employment opportunities, was declared fully disabled on the basis of his labour market position. The result of this system was that virtually every assessment led to the establishment of full disability benefits and the poor economic situation reinforced this process even further.

In addition, disability benefits were to ease the consequences of the economic restructuring in the 1970s and 1980s which resulted in many employees losing their

jobs. Employees and employers' organizations played a central role in the administration of the Disability Benefits Act, and found this mechanism to be a socially acceptable way of resolving economic problems. Employees received a secure income for an unlimited period. Employers faced less resistance towards the economic restructuring and achieved higher productivity levels (Vijgen, 2002; SCP, 2002).

Rise of the crisis of control

Public objections to the use of the disability programme as social policy first emerged in the 1970s. During that period the rapidly growing number of benefit recipients, in addition to concern about abuse of the system, led some people to doubt the sustainability of the system in the long run. However, the criticism did not have any impact on policy at that time. The fundamental principles of social security, including, for example, national solidarity, and the constitutional obligation of the Dutch government to protect citizens from poverty, were not questioned. Nevertheless, the need to control costs was gradually recognized and the financial consequences of including unemployment risks in disability benefits became clear. However, labour market considerations were, for the moment, prioritized (Trommel and van der Veen, 1999; Zeitzer, 2002).

The problem in regulating disability benefits was a matter firstly of controlling costs, and later of controlling the volume. A number of different strategies were adopted to try to solve the problem. The first reforms focused on limiting the costs of the scheme in order to maintain sustainability. This period of cost control began in the late 1970s, and really started to have an effect after 1982. The relationship between previously earned wages and the level of benefit was changed, resulting in lower benefit levels. Later, the percentage of salary that determined the rate of benefits was reduced from 80 percent to 70 percent. This combination of measures resulted in a reduction in the purchasing power of the average person receiving disability benefit by 25 percent during the period up to 1985 (Vijgen, 2002).

However, the number of beneficiaries continued to increase. With the System Reform (Stelselherziening) in 1987, measures to decrease the volume of benefits were added to the policy strategies implemented. The reform consisted, among other things, of an adaptation of the disability criterion.¹ In addition, the legal claims of all civilians entitled to disability benefit payments were equalized. The system was to be made simpler and cheaper (Aarts et al., 2002; Rigter et al., 1995). The most important changes were:

- relating the duration of unemployment benefits to work history;
- removing labour market opportunities from the disability assessment.

The System Reform was the first set of measures aimed specifically at restricting the number of beneficiaries, and not only the costs thereof. Before 1987, disability ben-

1. The disability criterion imposes peripheral conditions in a general sense for establishing whether someone is entitled to disability benefits or not.

efits covered a substantial proportion of hidden unemployment. The System Reform marked a paradigm change concerning disability in the Netherlands. Disability was no longer perceived as a fairly objective and unalterable variable. Measures could now be taken to reduce the number of disabled, where before this was thought to be an impossibility.

The T-acts: Trimming the system

The System Reform did not live up to expectations. The relative cost of the scheme started to decline, but the number of beneficiaries did not. The concerns had grown even stronger by 1990 when the prime minister characterized the problem as "the Dutch disease". It looked as though the number of people receiving disability benefits would soon exceed the one million mark.

At the beginning of the 1990s, there was an increasing tendency to characterize the scheme as a system of incentives that should stimulate the involved parties. The first reflection of the notion of "incentives guiding actions" was implemented through the Act on the Reduction of the Disability Volume (the TAV Act) in 1992. This consisted of a number of measures to promote reintegration, but particularly emphasized a system of rewards and sanctions for the employer. The aim was to increase the financial interests of the employer in preventing sickness and disability on the one hand, and promoting reintegration on the other. However, many people expected TAV would not achieve adequate results in the long run (Vijgen, 2002; SCP, 2002).

By far the most controversial set of measures in the history of Dutch disability policy so far was introduced in 1993, and is known as the Act on the Reduction of Disability Benefits Claims (TBA). This Act had three central elements:

- A restriction of the level and duration of benefit payments and linking them to age.
- A stricter disability criterion, adding the requirement that limitations have to be "directly and medically objectively determined"² to the previous formulation, "loss of income as the result of sickness or disability".
- The criterion "suitable work" was changed to "prevailing work"; all recipients of benefit payments under the age of 45 had to be re-assessed under the new criterion.

Since TBA was introduced, disability benefits have consisted of two parts. One component is based on loss of income and a second component is related to age. The reform resulted in a reduction of the level of income protection. However, this reduction was privately insured for the majority of employees through collective bargaining agreements. The Act (TBA) is presumed to have led to a fall in the number of people collecting disability benefits for the first time. The disability volume steadily declined for a number of years.

2. This means that it must be possible to make a direct link between the diagnosis and the limitations resulting from this.

The system of rewards and sanctions mentioned above only lasted for a short period of time. It was abolished in 1995 and replaced in 1998 by the PEMBA Act (premium differentiation and market forces in disability arrangements). PEMBA transferred part of the financial responsibility for disability benefits to the employer. This meant that contributions to the scheme for each branch of industry became dependent on the risk of disability in the sector. Furthermore, the employer could opt to carry the risk of the first five years of disability benefits himself, or to reinsure this risk privately. PEMBA is aimed at increasing the responsibility and therefore involvement of the employer with regard to prevention, supervision and reintegration of employees receiving disability benefits (Aarts et al., 2002).

The Disability Benefits Act and related programmes

The previous sections described the major developments in disability policy. We now turn to a description of the disability scheme and related programmes.

We start with an example:

Peter van Dijk is 42 years old and worked as a teacher for about twenty years. About a month ago he fell ill due to a range of stress-related complaints and he has not been able to resume work. Like all other Dutch employees, Peter is entitled to disability benefits on the basis of having had a job when he became ill. He will only receive this benefit if he remains sick for a period of two years, during which time Peter's employer will continue wage payments. After this two-year waiting period he will be assessed, and if he is deemed disabled, a benefit will be awarded. His eligibility exists as long as Peter has not reached retirement age (65) and his ability to work is impaired by more than 15 percent. The level of his benefit will depend on three factors:

- his level of impairment;
- his previously earned wages; and
- his age.

During the two years before Peter can enter the disability benefits scheme, his employer is responsible for his rehabilitation. Under the Gatekeeper Act, Peter and his employer will be required to report about the attempted rehabilitation activities as part of the application procedure for disability benefits. If Peter or his employer have not made sufficient efforts to get Peter back to work, either his employer can be forced to continue wage payments for a longer period or Peter's benefit level can be reduced.

It is however possible that Peter remains sick, but still will not receive disability benefit. Sickness is determined by the inability to perform the current job, disability by the ability to perform work in general. The level of disability is determined in an assessment procedure that consists of two parts. First, a social security physician establishes the physical and psychological limitations that inhibit active participation in the labour market. Second, a labour expert determines what kind of work Peter is

still able to do, taking his limitations into account, and how much can be earned through that work (the theoretical earning capacity). The level of disability is decided on the basis of the difference between the previously earned wages and the remaining earning capacity. For instance, should Peter be deemed 40 percent disabled, this means that he is able to earn 60 percent of the wage that he was accustomed to before he became disabled.

If Peter is eligible for disability benefits, he will receive a wage-related benefit for a limited number of years. The length of this period will be determined by Peter's age. Under the age of 32, no wage-related benefit is awarded, for people 59 years and older the wage related benefit is paid out until retirement age. Peter is 42, which means that his wage-related benefit will last only a year. The drop in benefits has however been privately insured by the employer. This was negotiated by the trade union after the TBA Act was implemented and is the case for all teachers. Peter's disability benefit will drop after a year. This is also true for people under the age of 32 who have no claim to a wage-related benefit. The follow-up benefit is only partially wage-related. The level of the follow-up benefit is determined by the minimum wage, supplemented with a wage- and age-related benefit. Once disability has been determined, the right to a benefit remains until the person retires or the disability is resolved.

But there is also the possibility that Peter is not eligible for disability benefit. In that case, two other benefits could apply. If he has worked for an extended period he may apply for unemployment benefits (WW). The benefit levels for unemployment are comparable to the levels for the disabled, but for unemployment benefits are time limited. Based on an individual's work history, someone can be eligible for a benefit from six months up to a maximum of five years for people with a 40 year work history.

For people who are not eligible for disability benefits or unemployment benefits, social assistance (*Bijstand*) may apply. Social assistance benefit is linked to the minimum wage level, not to previously earned wages, and the level is therefore lower than the other types of benefits in the Netherlands. Eligibility for social assistance is also means-tested. People who have substantial private assets do not qualify for it. There is however no restriction on the length of the benefit.

Both benefits could have been options for Peter, had he not been eligible for disability benefit and unable to resume work. Peter did however qualify for disability benefit and functions within the disability benefits scheme. This means that he should be re-assessed at regular intervals (for the first time a year after entry to the scheme) and is eligible for reintegration, which we will turn to in the next section.

Related programmes: Reintegration and prevention

Traditionally, social security in the Netherlands has been a tool for income security (welfare based). Later, the target shifted towards a "workfare" based policy with "activation" and "self sufficiency" at its core. It has proven difficult to combine

"welfare" and "workfare" based activities within one administrative body however. Research on how administrative bodies balance joint responsibilities for benefit provision and volume restriction in 2001 shows that it is problematic to combine these two tasks (Bergsma and Hazelaar, 2001).

An organization that is asked to prevent people from becoming benefit dependent, at the same time as it has an existential interest in keeping benefit levels high, can be less effective. Besides, empathy with applicants has been shown to influence the decision-making process that leads up to awarding disability benefit. More recently, research in 15 countries has shown empathy to be a part of assessment procedures even when the assessor does not meet the applicant in person, but bases the decision solely on paperwork (de Boer et al., 2004).

In recent years, the number of people entitled to benefits has continued to increase, and it is difficult to determine how effective various reintegration instruments are. This is partly because long-term processes are involved, and partly because it is difficult to prove that the job is a direct result of the reintegration measure that was used.

Since 1994, the level of disability is based on the remaining possibilities for regular work. A person is considered unable to work through disability if the restrictions are such that in theory there are no possibilities left. Therefore reintegration focuses mainly on helping those who are partially disabled to find work that is suitable for their personal situation. Someone who is unable to work through disability is, however, allowed to work more than might be expected on the basis of his disability, as long as a formal labour expert agrees. The expected results from this type of reintegration for the total number of benefit recipients are fairly limited. Efforts are often confined to the person's partial capacity to work, and an individual does not necessarily exit the benefit when he or she finds work. Because of this, prevention and reintegration during the first year³ of sickness (and before entering disability benefits) play an important role (Veerman and Besseling, 2001). In many cases, leaving disability benefits to go into paid work proves to be difficult, and therefore the initial process of preventing disability is all the more important (Veerman and Besseling, 2001; Molenaar-Cox and Deursen, 2003).

The preliminary stage before receiving disability benefits starts with the employee's absenteeism. During the 1990s, employers became fully responsible for the costs of sickness absenteeism. This explains the strong decrease in the costs of the Sickness Act during the same period. The first two Acts to contribute to this shift were aimed at curtailing sickness absenteeism (the TZ Act) and improving occupational health (the Occupational Circumstances Act).

The TZ Act made the employer responsible for the employee's first six weeks of sickness. The Occupational Circumstances Act (*Arbo-wet*) provided a framework for working conditions, and during the course of a number of years required all employers to join private Occupational Health Service providers (*Arbodiensten*). These service providers act as consultants in the field of occupational circumstances and

3. Recently this period was extended to two years.

absenteeism, as well as helping the employer to carry out a risk assessment and providing guidance and check-ups on absent employees. In principle, the supervision of absenteeism and the reintegration of sick employees became the responsibility of the employer, contracted out to an occupational service provider.

Following the introduction of the Act, the number of people who entered the disability benefits system continued to be higher than in comparable countries. It is doubtful whether people are unhealthier in the Netherlands than in other countries, but among those employees who are sick, a greater number of individuals receive disability benefit. Shifting the responsibility for the first year of sickness to the employer has not (yet) resulted in lower disability benefit volumes. The reintegration of sick employees with the aim of preventing employees from entering the disability programme also has yet to achieve the levels of success previously expected (Veerman and Besseling, 2001).

The reasons for these problems can be described at different levels. First, developments in terms of productivity and working conditions can be used to explain the trend. The average Dutch person has a relatively high risk of becoming unable to work through disability. From a macro-economic perspective, the Dutch have also been relatively productive in recent decades (Geurts et al., 2000). It is quite plausible that a relationship exists between higher productivity, related higher work pressure and a higher risk of disability. For example, a study by Paoli shows that the number of employees with high stress levels increased from 47 percent to 58 percent between 1991 and 1996 (Geurts et al., 2000). Thus, the introduction of ICT and the information society might be linked to the increase in the number of psychological complaints as a proportion of the reasons for inability to work through disability.

Nevertheless, the number of people receiving disability benefits cannot be explained only by occupational circumstances and productivity levels. Cultural and institutional factors play a major role. In the 1990s, an answer was sought through the introduction of financial incentives targeted at the employer. The employer must now pay the salary of a sick employee himself, and if the employee enters the disability benefit scheme, this has negative results for the premium that the employer contributes. Seen from this perspective, it is in the employer's interest to cooperate effectively with an Occupational Health Service.

However, the measures do not yet appear to be very effective. Many employers, particularly smaller businesses, sign minimum contracts. These so-called "10 guilder contracts" with occupational health service providers do not go beyond the compulsory registration and control of absenteeism. Furthermore, even if the legally required *risk analysis* is carried out (which is done by only approximately 50 percent of employers) this does not mean that suitable measures are then taken to prevent these risks (Geurts et al., 2000). A summary report in 2001 indicated that only one third of employers feel that it is possible to influence absenteeism. Research has shown that a stronger belief in the possibilities for intervention leads to a greater behavioral response to financial incentives (Besseling and Veerman, 2001). If a person expects more results from an intervention he is more likely to respond to a

change in incentives. In 1998, a study of stress and physical workload in 10,500 companies revealed that only a fraction of the employers take serious preventive measures related to absenteeism (Molenaar-Cox and Deursen, 2003).

The introduction of financial incentives for employers has only resulted in a partial development of a policy of prevention. Measures usually focus on either the behaviour of the sick employee, or on procedures related to absenteeism. Some authors note a development towards more intensive supervision for long-term sick employees (Veerman and Besseling, 2001). Nevertheless, the question remains to what extent this can be attributed to policy and legislation, rather than to broader social processes of modernization and individualization, and a growing awareness of the problem of disability. The question of whether a policy of prevention implemented by the government actually prevents disability, or merely postpones it, is not easy to answer. It is rarely possible to prove a direct relationship between a policy and its consequences. The policy of prevention does not seem to have led to many concrete prevention activities in the past few decades.

Nevertheless, there are also positive signs. There is a development towards more supervision for the long-term sick. In addition, employees that flow into the disability benefit system report more health complaints than in the early 1990s (Veerman and Besseling, 2001). Presumably, this means that fewer relatively healthy employees submit applications for disability benefits. In addition, the average disabled person exhibits a greater expectation of being able to resume work. In individual cases prevention and reintegration activities contribute to the prevention or reintegration of people in danger of becoming disabled or already receiving disability benefits. However, prevention activities during the first year of sickness are successful only to a limited extent, and usually consist of behavior-based and procedural measures to make absenteeism more difficult for an employee, rather than solving or preventing it. The disability assessment automatically takes place twelve months after the first day of sickness. If an employee is considered to be unable to work through disability at that time, he or she is included in the disability statistics. Failing to implement effective measures in the period leading up to the disability assessment, in combination with a disability policy that is typified by relatively low entrance barriers, means an almost automatic transition from sickness into disability.

Current developments: Waiting periods and the Gatekeeper Act

The economic and financial pressures of the disability programmes have been significantly reduced in recent decades. Moreover, the year 2003 has shown a decline in inflow statistics. Fewer people than before are entering the disability benefits scheme. In the third quarter of 2003, the number of new benefits awarded was reduced by 27 percent in comparison with the year before. The expected reduction in inflow for the entire year is expected to amount to 26 percent (UWV, 2003). The majority of new benefits are still granted for full disability, but the share attributed to partial benefits is steadily increasing, rising from 28 percent in 1998 to 43 percent in 2003 (UWV, 2003). These developments can be attributed to two causes. First, the

number of sick employees that stay sick long enough (39 weeks) to reach the point when they are eligible to enter the disability scheme has dropped. Moreover, because of the Gatekeeper Act it is possible to prolong the time period that an employee remains on the employer's payroll. After this prolonged waiting period, only a small number of people enter the disability benefits system.

Preliminary research shows that of the cases where a prolonged waiting period has been requested, approximately 20 percent enter the disability system. In cases where the extension of the waiting period is longer than six months, the results are not yet known, but it is expected that an even smaller number of these cases will still enter the benefit scheme. This expectation is based on the assumption that an extended waiting period will not be requested by the employer — as he is responsible for wage payments during this time — unless there is a realistic possibility of resuming work in a relatively short period of time. Approximately 17,500 extensions were requested in 2003. If, on average, 20 percent do ultimately lead to a benefit claim, approximately 14,000 cases do not request benefits or are turned down in the assessment procedure (UWV, 2003). However, this does not directly mean a reduction in inflow of 14,000 cases. Extensions are presumably only requested when opportunities for work resumption exist. It is not necessarily the case that these people would have entered benefits without the possibility of an extended waiting period (UWV, 2003).

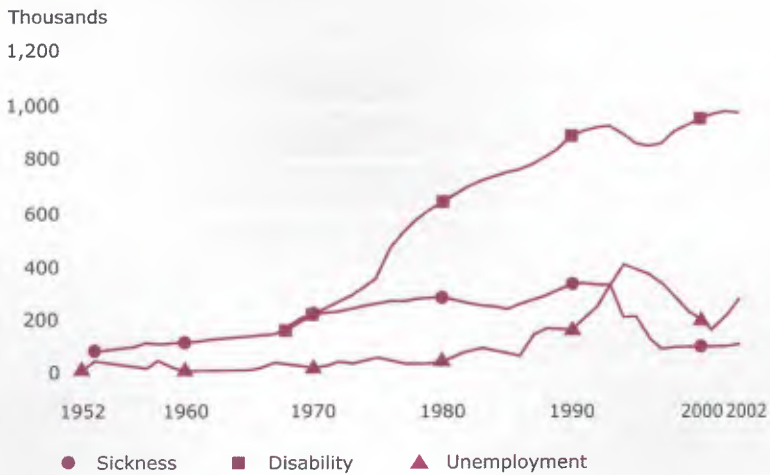
An important adage of the disability policy states that "where possibilities for labour exist, they should be utilized to the fullest". The above mentioned Gatekeeper Act is the most recent policy adjustment that tries to improve the reintegration of the system. The Act aims to define the responsibilities of employers and employees during the first year of sickness more strictly. Under the Gatekeeper Act, the employer and the employee must produce a plan of action for the reintegration of the sick employee by the 8th week of sickness at the latest. If the reintegration measures are not successful, these two parties describe their activities in a reintegration report, which is evaluated when an application is made for disability benefits. If the employer and the employee have not done enough to prevent the employee from joining the ranks of the disabled, this may lead to sanctions (e.g. the employer is held financially accountable for the disability benefits, or the benefits for the employee are lowered). The number of reintegration reports included in benefit applications rose to more than 90 percent during the course of 2003. However, the Gatekeeper Act became effective in April 2002 and has only been fully implemented for a relatively short time, therefore some caution is needed in considering its effects.

The recent drop in inflow numbers is substantial. Its causes, however, are not yet fully clear. Generally the Gatekeeper Act and its changes in the application procedures are presumed to have had an effect, next to a drop in the sickness absenteeism rate. This reduction may, at least partly, be explained by the recession the Dutch economy has faced since 2003. Another possible explanation could lie in the anticipation of further adjustments (restrictions) of the Dutch disability criterion, as discussions about the disability problem seem to be making such adjustments imminent.

Growth in disability programmes

Figure 7.1 shows the development in the number of disability benefits (WAO, WAZ and Wajong) from 1968 to 2003. This can be compared to the development in the number of benefit payments from the Sickness Act (ZW) and the Unemployment Act (WW), shown from 1952 onwards.

Figure 7.1 Total number of disability, unemployment and sickness benefit recipients, 1952-2002

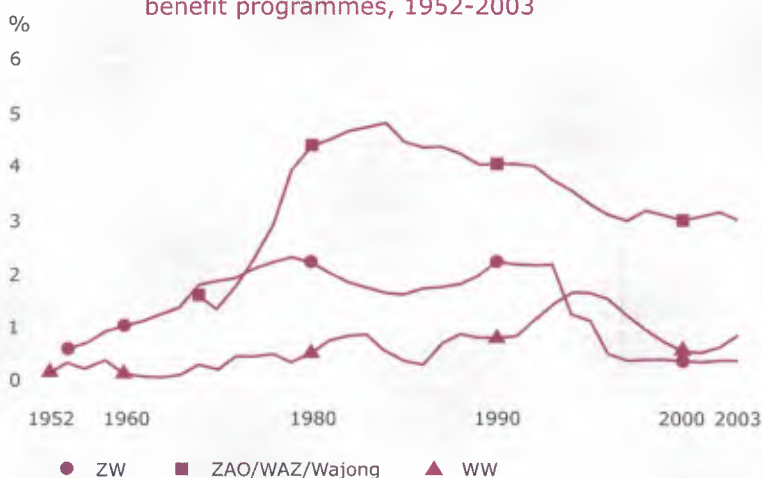


The number of disability benefits distributed appears to have increased almost constantly since the introduction of the Disability Benefits Act in 1967. The strong increase in 1976 was caused by the inclusion of self-employed workers and young disabled people in the population eligible for benefits. The number of individuals receiving disability benefits peaked in 1993, then fell for three years, and started to increase again in 1997, reaching almost one million disability benefit recipients today. The number of sickness benefit payments reached a peak in 1990/1991, and then fell in stages in 1994 and 1996 as a result of policy interventions. In 1994, the employer became responsible for the first six weeks of absence, so that a large share of the sickness benefit payments was no longer covered by the government budget. In 1996, this responsibility was extended to the entire first year of absence, so that the Sickness Act for the most part disappeared from the range of benefits, with the exception of providing coverage for a few specific groups who would otherwise not be covered (Veerman and Besseling, 2001). Recently, the period for which the employer carries responsibility has been lengthened further to two years. This development has led to further increased responsibility for the employer, and a year-long break in inflow to disability benefits.

Comparison with the number of unemployment benefit recipients (WW) reveals that during the 1980s, unemployment increased less than disability. This can partly be explained by the inclusion of self-employed and young disabled people in the disability programme, which meant that the number of people entitled to disability benefits increased significantly. In addition, there is a broad consensus that during this period, a proportion of the increase in unemployment figures was masked by attributing it to the Disability Benefits Act. Unemployment increased until 1994, and then fell significantly. Economic circumstances played a role in all these developments. The oil crisis and the recession in the 1970s and 1980s were important factors in the increase in unemployment. The period of great economic growth in the mid-1990s was an important stimulus for jobs, and therefore one of the causes of the fall in unemployment figures.

From 1980 onwards, the debate on the nature and scope of the disability policy intensified. Concerns about the possibility of controlling the volume and affordability of the system were fed by an increasing number of payments. The number of payments is often used to justify the large number of policy measures aimed at restricting the costs of the regulations, and later, the volume of disability benefits. However, showing the development in absolute numbers produces a biased picture. An increase in the number of people entitled to benefits can be caused by an increase in the risk of disability but also, for example, by a growing working population (while the risk of disability remains the same). A relative approach can help distinguish these factors. Figure 7.2 shows the cost of benefit payments (spending on benefits) as a percent of the net national product for three social security arrangements: the Sickness Benefits Act (ZW), the Disability Benefits Act(s) (WAO, WAZ, Wajong) and the Unemployment Benefits Act (WW).

Figure 7.2 Share of net national product spent on various benefit programmes, 1952-2003



A comparison of Figure 7.1 and Figure 7.2 shows that the costs of the Sickness Act and Unemployment Act reflect more or less the same trend. The development of the costs of the disability programme is striking. These reached a peak in the mid-1980s and have gradually fallen since then, while the absolute number of benefit payments has continued to increase. However, a comparison between the number of benefit payments and costs results in a somewhat flawed analysis. The latter is a relative figure (costs as a percentage of national product), while the first is an absolute number. By using a relative unit in comparison, it is possible to avoid this problem and provide a more accurate comparison of the development of the costs versus the volume.

Figure 7.3 compares the costs of benefit payments from the disability benefit system to the relative disability volume (the number of regular benefit payments stemming from the disability arrangements as a percentage of the total Dutch working population). The number of benefit payments in this figure is based on full benefit payments, correcting for the existence of partial disability payments within the Dutch system. For example, two people who both receive benefits based on their 50 percent incapacity to work (or 50 percent disability) are together counted as one full unit.

Figure 7.3 Disability benefit recipients and disability expenditure (in relative terms), 1970-2003

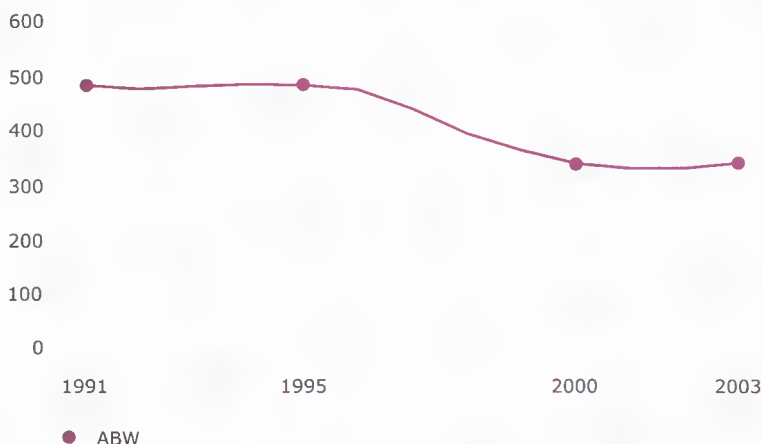


Unemployment and sickness benefits may serve as substitutes for disability benefits and other social security arrangements. When policy changes or when other factors cause a change in the number of benefit recipients, for instance a reduction, the individuals who leave the benefit rolls do not necessarily all start working. They may flow out of disability into unemployment, social assistance or pension arrangements. The

unemployment numbers are included in Figure 7.2. Some degree of substitution between disability and unemployment can be assumed between 1993 and 1995 when policy interventions caused a large reassessment operation of disability benefit recipients. It is not unlikely that some people who were assessed as able to work entered unemployment benefits.

Social assistance and early retirement schemes are shown in Figures 7.4 and 7.5. The social assistance scheme (Algemene Bijstandswet or ABW) operates for those citizens in the Netherlands who are not covered by the other schemes and offers a benefit related to the minimum wage level. The number of people on social assistance grew marginally during the early nineties, dropped during the second half of the nineties and started rising again at the turn of the millennium.

Figure 7.4 Total number of social assistance recipients, 1991-2003



The early retirement schemes in the Netherlands have traditionally been relatively generous. The system is based on tax-credited saving for early retirement. The numbers of recipients in one of the schemes (the VUT) grew in the second half of the 1990s. This growth is largely related to the growing participation rates of women. It is likely that government-sponsored forms of early retirement will be abolished in the near future. Figure 7.5 shows the number of people in the early retirement arrangement. The total number of benefits is shown, and the figures are split for men and women. In line with the major restructuring of disability benefits and fears regarding the country's ageing population, labour market participation has been pushed, once again, to the core of the debate.

Figure 7.5 Total number of people collecting early retirement benefits, 1996-2000



Until 1984, both the volume and costs of disability benefits increased at the same rate. The number of recipients continued to increase up to 1990, while the burden of expenses (the relative cost) started to fall slightly because of cost-limiting policy measures. After 1993, there was a significant fall in both the volume and the costs for several years as a result of changes in disability policy (specifically a restriction of the criterion), combined with a booming economy. In other words, the expenditure on benefit payments fell because fewer recipients entered the system, and the Net National Product increased (a numerator effect).

Analysis of trends

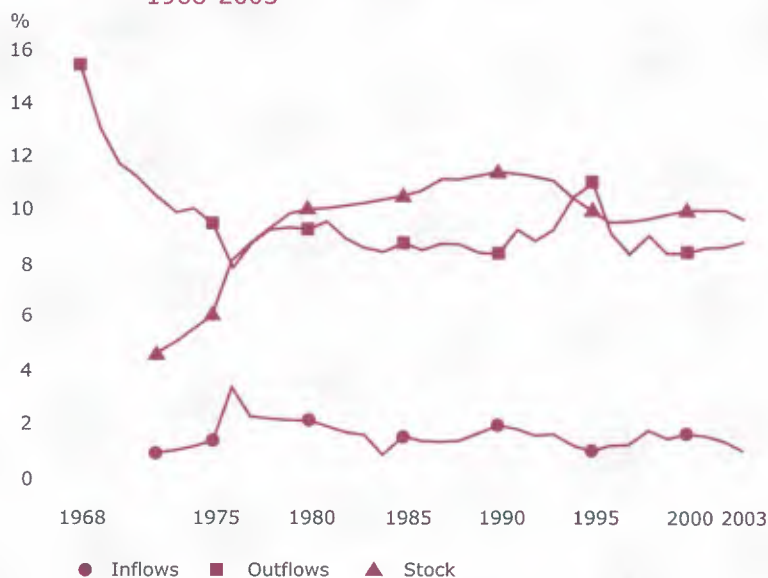
With the exception of a few years in the 1990s, the number of people unable to work as a result of disability has increased continuously ever since the Disability Benefits Act was introduced. The annual change in the number of current benefit payments is the difference between new and terminated payments, in other words the inflow and outflow. The number of new benefit recipients has exceeded the number of terminated benefits throughout the history of the disability system, except in the years 1994-1996. This decline was probably due to the set of measures designed to implement a decrease in the disability volume (the TBA Act). The fall in total volume coin-

cided with the implementation of these measures during the same period. After 1996, the volume gradually started to increase again.

Inflow and outflow can be defined as relative variables (compared to the *population at risk*). In this case, the concepts that are used are:

- Inflow percentage = the number of new WAO/WAZ/Wajong (disability) benefits in a year as a percentage of the working population in the previous year.⁴
- Outflow percentage = the number of terminated WAO/WAZ/Wajong (disability) benefits as a percentage of the total number of benefit recipients in a year (total number is equal to the number of benefits at the end of the year + the number terminated in that year).

Figure 7.6 Trends in disability inflows, outflows and stock, 1968-2003



Note: Inflows and stock: percentage of working age population; outflows: percentage of total number of benefit recipients.

The inflow percentage into the disability benefits scheme has mostly fluctuated between 1 and 2 percent of the population at risk (see Figure 7.6). Inflow was particularly low in 1984 and during the period 1994-1996. The relative outflow numbers

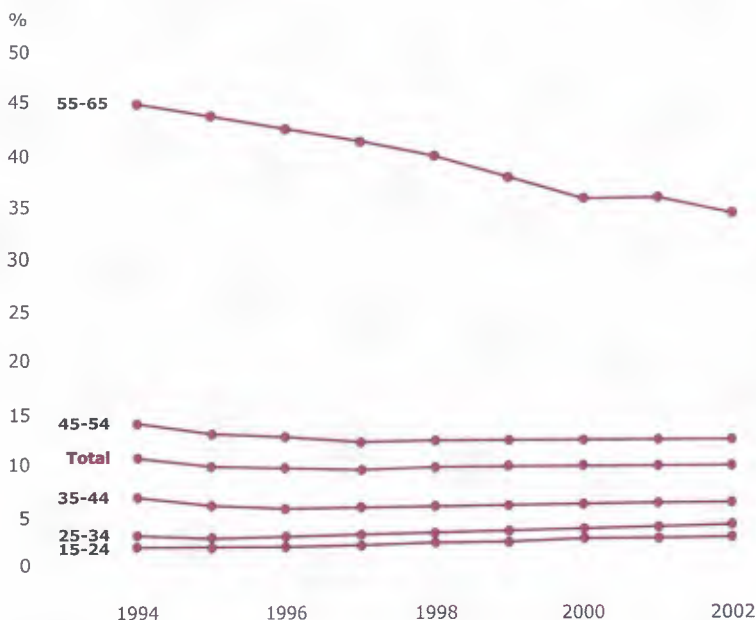
4. The working population of the *previous* year is used, because there is a waiting period of one year between the moment someone becomes ill or disabled and the point at which he becomes eligible for a the WAO/WAZ/Wajong benefit.

dropped during the 1970s and increased again sharply from 1993 to 1995. The development of the relative inflow and outflow is reflected in the disability percentage (the number of disability recipients as a percentage of the total Dutch working population). In the first half of the nineties this number declined due to a rise of the working population, a fall of the inflow percentage and a rise in the outflow percentage. The falling numbers from 1993 to 1996 are a striking phenomenon in this graph and will continue to surface in the following sections.

Trends in inflow

The population of people receiving disability benefits did not only change in size, but also in composition. Several dimensions are often noted to be important, namely age, gender, the branch of industry and the cause of disability. When we look at the composition of the disability population, it is apparent that the average age has dropped (see Figure 7.7). The share of people above 55 is still by far the largest, but has diminished in importance over time. Across the other age groups, the share of individuals entering the benefits scheme is relatively stable.

Figure 7.7 Age-specific rates of disability benefit receipt, 1994-2002



As shown in Figure 7.8, the age-specific award rates fluctuate, especially for the oldest group, but show the same trends. Following the interventions introduced by the TBA Act, all age groups show a decline in the award rate. This was followed by a steep rise in award rates as the effects of TBA ebbed out. More recently, the award rate for the older age groups declined rapidly.

Figure 7.8 Age-specific disability award rates, 1993-2002



Figure 7.9 shows the risk of disability receipt for men and women between 1971-2001. More so than age, the gender dimension has grown in importance over the last decade. Even though fewer women are active on the labour market in comparison to men, 1996 statistics indicated that, in absolute numbers, more women became disabled than men. Over time, the disability risk for women gradually started to surpass the risk for men and over the last decade, the disability risk for women grew to be almost twice that of men.

Figure 7.10 shows the disability risk for men and women distributed over five age categories. The disability risk for both men and women increases with age, although the risk is always higher for women than for men. From age 25 onwards, the difference between men and women is approximately one percentage point. For the category of women younger than 25, the risk is more than twice as high. Research shows that the

importance of education as a factor in the disability risk has diminished for women. Disability was traditionally a problem of lower educated industrial workers. For women, certainly, this is less the case now than it was 20 years ago (Aarts et al., 2002).

Figure 7.9 Disability risk for men and women, 1971-2000

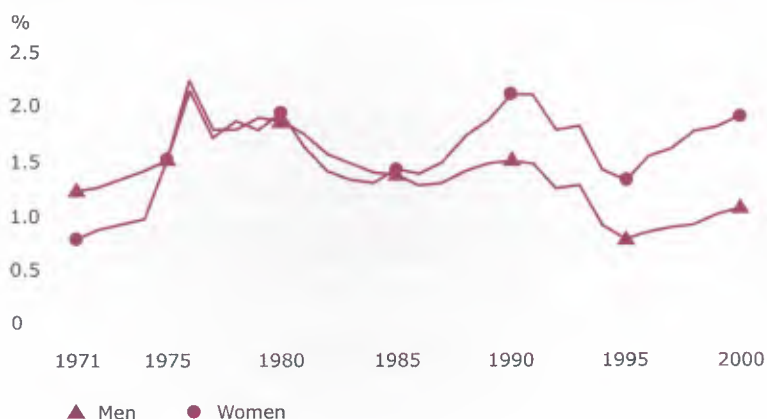
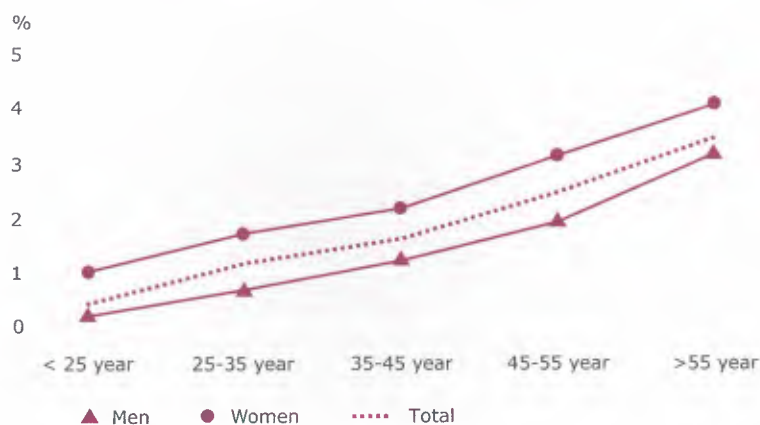


Figure 7.10 Disability risk by gender and age



It is striking that the inflow of younger people (up to age 45) is much higher for women than for men. The participation of women in the work force has been (very) low in the Netherlands, though it has caught up in the past few decades. Research has shown that women's increased risk of disability can be explained by the following (Aarts et al., 2002; UWV, 2002):

- differences between men and women in terms of employment or the nature of work;
- the phenomenon of double load; and
- gender-specific differences in coping with physical or psychological strain.

According to a study in 2000, the characteristics of the job explain a significant amount of the difference in disability risk between men and women (van der Giezen, 2000). The study shows the relevance for the risk of collecting disability of factors such as limited opportunities for promotion, an over-representation of women in high-risk branches (such as health care), high stress levels, and little or no job satisfaction. Other studies differ in the amount of explanatory power they attribute to work-related variables. In general, such factors are said to account for 30 to 50 percent of female disability.

The concept of double load refers to the double responsibility of performing a job and taking care of family members at the same time. The importance of "family life" as a factor in determining disability risk is however somewhat unclear. Several studies show no relationship between this factor and a higher disability risk (van der Giezen, 2000; UWV, 2002). However, a recent study by Aarts et al. (2002) shows that although this relationship cannot be shown before 1991, in recent years higher disability risk exists for women with a family (Aarts et al., 2002).

From the seventies onwards the focus of the Dutch labour market shifted from industry to services. This trend can also be seen in the development of the disability risk in the different sectors. Previously, industrial workers with musculo-skeletal complaints (e.g. lower back pains) made up the bulk of disability benefit claimants. Today, the risk has shifted towards the service economy with a peak in the government and health care branches, as shown in Figure 7.11.

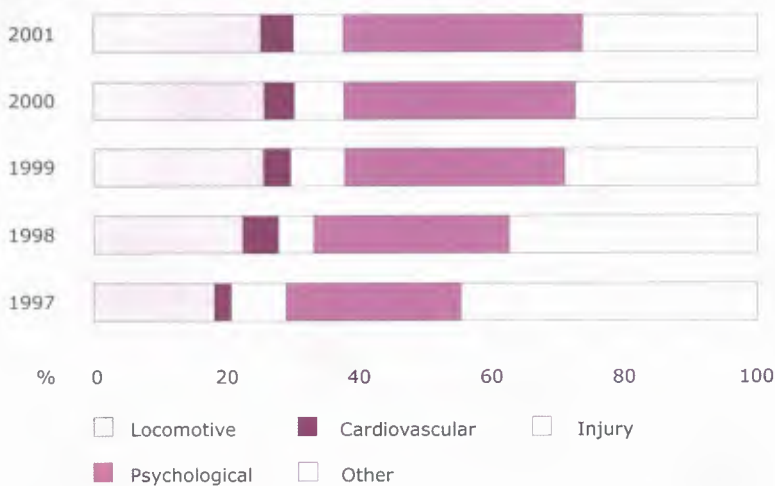
Closely tied to this change is a change in diagnoses that is seen among new disability benefit claimants. Psychological complaints grew in importance at the expense of physical problems. The share of psychological disorders has grown from 13 percent in 1970 through 23 percent in 1980 to approximately 33 percent in the nineties (Bruinsma and Vrijhof, 2002). Figure 7.12 shows the importance of psychological complaints in the total inflow numbers from 1997 to 2001.

However, a person with disability benefits may have more than one complaint. Approximately ten percent of people collecting disability benefits had a combination of psychological and physical problems. Depression, adjustment problems and stress or tension-related problems make up the vast majority of psychological diagnoses (Bruinsma and Vrijhof, 2002).

Figure 7.11 Disability risk by economic sector



Figure 7.12 Disability inflow by diagnosis



The Dutch disability criterion gives rise to a multiplicity of forms of disability. Aarts et al. (2002) convincingly show in their overview of 25 years of disability research that, in the Netherlands, different groups have flowed in to the disability benefits

scheme in different periods of time. In the seventies, the scheme was largely filled with older male industrial workers who could not comply with the demands of the sectoral shift from industry to services. In the eighties, the group at risk has shifted towards younger men and women confronted with rising work pressure and increasing stress levels, a trend that is continuing today.

Figure 7.13 shows that the share of partial disability benefits increased from approximately 18 percent in 1991 to 43 percent in 2001. In short, the inflow is characterized by a higher share of female employees, the inflowing population is younger, mostly originates in government and health care jobs and is to a greater extent ailed by psychological complaints (de Jong and Thio, 2002).

Figure 7.13 Percentage of partial benefits, 1990-2001



In sum, the inflow into disability over the last decades shows that the Dutch disability policy has developed from a generous early retirement scheme for older male workers with a long working history to a far less generous arrangement for younger people who temporarily have difficulty coping with the stresses of daily life. This reduction in income replacement rates is partly due to the strong rise in the number of partial disability benefits.

Trends in outflow

Since 1968, outflow has tripled in absolute terms, but remained virtually stable in relation to the total number of benefits (Figure 7.14). The most interesting cause for outflow is recovery. Recovery implies that a disabled person has regained sufficient work capabilities that he or she no longer needs benefits. Over time, the level of recovery has fluctuated. The peak in outflow in 1993 can be explained by the stricter disability criterion in 1993 and the implementation of that definition through assessments. The reassessments that took place according to the stricter criterion of the TBA Act is assumed to have played an important role.

Figure 7.14 Causes of disability outflows, 1968-2001

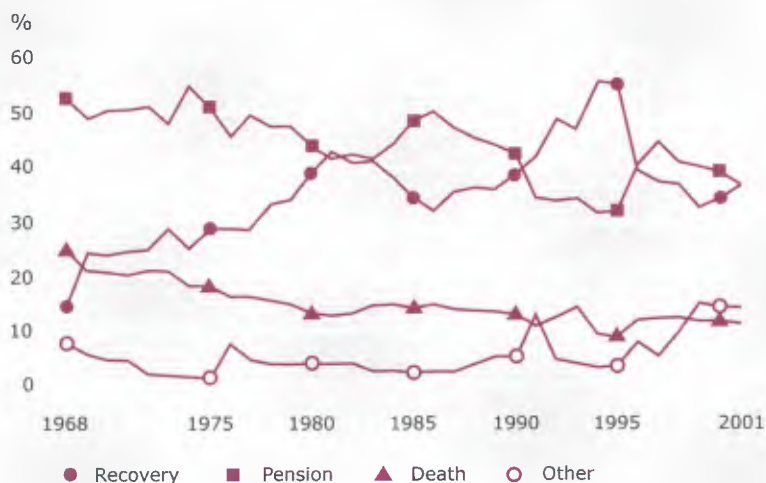


Figure 7.14 reveals important shifts in the causes of outflow. Recovery has grown while exits to death and pensions have decreased. However, retirement and death still account for the majority of terminated benefits. The share of benefits that come to an end due to retirement at 65 has fallen from approximately half to slightly less than 40 percent, and mortality as an outflow cause dropped from more than 20 percent to 10 percent. Recovery has increased from 15 percent to approximately 40 percent, with peaks in the first half of the 1980s and the 1990s.

It is always difficult to establish a causal relationship between policy measures and their effects. We indicated above that the absolute number of disability benefit payments fell for a period of about three years following the introduction of the TBA Act, and then increased again. One development that contributed significantly to this development is the fall in the average level of disability benefits for each eligible individual. This is shown in Figure 7.15, which reveals a gradual but structural fall in average benefit levels from 92 to 83 percent during the period since 1988 (following the change in the system). This was caused by a gradual change in the practice of assessments, so that more people received partial rather than full benefits.

The reason for the decrease in average benefits is that the organizations carrying out the assessments adopted stricter procedures. Under the TBA Act, reassessments have to take place for everyone under the age of 45 receiving disability benefits. These reassessments have to be based on the new disability criterion. In the first two years this resulted in a large number of modifications of the extent to which people were considered unable to work through disability.

Figure 7.15 Average level of disability benefits, 1968-2001

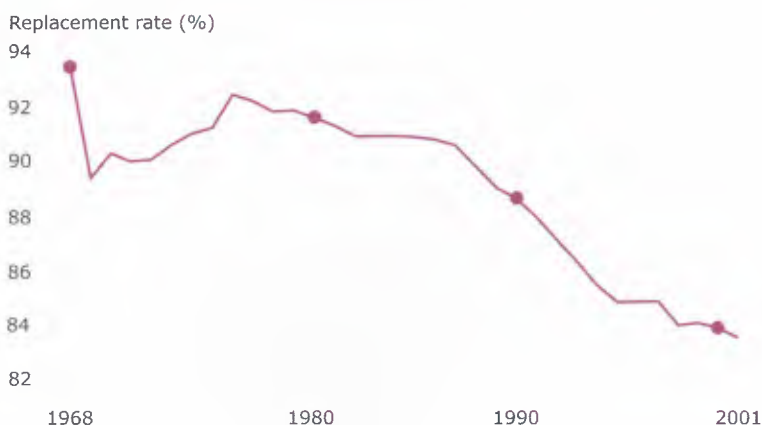


Figure 7.16 shows the outflow by demographic characteristics. The outflow among men is to a large extent determined by age, while this is less the case for women. Moreover, female outflow is smaller than male outflow. Female employees not only have a larger risk of becoming disabled, but once disabled they have a lower chance of recovery.

Active efforts to increase outflow were most successful right after the introduction of the TBA Act. The mechanism behind this reduction was the reassessment of all disabled people under the new, stricter, disability criterion. Demographic factors generally also play a major role. Once disability is diagnosed, more than half of the population stays disabled until they reach either their pension or death. Recovery is difficult and, even if it occurs, is often incomplete. A large share of recovery consists of partial recoveries. In this light it is interesting to take a look at the disabled worker, or better, the working disabled.

In the Dutch system, it is not unlikely that somebody will collect disability benefits and have a job at the same time. In 1999, 25 percent of individuals in the disability benefits scheme were in employment. This number is even higher if we look at people who have only been on disability for a short period of time (de Jong and Thio, 2002). The idea behind awarding partial benefits is that it enables people to work at restoring their labour capacities. However, a part of the population on full disability benefits is also active in the labour market. For both groups, the chance of active participation in the labour market correlates with their chance at obtaining a partial benefit (de Jong and Thio, 2002). A large part of the outflow in the mid-nineties consisted of full benefits being cut back to partial benefits. This, coupled with the prevalence of working benefit recipients, supports the hypotheses that at least part of this group is now fully or partially back at work (de Jong and Thio, 2002).

Figure 7.16 Disability benefits terminated, by age and gender, 1990-2003



Administrative effects, incentives and the criterion

The introduction of financial incentives during the first half of the 1990s meant a break with the prevailing way of thinking about disability. For a long time, disability benefits dependence was seen as the result of sickness, injury, and the economic conditions ("the disabled as victims of circumstance"). This view was gradually abandoned and replaced by a different approach. The influence of individual choice on the behavior of the parties involved was added to the already existing, more administrative perspectives of the system ("the disabled as calculating actors"). This essentially micro-economic approach to behavior is based on the assumption that maximizing practical considerations plays a role in determining the actions of both an employee and an employer confronted with possible inability to work through disability (Aarts et al., 2002).

From this perspective, the development of the number of individuals collecting disability benefits is at least partially determined by individual behavioral aspects that may be influenced by the incentive structure of the system. Incentives can be used to convince employees to remain active in the labour market, but also to encourage the employer to exert effort to prevent sickness and better achieve the reintegration of sick employees. In a more general sense, incentives were meant to give individual employers and employees a strong reason not to have people flow into the disability benefits scheme. This kind of reasoning determined a large part of the policy initiatives in the 1990s and still does so today.

The present disability criterion follows from the TBA Act (1993) and is based on the inability to work through disability when there are direct, objective consequences of sickness or disability which result in a loss of earning capacity. Before 1993, objectively establishing the consequences was not part of the criterion. By adapting the criterion, the aim was to reduce the number of people receiving disability benefits. However, a study evaluating the effects of this measure has revealed that an "objective" assessment of disability is difficult to achieve (Aarts et al., 2002).

In the early nineties, the eligibility requirements for disability benefits were made stricter by demanding "objective" medical grounds for disability. Financial incentives were introduced, targeting employees by reducing their benefits and targeting employers by making them financially accountable for their disabled employees. The TBA Act particularly appears to have had an effect. After 1993, there was a fall in the absolute number of people receiving benefits for the first time in the history of Dutch disability policy.

In the first two years, reassessments following the TBA Act meant that 50 percent of full benefits were converted into partial benefits, or that benefits were terminated (van Oorschot and Boos, 2001). The introduction of the new criterion meant changing the definition of work from "suitable work" (based on training and experience) to "generally accepted work" (meaning any possible work). This resulted in a reduction in the number of people receiving full disability benefits on the basis of the assess-

ment. Work incentives were also introduced, but these were partly mediated by private insurance. Therefore it seems likely that the temporary decline was due to the stricter criterion and its consequences for reassessment.

The redefinition of the disability criterion through the TBA Act has had measurable effects. Determining the effectiveness of financial incentives in controlling the disability volume is more difficult, however. Incentives do not directly rule out certain categories of disability, but are supposed to have an effect on the behavior of individuals. Evaluating the use of incentives as a policy instrument can therefore only be done by examining whether people respond to the incentives. Research shows that financial considerations play a significant part in the actions of individuals (Aarts et al., 2002). But how these considerations relate to others and whether or not they are translated into behavior that has a positive influence on the disability volume, remains unclear.

TBA combined a stricter criterion with the reassessment of all people eligible for disability benefits. However, it is not the criterion that determines how administrators determine disability. The criterion is a structuring principle in assessment procedures, but by far the most influential force on inflow into disability is the way the criterion is implemented (de Boer et al., 2004). TBA was successful, in the sense that a large number of benefits recipients were reassessed and their benefits reduced through those reassessments. However societal forces and administrative effects caused the strictness of the assessment to lessen over time. The realization that new assessment criteria resulted in a much harsher policy regime played an important part in this. In the wake of new discussions about the disability criterion, the period following the implementation of TBA is of great interest.

Conclusion

Introducing incentives and redefining the disability criterion are the main ways that have been used to improve the Dutch Disability Benefits Act (WAO). Incentives have been introduced to improve the system in such a way that people who have the option to support themselves do not enter the disability system and people who are on benefits have the best possible motivation to re-enter the labour market, at the same time as safeguarding the level of income protection the system offers. Redefining the criterion works differently. By excluding certain groups that would otherwise receive disability benefits, it is a more direct way of cutting back the number of beneficiaries and forcing people to find other solutions.

Why then is the majority of policy adjustments aimed at incentives when a stricter criterion might be more effective in order to achieve the central goal of the restructuring, namely reducing the number of benefit recipients? A possible answer can be found in the work of Pearson (1994), who states that, internationally, most developed welfare states have been criticized for being uncontrollable, overly expensive and unhealthy for the motivation of the working population (Engbersen et al., 1994; Pierson, 1994). In most countries however, this has not led to a serious cutting back

of welfare protection levels. Welfare states have been reformed with a greater emphasis on a proactive approach, cost and volume control, but with no question of dismantling. The restructuring of the welfare state is then a restructuring of interests and responsibilities. In this way, incentives are a way to redefine responsibilities and create a disability benefits system that functions as a form of temporary or permanent assistance for the disabled.

Sheer numbers can have an effect. Approaching one million benefit recipients put the issue of the indiscriminating Dutch disability criterion on the policy agenda. The high uptake of disability benefits in the Netherlands originated in a disability criterion that made the system accessible to a relatively large group of people in comparison to other countries. This fact has been well known for quite some time. Until now, except temporarily during the implementation of the TBA Act, a serious restriction of the accessibility of the system has never been politically viable. With current plans to restructure the Disability Benefits Act, such a restriction could however be imminent.

For the past few years, two proposals have been at the centre of debate (Adviescommissie Arbeidsongeschiktheid, 2001; SER, 2002). To provide new input, a committee was established to study the characteristics of recipients, and causes of illness and disability. The committee was named after its chairman, Donner, and its report concluded that the Dutch scheme functions as a trap in which employees with diverse complaints get caught and are automatically drawn into disability. Many of these people, the committee stated, would still be able to work if employee and employer had joined in a serious attempt to make this possible. In this way, the tendency to turn non-medical complaints into medical complaints and therefore inflow into the disability benefits scheme could have been avoided. The solution, the committee concluded, was stronger selection at the gate, hence the Gatekeeper Act. The committee suggested that eligibility for disability benefits should only go to those who were confronted with inevitable, i.e. complete and long-term, loss of labour capacity due to illness or injury (Bruinsma and Vrijhof, 2002).

Since employer organizations and labour unions have an important role to play, the government asked the Social Economic Council (SER) for its views on the Donner Report. The Council is the most influential tripartite⁵ advisor of the government on socio-economic issues. The Council accepted the core notions outlined by the Donner Committee and stressed the responsibilities of employers and employees in preventing disability. Both proposals stated that disability benefits should only be awarded to people who were fully disabled, and that the partially disabled should be assisted through separate arrangements. At the end of 2003, this line of thinking seemed to have been adopted by the Government. As plans are drawn up to fundamentally restructure the disability benefits system by 2007, substantial changes are to be expected, both in the disability criterion and in the administrative structure executing it.

5. Consisting of unions, employer organizations and government representatives.

The disability debate can be summarized in this dichotomy: the benefit system as an important reintegrating force versus the benefit system as a social trap. The fact that a significant group of partially disabled people are active in the labour market favours the first view. But who is to say this group could not be larger, or that the benefits impede individuals' work incentives, as proponents of a stricter criterion would state? Clearly, disability in the Netherlands is a phenomenon that follows societal developments. Be it friction between the industrial and the service society or uncertainty originating in the risk society, patterns of disability shift with the times.

However, one important question remains unanswered. What happens to people, who under the current system would be considered disabled, in a system based on a (much) stricter criterion? Do they become active and self supporting? Do they reside in other welfare arrangements? Or do they find their way into disability anyway, but then with more serious complaints?

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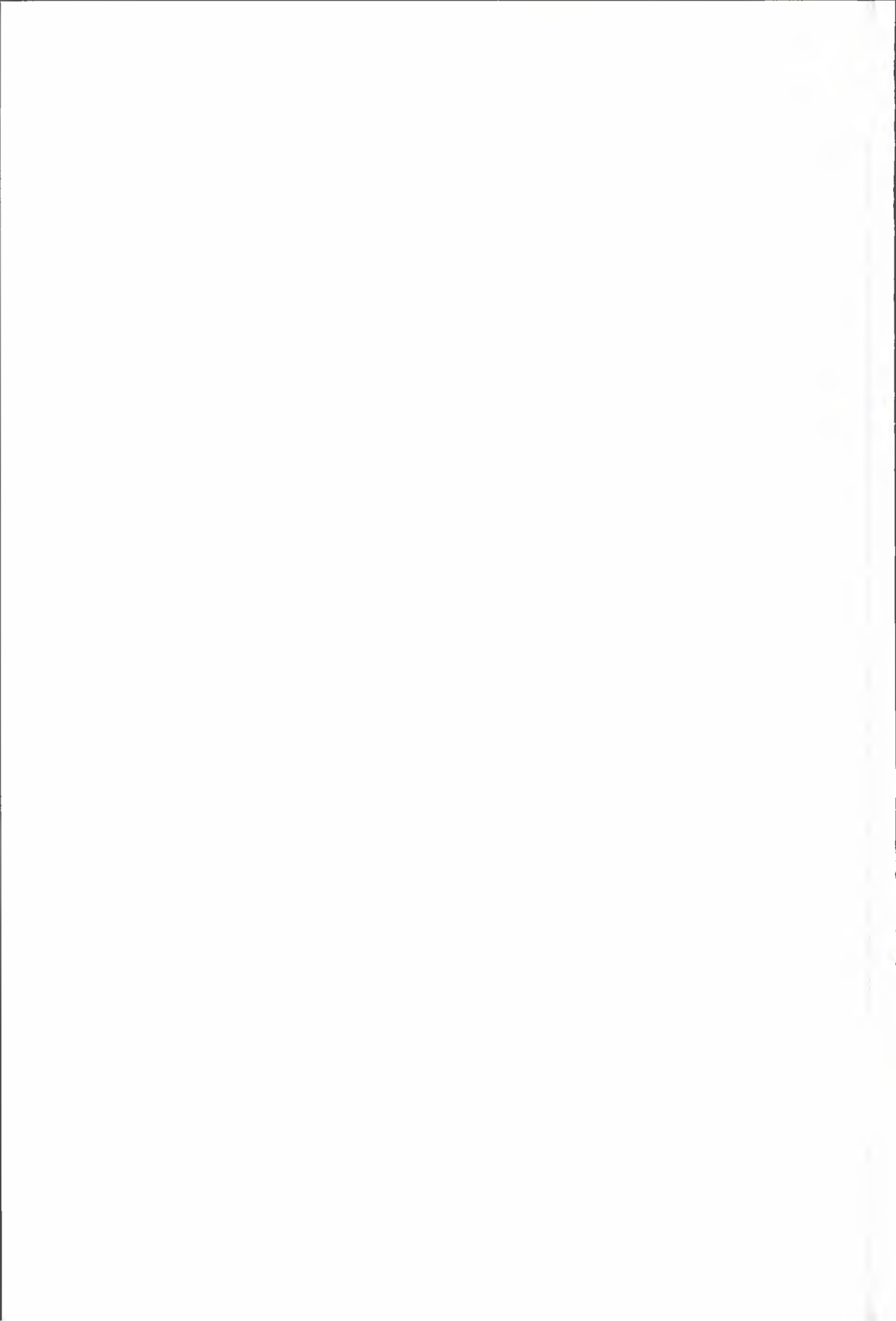
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Disguised unemployment? The growth in incapacity benefit claims in Great Britain

Peter A. Kemp and Patricia Thornton

Great Britain¹ was comparatively late in introducing a contributory benefit to replace lost earnings arising from long-term incapacity for work. In 1971, Invalidity Benefit (IVB) was added to the range of National Insurance benefits (including Sickness Benefit) established in 1946 and was a response to a growth in long-term sickness claims.

The number of people in receipt of incapacity benefits — including non-contributory benefits — trebled from the late 1970s to the mid-1990s. In response to this increase in caseload, IVB and Sickness Benefit were replaced by Incapacity Benefit (IB) in 1995, which introduced more restrictive eligibility criteria and reduced benefit levels. Since then growth in the caseload has almost stabilised: the rate of inflow is falling but annual outflow is also declining. The Labour Government introduced a further reform of the scheme in 1999, which came into effect in 2001.

An important policy theme since the early 1990s has been to increase incentives to work amongst disabled people through topping-up earnings from paid work. An income-tested, in-work benefit for working disabled people was first introduced in 1992. As part of its evolving agenda to modernise the tax and benefit system, in 1999 the Government introduced a Disabled Person's Tax Credit, along with a Working Families Tax Credit, to replace the existing benefits. In April 2003, this was in turn superseded by the Working Tax Credit with additional payments on grounds of disability.

The popular understanding of incapacity benefits in Britain is that they are intended for those who are incapable of work because of disability. The Government is attempting to change that perception by making it easier for recipients of IB to undertake "permitted work" up to certain hours and earnings thresholds, and by promoting services to help support recipients of incapacity-related benefits in their return to work. Of especial note here is the New Deal for Disabled People, first introduced in

1. This chapter covers Great Britain — that is, England, Scotland and Wales — and not the United Kingdom (which also includes Northern Ireland).

1997 as a pilot, and now a nationwide pilot. Moreover, a mandatory work-focused interview with a personal adviser at the point of making a benefit claim is being introduced nationwide for claimants of income replacement benefits. Specifically for claimants of incapacity benefits, a compulsory series of such interviews, along with an action plan, is being piloted in seven areas. While levels of public expenditure on incapacity benefits remain a concern, policy in this area is also driven by a wider strategy to tackle poverty and social exclusion and to increase employment levels among disabled people.

Incapacity benefits

Britain has a complex system of benefits for people who are of working age and are not expected to seek work in return for benefit because of incapacity. It involves a number of interwoven schemes. The principal incapacity benefit is the contributory, earnings-replacement benefit for disabled people of working age known as Incapacity Benefit (IB). In addition, there is a non-contributory, earnings-replacement benefit known as Severe Disablement Allowance (SDA), which since 2001 has been abolished for new claims. Finally, the means-tested, safety-net benefit called Income Support includes extra amounts ("premiums") for disabled people. These three income-replacement benefits are referred to collectively as "incapacity benefits" and are the focus of this chapter.

Incapacity Benefit

This section of the chapter outlines the most important features of Incapacity Benefit. It looks at the conditions of eligibility, how decisions are made about whether a claimant is incapable of work, and the amount of benefit to which recipients are entitled.

Eligibility

In most cases, Incapacity Benefit is payable after at least 28 weeks of incapacity for work. Eligible employees receive Statutory Sick Pay (SSP) from their employer for the first 28 weeks of sickness; people not entitled to SSP may claim IB early. If an employee or self-employed worker has paid or been credited with a minimum level of National Insurance contributions and they satisfy the relevant medical test, they will be entitled to contributory IB. Earnings have to equal or exceed the lower earnings limit for National Insurance contributions of £79 per week (in 2004/05). From April 2001, entitlement has been restricted to those who have contributed in one of the last three tax years.

If a person has not paid enough National Insurance contributions but has been treated as incapable of work for at least 196 days, and if that period of time began before the age of 20 (25 for those in education or training before age 20), they are now able to claim IB. Before April 2001 they would have claimed SDA.

Testing for incapacity

For those in employment, an IB claim is usually only possible after they have satisfied the "own occupation test" to get SSP, which is paid by the employer for up to 28 weeks. The own occupation test looks at whether ill health or disability stops a person doing their normal job. A certificate from a medical practitioner, usually the person's GP (family doctor), is normally sufficient to satisfy this test. People not entitled to SSP — because the contract of employment is less than three months or if normal weekly earnings are less than the earnings limit laid down — can claim IB if they satisfy the own occupation test, as can self-employed people, who have no entitlement to SSP. After 28 weeks of SSP or IB, they are required to satisfy the Personal Capability Assessment (PCA). Claimants who are unemployed or otherwise not working, who still meet the contribution requirements for IB, must satisfy the PCA at the outset of their claim.

The PCA, previously known as the "All Work Test", draws a line between people who should not be expected to seek work in return for benefit (those satisfying the PCA who stay on IB) and those who can be expected to do so (who can attempt to move back to work or claim JSA). It looks beyond ability to perform the normal occupation to assess the extent to which a person's condition affects everyday activities said to be "work-related". The PCA assesses 14 specified functional areas:

- physical functions such as walking, bending and kneeling, sitting in a chair;
- sensory functions such as speaking, hearing or seeing; and
- mental functions such as interacting with others and coping with pressure.

A person satisfies the PCA if their ability to perform any individual activity is seriously curtailed. Alternatively the PCA can be satisfied if there is a lesser degree of limitation across several areas of function. It can also take account of the combined effect of mental and physical health problems.

Around 20 to 25 percent of people on IB are exempt from the PCA. This group includes, for example, those who are already in receipt of the highest rate of the care component of Disability Living Allowance (DLA), those with terminal illnesses and those with severe or progressive illnesses such as dementia, chronic degenerative disease and severe mental illness. People registered blind and people with tetraplegia and paraplegia are also exempt.

The PCA process requires the collection of evidence to inform the decision-making process and involves: a request for information from the doctor issuing sickness certificates; in most cases, the completion of a detailed questionnaire by the claimant about the impact of their condition on the above activities; scrutiny of the paper evidence by a doctor working for the Department for Work and Pensions (DWP) to decide whether the claimant's self-assessment is supported by the medical evidence; and, in about a third of cases, where further evidence is required, a face-to-face medical examination with an approved doctor. A Jobcentre Plus decision-maker makes the final decision on benefit entitlement. The entire PCA process can take some time to complete and in the meantime IB can be put into payment supported by evidence from the patient's own doctor.

Where a person satisfies the test, a date is set for a further PCA to identify whether a condition has improved. Usually this is at an interval of between three and 18 months, depending on when a change might be expected. Procedures were standardised in 2001 so that all cases going through the PCA are scheduled for consideration of a further test at least after three or five years — except for a small number of people with severe conditions where this would be inappropriate.

Entitlement

There are three rates of IB, depending upon the length of the claim and whether the claimant is entitled to SSP. Those who are not entitled to SSP are paid at the "short-term lower rate" of IB for the first 28 weeks of sickness, after which they receive the "short-term higher rate" for the next 24 weeks. Those who received SSP but remain unable to work when that runs out at 28 weeks, also move on to the short-term higher rate of IB. From 52 weeks onwards, all recipients get paid at the "long-term rate" of IB. In the year beginning April 2004, the three rates of IB were:

- for the first 28 weeks — £55.90 (short-term lower rate);
- from weeks 29-52 — £66.15 (short-term higher rate);
- from week 52 onwards — £74.15 (the long-term rate).

In addition, an amount can be payable where the person claiming has an adult dependent (defined as a partner caring for the person's child or a spouse aged 60 or over). This amounts to £34.60 a week for short-term IB (both lower and higher rates) and £44.35 where the long-term rate is received. A spouse's earnings may reduce the additions for dependent adults. Further amounts payable for dependent children were abolished for new customers from April 2003, who instead can apply for the Child Tax Credit, which was introduced at the same time. There is an age-related addition to long-term IB for people aged under 45 when they became entitled to IB or SSP: £15.55 per week for people aged under 35 and £7.80 per week for those aged 35 to 44.

For people becoming entitled to IB on or after 6 April 2001, benefit may be reduced by receipt of certain kinds of pension payments; that is, any personal, occupational or public service pension scheme, or any permanent health insurance arranged by an employer. IB is reduced by half of the amount of gross pension that is paid above £85 per week. Also, the higher short-term rate and the long-term rate of IB are treated as taxable income.

IB and SDA recipients are allowed to work for up to 16 hours a week and up to an earnings limit equivalent to 16 times the hourly adult minimum wage. Since April 2002, there has been a time limit of 26 weeks, with an extension of a further 26 weeks if a Jobcentre Plus adviser or a New Deal for Disabled People job broker is supporting the person, but no limit for people working with permanent support and supervision from an agency.

Severe Disablement Allowance

Severe Disablement Allowance (SDA) was introduced in 1984 as a replacement for two benefits funded from tax revenues available to disabled people who had never worked or had insufficient national insurance contributions. SDA was abolished for new claims from April 2001. Previously, people who were incapable of work, but who did not satisfy the contribution conditions for IB, could get SDA. They had to be aged between 16 and 65 at the date of claim, but there was no upper age limit once benefit was in payment. The weekly rate for those remaining entitled to SDA in 2004/05 was £44.80, with three age-related additions: aged under 40 (£15.55), aged 40-49 (£10.00), and aged 50-59 (£5.00).

Income Support

Income Support (IS) is a means-tested safety-net benefit for people of working age who are not required to search for work. It is designed to bring income up to a minimum level and may be awarded on top of IB or SDA. In the main, people who are sick or disabled can claim IS if they are incapable of work because of illness or disability *and* are entitled to SSP *or* satisfy the own occupation test or the PCA *or* are treated as incapable of work by a decision-maker. About half of all IS recipients are in receipt of a disability premium.

Entitlement to Income Support is calculated on the basis of a system of personal allowances and premiums, reflecting the claimant's personal characteristics. After 12 months of incapacity they can qualify for an extra payment, known as a disability premium. Qualification for a disability premium comes mainly through entitlement to certain other disability benefits, through being "incapable of work" or registered blind with a local authority.² The standard amount of IS for a single person aged 25 or over is £55.65 per week and the disability premium is £23.70 a week. Further amounts can be payable where the person claiming has other adults or children living in the same household.

Recipients are allowed to do small amounts of work, up to 16 hours per week, and there is a basic disregard of £5 per week for a single person and £10 of total earnings for a couple. For those who qualify for a disability premium, the level of disregard is higher at £20 (single and couple). Benefit is reduced pound for pound by the amount of any earnings over the disregarded amounts. For comparison, in October 2004 the national minimum wage for people aged 22 and over was £4.85 per hour.

National Insurance Credits

National Insurance Credits are granted to people qualifying for IB on medical grounds who have not paid enough contributions or whose household income disqualifies

2. Qualification for enhanced disability premium comes through receipt of the DLA highest rate care component (see below). Severe disability premium is available for people who receive a qualifying benefit, have no non-dependant living with them and do not receive care from somebody who receives a Carer's Allowance for looking after them.

them. People on low incomes may claim IS and also receive credits. In other circumstances people receive credits only and no benefits. The latter group may be categorised as recipients of incapacity benefits for administrative purposes and are called "credits-only" cases.

The combinations of benefits and credit receipt at the end of February 2004, in terms of the number of recipients, are shown below.

Incapacity Benefit only	1,250,000
Incapacity Benefit and Income Support	247,800
National Insurance Credits only	171,800
National Insurance Credits and Income Support	735,600
Severe Disablement Allowance only	77,300
Severe Disablement Allowance and Income Support with Disability Premium	187,300
Income Support with a Disability Premium only	113,000

Source: Department for Work and Pensions, IAD Information Centre 5 percent sample.

Note: Figures are shown in thousands and rounded to the nearest hundred.

Other related benefits and tax credits

Receipt of these incapacity benefits can be combined with two disability benefits — Disability Living Allowance and Industrial Injuries Disablement Benefit.

Some 636,000 people on the three incapacity benefits also get **Disability Living Allowance (DLA)** (at February 2004). DLA is a contribution towards the extra costs faced by disabled people who claim before the age of 65. It is a non-contributory, non-income-related and tax-free benefit available regardless of employment and benefit status. DLA has a *care* component for people who need personal care, payable at three rates, and a *mobility* component for people who have walking difficulties, payable at two rates.³ The number of allowances grew from 2 million in 1998 to over 2.5 million at the end of November 2003.

Industrial Injuries Disablement Benefit (IIDB) can be paid alongside incapacity benefits and DLA. This is a non-contributory, non-income-related benefit, payable in and out of work. It does not cover self-employed people. It is a relatively minor benefit: in September 2003, 267,000 people received it and more than half of the recipi-

3. In 2004/05 the rates for the care component were £58.80, £39.35 and £15.55 per week and for the mobility component £41.05 and £15.55. To qualify, the need for help with personal care or the walking difficulties must have been present for at least three months and be expected to continue for at least a further six months.

ents were over working age. In 2002/03, 61,810 claims were made (provisional figure), a drop from 109,856 in 1989/90.⁴ It is estimated that around 43 percent of claims are successful (National Statistics, 2003).

Jobseeker's Allowance (JSA) is for people of working age who are required to look for work as a condition of benefit. It replaced Unemployment Benefit and Income Support for unemployed people in 1996. To be entitled to JSA, people must be available for and actively seeking work, and have entered into a Jobseeker's Agreement. *Contribution-based JSA* is a taxable, flat rate⁵ personal benefit for those who have paid sufficient National Insurance contributions, and is paid irrespective of their own savings or their partner's earnings or savings. Payment is limited to six months (compared with 12 months for its predecessor, Unemployment Benefit). *Income-based JSA* is very similar to Income Support. It is a taxable, indefinite benefit, with entitlement assessed on the income of the claimant and any partner. There are disability premiums in income-based JSA similar to those in IS.

Working Tax Credit (WTC) is designed to boost the incomes of lower paid workers. It includes elements for disability and severe disability. Introduced in April 2003, it broadly replicates the adult support within the Working Families' Tax Credit and Disabled Person's Tax Credit (DPTC), which ran from October 1999. In April 2004 there were 76,100 disabled workers in households benefiting from the disability element of WTC (Inland Revenue, 2004). Since 1999, the taxation authority — the Inland Revenue — has administered the tax credits. The tax credit is based on the current year's annual pre-tax household income, is assessed on an annual basis and is responsive to certain changes of circumstances (such as the birth of a child or a change in household income) throughout the year.⁶ To qualify for the disability premium, the applicant must be in paid work and declare s/he meets one of a list of functional criteria (physical, sensory and mental) or that s/he is not normally able to sustain an eight-hour working day or a five-day working week due to a medical condition or severe pain. In addition, he or she must receive DLA or have recently received a qualifying incapacity-related benefit.

Major programme and policy changes

In recent years there have been a number of changes to the benefit system, primarily of an incremental nature, and rather more radical changes in the form of service interventions. Service interventions, as we discuss later in the chapter, have as yet had little impact on inflow or outflow to incapacity benefits. The key changes to these benefits relevant to interpreting trends in rates of receipt are summarised as follows.

4. Data provided by the Department for Work and Pensions.

5. In 2004/05 the weekly rate for someone aged 25 and over was £55.65.

6. In 2004/05 the annual credit for a disabled person is £2,100; the basic credit for a non-disabled person is £1,570. There is severe disability element of £890 for those who receive the highest rate of the care component of DLA.

Statutory Sick Pay was introduced in 1983 to cover the first eight weeks of sickness, replacing Sickness Benefit for entitled employees. At that time employers were entitled to recover 100 percent of their liability. In 1986 SSP was extended to 28 weeks, and reimbursement of employers was abolished almost entirely by 1995. At £66.15 per week (in 2004/05) the rate of SSP is rather low, and there is no evidence that paying it acts as an incentive to employers to intervene to speed return to work.

The contributory benefit was reformed in 1995, when IB replaced IVB. This restricted it to people of working age, tightened the qualifying contributions period in order to make it harder to claim without a recent work record, abolished earnings-related additions and introduced a tighter test for assessing capacity for work. Reforms that took effect in 2001 further restricted the qualifying period — to the previous three years — and introduced income-related tests in relation to personal and occupational pensions. The 2001 reforms also abolished SDA and brought young people with insufficient contribution records (who would previously have claimed SDA) within the scope of IB.

The introduction of “permitted work” in 2002 made it easier than under the previous “exempt work” rules to do some paid employment while retaining IB or SDA.⁷ “Linking rule” periods were extended in 1998, so that now it is possible to return to the same level of IB within 52 weeks of starting employment (two years if receiving the disability element of WTC) if a person leaves the job for reasons related to the disability stated in the claim. Also in 1998, the 16-hour limit on voluntary work was abolished for IB and SDA recipients.

Turning to the legal framework as it affects the employment of disabled people, the key change was the Disability Discrimination Act 1995, the employment provisions of which came into force in December 1996. It is unlawful for employers covered by the Act to discriminate against employees or job applicants on grounds of disability as defined by the Act. There is a duty on employers to make reasonable adjustments to premises or employment arrangements so that disabled people are not substantially disadvantaged. In December 1998, the exemption threshold was reduced from 20 to 15 employees, and it was removed altogether in October 2004, after which most previously excluded occupations were covered.

Since 1997, there has been an unprecedented policy commitment to raise the employment levels of disabled people. Key developments include: increasing financial incentives to take up paid work and removing disincentives to doing so; extending publicly funded employment services to disabled people previously not expected to work as a condition of benefit receipt; extension of the Disability Discrimination Act 1995 to employers of all sizes; and pilots of health and workplace interventions to support employees’ return to work. These developments are part of a wider strategy to tackle poverty, welfare dependency and social exclusion. Employment is central to the strategy, supported by reforms of the tax and benefits system to help ensure that “work pays”. Divisions between government agencies responsible for delivery of ben-

7. In July 2004 around 40,000 recipients of IB, SDA and IB (Youth) (which replaced SDA for young people from April 2001) were on some form of permitted work.

efits and support with job seeking have been removed with the creation of Jobcentre Plus. Joining their parent organizations into a single Department for Work and Pensions (DWP) has further increased policy coherence.

While public expenditure on incapacity benefits is a continuing concern for the Government, activation measures (such as the requirement to participate in work-focused interviews when claiming benefit) are not driven just by a desire to save on benefits costs. The guiding principle is "work for those who can and security for those who cannot" (DSS, 1998), recognising that for some people work is ruled out by severe ill health or impairment. A policy consultation document, setting out proposals for helping people on incapacity benefits into employment, recognised potential gains to physical and psychological well-being through participating in productive activity and emphasised that everyone who wants to work has a right to do so (Secretary of State for Work and Pensions, 2002).

A potential skills gap and an ageing population are additional influences on Government policy to bring more disabled people into the labour market. While unemployment has fallen, the number of people on incapacity benefits has not. There are now more people on these benefits than there are unemployed people and lone parents on benefits.

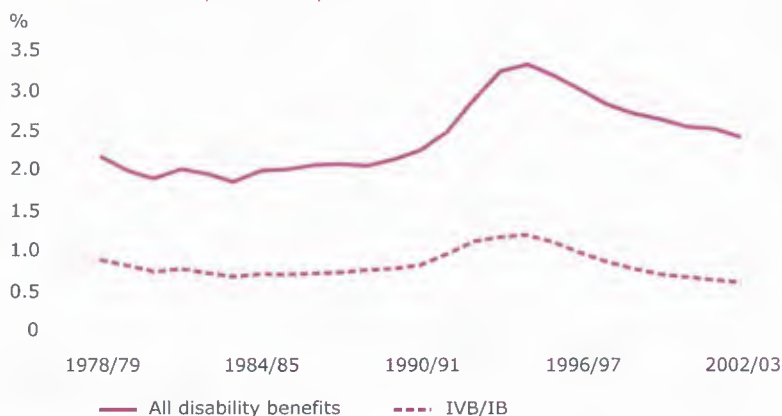
The New Labour Government has announced plans to introduce a further and more far-reaching reform of Incapacity Benefit in order to encourage claimants to move closer to the labour market and to reduce the cost of the programme. One possibility that is being discussed is to distinguish between those who clearly cannot work and others with more manageable conditions that might (eventually) be able to return to work. The latter would receive only the same amount of benefit as unemployed people on JSA, but would get additional amounts if they attended work-focused interviews and agreed to take steps to move them closer to the labour market (DWP, 2005).

Trends in incapacity benefits

Figure 8.1 shows trends in public expenditure on sickness and incapacity benefits as a percentage of GDP from 1978/79 to 2002/03. It also shows public expenditure on all disability benefits as a percentage of GDP over the same period.⁸ Expenditure on sickness and incapacity benefits fluctuated around 0.75 percent of GDP for much of the 1980s before rising in the early 1990s to a peak of 1.2 percent in 1994/94. Expenditure then fell away quite quickly in the second half of the 1990s and into the new century. Expenditure on all disability benefits followed a broadly similar pattern, but at a higher level.

8. As well as sickness and invalidity/incapacity benefits, "all disability benefits" includes Severe Disablement Allowance, the industrial injuries benefits, Mobility Allowance, Attendance Allowance and Disability Living Allowance; it excludes expenditure on Income Support where the recipient was in receipt of a disability premium.

Figure 8.1 Public spending on sickness, invalidity and incapacity benefits as a percentage of GDP, 1978/79-2002/03



Sources: National Statistics (2004) *Economic Trends: Annual Supplement*, No. 29, 2003 edition, London: TSO, Table 1-2.

Department for Work and Pensions, *Benefit Expenditure Tables 2004*, accessed at www.dwp.gov.uk.

Note: GDP data is for calendar years, benefit expenditure for financial (April to March) years.

Figure 8.2 shows the trend in the number of working age claimants of incapacity benefits (i.e. IB and SDA) from 1979 to 2004. In 1979, 720,000 people were receiving Invalidity Benefit and Invalidity Pension (the pre-1995 equivalents of Incapacity Benefit). By February 2004, the number had reached almost 2.6 million, excluding IB short-term lower cases⁹ (around 2.7 million if IB short-term lower cases are included). Thus, in little more than two decades, the incapacity benefits caseload more than trebled (+361 percent). However, as Figure 8.2 indicates, growth in the number of claimants was not uniform across this period. In fact, the number increased rapidly in the 1980s and early 1990s, after which the rate of increase slowed. A key factor behind the slow down in the rate of growth of the caseload might be the 1995 reform, the principal aim of which was precisely that. The incapacity benefits caseload now seems to have stabilised.

One way in which it was hoped by the Government that the caseload would decline was by reducing the economic incentive to claim the benefit. The amount of benefit payable was reduced in a number of ways, for example, by abolishing the earnings-related addition to IVB (Howard, 2000) known as Additional Pension (AP). This, combined with annual benefit uprating in line with consumer prices rather than earnings,

9. IB short term lower cases are excluded, in order for figures to be comparable across years.

resulted in the average amount of Invalidity/Incapacity Benefit paid falling from 22 percent of average male full-time earnings prior to the reform, to only 16 percent in 2003; a reduction of a quarter in less than a decade.

Figure 8.2 Number of working age claimants of incapacity benefits, 1979-2004



Source: DWP Administrative data.

The abolition of AP in 1995 also affected the generosity of incapacity benefits relative to unemployment benefit. In the decade or so prior to the reform, because of AP entitlement, the value of incapacity benefit had increased substantially for mid-life and older claimants, thereby increasing the financial incentive to claim this benefit instead of unemployment benefits for those able to do so. Thus, it has been calculated that, in 1981, the average new incapacity benefit recipient aged 46 to 49 would have received 1.5 times more in benefit than a comparable unemployment benefit recipient; but by 1995 they would have received 1.98 times more. However, with the abolition of AP in 1995, the relative generosity of incapacity benefit fell substantially for mid-life and older claimants (Bell and Smith, 2004) thereby reducing the financial incentive to claim IB compared with unemployment benefit.

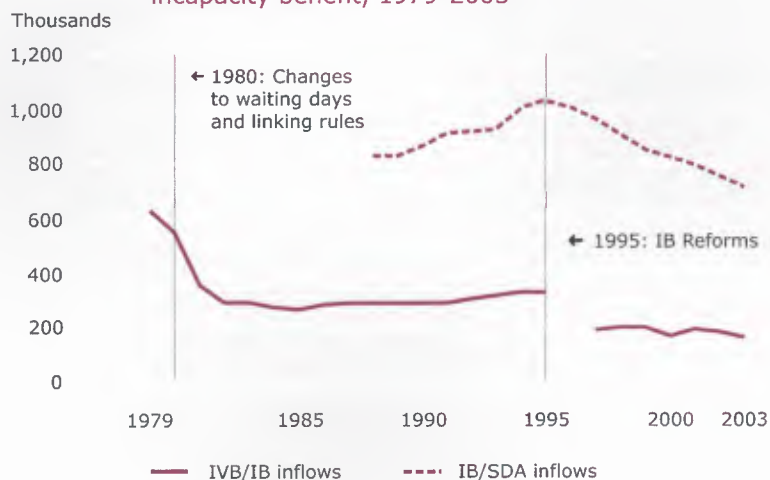
The number of claimants on means-tested Income Support in receipt of a disability premium increased substantially in the years following the 1995 reform, rising from around 770,000 in 1996 to almost 1,120,000 in 2004. This suggests that there may have been some substitution between Incapacity Benefit and Income Support as a result of the 1995 reform.

Berthoud (1998) estimated that the increase in the Invalidity Benefit caseload between 1975 and 1995 could be broken down into four main components:

1. People over retirement age continuing to draw IVB for a further five years as allowed by legislation because it was not then taxed, unlike the state retirement pension. Berthoud estimated that 29 percent of the growth was attributable to this group.
2. An increase in the number of married women who were both in paid work and making National Insurance Contributions before becoming disabled. This accounted for 16 percent of the increase in the IVB caseload.
3. An increase in the proportion of the working age population with impairments or experiencing ill-health. This accounted for an estimated 13 percent of the growth.
4. An increase in the proportion of disabled people claiming. According to Berthoud, this accounted for 42 percent of the growth.

Changes in the stock of claims reflect changes in either the inflow of new claims, the outflow of existing claims (i.e. claim terminations) or both. Figure 8.3 shows inflows to incapacity- benefits from 1988 to 2003 and to Invalidity Benefit (and its post-1995 equivalents) from 1979 to 2002.

Figure 8.3 Inflows to all incapacity-related benefits and incapacity benefit, 1979-2003



Source: DWP IB Audit.

The top line in Figure 8.3 shows that the inflow onto all incapacity benefits increased from over 800,000 in 1988 to over a million in 1996, an increase of a quarter in only eight years. In the subsequent seven years the inflow declined by almost a third, falling to around 730,000 new recipients in 2003.

The bottom line in Figure 8.3 shows the inflow onto Incapacity Benefit and its pre-1995 equivalents. It excludes short-term lower rate and credits-only cases. The Department for Work and Pensions has noted that the sharp decline from 1979 to 1982 followed the introduction of two changes in 1980. In the first, a four-day waiting period was introduced for Sickness Benefit, which reduced the number of short-term claims. The second involved a cutback to the "linking rules" whereby claimants with an intermittent illness could link together successive spells on Sickness Benefit into a combined claim and thereby record a sufficient number of days on benefit to qualify for Invalidity Benefit.

In the decade from 1982, the inflow onto IVB was more or less stable, but it began to increase at a moderate rate in the early 1990s, rising from just under 300,000 to 340,000 by 1995. After the 1995 reform, however, there was a sharp reduction in the inflow, which fell to just under 200,000 a year by the end of the decade.

Meanwhile, the outflow from IVB fell during the 1980s. Disney and Webb (1991) found that, when calculated on a three-year moving average, the *outflow* probability from IVB halved between 1979 and 1988, falling from 0.13 to about 0.06. Because of this decline in the outflow, the average duration of claims lengthened. Between 1985 and 1995 the average duration of IVB claims increased from three to five years. By the end of the century it had reached six years (Howard, 2000).

Thus, the evidence indicates that the rise in the IVB caseload in the 1980s and early 1990s was due more to a reduction in the rate of outflow than to an increase in the inflow. According to Berthoud (1998: 30), "The problem was not more people losing their jobs because of their impairments so much as fewer of them finding new employment after a spell on [incapacity] benefit".

Table 8.1 shows the rate of receipt of Incapacity Benefit and its predecessors (Invalidity Benefit and Sickness Benefit) among the working age population by gender for selected years from 1985 to 2004. It shows that the rate of receipt for among adults of working age increased from 3.2 percent in 1985 to 6.9 percent in 1995. Thus the rate of receipt more than doubled in a decade. Thereafter the proportion of adults in receipt of benefit declined slightly. However, the table also shows somewhat different trends between men and women. The rate among men of working age increased sharply in the decade to 1995, peaking at 9.1 percent, before falling to 8.1 percent in 2004. In contrast, the rate of benefit receipt among women of working age increased steadily throughout the period, rising from 1.5 percent in 1985 to 5.5 percent in 2004. Hence the rate of receipt among women more than trebled over this period.

Although the number of claims for incapacity benefits increased relatively slowly from the mid-1990s, the *composition* of awards altered. The number of claimants receiving the two short-term rates and the long-term rate of Incapacity Benefit fell after 1995, but the number of credits-only cases increased. The number of short-term lower rate claimants fell by 26 percent, the short-term higher rate fell by 18 percent, and the higher rate fell by 15 percent between 1996 and 2002. Over the same period, the number of credits-only cases increased by 43 percent. In consequence, the share of all claims accounted for by credits-only cases increased from about quarter to a third over this period.

Table 8.1 Rate of receipt of Incapacity/Invalidity/Sickness Benefit by gender, 1985-2004

Year	Percent of working age population ¹		
	Men	Women	All
1985 ²	4.7	1.5	3.2
1990 ²	6.0	2.7	4.4
1995 ³	9.1	4.6	6.9
2000 ⁴	8.1	4.9	6.5
2004 ⁴	8.1	5.5	6.8

¹ Working age: 16-64 (men), 16-59 (women). ² Calendar year. ³ Quarter ending February. ⁴ Quarter ending February.

Sources: DSS (1999) *Social Security Statistics 1999*, Leeds: Corporate Documents Services, Table D1-04; DWP (2004) *Incapacity Benefit Administrative data (February 2000 and February 2004)*; Labour Force Survey (winter 1999 and winter 2003).

Table 8.2 Working age female claimants as a percentage of the flow and the stock of IVB/IB

Year	Percent of inflow	Percent of stock
1975	12	18
1980	19	18
1985	27	22
1990	27	26
1995	32	30
1999	38	32
2003	39	39

Source: Calculated from DWP data for OECD; DWP (2004) IB Administrative data.

Compared with men, women claimants are disproportionately likely to be credits-only cases. In 2004, for example, 43 percent of women claimants were receiving credits only, but for men it was just 34 percent. The figures for 1997 were 36 and 24 percent respectively. This gender difference probably reflects the fact that, compared with men, women are less likely to have a sufficient National Insurance Contribution record to qualify for payment of Incapacity Benefit.

The growth in credits-only cases reflects an increase in the number of women claiming IVB/IB. In total, between 1975 and 1995, men accounted for two-thirds and women for one-third of the growth in the number of claims for Invalidity Benefit (IVB). Although men have always accounted for the majority of IVB/Incapacity Benefit claimants, women's contribution to the growth in the caseload has increased over time (see Table 8.2). In 1975, women accounted for only 12 percent of the *inflow* of new working age claimants, but by 1995 this had increased to 32 percent and by 1999 to 38 percent. As a result of this trend, the share of the total working age *stock* of claimants accounted for by women has also increased over time, rising from 18 percent in 1975 to 32 percent in 1999. By February 2004, women accounted for 39 percent of the stock of Incapacity Benefit claimants.

Table 8.3 Rate of receipt of incapacity benefits by age and gender, 2004

Age	Percent of working age population	
	Men	Women
16-29	4	3
30-34	6	4
35-39	7	5
40-44	8	6
45-49	9	8
50-54	11	11
55-59	16	14
60-64	23	

Source: IB Administrative Data; Labour Force Survey.

Thus the growth in IVB/Incapacity Benefit claims by women has outstripped that of men. Whereas the total stock of male claimants of working age increased by 292 percent in the two decades from 1975 to 1995, the figure for females was 578 percent. From 1995 to 2003, the number of male recipients of working age increased by just

three percent, but the number of female recipients increased by 32 percent.¹⁰ This implies that an important driver of the growth in IVB/Incapacity Benefit has been the disproportionate increase in the number of female claimants, which in turn reflects the rise in their participation in the labour market.

Because working age for men extends to 64 whereas for women it ends at 59, there are proportionately more young female recipients of Incapacity Benefit than male ones. However, when calculated only among claimants aged under 60 years, the proportion of men and women in the different age categories is very similar. The rate of benefit receipt rises slowly for men and women by age up to the age of 59 (when women cease to be eligible) and then rises sharply among men in the 60 to 64 age group. In 2004, almost a quarter of men aged between 60 and the state pension age of 65 were in receipt of incapacity benefits (Table 8.3).

There has been a significant change over time in the type of health condition of claimants of incapacity benefits. In both absolute and proportionate terms, there has been a substantial increase in claimants with mental or behavioural disorders and musculo-skeletal problems.

Table 8.4 shows the main diagnosis group for the *inflow* of new claimants for selected years from 1975 to 2003. The proportion of the inflow accounted for by mental disorders more than quadrupled over this period, rising from seven percent to 33 percent. By 2003, it was the largest category among the inflow of new claimants. Musculo-skeletal problems increased from 12 percent to 34 percent of the inflow between 1975 and 1995, but then declined to only 16 percent by 2003.¹¹

As a consequence of these changes to the inflow, the composition of the *stock* of claimants also altered between 1975 and 2003. The share of the stock of accounted for by claimants with mental disorders and musculo-skeletal problems increased, while the shares accounted for by cardiovascular and "other" conditions decreased over this period. Thereafter, mental and behavioural disorders continued to grow proportionately and absolutely and, by 2004, accounted for the largest share of the stock (Figure 8.4). By this date, mental and behavioural disorders accounted for over a third of all recipients. It appears that almost half of these recipients have had an episode of depression. A fifth of the stock of incapacity-benefits recipients had musculo-skeletal or connective tissue problems.

These trends in diagnosis groups suggest that mental and behavioural disorders, and to a lesser degree musculo-skeletal problems, have to some extent underpinned the growth in the disability caseload shown in Figure 8.1. Not only have they accounted for an increasing number and proportion of the inflow, but their spells on benefit are longer than for people with other types of diagnosis. In other words, once on benefit, people with mental illness or other mental disorders are less likely to leave than those with other health conditions.

10. If those over state retirement age are included, the number of male claimants fell by 11 percent while the number of female claimants increased by 21 percent.

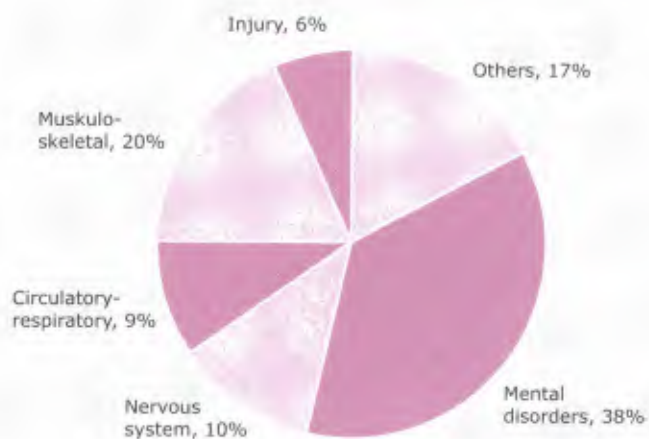
11. These data refer to the claimant's main diagnosis group. In reality, some people could qualify under more than one condition.

Table 8.4 Inflow of IVB/Incapacity Benefit claimants by main diagnosis group, 1975-1999 (percent)

Health condition	1975	1985	1995	1999	2003
Mental disorder	7	11	18	26	33
Musculo-skeletal	12	24	34	22	16
Circulatory & respiratory	11	16	13	8	8
Injuries	11	10	8	11	15
Other	59	39	28	33	28
Total	100	100	100	100	100

Source: Calculated from DWP data for OECD (1975-99); DWP IB Audit (2004).

Figure 8.4 Stock of incapacity benefit recipients by diagnosis group



Source: IB Administrative data.

Although some incapacity-benefits claim durations are very short, many are for quite long periods. Indeed, the duration of claims has increased. In 1985, 70 percent of claims had a duration of longer than one year, but by 1999 it was 83 percent. At the beginning of this period, a larger proportion of claims by men were for more than a year, but by the end women had more or less caught up with men. Hence the rate of increase in the proportion of claims that were longer than one year was faster among women than among men.

The lengthy durations of claims for incapacity benefits is illustrated in Table 8.5, which shows the duration of claims for working age recipients. Eight out of ten claims for such benefits last for more than a year, and half last for five or more years. Meanwhile, only one in ten claims lasts for less than six months.

Table 8.5 Duration of claims by working age recipients of incapacity benefits

<i>Duration of claim</i>	<i>Percent of recipients</i>
0 to 3 months	5
3 to 6 months	5
6 to 12 months	6
1 to 2 years	10
2 to 5 years	23
5+ years	51
Total	100

Source: IB Administrative data.

The rate at which people leave benefit is known as the attrition rate. Table 8.6 shows the attrition rate for IB claimants at various intervals after the commencement of their claim. Within the first three months, 25 percent of people have left Incapacity Benefit. In total, 43 percent of claimants have left this benefit after six months. By the time a year has passed from the date of the claim, 59 percent have left, but after that the rate of attrition slows down, such that only nine percent leave in the second year and a further four percent in the third year. After four years, a quarter of people are still claiming Incapacity Benefit. Thus the outflow rate is relatively low. A recent government consultation paper noted that, "once a person has been on ... incapacity benefits for 12 months, the average duration of their claim will be eight years" (Secretary of State for Work and Pensions, 2002: 6).

Table 8.6 Attrition rate for Incapacity Benefit claims

<i>Time elapsed since claim commenced</i>	<i>Percent remaining on IB</i>
3 months	75
6 months	57
1 year	41
2 years	32
3 years	26
4 years	23

Source: DWP IB Administrative data.

The rate of outflow has declined in recent years. Thus, between 1997 and 2003, the outflow as a percentage of the total stock IB/SDA claimants halved, falling from nine percent to four percent over this six year period. These figures exclude credits-only cases, among which the outflow also halved, falling from 16 percent in 1997 to only eight percent six years later in 2003.

Relatively little data is available about claim terminations. Table 8.7 shows the reason for terminations in the quarter to 29 February 2004. It excludes terminations due to movement onto Retirement Pension, Widows and Bereavement Benefits.¹² A quarter of claims was terminated because the person was deemed to be not incapable of work. One in 20 claims was officially terminated because the claimant returned to work, but this refers only to people with linking rules. Some of the other terminations may have been followed by a resumption of employment and this is particularly true of closed certificate cases since these occur where the claimant has had a "closing" medical certificate from their doctor and been classed as fit to return to work (if employed).

Dorsett et al. (1998) carried out a large-scale survey of people of working age leaving Incapacity Benefit shortly after the 1995 reform. Over a third (36 percent) had left voluntarily and the remainder (64 percent) had been disallowed benefit. Almost two-fifths (38 percent) of leavers had found work the following year, but those who left IB voluntarily were much more likely to have found a job than those who were disallowed benefit (69 percent compared with 23 percent). Leavers who had been disallowed were more likely than voluntary leavers to report having health problems and other barriers to employment.

12. In the year ending 31 March 2002 117,000 transferred from IB to Retirement Pension.

Table 8.7 Terminations¹ of Incapacity Benefit by reason, 2004²

<i>Reason</i>	<i>Percent</i>
Not incapable of work	25
Failure to attend medical	7
Failure to provide information	3
Death of claimant	6
Closed certificate	36
At request of claimant	13
Return to work ³	5
Other	3
All	100

¹ Excludes cases transferring onto Retirement Pension, Widows Benefit and Bereavement Benefit. ² Terminates in the quarter to 29/02/04. ³ Includes only those with linking rules, therefore it underestimates the number of incapacity benefit claimants returning to work.

Source: IB Administrative data.

Claimants may appeal against the decision to not allow or to terminate their claim. The number of appeals more than doubled between 1999 and 2002 and reached about 60,000 a year by the latter date. About nine out of ten appeals is connected with the Personal Capability Assessment. In the third quarter of 2003, 47 percent of all appeals were successful (48 percent of appeals against the PCA and 40 percent of other appeals). Thus almost half of all claimants who appeal are successful.

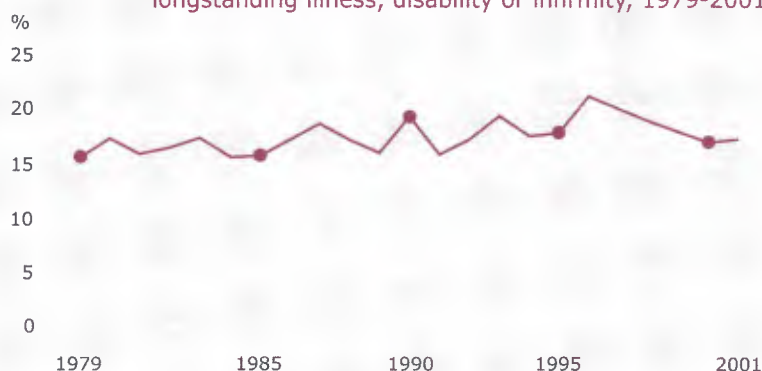
Interpreting trends in incapacity benefits

The sharp rise in the number of incapacity-benefit claims in the 1980s and early 1990s has been much commented upon and led to a major reform in 1995 that contained the subsequent rate of growth. Since the mid-1990s the British economy has performed relatively well. Employment has grown more or less continuously since then and is now at historically high levels, while recorded unemployment has fallen over the same period. Despite this more favourable economic environment, the incapacity benefit caseload has remained at a historically high level. In this section we discuss the factors that have been put forward to explain these trends in the caseload.

Deteriorating health

An increase in the incapacity benefit caseload might at first sight imply that more people were long-term sick or disabled or were willing to report their being so. However, it is apparent that only a small part of the increase could be due to changes in the incidence of disability among the working age population. Relatively objective measures of population health, such as mortality, cardiovascular disease and hypertension have in fact improved, though the incidence of obesity has increased substantially.

Figure 8.5 Percentage of people aged 16-64 reporting a limiting longstanding illness, disability or infirmity, 1979-2001



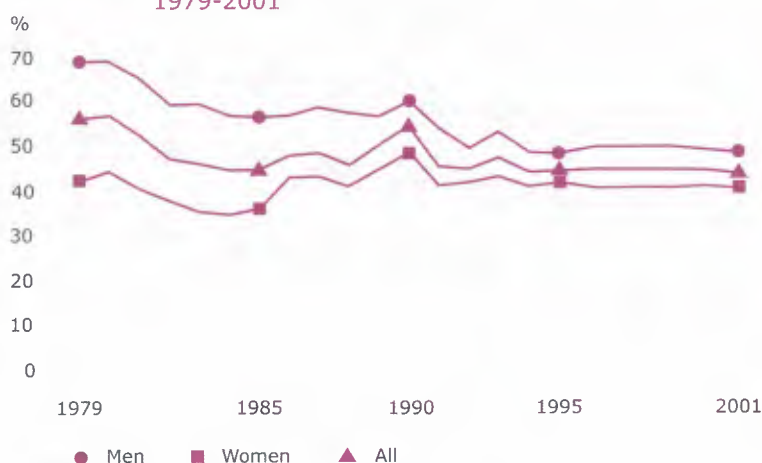
Source: General Household Survey data.

The incidence of more subjective measures of ill-health has increased (Moncrieff and Pomerleau, 2000), but the change has been relatively small. As shown in Figure 8.5, there was only a modest increase in the proportion of people reporting a limiting long-standing illness, disability or infirmity in the period from 1979 to 2001. However, Bell and Smith (2004) have shown that, although the overall trend was relatively stable, there was a significant increase in the percentage of prime age (25 to 54) males reporting a limiting long-standing illness. The Census data for England and Wales also show a significant increase in the incidence of limiting long-term illness, rising from 8.2 percent in 1981 to 13.6 percent in 2001.

As noted in the previous section, among IB claimants this increase reflects rising numbers of claimants with a diagnosis of mental and behavioural disorders, particularly depression. People with depression have an employment rate of only 26 percent, compared with 48 percent for the working age population of disabled people as a whole. This change in the composition of the caseload by itself will have led to a fall in the proportion of disabled and long-term ill people who were in employment.

There has in fact been a significant fall in the employment rate of people with limiting long-term illness and this has very largely been concentrated among men. Thus, whereas in 1979 about seven out of ten men with a limiting long-term illness were in work, by 2002 only half of them were in paid employment (Figure 8.6). The central question, therefore, is why are men with a limiting long-term illness now much less likely to be in work than was the case in 1979? Most explanations of this development focus on changes in the nature of the labour market over this period.

Figure 8.6 Employment rates for people aged 16-64 reporting a limiting longstanding illness, disability or infirmity, 1979-2001



Source: General Household Survey data.

Disguised unemployment

It has been claimed that the rise in IVB during the 1980s and early 1990s was a response to the emergence of high levels of unemployment, particularly in older industrial districts (Beatty and Fothergill, 1996). Over the past two decades there have been structural changes in the economy. In particular, there has been a decline in manufacturing and in coalmining, and a shift towards service jobs. These changes were associated with, and accelerated by, two deep economic recessions, the first in the early 1980s and the second in the early 1990s, which led to the re-emergence of mass unemployment including a growth in long-term unemployment, particularly affecting men.

It has been argued that one result of the rapid escalation of unemployment in the early 1980s was that men who would previously have found other jobs ended up

claiming incapacity benefits instead. For example, Beatty and Fothergill (1996) found that, despite the closure in the 1980s of most of the coalmines, by the mid-1990s male unemployment in the former coalfield areas was lower than when the pits were working. Instead of a growth in unemployment, the former coalfields witnessed a surge in the number of people who were long-term sick and claiming incapacity benefits. Similar arguments have been made by Fieldhouse and Hollywood (1999).

It has been claimed that, in the labour market recession of the 1980s, men with limiting long-term illness or other disabilities were more likely to have been made redundant, and less likely to be able to get another job, than able-bodied workers. Men who, in the past, would eventually have found another job despite having a limiting long-term illness, were being diverted onto IVB instead (Alcock et al., 2003). People may become more willing to see themselves as disabled when their job prospects are poor (Piachaud, 1986).

It has also been claimed that, during the 1980s, faced with pressure to reduce the unemployment count, Employment Service staff encouraged people with little apparent prospect of getting another job to withdraw from the unemployment register and claim IVB instead (Campbell, 1999; National Audit Office, 1989). There is some evidence that, in deciding whether to provide the medical certificate needed to claim IVB, doctors were influenced by the perceived probability of the patient finding a job (Ritchie et al., 1993). An incentive for these claimants to switch may have been the fact that IVB rates were significantly higher than unemployment benefit and there was no pressure to actually seek work. In fact, this gap increased from the mid-1980s to the mid-1990s (at a time when claims were rising fast) before falling back after the 1995 reform (Nickell, 2003).

Supporters of the disguised unemployment thesis point to the fact that claims for incapacity benefit are especially high in areas of high unemployment. The local authorities with the highest rates of incapacity benefit claims tend to be located in the former coalfields and older industrial areas of northern England and Scotland (Alcock et al., 2003). Table 8.8 shows the ten local authorities with the highest rates of Incapacity Benefit. In these ten areas, between one in five and one in seven men aged between 16 and 64 were claiming Incapacity Benefit in August 2003. In two of these areas, a fifth of the male working age population was on IB (Beatty and Fothergill, 2004). However, although the rate of benefit receipt is high in areas of high unemployment, only a small proportion of Incapacity Benefit recipients live in such areas (DWP, 2004). While disguised unemployment may be an important factor, it is unlikely that it is the only driver of the growth, and continued high level, of incapacity benefit claims.

Analysis by the Department for Work and Pensions (2004) shows that there is a strong positive correlation ($R\text{-squared} = 0.6$) between the local unemployment rate and the proportion of the male population in receipt of Incapacity Benefit. But the analysis also found little correlation between "job density" — the ratio of jobs per adult resident — and receipt of Incapacity Benefit. This suggests that the local variation in rates of benefit receipt may be less to do with lack of jobs and more to do with

a mismatch or "jobs gap" (Turok and Edge, 1999) between the skill and educational characteristics of labour demand and supply. In other words, jobs exist but they tend to be ones for which low-skilled workers who are sufficiently disabled to be in receipt of incapacity benefit do not have the requisite skills.

Table 8.8 Percentage of men aged 16 to 64 claiming Incapacity Benefit, August 2003: Top 10 Local Authorities

<i>Local authority</i>	<i>Percent of men aged 16 to 64 on IB</i>
Easington	21.1
Merthyr-Tydfil	20.7
Blaenau Gwent	19.1
Neath Port Talbot	17.2
Glasgow	17.2
Rhondda Cynon Taff	16.7
Liverpool	16.1
Knowsley	16.0
Caerphilly	15.6
Bridgend	14.7

Source: Beatty and Fothergill (2004).

It is not just claims for Incapacity Benefit that are high in areas of high unemployment. The incidence of limiting long-term illness is also significantly higher in such areas (Haynes et al., 1997). Thus one reason why the rate of claiming Incapacity Benefit is relatively high in areas with poor employment prospects is because there are more people with chronic illnesses in such areas compared with areas with relatively good employment prospects. Moreover, the experience of non-employment may itself contribute to deterioration in health. Analysis of a longitudinal dataset for 1971 to 1991 by Bartley and Plewis (2002) concluded that the experience of unemployment at any time during this period contributed, independently of other factors, to an increased risk of limiting long-term illness up to 20 years later. Thus, further deterioration in health while claiming incapacity benefits may be an important factor behind lengthy benefit durations.

Early retirement

It has been argued that the introduction of an increasingly strict benefit regime from the mid-1980s may have led some claimants to prefer IVB in order to avoid the "hassle" associated with claiming unemployment benefits at a time when their chances of ever getting another job seemed to be scarce. Unlike unemployed claimants, people on incapacity benefits were not required to look for work and therefore did not face the pressure of having to prove they were looking for a job in a situation where they felt themselves unlikely ever to get one again (Ritchie and Snape, 1993; cf. Alcock et al., 2002). By providing a financial bridge between work and retirement, IVB was in effect operating as an early retirement benefit for people who had little or no occupational pension entitlement (Alcock et al., 2003).

Although the level of unemployment has fallen considerably since IVB was replaced by Incapacity Benefit, there is evidence that many recipients do not anticipate returning to work. A year 2002 survey of recipients of incapacity-related benefits asked about expectations of being able to work in the future (Woodward et al., 2003). Not surprisingly, respondents who worked in the previous two years were found to be most likely to have looked for work in the last 12 months or to expect to work in the future. Nearly three-quarters of *stock* respondents who were last in work five or more years ago, or had never worked, did not expect to work in the future (comprising four in ten of the stock population) compared with one third of the *flow*.

Disincentives to leaving benefit

The fear of not being able to return to incapacity benefit if employment does not work out is a widely reported disincentive (e.g., Loumidis et al., 2001a; Woodward et al., 2003), although linking rules can allow some Incapacity Benefit recipients to return to the same level of benefit. A related disincentive factor is complex interactions between benefits, which make it hard for an individual to work out the financial consequences of leaving an incapacity benefit for paid work. One study of people moving between unemployment and sickness benefits found that claimants were confused about the benefits available to them and even the benefits they were currently receiving or had received in the past. Most respondents still talked about "sickness benefit" (Hedges and Sykes, 2001).

The "unemployment trap", whereby a person is little or no better off as a result of moving into work compared with staying on benefit, is often thought to be a disincentive but this is hard to demonstrate.¹³ Possible loss of Disability Living Allowance after a review and benefit traps associated with housing costs are other key hypothetical disincentives (Turton, 2001). There is no direct evidence that the *main* disincentive to leaving incapacity benefit for paid employment is the possibility of being little or no

13. It has been estimated that only about 25 percent of people on incapacity benefit would be at least £40 better off if they moved into work of 30 hours a week paid at the National Minimum Wage (Secretary of State for Work and Pensions, 2002).

better off financially.¹⁴ A study of IVB recipients by Erens and Ghate (1993) found that levels of benefit relative to prospective rates of pay did not influence attitudes towards returning to work. Moreover, the levels of pay that they were willing to accept, and in the case of leavers had accepted, tended to be low.

Discouraged workers

The above findings might suggest that incapacity benefits recipients are discouraged from looking for work. Certainly, reported rates of job seeking are low amongst the stock of Incapacity Benefit claimants. Alcock and colleagues (2003) found that eight out of ten long-term sick and disabled men had not worked for at least two years or had never worked. Although half of the long-term sick and disabled respondents said they would like a full-time job, only one in ten of those who wanted a job thought there was a realistic chance of getting one. Interestingly, although a quarter of respondents had looked for work when they lost their last job, only one in twenty was still looking for a job now. The authors suggest that these people may have become disillusioned and detached from the labour market as a result of failing to find a job: "There is little point in continuing to look for work if the repeated experience is one of rejection or if the supply of appropriate jobs is derisory" (Alcock et al., 2003: 98). Likewise, a survey of IVB recipients found that attachment to the labour market declines sharply as benefit duration lengthens (Lonsdale et al., 1993). McKay (1997) found that the incidence of incapacity benefit claims was highly sensitive to the pressure of demand for labour in a region, especially for older workers.

Additional labour market disadvantage

One reason why some claimants of incapacity benefits fail to find employment and eventually become detached from the labour market is that there has been a long-term decline in the demand for low-skilled jobs. By contrast, there has been a rise in the demand for skilled jobs (Nickell and Quintini, 2002). Two-thirds of the rise in economic inactivity since the late 1970s has been among chronically sick and disabled people, of whom three-fifths were in the bottom skill quartile. Among men aged 25 to 54, those in the bottom skill quartile are about three to four times more likely to be economically inactive than the remainder of the prime age male population (Nickell, 2003).

Thus, people may stay on incapacity benefits for a relatively long time because they have little or no educational qualifications or skills and have difficulty finding jobs for people in that position. When combined with poor health and in some cases a lengthy period of non-employment, they are relatively disadvantaged in the labour market. Disabled people are also more likely to be over 50, which can itself be a disadvantage in the labour market. Recent analysis by Berthoud (2003) found that, for men, being over 50 and having low skill levels had much more serious consequences for the job

14. In a survey of incapacity benefit recipients, uncertainty about being better off in work than on benefits was among the least salient barriers (Woodward et al., 2003).

prospects of disabled people than for non-disabled people as these disadvantages were additive. Qualitative work by Alcock et al. (2003) found that many men on Incapacity Benefit were unable to find suitable unskilled work and felt they could not compete with younger people and those in better health for the jobs that were available.

Selectivity on the part of employers

Berthoud (1998) argued that the finding that existing beneficiaries were staying on benefit for longer was likely to reflect the tendency for employers in a hirer's market to become more selective in their choice of staff, so excluding disabled people and other "marginal" workers. There are some hints that people on incapacity benefits share this view but survey question wording is unhelpful. For example, in a survey of incapacity-related benefits recipients who were seen as being closer to the labour market, the most often cited barrier (mentioned by half) was being unlikely to get a job because of a health condition or impairment (Loumidis et al., 2001b). However, respondents may have seen the "problem" as located with them rather than with employers, as only 13 percent said that other people's prejudices made it difficult for them to work. Woodward and colleagues (2003) found that four in ten of the stock and one in four of the flow agreed that other people's attitudes about their health or disability was a barrier to work.

There is some evidence that employers are less inclined to recruit disabled people than prospective employees with other defining characteristics. A telephone survey of employers in ONE areas (see below) asked about the likelihood of taking on people from the three main ONE groups (Bunt et al., 2001). It found that only 62 percent of employers said they were "quite or very likely" to recruit "people with physical disabilities" and only 37 percent would recruit "people with mental health problems", compared with 88 percent of employers saying they were "quite or very likely" to take on lone parents and 78 percent long-term unemployed people.

The demand for labour has increased over the past decade and consequently employers might be expected to be less choosy, especially in areas approaching full employment such as London and the south east of England. On the other hand, it has been suggested that the "employability threshold" has risen as a result of demands for higher productivity, thereby making it more difficult for people with ill-health or a disability to get a job. In support of this argument, Howard (2000) cites a study by Bartley and Owen (1996) which found that, to be in work, men aged 20-59 had to be in better health in 1993 than in 1973. However, this result could just as easily reflect the downward shift in the demand for labour over this period rather than an increase in the level of employability required by firms.

Growing female labour market participation

While these processes mainly affected men, the rising number of women claiming IVB/Incapacity Benefit probably reflected their growing participation in the labour market, as well as changes in National Insurance Contributions affecting married

women (Berthoud, 1998). Because of these developments, an increasing number of women have built up a contributions record that would entitle them to IVB/Incapacity Benefit in the event of them acquiring a disability. As noted in the previous section, the number and proportion of female claimants of IVB/Incapacity Benefit has increased substantially since the 1970s.

Effectiveness of reintegration programmes

Until the introduction of the *New Deal for Disabled People* (NDDP) in 1997 and the regime of work-focused interviews, there were no specific links between receipt of incapacity-related benefits and employment programmes. In some programmes specifically designed for disabled people, the only entry criterion is meeting the Disability Discrimination Act 1995 definition of a disability. This is the case with the *Access to Work* programme, which provides help with the costs of environmental and human support in the workplace as well as travel to work, and the very small Job Introduction Scheme, which offers employers a short-term wage subsidy to persuade them to take on a disabled candidate about whom they have some remaining doubts. Other programmes use benefit-related criteria as well, and there has been a shift in recent years towards prioritising recipients of incapacity benefits in the small *Work Preparation* programme, which offers short courses in personal development and work placements on employers' premises, and in the supported employment scheme since it was re-launched as *WORKSTEP* in 2001.¹⁵ A mainstream work preparation programme, *Work-based Learning for Adults*, is now open to recipients of incapacity benefits.

For many years, Disability Employment Advisers employed by Jobcentre Plus (and its predecessor, the Employment Service) had provided return-to-work support to people on incapacity benefits as well as to JSA clients. However, the NDDP marked a major shift in policy as a case-managed return to work programme dedicated to people on incapacity-related benefits (see below).

A further initiative of note is the *Incapacity Benefit Reform pilot*, which began in the autumn of 2003 and is being evaluated.¹⁶ This follows on from mandatory work-focused interviews for new claimants of incapacity benefits, JSA claimants and lone parents claiming IS, which were piloted through the *ONE* initiative and are being rolled out nationwide as new Jobcentre Plus offices (bringing together the Benefits Agency and Employment Service) are set up. The pilots feature a series of mandatory interviews with an adviser specialising in disability, a new health condition management programme and, where personal earnings are below £15,000 per year, a return-to-work payment of £40 per week for one year after leaving incapacity ben-

15. None of the specialised programmes is large. *Access to Work* helped 36,600 people in 2002/03. *WORKSTEP* supports approximately 26,200 (April 2004). In 2000-01 11,500 people entered the *Work Preparation Programme for Disabled People*. The number of people helped annually by the *Job Introduction Scheme* fluctuated between 4,000 and 2,500 in the period 1989/99 to 2000/01.

16. See Secretary for State for Work and Pensions, 2002.

efits for paid work of at least 16 hours a week, to reduce concerns over maintaining security of income. The overall intention is to activate people early and often in their claim in order to reduce the likelihood of a transition to long-term incapacity.

A pilot scheme providing help to return to work for employees on sickness absence, known as the *Job Retention and Rehabilitation pilot*, is currently being evaluated through random assignment methods. There is no specific link to receipt of SSP; rather volunteers must have been off sick for between six and 26 weeks when they contact a pilot provider organization.

At the time of writing there is limited evidence of the effectiveness of employment programmes aimed at improving employment rates among recipients of incapacity benefits. Much of the available research evidence relates to pilot programmes that were altered somewhat when subsequently extended nationally. Here we review the research evidence from two major programmes: the New Deal for Disabled People (NDDP), the ONE pilot and the subsequent work-focused interview regime.

New Deal for Disabled People

The New Deal for Disabled People (NDDP) Personal Adviser Service pilot, introduced in 1997, was a case management programme with a personal adviser guiding the participant and drawing on a range of services to improve employability and secure employment. People in the twelve pilots areas were encouraged by letter, advertising and outreach to approach a newly established service.

NDDP was evaluated extensively (Arthur et al., 1999; Loumidis et al., 2001a; 2001b). Take up was not high. Three percent of eligible participants (that is, people in receipt of an incapacity benefit for at least six months) responded to a letter of invitation and a similar number were self-referred or referred from other agencies. It was not possible to detect any statistical effect of the pilot programme on movement into paid work by comparing the relative outcomes of participants and non-participants, because of the small numbers in the latter sample taking up work. All that can be said is that a quarter of participants surveyed, who had had a first interview with an adviser four to 17 months previously, said they had since taken up employment. Those with shorter benefit durations were statistically more likely to have done so. A high proportion of participants surveyed (78 percent) said they would have obtained their employment without contact with the service. Depth interviews showed that most people moving into work found the vacancy themselves, although help with job search skills was sometimes acknowledged.

The NDDP was extended across Great Britain in July 2001, still with pilot status, with some important differences. Choice of provider was introduced. The extended programme introduced a new funding regime, with the bulk of the funding attached to job entries and jobs sustained for six months (later reduced to 13 weeks) along with a small payment to the provider for each registration. Eligibility was extended to include people in receipt of a qualifying incapacity-related benefit for less than six

months.¹⁷ Those moving on to such a benefit were told about the job broker services during the mandatory work focused interviews gradually being introduced by Jobcentre Plus, though applying to a minority of new claims. Existing recipients received postal information but early evidence from a telephone survey of the eligible population showed low levels of recall (Woodward et al., 2003).

At this stage there is no available evidence on the net impact of the programme.¹⁸ The take-up rate has been less than expected, standing at around two percent of the eligible population. However, incapacity-related benefit claimants who underwent a mandatory Jobcentre Plus work-focused interview were found to be twice as likely to register as those who did not.¹⁹ Analysis of administrative data indicated that under one third of people registered with job brokers entered paid work, of whom half sustained paid employment for six months. It also demonstrated that people with shorter benefit durations (those undergoing work-focused interviews or claiming benefit for less than six months) were more likely to enter employment. In-depth studies based on 18 NDDP job broker services indicated that the funding regime was to some extent influencing job brokers to focus their efforts on people who were more "job ready" (Corden et al., 2003).

Work focused interviews at the point of making a benefit claim

The ONE service was introduced in 1999 to pilot combining delivery of benefits to people of working age with work-related advice. It reflected the Government's commitment to active case-managed intervention to bring benefit recipients closer to the labour market. ONE brought together the then Employment Service and Benefits Agency in 12 pilot areas in Great Britain. People applying for a benefit were allocated a personal adviser to deal with their benefit claim and discuss their options for work, job readiness and any barriers. Until April 2000, people applying for incapacity benefits (and people on benefits other than Jobseeker's Allowance) could choose whether to take part in an adviser interview. Since that date, all benefit groups have been required to attend a first meeting with a personal adviser as a condition of receiving benefit.²⁰

The ONE pilots were subject to extensive evaluation. Final results on the labour market impact show that ONE had no discernable effect in increasing employment (Green et al., 2003). This was true of all three main client groups — that is, claimants of the three main incapacity benefits, lone parents claiming income support and unemployed people claiming Jobseeker's Allowance. There were no differences be-

17. Eligibility was subsequently extended to people in receipt of Disability Living Allowance and not receiving Jobseeker's Allowance.

18. The original plan to assess net impact through random allocation to the programme and to a control group that would not receive the service was dropped. The impact is being assessed using non-experimental methods.

19. DWP NDDP Database Analysis, March 2003.

20. The interview can be deferred to a later time if it is considered that the claimant is not in a position to benefit from it (for example, if coming to terms with a recently acquired impairment), or entirely waived in some circumstances (for example, if suffering from a terminal illness).

tween pilot and control groups in the proportions of incapacity benefits clients looking for work, and no evidence of the pilots moving incapacity benefits clients onto JSA. Analysis of administrative benefit records does not suggest that ONE changed the probability of leaving benefit for incapacity benefits recipients (Kirby and Riley, 2003).

Incapacity benefits clients in the pilot areas were more likely than counterparts in the control areas to report having discussed ways of finding work or training and to have received advice about jobs, and indeed more likely to report they had received *any* advice (Green et al., 2003). But here there was no evidence that receiving advice through ONE increased the odds of finding work. In any case, only one in five incapacity benefits clients recalled discussing ways of finding work or training with a personal adviser (compared with over two in three jobseekers). The work focus of ONE had not always been communicated to clients at first contact, and overall few expected ONE to help them in finding work or to contemplate work in the longer-term.

Conclusion

Receipt of incapacity benefits trebled in Britain between the late 1970s and the mid-1990s, but after a major reform in 1995 the rate of growth tailed off. In recent years the caseload has been more or less stable and yet the last decade has witnessed falling unemployment and increased employment. There are now more people claiming incapacity benefits than there are claiming unemployment or lone parents benefits together.

Since 1997 the Government has sought to find ways of helping people on incapacity-related benefits into paid employment. The wide range of initiatives that has been introduced has sprung from concerns to reduce poverty and social exclusion as much as from a desire to reduce expenditure and bring more people into the labour force. Evidence on the effectiveness of these initiatives is as yet limited and it is too early to say what the impact is of the practical programmes being piloted.

A key trend in the incapacity benefits caseload is the increase in claimants whose main condition is a mental disorder. This has now overtaken musculo-skeletal conditions as the largest diagnosis category and appears to reflect the shift from an industrial to a post-industrial society. A further and to some extent related trend has been the marked increase in female claimants of incapacity benefits, which reflects the growing labour market participation of women in recent decades. And yet the growth in the number of female claimants has often been neglected in the literature on the growth of incapacity benefit claims.

The large size of the incapacity benefit caseload remains a significant concern for policy makers, but the nature of the problem is complex. It is certainly more than just a case of disguised unemployment. Despite some important policy innovations such as Pathways to Work, a major decrease in the number of claimants will not be easily

achieved. Although in theory reductions could be made through benefit cutbacks or more stringent medical testing, retrenchment measures of this sort might result in the displacement of some claims to other parts of the benefit system.

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The challenge of growth: Disability benefits in the United States

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The United States has a mixed system of disability benefits that depend on employment history, earnings, whether or not a person is an armed forces veteran and how they came to be disabled. Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI) are the two largest nationally administered programmes. This chapter examines the growth in disability receipt that has occurred in both the SSDI and SSI programmes during the past two decades and identifies factors affecting the rates of awards and terminations.

Although this chapter primarily focuses on the SSDI and SSI programmes, brief descriptions of other more specialized systems of benefits — veterans' benefits and workers' compensation for workers and their families — are included in an attempt to cover the major public programmes available in the United States.

Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI)

SSDI provides a monthly benefit to disabled workers who have earnings covered under the programme. The worker and employer each pay payroll taxes of 6.25 percent on covered earnings to fund social security benefits. Included in that is 0.9 percent of earnings for disability benefits. The dependents of disabled workers are also able to receive a monthly benefit. About 7.6 million disabled workers and dependents received disability insurance benefits in 2003.¹ SSDI recipients are automatically converted to retirement benefits status upon reaching full retirement age.

The SSI programme is social assistance that provides a minimum guaranteed monthly income level for disabled persons who meet certain income and resource

1. Available at <http://www.ssa.gov/OACT/STATS/OASDIbenies.html>.

requirements. For 2005 that guarantee is \$579 for an individual and \$869 for a couple, although a number of individual states supplement those amounts. Since 1980, the annual equivalent of the monthly federal guarantee amount for an individual has approximated between 19 and 24 percent of average annual wages earned. Approximately 4 million disabled adults received a monthly SSI payment in May of 2004.² The most recent available data for both programmes show that about 14 percent of disabled workers receiving SSDI benefits also qualify for an SSI payment based on their low SSDI entitlement (Social Security Administration, 2004b: Table 3.6). Like SSDI recipients, SSI recipients can continue receiving their benefits beyond age 65. Both programmes also provide access to government health insurance programmes. SSDI recipients can get Medicare, a nationwide health insurance programme for aged and certain disabled persons, after two years of receiving cash benefits. SSI recipients, on the other hand, become immediately eligible for Medicaid, a means-tested health insurance programme for certain low-income people.

Administration of the SSDI and SSI programmes

The Social Security Administration (SSA) is responsible for administering the SSDI and SSI programmes. SSA is an independent agency within the federal government. In addition to administering the two disability programmes, SSA also administers retirement and survivor's insurance benefits and SSI benefits for the aged. The agency also provides service delivery support for other federally funded programmes, including Medicare, Medicaid, and the Food Stamp programme, for which other federal agencies have primary responsibility.

Persons seeking benefits on the basis of disability file an application at a Social Security field office. These offices are responsible for determining that the individual meets the non-medical requirements for benefits. Disability Determination Services, which are state agencies, receive funding through SSA to make the disability determination. Appeals of the determinations made by state agencies are processed by federal administrative law judges located in a network of hearing offices across the country. Administrative expenses for the SSDI programme in fiscal year 2004 represented 3.0 percent of the total benefit payments for that fiscal year (Social Security Administration, 2004a).³

Medical requirements

The SSDI and SSI programmes share the same stringent test of disability. For both programmes, disability means the "inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last

2. Available at http://www.ssa.gov/policy/docs/statcomps/ssi_monthly/2004-05/table2.html. Not included in the 4 million are about 980,000 blind and disabled children.

3. Administrative expenses for the SSI programme represented about 8.2 percent of total benefits in fiscal year 2004. This ratio reflects operating expenses not only for processing claims by disabled adults of working age, but also workloads for children and the aged.

for a continuous period of not less than 12 months.” Partial or short-term disabilities do not meet these criteria.

“Substantial Gainful Activity” (SGA) is defined as employment at a particular earnings level.⁴ By definition, a person’s physical or mental impairment must be established by medical evidence consisting of “signs, symptoms, and laboratory findings” and cannot be established only by the individual’s statement of symptoms. The impairment must be of such severity that it prevents the person not only from doing his or her previous work, but also other work that exists in the economy of the United States. In determining whether the person is able to do other work, consideration is also given to the person’s age, education, and prior work experience. An applicant whose medical condition meets or equals in severity a detailed list of impairments is approved for benefits, while others are given more scrutiny regarding their medical and vocational situation (Social Security Administration, 2003c).

Non-medical requirements

The non-medical requirements for SSDI and SSI differ and reflect the different objectives of each programme. To obtain SSDI benefits, applicants in general must have at least a specified minimum level of lifetime work that includes a minimum for the ten years preceding the onset of the person’s disability. These requirements are adjusted for younger workers to reflect their shorter potential work histories.

For SSI benefits, applicants must satisfy income and resource tests. For example, in 2005 for a disabled person who is not working, his or her monthly income cannot exceed \$599. An individual who is working may be eligible if his or her earnings are less than \$1,243.⁵ However, applicants earning over \$830 — the level in 2005 for SGA — will usually be found not disabled. Although the programme excludes certain resources such as one’s home, it limits the total amount of money a person can have on-hand, in bank accounts, and invested in stocks or bonds to no more than \$2,000. If the person has a spouse, the limit is \$3,000. In addition to the income and resource requirements, the individual must be living in the United States or Northern Mariana Islands and be a United States citizen or national. Certain non-citizens may also qualify for SSI.

Continuing disability reviews

Persons receiving DI and SSI disability benefits are subject to periodic reviews of their medical condition.⁶ A profiling system is used for identifying those recipients with medical conditions that are more likely to improve. In Fiscal Year 2003 alone, the Agency processed 1.36 million reviews (including about 190,000 for children

4. Hours of work for the self-employed and subsidies to wages of the disabled, for example, can be considered in determining whether employment is SGA.

5. These income thresholds are higher in states that supplement the federal benefit.

6. An exception is made for persons who are currently enrolled in a Ticket to Work programme. Ticket to Work is described later in the chapter.

receiving SSI) (Social Security Administration, 2004c). After appeals, the Agency projects that only 65,100 of these reviewed recipients will lose benefits. Nevertheless, the cost effectiveness of conducting continuing disability reviews is demonstrated by the ratio of estimated programme savings (that is total projected lifetime benefits) to administrative costs. For cases processed in Fiscal Year 2003, the ratio was roughly \$9.60 in programme savings for every \$1 in administrative costs.⁷

Consistency of decision-making

The variation in proportion of disability claims approved — so-called “allowance rates” — within and between the different levels of adjudication has long been an issue of concern. In recent years, states with the lowest and highest allowance rates for initial determinations have differed from each other by as much as 30 percentage points. Part of this variation may reflect differences in applicant characteristics attributable to variation across states in demographics and economic conditions. Strand (2002) found that adjusting for economic, demographic, and health factors accounted for about 50 percent of the variation across states.

In addition to this apparent variation across states in effective allowance criteria, there is also indication of differences in standards applied initially and on appeal. Approval rates on appeal are quite high, averaging 60-61 percent for fiscal years 2001 to 2003 (Social Security Administration, 2004).

Other assistance for persons with disabilities

Veterans benefit programmes and workers’ compensation are two additional sources of cash benefits and payment for medical expenses for persons with disabilities. There are other, more general income supports that may also be available.

Veterans’ benefits

The federal government provides disability compensation as a monetary benefit paid to veterans who are disabled by injury or disease incurred or aggravated during active military service. This benefit varies with the degree of disability and number of dependents. In 2002, 2.4 million veterans received compensation benefits.⁸ The Veterans programme also has another disability benefit that is roughly parallel to the SSI programme. Veterans with low incomes who are permanently and totally disabled may be eligible for monetary support if they have given 90 days or more of active military service, at least one day of which was during a period of war. War veterans who are age 65 or older and meet service and income requirements are also eligible to receive a pension regardless of current physical condition. 347,000 veterans received

7. Social Security Administration, Office of Legislation and Congressional Affairs, “Report on Continuing Disability Reviews, Fiscal Year (FY) 2003,” unpublished; available from the authors.

8. Available at: [http://www.va.gov/vetdata/ProgrammeStatics/stat_app02/Table%2013%20\(02\).xls](http://www.va.gov/vetdata/ProgrammeStatics/stat_app02/Table%2013%20(02).xls).

pensions in 2002.⁹ Veterans receiving compensation payments based on a service-related disability with a 50 percent or more impairment rating, and veterans who meet certain means-tested requirements, do not pay for medical care. Other veterans are generally required to pay a fraction of medical costs.

Workers' compensation

Workers' compensation provides cash benefits and medical payments to workers who have a work-related illness or injury. Evaluated in terms of annual expenditure, it is the second largest disability programme, after SSDI. The workers' compensation system is not actually a single programme, but rather a collection of state programmes that require employers (in all states but Texas) to carry (generally private) insurance for their workers. About 88 percent of U.S. workers are covered (National Academy of Social Insurance, 2002). In exchange for receiving benefits, workers who receive workers' compensation are generally not allowed to bring a tort suit against their employers for damages of any kind. Benefits are paid for temporary as well as permanent total disability and permanent partial disability. Because workers' compensation is a largely private programme operating independently in every state, statistics comparable to those available for the federally run disability programmes are not compiled. Trends in take-up must be inferred from aggregate benefits paid as a percentage of covered wages. In 2001, workers' compensation benefits as a percentage of covered wages increased slightly to 1.07 percent, still well below the high of 1.69 percent attained in 1992 (Social Security Administration, 2004b: Table 9.B1).

Americans with Disabilities Act

While public benefits are provided to people whose disabilities preclude work, legal requirements exist to facilitate employment for people with disabilities who can work with some reasonable accommodations and to protect them from unfair employment discrimination. The Americans with Disabilities Act of 1990 (ADA) prohibits private and public entities from discriminating within their hiring, advancement, and other terms of employment against qualified individuals who have a physical or mental impairment. Employers are required to make reasonable accommodations for such candidates unless the accommodation would be an undue burden. Reasonable accommodations can include making existing facilities more accessible and usable for workers with disabilities, restructuring jobs, revising training procedures, modifying work schedules or reassigning workers to vacant positions, and acquiring appropriate supporting equipment or devices.

Tax incentives to encourage hiring of people with disabilities

Two tax incentives are intended to encourage businesses to hire and retain workers with disabilities. The Work Opportunity Tax Credit (WOTC) allows businesses a tax

9. Available at: [http://www.va.gov/vetdata/ProgrammeStatics/stat_app02/Table%2014%20\(02\).xls](http://www.va.gov/vetdata/ProgrammeStatics/stat_app02/Table%2014%20(02).xls).

credit for employing individuals that fall within specific disadvantaged categories, such as welfare recipients and disabled SSI beneficiaries. (SSDI beneficiaries are not as a class included but could benefit if they fall within one of the enumerated categories.) The Disabled Access Credit allows small businesses a credit for certain expenditure related to furthering access to people with disabilities (including both employees and the public) to meet the requirements of the ADA. However, a government evaluation found that these credits are rarely used and have had no discernable effect (General Accounting Office, 2002).

Food stamps

Although not a direct disability support, the Food Stamp programme is an important component of social assistance in the United States. "Stamp" is an anachronism; the Food Stamp benefit is now almost universally provided through electronic debit cards. Individuals who receive SSI and live alone are automatically eligible for at least a minimum Food Stamp benefit. Individuals receiving Disability Insurance but not SSI do not automatically qualify. For all eligible households the amount received depends on income and household size.

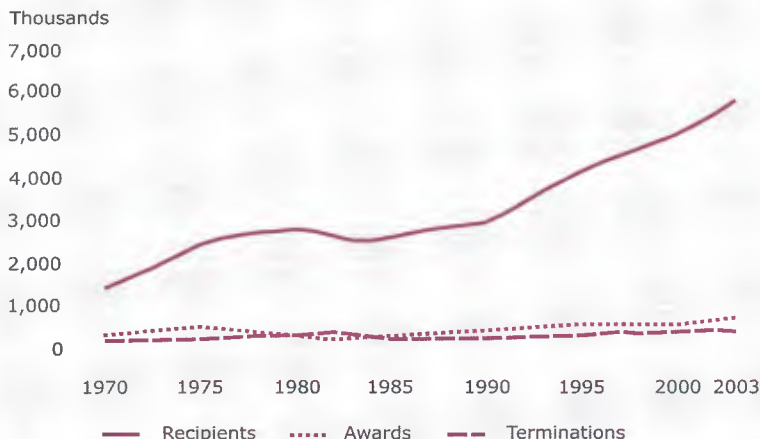
Temporary assistance for needy families

Temporary Assistance for Needy Families (TANF) is limited to parents with dependent children and includes work requirements and time-limited benefits. It is not intended to be a disability programme, but a substantial number of individuals on TANF report some disability; in general these impairments are not sufficiently severe to qualify for the stringent criteria of SSI. In 1999, 44 percent of adult TANF recipients reported having some physical or mental impairment, which is three times the self-reported prevalence in the general population (General Accounting Office, 2001: 3). TANF therefore functions in some cases as lower-level disability support for a portion of the population with physical or mental limitations (Nadel et al., 2003/2004).

Growth in SSDI and SSI Benefit Receipt

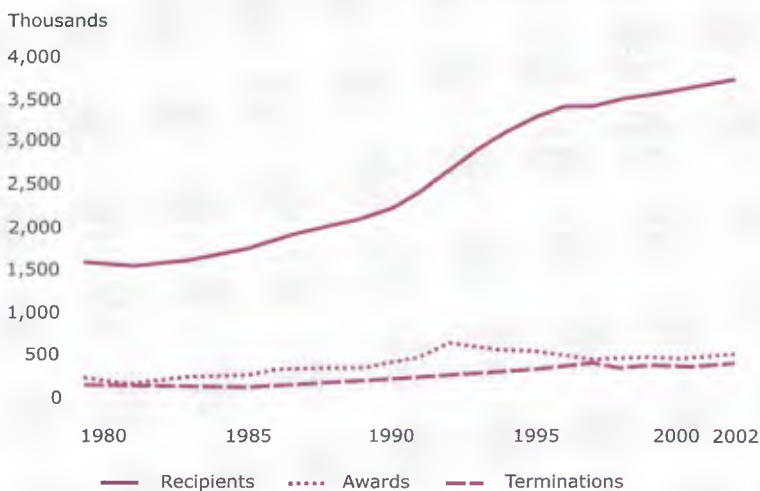
During the past decade, the SSDI and SSI programmes have grown significantly. In 1989, about 2.9 million workers were on the SSDI rolls and 2.3 million working age individuals collected SSI benefits. Over the subsequent ten years, the numbers grew to almost 4.9 million and 3.7 million respectively. About 1 million of the 4.5 million SSI recipients also received a DI payment and are included in the total 4.9 million for the SSDI programme. Figure 9.1 and Figure 9.2 show the gross annual number of new awardees, recipients, and terminations for the two programmes. Figure 9.3 compares the size of both programmes as a percentage of the Gross Domestic product. The figures indicate that while the numbers of SSI and SSDI recipients have grown since 1990, most growth, especially since 1993, is attributable to SSDI.

Figure 9.1 Disabled worker awards, recipients and terminations, 1970-2003



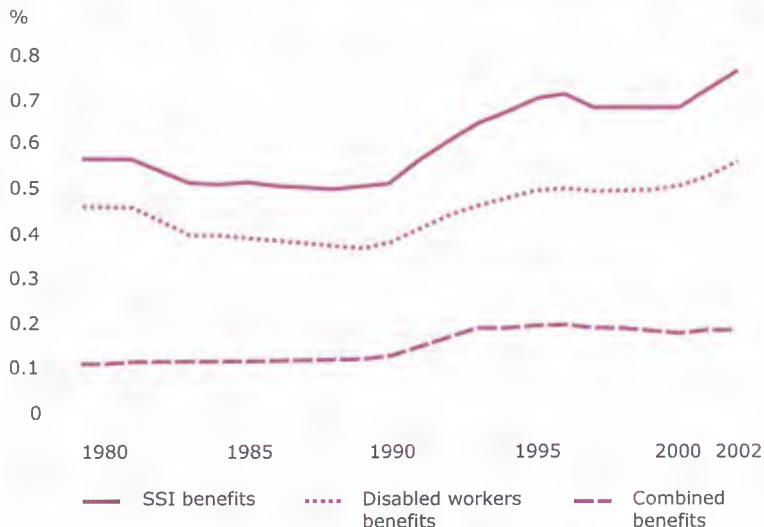
Source: Based on data from Social Security Administration, Office of the Chief Actuary.

Figure 9.2 SSI disabled adult awards, recipients and terminations, for working age population, 1980-2002



Source: Based on data from Social Security Administration, Office of the Chief Actuary.

Figure 9.3 DI worker benefits and SSI benefits for working age population as a percentage of GDP, 1980-2002



Source: Based on data from Social Security Administration, Office of the Chief Actuary.

Trends in receipt, awards, and terminations

While the growth in receipt over the last decade is substantial, it is important to note that part of this increase is due to a 1.2 percent per year increase in both the adult population and the labour force during the 1990s. Figure 9.4 reports prevalence of SSI and SSDI receipt within the working age population.¹⁰ Normalized in this way, it is again evident that the major source of growth in benefit receipt, particularly since 1995, lies with the workers' insurance programme.

This growth represents a steady accumulation of cases on the rolls. In terms of programme administration, however, it is important to look at the number of new awards per year or the incidence rate — the number of new awards as a percentage of

10. Figure 4, and other figures that present incidence or prevalence rates, use the "Social Security area population" as the denominator. This is administrative language for the estimated population that could qualify for benefits if meeting the appropriate criteria. For figures pertaining to DI worker benefits, the denominator is confined to those aged 15-64 in the Social Security area population because DI worker benefits may be collected between ages 15 and 64. For figures pertaining to SSI disabled adult benefits, the denominator is confined to those aged 18 through 64 in the Social Security area population. For a definition of Social Security area population, see Social Security Administration (2002: 168).

the working age population. As shown in Figure 9.5, the incidence rate was relatively steady from the mid 1990s to the end of the decade.¹¹

Figure 9.4 Working age recipients and corresponding prevalence rates for DI and SSI, 1980-2002



Source: Based on data from Social Security Administration, Office of the Chief Actuary.

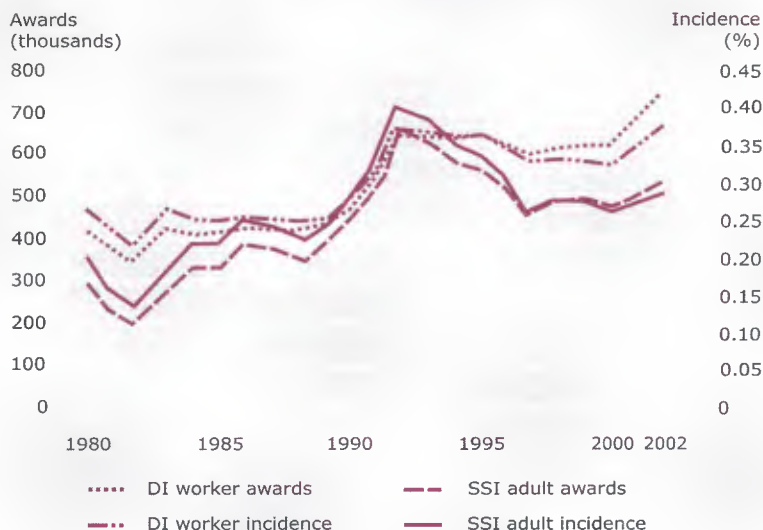
For the SSI programme, the number of awards and corresponding incidence rate follow those of the DI programme. Figure 9.5 shows an upturn in awards in the mid to late 1980s that continued until about 1992-1993. Both the incidence rate and number of awards have remained relatively steady in recent years.

The effect of new accessions on disability programme growth is partially offset by programme exit. For the SSDI programme, the predominant reasons for programme exit are conversion to the retirement programme on attainment of full retirement age (65, until recently),¹² death, and recovery (or return to work). Although the number of terminations has increased since 1990, the overall termination rate from the SSDI programme has generally declined since the early 1980s (Figure 9.6), indicating that exit from the SSDI programme has not kept pace with the size of the programme.

11. Although not commonly done, in principle incidence should be calculated for population at risk – working age people not already receiving benefits. However this adjustment does not alter the impression of the sources of growth provided by these figures. The incidence of awards has risen slightly since 1999.

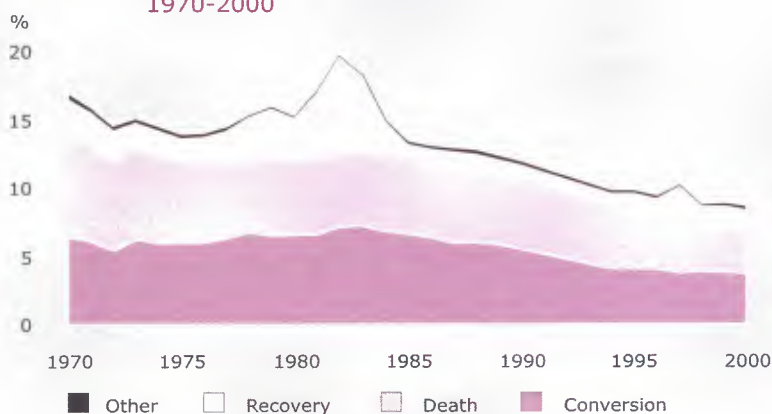
12. Full Retirement Age (FRA) is being gradually increased to 67.

Figure 9.5 Awards to working age adults and corresponding incidence rates for DI and SSI, 1980-2002



Source: Based on data from Social Security Administration, Office of the Chief Actuary.

Figure 9.6 Disabled worker termination rates by reason, 1970-2000



Source: Based on data from Social Security Administration, Office of the Chief Actuary.

The SSI programme does not terminate, or convert recipients to the old age programme at age 65. Instead, they remain SSI recipients. Terminations occur for death, recovery, and unlike the SSDI programme, for increased income and resources. The absolute number of terminations has more than doubled over the past two decades for disabled persons age 18-64, climbing from about 216,000 in 1980 to 440,000 in 2002.

Age and gender

The U.S. population is ageing, and other things equal this might be expected to increase the average age of new recipients at the time of the disability award. The Bureau of the Census reported a median age for the population of 30 years in 1980, 32.9 years in 1990, and 35.3 years in 2000 (Department of Commerce, Bureau of the Census, 1980, 1990, and 2000). However, the average age at the time of the SSDI award has generally declined. In 1970, the average age at award was 52.8. It declined to 47.8 in 1992 and has slightly risen in recent years. Table 9.1 shows the average age for men and women at the time of the SSDI award.

Table 9.1 DI worker awards: sex distribution and age at the time of award

	<i>Total number men and women</i>	<i>Per- centage men</i>	<i>Per- centage women</i>	<i>Average age men</i>	<i>Average age women</i>
1970	350,384	73.7	26.3	52.1	52.8
1975	592,049	69.0	31.0	51.5	52.1
1980	396,559	69.4	30.6	51.2	51.1
1985	408,900	67.1	32.9	50.1	49.7
1990	461,800	63.5	36.5	48.1	48.4
1991	513,100	62.9	37.1	47.9	48.4
1992	636,900	62.1	37.9	47.8	47.7
1993	629,900	62.2	37.8	47.7	48.1
1994	613,300	61.8	38.2	48.4	48.2
1995	631,600	58.3	41.7	48.9	48.5
1996	604,000	57.5	42.5	48.3	48.7
1997	561,300	55.4	44.6	48.8	47.9
1998	603,300	54.9	45.1	48.8	48.5
1999	605,800	55.9	44.1	49.1	48.7
2000	610,700	53.8	46.2	49.1	48.7
2001	661,900	54.4	45.6	49.1	48.0
2002	730,383	54.0	46.0	49.0	48.3

Source: Social Security Administration, Office of Policy.

Awards for women have increased dramatically during the past two decades, reaching over 300,000 in 2001 (Table 9.1). In 1970, only 26 percent of workers awarded SSDI were women. By 2000, it had reached 46 per cent, reflecting greater female participation in the labour force. For the SSI programme, the breakdown of awards among adults age 18-64 has been running at about 50 percent for each sex during the last decade, with some years showing more men entering the SSI programme than women (between 51 and 52.5 percent for men from 1997 to 2001).

Table 9.2 **DI prevalence, incidence, and termination rates by age group and sex, 1975-2000**

	15-34		35-49		50-54		55-59		60-64	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
DI prevalence by age group and sex, 1975-2000										
(beneficiaries as a percentage of social security area population for the given age group and age)										
1975	0.4	0.1	1.9	0.7	4.5	2.0	7.5	3.5	12.5	5.2
1980	0.4	0.2	2.0	0.9	4.7	2.2	8.1	3.8	13.2	6.0
1985	0.4	0.2	1.8	0.8	4.1	2.0	6.8	3.3	11.1	5.1
1990	0.5	0.3	2.2	1.1	4.3	2.4	7.0	3.7	10.5	5.0
1995	0.6	0.4	2.9	1.8	5.3	3.5	8.3	5.1	11.8	6.5
2000	0.5	0.4	2.8	2.1	5.6	4.3	8.6	6.3	12.3	8.1
Incidence of DI worker awards by age group and sex, 1975-2000										
(awards as a percentage of social security area population for the given age group and sex)										
1975	0.13	0.05	0.46	0.20	1.06	0.51	1.78	0.82	2.43	0.90
1980	0.08	0.03	0.33	0.16	0.78	0.36	1.28	0.54	1.49	0.52
1985	0.10	0.05	0.32	0.16	0.72	0.37	1.09	0.49	1.21	0.47
1990	0.12	0.06	0.33	0.20	0.68	0.43	1.12	0.61	1.24	0.54
1995	0.13	0.08	0.40	0.30	0.79	0.62	1.31	0.89	1.41	0.76
2000	0.09	0.08	0.31	0.28	0.66	0.57	1.08	0.82	1.20	0.74
Rate of DI worker termination by age group and sex, 1975-2000										
(terminations as a percentage of DI worker beneficiaries for the given age group and sex)										
1975	9.5	6.8	7.5	6.2	7.2	6.0	7.4	5.4	7.8	5.1
1980	8.4	7.5	10.4	9.6	9.4	7.4	8.4	6.1	7.2	4.6
1985	5.0	5.2	4.9	4.9	6.2	5.2	6.8	5.2	7.3	5.1
1990	6.1	4.4	5.3	4.3	5.8	4.8	6.3	4.8	7.3	5.2
1995	7.1	4.6	5.7	3.9	5.1	3.9	5.4	4.0	6.4	4.5
2000	6.4	5.0	5.2	4.1	4.7	3.8	4.9	3.7	5.8	4.1

Source: Based on data from the Social Security Administration, Office of Policy.

Table 9.2 shows DI rates (prevalence, incidence, and termination, respectively) by age groupings, by gender. Prevalence rate trends include significant increases for women across all age groupings over time. Incidence rates for both men and women generally increase with age. Termination rates reflect — to some extent — changes in programme policy, with overall decreases for both men and women for all age groupings since the early 1980s.

As shown in Table 9.3, prevalence of SSI receipt for both men and women has increased over the past twenty years. Prevalence rates for men and women increase with age. SSI incidence rates for men and women increased somewhat for some age groups and remained relatively stable for others. Termination rates decreased for men and women with the exception of those aged 18-34. Termination rates are greater for men than for women in all age groups and years.

Table 9.3 **SSI prevalence, incidence and termination rates by age group and sex, 1980-2000**

	18-34		35-49		50-54		55-59		60-64	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
SSI disabled adult prevalence by age group and sex, 1980-2000										
(recipients as a percentage of social security area population for the given age group and sex)										
1980	0.8	0.7	0.82	1.15	1.24	2.14	1.57	3.30	1.99	4.40
1985	1.0	0.8	0.89	1.14	1.08	2.09	1.51	3.01	1.87	3.81
1990	1.2	1.0	1.27	1.48	1.51	2.69	1.77	3.69	2.14	4.16
1995	1.7	1.5	1.80	2.12	2.02	3.22	2.67	4.40	2.76	5.04
2000	1.5	1.5	1.80	2.29	1.94	3.19	2.51	4.25	3.00	5.04
Incidence of SSI disabled awards by age group and sex, 1980-2000										
(awards as a percentage of social security area population for given age group and sex)										
1980	0.15	0.11	0.16	0.16	0.28	0.34	0.40	0.54	0.42	0.51
1985	0.16	0.12	0.19	0.17	0.36	0.37	0.41	0.56	0.38	0.51
1990	0.22	0.15	0.27	0.24	0.38	0.55	0.55	0.73	0.51	0.54
1995	0.22	0.20	0.34	0.33	0.48	0.56	0.68	0.77	0.56	0.61
2000	0.17	0.16	0.26	0.28	0.38	0.42	0.49	0.54	0.42	0.47
Rate of SSI disabled adult termination by age group and sex, 1980-2000										
(terminations as a percentage of SSI recipients for the given age group and sex)										
1980	12.2	8.0	18.7	10.4	17.3	10.0	21.4	9.9	22.7	0.9
1985	8.7	5.4	14.7	7.0	22.0	8.7	25.3	8.9	16.8	8.5
1990	9.2	5.4	13.9	7.0	19.2	6.8	21.6	8.7	17.5	9.7
1995	10.2	6.9	15.6	8.4	18.6	9.5	18.1	10.3	18.9	11.0
2000	12.7	8.2	13.0	7.9	15.7	8.5	15.8	8.9	16.5	9.7

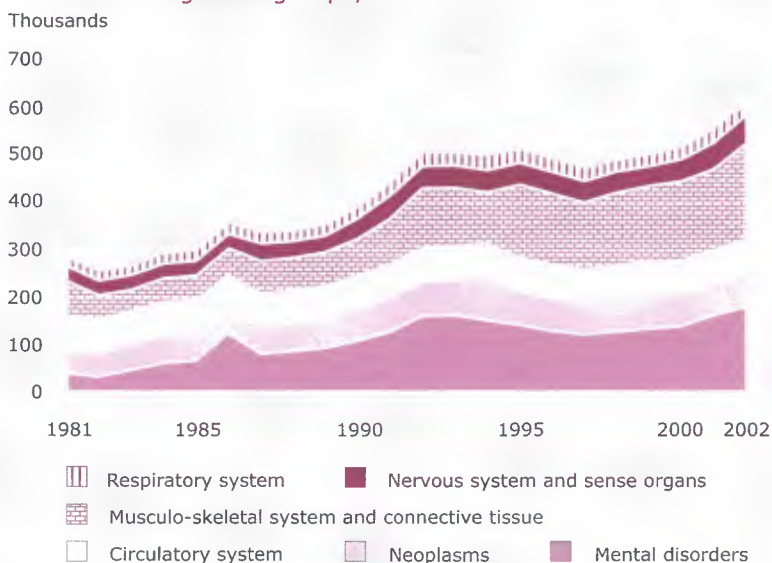
Source: Based on data from the Social Security Administration, Office of Policy.

Trends in programme participation by primary impairment

Mental disorders has been the most rapidly increasing type of qualifying disability over the past 20 years. In 1975, persons with mental disorders accounted for about 11.4 percent of new DI benefit awards. In 2001, 25.5 percent of all awardees had a primary diagnosis of a mental impairment. In contrast, the percentage of persons being awarded DI benefits with a cardiovascular disorder went from a high of 30 percent in 1976 to 12.5 percent in 2001.

Figure 9.7 shows the trends of the six major diagnostic categories from 1981 to 2002. These categories account for 85 percent of all new awardees.

Figure 9.7 Distribution of awards to disabled workers by major diagnostic groups, 1981-2002



Studies show that persons with mental impairments as their primary diagnosis are more likely to suffer from life-long conditions and have lower mortality rates than disabled persons with other primary impairments (cf. Rupp and Scott, 1996). Younger persons being awarded disability benefits are proportionately more likely than older persons to have a mental disorder as a primary impairment. For example, 2001 data show that 56 percent of all DI awards and 66 percent of all SSI awards for persons under age 35 had a mental disorder as the primary impairment. This is illustrated in Table 9.4 and Table 9.5. Some of these trends become evident in changes in recipient characteristics over the past two decades — such as the decline in the average age of persons receiving DI benefits in the 1980s and early 1990s. In 2002 the averages were 51.1 years for men and 51.0 years for women, still below the average ages in 1980.

Table 9.4 Percentage distribution of DI awards for 2001 by diagnostic group and age

	<i>Diagnosis</i>	<i>Age</i>			
		<i>Under 35</i>	<i>35-49</i>	<i>50 or older</i>	<i>All</i>
Men	Mental	55.8	31.0	12.4	23.0
	Musculo-skeletal	7.4	21.1	27.2	22.9
	Circulatory	2.7	8.3	21.0	15.4
	Nervous system	10.2	8.4	7.4	8.1
	Neoplasma	4.3	8.0	11.6	9.6
	Respiratory	0.6	1.9	6.0	4.1
	Injuries	7.4	5.9	4.1	5.0
	Other	10.8	15.7	10.3	12.1
Women	Mental	55.5	37.3	16.5	28.0
	Musculo-skeletal	9.4	21.4	33.8	26.7
	Circulatory	2.4	5.1	11.3	8.1
	Nervous system	12.2	9.9	7.8	9.0
	Neoplasma	4.8	9.6	12.1	10.4
	Respiratory	1.2	2.5	6.1	4.3
	Injuries	3.3	3.0	3.1	3.1
	Other	11.3	11.2	9.5	10.3
All	Mental	55.7	33.9	12.4	25.5
	Musculo-skeletal	8.3	21.2	27.2	24.7
	Circulatory	2.6	6.7	21.0	11.9
	Nervous system	11.1	9.1	7.4	8.5
	Neoplasma	4.5	8.8	11.6	10.0
	Respiratory	0.9	2.2	6.0	4.2
	Injuries	5.6	4.5	4.1	4.1
	Other	11.4	13.5	9.9	11.2

Source: Based on data from the Social Security Administration, Annual Award and Termination file, based on a 1 percent sample.

The percentage distribution of diagnostic groups for 2001 indicates similar differences based on gender between the two programmes. Table 9.4 and Table 9.5 show higher percentages of women with the mental and musculo-skeletal impairments and higher percentages of men with circulatory impairments. For both programmes, no difference can be discerned based on gender in the percentage of awards for persons under age 35 with a mental disorder as a primary impairment. However, that changes for persons between 35 and 49 for both programmes, with higher percentages of women having a mental disorder.

Table 9.5 Percentage distribution of SSI awards for 2001 by diagnostic group and age

	<i>Diagnosis</i>	<i>Age</i>			
		<i>Under 35</i>	<i>35-49</i>	<i>50 or older</i>	<i>All</i>
Men	Mental	66.3	42.6	18.6	40.6
	Musculo-skeletal	3.4	13.4	21.9	13.9
	Circulatory	2.2	8.3	21.3	11.5
	Nervous system	9.7	5.9	6.4	7.1
	Neoplasma	2.9	6.0	8.9	6.3
	Respiratory	0.6	2.5	7.0	3.7
	Injuries	5.4	5.0	4.4	4.9
	Other	6.2	10.9	9.8	9.2
Women	Mental	65.8	51.8	23.2	43.7
	Musculo-skeletal	6.2	14.9	29.9	18.8
	Circulatory	2.0	5.4	14.8	8.2
	Nervous system	10.5	6.2	6.0	7.1
	Neoplasma	2.7	5.8	6.8	5.5
	Respiratory	1.2	3.1	6.4	3.9
	Injuries	2.4	2.2	2.6	2.4
	Other	6.2	10.7	11.7	10.0
All	Mental	66.0	47.3	21.0	41.9
	Musculo-skeletal	4.7	14.2	26.1	16.4
	Circulatory	2.1	6.8	17.9	9.9
	Nervous system	10.1	6.1	6.2	7.1
	Neoplasma	2.8	5.9	7.8	5.8
	Respiratory	0.9	2.8	6.7	3.8
	Injuries	4.0	3.5	3.5	3.6
	Other	6.2	10.8	10.8	9.6

Source: Based on data from the Social Security Administration, Supplemental Security Record, 10 percent sample.

Changes affecting growth in the disability programmes

It is useful to treat changes in disability benefit receipt over time as the product of changes both in the supply of and demand for disability benefits. Supply of benefits refers to the schedule of benefits paid and the terms under which awards are made. Since programme rules define the terms of access, changes in programme rules, both medical and non-medical requirements, are matters of supply. Demand for benefits refers to factors affecting the need for benefits and willingness to apply for them.

Changes in health trends, the prevalence of disabilities, economic conditions and employment opportunities for persons with disabilities affect the demand for disability benefits. Supply and demand factors affect both entry to and exit from the disability programmes.

Programme rules

Legislation during the 1980s generally liberalized the criteria for evaluating physical and mental conditions. Changes in the law were often the result of litigation, which had the effect of making the determination process more complex. The following sections briefly highlight these changes as supply factors affecting initial and continuing eligibility for disability benefits.

Mental impairments

The Disability Benefits Reform Act of 1984 placed a moratorium on the processing of all disability reviews for persons with a mental disorder pending the issuance of revised criteria to assess a person's ability to engage in Substantial Gainful Activity (SGA). The legislation also required that unfavorable initial decisions issued prior to implementation of the revised standard be reviewed under the new criteria.

Mental health experts had long been critical of the disability review process and were successful in demonstrating to the courts and Congress that SSA's criteria for evaluating disability did not reflect the current state of knowledge about mental disorders. Legal advocates argued that SSA did not individually assess the person's ability to work, and for younger persons SSA simply concluded that they could do unskilled work. New rules for evaluating mental impairments came into effect in 1986. The rules required a complete assessment of the severity of functional limitations imposed by the person's mental disorder. The new rules also mandated a prescribed procedure for recording pertinent findings and rating the degree of functional loss. These changes limited the adjudicator's discretion and ability to use a finding that the applicant could do unskilled work. As a result, the proportion of awards with a mental disorder as a primary diagnosis increased, as was seen in Figure 9.7.

Medical improvement standard

The 1984 legislation also changed the standard for Continuing Disability Reviews, making it more difficult for beneficiaries to be found ineligible. The Act required that for a person to be found no longer disabled it was necessary to demonstrate medical improvement relative to the person's situation at the time of initial award, and that the medical improvement must be related to the person's ability to work. Under the prior standard, SSA could call upon the beneficiary to prove that he or she still met the criteria for disability and then issue a new determination, without regard to the initial assessment. The change in the law and implementing regulations shifted the burden to SSA to prove that the person was no longer disabled and required SSA to prove that medical improvement had occurred after the initial finding of disability.

Terminations from reviews of persons receiving SSDI benefits dropped from 130,000 in 1983 to 24,000 in 1986 following the implementation of the medical improvement standard and have remained below the pre-1984 level (Zayatz, 1999).

Other 1984 changes

The 1984 legislation and associated regulations made several other changes that affected the supply of benefits. These included giving more weight to the opinion of the applicant's physician, the assessment of pain, and the consideration of multiple non-severe impairments. Each of these changes liberalized policy and contributed to the increase in awards that occurred from the late 1980s. These changes and the changes affecting the evaluation of mental disorders resulted in an increase in the share of awards made on the basis of vocational (rather than medical) factors to about 40 per cent.

Treatment of drug addiction and alcoholism

Legislation in 1996 tightened the programme by ending eligibility for SSDI and SSI benefits for persons whose drug addiction or alcoholism was material to the finding of disability. About 123,000 recipients ultimately lost their benefits as a result (Nibali, 2000).

Defining what constitutes substantial gainful activity

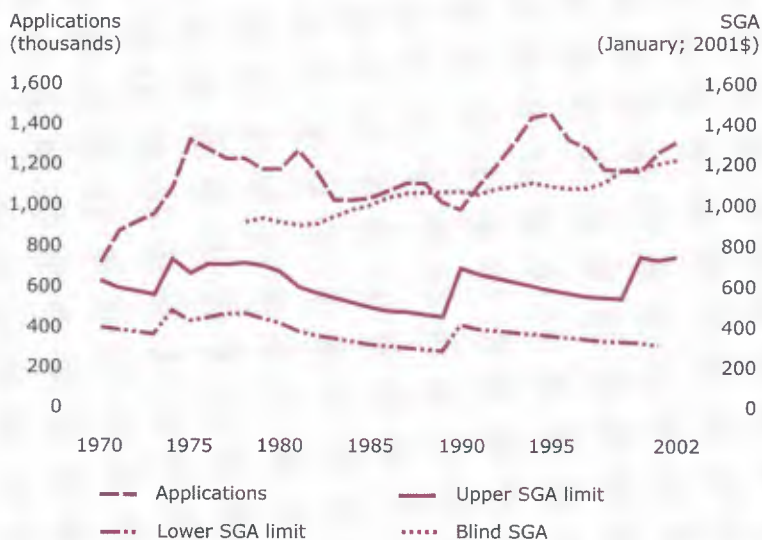
In general, SGA is determined by the dollar amount of earnings. Before 2000, SGA increases were implemented on an ad hoc basis, with inflation eroding the real value of SGA between revisions. Although sporadic, these increases roughly kept pace with inflation. Since 2000, however, SGA levels have been automatically adjusted for annual changes in the average wage. Figure 9.8 shows the levels of the various measures of SGA in real terms over the period 1970 to 2003, indicating when the ad hoc increases in SGA were made.

As can be seen in Figure 9.8, applications to the SSDI programme tend to increase following increases in the SGA. However, the relatively large ad hoc SGA increases granted in 1974, 1990, and 1999 (nominal increases of 43, 67, and 40 per cent, respectively) occurred at the peak of an economic cycle, just prior to the economy moving into recession, so it is difficult to discern whether the increased applications were the result of the SGA increase or poorer job opportunities.

Economic conditions

Changes in economic conditions also affect the demand for benefits. Prior to establishing the SSDI programme in 1956, Congress expressed concerns that the disability programme could become an unemployment programme and as such would be difficult to contain. This concern is reflected in the programme's very strict statutory definition of disability.

Figure 9.8 Applications and real SGA levels, 1970-2002

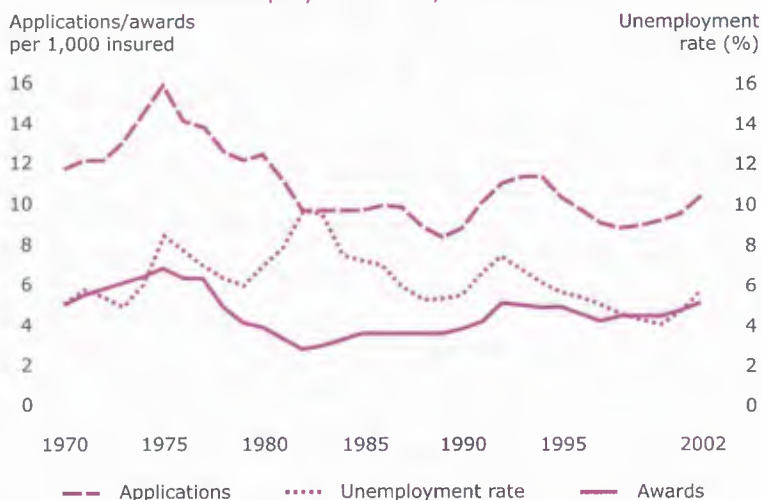


It has long been believed that a causal relationship exists between unemployment and application for disability, as the lack of labour market opportunity results in increased demand for disability benefits. It has, however, been difficult to prove and quantify the relationship due to the sizeable number of other factors that may play a role (either in determining overall demand or supply), which must be controlled for. Figure 9.9 shows that since approximately 1985, the rate of application for disability benefits among insured workers has closely tracked changes in the unemployment rate, with increases in unemployment seeming to result in higher demand for benefits among insured workers.

The relationship between applications and unemployment prior to 1985 is not so clear or consistent. While the application rate increased from 1970 to 1975, unemployment only rose over part of that period (1973 to 1975) reflecting the recession of 1974-75. The application rate began to decline in 1976, as did unemployment, but the decline in applications continued well past the trough of unemployment in 1979. In fact, the application rate continued to decline throughout the economic recession of the early 1980s, despite unemployment rates in 1982-1983 (over 10 percent) that were the highest experienced since the Great Depression. Even if a strong relationship exists between unemployment and the rate of application, there are many factors that may have contributed to the deviations discussed above. The increasing replacement rates in the early to mid-1970s, the addition of Medicare coverage to SSDI in 1972 and the implementation of SSI in 1974 may have contributed to increases in demand

for benefits. Similarly, reductions in replacement rates in the late 1970s and early 1980s may have reduced demand, at the same time as increased screening stringency and expanded Continuing Disability Reviews in the early 1980s may have reduced the supply of benefits, contributing to an overall reduction in demand that exceeded the increase in demand associated with rising unemployment rates.

Figure 9.9 SSDI application and award rates per 1,000 insured and unemployment rate, 1970-2002



Extensive research has been conducted on the relationship between unemployment and participation in the SSDI programme. A full discussion is beyond the scope of this paper; Rupp and Stapleton (1995) summarize quantitative evaluations of the relationship between unemployment and applications, as well as the relationship between unemployment and benefit awards. All in all, there appears to be much anecdotal evidence and some empirical evidence that suggests rising unemployment leads to greater demand for disability benefits. At the same time, evidence of the relationship between award rates and unemployment is less clear, and evidence as to the magnitude and direction of the relationship is conflicting.

Other research has looked at the relationship more or less in reverse, attempting to associate declines in labour force participation with increasing generosity and increased participation in the SSDI programme. Autor and Duggan (2001) found that increases in SSDI benefit replacement rates brought about by changes in the earnings distribution, combined with decreased stringency of applicant screening, has resulted in a reduction of the measured US unemployment rate of two-thirds of a percent.

Increased demand for benefits may or may not lead to additional awards, depending on the nature of the demand and whether there is a change in the supply of benefits. One might presume that if higher unemployment leads to increased demand for benefits, some of the increased applications will be among individuals who are less severely disabled and that the relationship between unemployment and the awards rate might be negative, since the increase in applications among less severely disabled individuals might yield lower award rates. As seen in Figure 9.9, the award rate (percentage of awards per one thousand insured) does tend to be negatively correlated with the unemployment rate, declining as the unemployment rate increases and increasing as the unemployment rate drops, particularly during the 1980s. On the other hand, the award rate seems to be somewhat positively correlated with the application rate, indicating that, if more persons apply for SSDI, more persons will be awarded. This could mean that the increase in applications does not occur only among ineligible individuals.

Real value of disability benefits

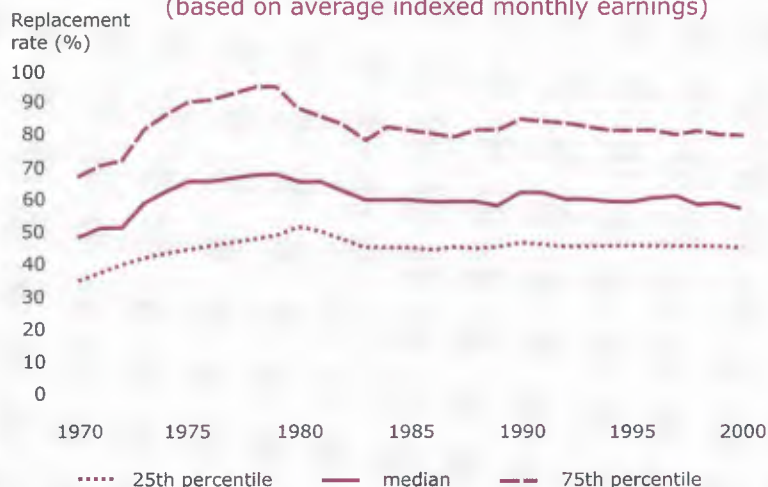
Other things being equal, applications for SSDI and SSI are likely to be positively related to the size of the benefit. The key "other thing" is earnings, and over time both earnings and benefits have increased. A better sense of the relationship between benefits and earnings is provided by looking at actual replacement rates — that is, the ratio of the workers' SSDI benefits to pre-disability earnings. This simple measure provides a glimpse of the adequacy, equity, and incentives associated with disability benefits. While there are many caveats related to taxes, multiple sources of disability income, and other factors, high replacement rates may increase demand for DI benefits, by providing incentives for individuals to apply for benefits rather than continue working and by reducing incentives for those on the programme to return to work. Replacement rates in the United States vary with workers' earnings histories and reflect the interaction of the benefit formula with the actual histories of workers gaining benefits. Since the schedule is designed to replace a higher fraction of earnings for low-wage workers than for high-wage workers, observed replacement rates will depend both on the schedule and the types of workers who choose to apply. Even without a change in regulations, the replacement rate could rise, for example, if the number of workers with low wages rose as a fraction of applicants receiving awards.

Figure 9.10 shows trends in actual replacement rates for cohorts of newly entitled beneficiaries from 1970 to 2000, based on a measure of lifetime earnings up to the year prior to the year of disability onset.¹³ The numerator is the amount of SSDI benefits paid to the worker and any dependents.¹⁴

13. The measure of pre-disability earnings used in the computation of replacement rates reported in Figure 9.10 is average indexed monthly earnings, calculated using basically the same formula employed by SSA since 1980 to compute benefits. Earnings are indexed by average wages for each year after dropping up to 5 years (depending on age) of lowest earnings after age 22.

14. It should also be noted that the real value of benefits is increased by the provision of government health insurance.

Figure 9.10 Median and quartile replacement rates for disabled worker entitlement cohorts, 1970-2000
(based on average indexed monthly earnings)



The data show an increase in replacement rates in each earnings quartile up to 1979 (except the 25th percentile, which rose until 1981), followed by declines until 1983. Since 1983, replacement rates have been relatively stable and the median replacement rate is now about 57 percent.

Replacement rates began to rise dramatically after Congress passed automatic cost of living adjustments (COLA) in 1972. The rise in replacement rates was partially the result of the method used to index benefits, which over-compensated new beneficiaries for inflation. In 1977, Congress enacted legislation intended to stabilize replacement rates by "decoupling" the COLA increase for current beneficiaries from the calculation of benefits for new beneficiaries. Current beneficiaries would receive COLAs for price increases, while benefits for new beneficiaries would be adjusted to keep pace with average wages. The new benefit calculation generally applied to disabled worker beneficiaries becoming eligible in January 1979 and later. This legislation also froze the minimum primary insurance amount at its 1979 level¹⁵. In 1980, Congress took further action to limit replacement rates for disabled workers, targeting younger workers with dependents. That legislation made the formula for these workers less

15. The primary insurance amount (PIA) is the monthly amount payable to a retired worker who begins to receive benefits at full retirement age or to a disabled worker who has never received a retirement benefit reduced for age. The amount is derived from the worker's average monthly wage or average indexed monthly earnings. The PIA is used to compute all types of benefits payable on the basis of an individual's earnings record. Dependents and survivors of workers receive percentages of the PIA subject to the family maximum and entitlement before the full retirement age.

generous and put a cap on family benefits such that the maximum benefit for a worker and family could not exceed 150 percent of the worker's primary insurance amount, effectively permitting the disabled worker to receive additional benefits for only one dependent.

Trends in population health and disability

Underlying trends in population health have improved over the last thirty years in the United States. During this period, significant advances were made in the treatment of many serious physical and mental disorders. The five-year survival rate for many forms of cancer has increased (National Center for Health Statistics, 2003). Smoking rates have decreased, as has cardiovascular disease. On the other hand, obesity has been increasing, and threatens to cancel out previous gains in health. While it is beyond the scope of this paper to attempt to assess the impact of health trends on disability benefit demand, a review of certain medical conditions illustrate the complexities of the relationship between health and disability benefit receipt.

Because of improvements in the treatment or management of some chronic conditions, increasing prevalence has not always led to increases in the number of people unable to work because of the condition. For example, the prevalence of asthma has doubled during the past two decades, and an estimated half million new cases are diagnosed each year. However, better drug therapy and management of symptoms have allowed more persons with severe and persistent asthma to continue working. Although administrative data also does not capture the number of disabled persons with asthma as a primary condition, such data are collected on respiratory impairments, including asthma. From 1986 through to 2001, the number of persons receiving DI benefits because of a respiratory condition as a primary condition increased by only 30 percent, despite a concurrent increase of over 100 percent in the number of persons receiving DI benefits (Social Security Administration, 1987, 2002).

Obesity in the United States has increased at an epidemic rate. Adult obesity (defined as a body mass index equal to or greater than 30) jumped from 12 percent in 1991 to 21 percent in 2001.¹⁶ Obese individuals are at risk for physical disorders such as hypertension, Type 2 diabetes, coronary heart disease, congestive heart failure, osteoarthritis, and respiratory impairments. Recent evidence also links obesity to the incidence of certain types of cancer and mortality from cancer (Calle et al., 2003). A recent study suggests that obesity is the primary reason for the rise in disability among the working age population in the United States (Lakdawalla et al., 2004). In 1999, SSA eliminated obesity as a separately listed impairment, but now evaluates it in combination with other impairments in determining disability. From 1975 to 1999, the percentage of persons being awarded DI benefits under the diagnostic category for obesity increased by almost 60 percent from 3.8 to 6 percent (Social Security Administration, 1980 and 2000). It is believed that persons being awarded DI ben-

16. Available at: http://www.cdc.gov/nccdphp/dnpa/obesity/trend/prev_char.htm.

efits with obesity as a primary impairment are now captured primarily under the diagnostic categories for circulatory and musculo-skeletal systems, and the musculo-skeletal category increased from 23.6 percent in 1999 to 26.3 percent in 2003. The circulatory category remained constant at about 12 percent during this period.

During the past two decades, the number of persons diagnosed as suffering from depression increased dramatically. From 1987 to 1997, the number of persons receiving treatment went from 1.7 million to 6.3 million (Olsson et al., 2002). It is estimated that one in six persons will suffer from depression during their lifetime. Less stigma, better diagnostic screening and better treatment are probably the primary reasons for the reported increase. These factors may have also contributed to the overall increase in the proportion of mental disorders identified as the primary impairment for disabled persons awarded SSI and DI benefits.

New physical disorders also contributed to the growth in the disability programmes. For example, the HIV/AIDS epidemic started during the period under study. Data shows an upward trend in the diagnostic category that captures persons with HIV/AIDS from the late 1980s to about 1992, when 6.2 percent (39,253 persons) of persons being awarded disability benefits were included in the diagnostic category for HIV/AIDS. That percentage has dropped significantly since 1992 and represented only 1.7 percent (11,200 persons) in 2001. Despite the evidence of fewer awards due to HIV/AIDS, the share of recipients with HIV/AIDS as a primary impairment has remained relatively unchanged at about 2 percent during the last decade. These trends seem to mirror the advances made in the treatment of HIV/AIDS that have resulted in a longer life expectancy and has allowed many to continue working. Data from the Centers for Disease Control and Prevention show that the estimated number of deaths for persons with AIDS dropped from a high of about 52,000 in 1995 to less than 16,000 in 2001.¹⁷ During the same period, the number of persons living with AIDS increased from about 215,000 to about 363,000 (Centers for Disease Control and Prevention, 2001).¹⁸

Advances in medical treatment have also meant that some conditions once fatal now lead to disability rather than death. For example, more people survive severe spinal cord injuries resulting in paraplegia or tetraplegia. Mortality rates are still high during the first year after injury, but life expectancies for persons who survive at least one year post-injury continue to increase. A person injured at age 40 with resulting paraplegia, who survives the first year post-injury, has a life expectancy of almost 28 years, which is about 10 years less than for a person without a spinal cord injury. At the start of the DI programme in 1956, a 40-year-old with such a spinal cord injury would only be expected to live a few years. For persons with traumatic brain injuries (TBI), there has been a similar trend.

17. Available at <http://www.cdc.gov/hiv/stats/hasr1302/table31.htm>.

18. Available at <http://www.cdc.gov/hiv/stats/hasr1302/table28.htm>. The incidence of people living with AIDS declined since the mid-1990s until 2002, when it increased by 2 percent over the previous year (Centers for Disease Control and Prevention, 2001: 5).

Trends in the employment of persons with disabilities

Researchers using various sources of data have found that the rate of employment among people who identify themselves as having disabilities declined in the United States between the mid- and late-1980s and 2000. For example, Burkhauser, Daly, and Houtenville (2001) use data from the Current Population Survey (CPS) to find that men with disabilities were 28.4 percent less likely to be employed in 2000 than in 1989, while the decline for men without disabilities was only 1 percent. Similarly, women with disabilities were found 13.8 percent less likely to be employed in 2000 than in 1989, while the likelihood of employment for women without disabilities increased by 5.3 percent. Analysis of the employment rate of persons with disabilities in this way is controversial, since at least some people with disabilities are assumed to be unable to work and efforts to encourage work would not be effective if targeted towards them.

Burkhauser and Stapleton (2003) summarize the evidence of the decline in employment among people with disabilities and the various explanations of this trend that have been put forth. They review six influences:

- *Demographic shifts:* The disabled population is now older, less educated and more likely to be female than previously, and each of these factors has reduced employability.
- *Changing job requirements:* Qualitative changes in labour demand have made certain limitations more problematic for job-seekers.
- *Medical cost inflation:* Rising costs of health care have made firms less willing to hire those with health problems or impairments and also have made the health insurance available through firms relatively less attractive than Medicare or Medicaid.
- *Increased severity of disabilities:* The disabilities that are least likely to be overcome for work are more common.
- *The Americans with Disabilities Act:* ADA accommodation requirements have made hiring people with disabilities too costly for firms.
- *The size of benefits:* The generosity of DI and SSI has increased in a way that discourages work among people with disabilities.

Burkhauser and Stapleton conclude that the last argument is the most persuasive. They cite studies by Autor and Duggan (2003) and Bound and Waidmann (2002) asserting that the decline of employment of people with disabilities can be explained by the disability programmes. These authors generally conceive of increased benefit "generosity" as having two parts: the liberalization of eligibility for disability programmes that began in 1984, and the higher replacement rates that have resulted from a combination of benefit indexing and widening wage dispersion. Benefits are indexed to the mean wage. As the gap between low-wage and high-wage workers increases, indexation raises replacement rates for low-wage workers.

The increased generosity of benefits can have at least two effects. One is straightforward: a reduced level of labour force participation among potential beneficiaries. The second is more complex: The generosity of benefits may interact with labour market conditions to result in a group of people who would work if the job market was better, but in current conditions are willing to choose benefits over work. This is plausible, since most workers with steady employment would not want to trade work for the process of applying for disability benefits, at the very least because of the long processing time in which the claimant must appear unable to work and the risk that benefits will not be awarded. But if a person with a disability loses a job due to an economic recession or other factors, claiming DI benefits might seem a more viable alternative.

Trends in participation in disability programmes versus early retirement programmes

A central policy concern is whether changes in retirement (Old Age, Survivors, and Disability Insurance — OASDI) policy will cause older workers with health problems to apply for DI in greater numbers rather than collect early retirement benefits. Individuals are eligible for old-age benefits at age 62 (the Early Retirement Age, or ERA), but early retirement results in reduced benefits — currently 25 percent less for a person age 62 retiring in 2005. Under current law, the full Social Security retirement age (FRA) in the United States is increasing gradually to age 67, at which point the penalty for taking benefits at age 62 will increase to 30 percent. However, because DI benefits are not reduced in any way related to age, a worker who begins collecting DI benefits at age 62 will essentially collect a full benefit until reaching FRA, when the benefit will convert (in name only) to retirement benefit.

Raising the FRA is essentially a benefit reduction for those who wish to retire early at a given age, which might encourage some to attempt collecting DI instead of the further reduced early retirement benefits. Recent research indicates that over 20 percent of early Social Security retirees have health problems that impair their ability to work, implying that early retirement therefore serves as an unofficial disability programme for older adults (Leonesio et al., 2000). However, this research also estimates that a majority of these impaired early retirees have not recently worked and, as a result, are not eligible for SSDI. This is particularly true of women. A recent study explored the possible consequences for disability benefit demand of raising the retirement ages (Panis et al., 2002). The researchers estimate that raising the ERA would push some workers who plan to retire early to apply for and receive DI instead, thereby resulting in no savings for the Social Security programme. Raising the FRA is also estimated to cause some movement towards DI, but not enough to outweigh the savings to the Social Security programme, which are estimated at five percent of lifetime Social Security payments for every year the FRA is raised.

Current projections by SSA actuaries accept these conclusions and assume that the rising FRA will, by reducing the benefit from early retirement, induce greater numbers of older adults to apply for and receive DI benefits (Motsiopoulos and Zayatz, 2001).

Reintegration efforts

Rehabilitation and reintegration into the work force have been central to the SSDI programme since its creation in 1956. The initial legislation required that applicants for disability benefits be referred for vocational rehabilitation (VR) services. The SSI programme was also designed to provide opportunities for those able to work. Over the past two decades, emphasis on returning disabled beneficiaries to work has increased, and both programmes have been modified to increase work incentives and provide employment support.

Trial work period

Currently SSDI beneficiaries may work and receive a full benefit for a total of 9 months, regardless of earnings level during the trial work period (TWP), as long as the disabling impairment continues. Any month within a rolling period of 60 consecutive months in which a beneficiary earns at least \$590 (for 2005) counts as a trial work month. When an individual's benefits are ceased due to earnings at the SGA level following the TWP, he or she moves into the extended period of eligibility. This is a 36-consecutive-month period during which benefits will automatically be reinstated for any month in which earnings fall below the SGA level and the individual continues to have a disabling impairment. Since 1980, SSI recipients have been able to earn above SGA and remain eligible for reduced cash benefits; even when cash benefits stop due to earnings, Medicaid coverage continues.

Income exclusions

SSDI and SSI beneficiaries may deduct certain impairment-related work expenses from their countable income. Qualified expenses include those that enable the individual to work, such as attendant care services performed at work, medical devices, or special transportation needs. These exclusions are deducted from the gross earnings of SSDI beneficiaries when determining if countable earnings constitute performance of SGA. For SSI, excluding such expenses reduces countable income and results in a higher benefit. SSI also allows people to exclude certain income and resources in a Plan for Achieving Self Support (PASS) in order to meet an employment-related goal. The earnings exclusion is further increased for SSI recipients participating in educational programmes. In 2005, up to \$1,410 per month (with an annual maximum of \$5,670) of earnings may be excluded from income counted against benefits for those who regularly attend school.

The "Ticket"

The Ticket to Work and Work Incentives Improvement Act of 1999 further expands the work incentives available to people with disabilities. In 2002, SSDI and SSI disability beneficiaries began receiving vouchers (called "Tickets") that may be used to obtain vocational rehabilitation and other employment services from an approved

provider of their choice. The law also requires that the SSA establish community-based benefits planning assistance and outreach programmes to provide information on work incentives and allow disability beneficiaries to make informed choices about employment. Prior to the Ticket initiative, fear that a medical review triggered by work activity would result in termination of benefits had long been cited as a disincentive to work. Under the Ticket to Work initiative, any individual who is using a Ticket is exempted from regularly scheduled medical reviews.

Opportunity for benefit reinstatement

Prior to 2001, an SSDI beneficiary whose benefits terminated because of work had to file a new application after the extended period of eligibility expired, but the Ticket to Work law now provides expedited reinstatement of benefits. Starting in 2001, individuals whose prior entitlement to disability and health care benefits have been terminated as a result of earnings may request reinstatement of benefits without filing a new application if they are unable to continue working on account of their medical condition. In determining eligibility for benefits, SSA will look at whether the impairment or condition has improved, rather than make a new determination of disability. An individual may receive provisional benefits for up to 6 months while a decision is being made.

Availability of health care benefits for people who work

SSDI and SSI beneficiaries who lose eligibility for cash benefits because of their earnings may continue to receive health insurance benefits from Medicaid and Medicare. Prior to the Ticket to Work, SSDI beneficiaries were eligible to receive at least 39 consecutive months of hospital and medical insurance after a trial work period. The Ticket to Work law increased this time to eight and a half years for most SSDI beneficiaries who work. After this premium-free Medicare coverage ends, some people who have returned to work may buy continued Medicare coverage, as long as they remain medically disabled. Also, some disabled workers with limited income and resources may qualify for a programme that helps pay monthly Medicare premiums.

SSI beneficiaries whose earnings make them ineligible to receive a cash benefit may qualify for continued Medicaid coverage, as long as they are still disabled, meet all other eligibility rules, including the resource test, and need Medicaid in order to work. About 71,000 disabled SSI beneficiaries qualified for extended Medicaid coverage in September 2003 (Social Security Administration, 2003b). In addition, states have the option of providing Medicaid to working people with disabilities whose earnings are too high for them to qualify for Medicaid under the state's existing rules, and may also permit working individuals with income above 250 percent of the federal poverty level (roughly \$23,000 per year for a single individual in 2004) to purchase Medicaid coverage.

Results of reintegration efforts

It is difficult to track return to work by SSDI beneficiaries using administrative data, but it appears that the rate of termination for return to work has remained relatively constant over the period under study at about 0.5 percent of SSDI beneficiaries. In 2002, for example, approximately 0.5 percent of DI beneficiaries left the rolls because of work activity and an additional 0.5 percent had their benefits suspended due to work (Social Security Administration 2003). The number of persons beginning a trial work period has actually declined in recent years, dropping from about 16,000 in 1997 to 7,200 in 2002 (Social Security Administration, 2003a).¹⁹

Work by SSI recipients can be tracked because SSI benefits are reduced by \$1 for each \$2 of earnings over \$65 per month. While the number of working SSI recipients remains low (8 percent of all disabled recipients age 18-64), it has increased gradually from 3.4 percent in 1976 (Social Security Administration, 2003b). In Fiscal Year 2002, the Social Security Administration reimbursed state vocational rehabilitation agencies and alternate providers for services that helped 10,521 DI and SSI beneficiaries work at SGA for at least nine months.

Data tracking of early implementation of the Ticket to Work programme suggests that this programme will not result in a significant number of DI and SSI recipients returning to work. As of November 2004, 10,139,908 Tickets had been issued (MAXIMUS, 2004). However, only 72,824 Tickets (0.72 percent) had been assigned by a recipient to an employment services network (6,548 Tickets) or vocational rehabilitation agency (66,276 Tickets). Of the 66,276 Tickets assigned to a vocational rehabilitation agency, 25,462 were from prior clients of the same vocational rehabilitation agency.

Conclusion: Policy and the interpretation of disability in the United States

Like other countries, the United States has experienced substantial growth in disability benefit receipt in recent years. This development appears to be the product of factors influencing both the demand for disability benefits and changes in the supply of benefits. To date, the policy response has been modest, focusing on marginal changes in procedures, incentives and work support. Nevertheless, the growth in receipt is receiving increased political attention; among other things, it has raised issues about the criteria used for defining qualifying disabilities.

The current U.S. definition requires that the person be "totally and permanently disabled," and unable to engage in any type of substantial gainful activity. That definition worked reasonably well during the early years of the DI programme, when only disabled workers age 50 or older could qualify and the presumption was that DI was a

19. Recent changes to administrative processes should improve data on SSDI work activity in the future.

door to early retirement. Extending eligibility to those under age 50 and defining the minimum duration for a finding of disability as 12 months moved the programme beyond the concept of an early retirement programme for older disabled workers. With these changes and the resulting increases in the number of persons receiving benefits, finding ways to return disabled persons to work gained more significance as a programme objective. However, the definition of disability is viewed by many as an impediment to assisting disabled persons in returning to work because of the confusing and somewhat contradictory messages given to those seeking help. On the one hand, a disability benefit applicant is expected to prove that his or her medical condition is so severe that it results in near total inability to work. But once eligibility is established and benefits commence, the focus shifts, at least in principle, to providing financial incentives and the Ticket to Work. For some it is possible that the necessity of establishing incapacity for "Substantial Gainful Activity" actually diminishes the chances for regaining it in the future.

The second issue is whether the criteria for determining disability address the changing world of work. Objective criteria exist for determining whether a person with physical limitations can perform the requirements of his or her past work or other work. However during the past several decades, jobs requiring physical exertion or the performance of repetitive, routine tasks have declined dramatically as a share of all employment. For those applicants with non-physical impairments such as mental illness, an individualized assessment of the person's abilities is often needed to determine what, if any, jobs the person is still able to perform. Consequently, the process today calls for a more resource-intensive and subjective assessment than was true in years past. This presents a greater challenge to programme administrators.

A related question is whether the definition and criteria for determining disability should change in response to medical and technological advances (Social Security Advisory Board, 2003). SSA has made changes to rules for evaluating certain medical conditions to reflect advances in diagnostic testing and medical treatment. However, less has changed in response to improvements in vocational rehabilitation and the availability of new or improved assistive devices. Should work enablers be a consideration in determining a person's initial eligibility for disability benefits? Are such individualized assessments workable or cost-effective in a mass adjudication system?

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Disability insurance and work incentives in an evolving workforce: The case of Israel

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The General Disability Benefit scheme is the second largest scheme, from the point of view of expenditure, operated by the National Insurance Institute of Israel (NII).

This scheme is a universal and contributory one: in its foundation, special emphasis was placed on the extension of coverage to the non-working population, as well as on the provision of benefits on a universal, although flat-rate, basis, guaranteeing a minimum subsistence level (rather than earnings-related). Income distribution considerations played a crucial role, at the expense of insurance principles (Roter and Avineri, 1974; Doron and Kremer, 1992).

Access to the benefit is quite strict: its earning capacity test is based on "all occupation criteria" and the medical impairment threshold is rather high.

The short-term benefit — sick pay — is the responsibility of employers and is administered separately from the NII disability benefit. The employer has no role in rehabilitation efforts. Rehabilitation services are provided by the NII, usually after the degree of medical impairment is determined. Therefore interventions are quite late.

Combinations of work and partial benefit are possible, leaving some income from work disregarded in the income test for the benefit. However, work incentives are quite limited, as there are only three levels of partial benefits (with no continuity among them), and the lowest level is 60 percent of full benefit.

Current social policy aims towards greater integration into the labour market, but at this point in time the emphasis of this policy is more on income support beneficiaries. Regarding disability benefit recipients, the main concern is to enhance work incentives embodied in the disability benefit structure. Policy-makers face not only the challenge of encouraging disability benefit recipients to work more, by reducing the benefit trap or by introducing new financial incentives (such as refundable tax credits to low-wage earners, being presently discussed), but also the task of creating more jobs, particularly for low-skilled workers. This policy should be accompanied by improving the rehabilitation process, mainly its timing.

Policy context and description of disability programmes

General background

The NII operates most of the social security programmes in Israel, including a variety of programmes for the disabled. The main programme for the disabled is under the General Disability Law, enacted in 1970 and implemented as of 1974. Previously, only a small fraction of the civilian population was covered by some form of disability programme or insurance.

The General Disability Law covers the entire population and provides a basic benefit for minimum subsistence, based primarily on earning capacity but with a threshold defined according to the degree of medical impairment.

Before describing in detail the features of the General Disability programme, the subject of this chapter, we will briefly discuss the other disability benefit programmes in Israel as well as related programmes that supplement or substitute the General Disability programme.

Other disability and related programmes

Work Injury Insurance (1954) provides both short and long-term benefits for employees and the self-employed who are injured during and as a result of work. Both types of benefits are based on the principle of compensation for damage. Their rates are quite generous (75 percent of previous earnings), they are not subject to income tests and working does not rule out entitlement.

Accident Injury Insurance (1981) covers all residents aged 18-60/65 who suffered a sudden occurrence in which an outside factor caused physical injury and a resulting loss of ability to function. The benefit, which is earnings-related, is paid only if there is no eligibility for any other payment.

Non-insurance programmes that compensate disabled individuals are provided under the **War Casualties Law** (1959), operated by the Ministry of Defense, and the **Hostile Action Casualties Law** (1956, 1970), operated by the NII.

Unemployment benefits (1973) are granted to unemployed individuals who worked for at least 6 out of 12 months or 9 out of 18 months before becoming unemployed (since 2002, the qualifying period is 12 out of 18 months). Unemployed persons willing and able to work full-time, for whom the employment service cannot find jobs, are entitled to unemployment benefits for 50-175 days, according to their age and number of dependents.

Income Support (1982) is administered by the NII and covers a broad and primarily residual population in various forms of economic and social distress not adequately addressed by other NII programmes. The income support benefit provides a minimum subsistence income to eligible families. Eligibility is determined by a family means test and is usually contingent on an employment test for both spouses. The

benefit is provided at two levels: the regular rate for the first two years of eligibility and to those under age 46, and the increased rate (25 percent higher than the regular rate) for long-term recipients. Until 2002, the increased rate of the income support benefit was very close to that of the basic General Disability benefit.

The above benefits are supplemented by workplace based programmes, namely, short-term sick pay (provided, financed and administered by employers) and occupational pension plans.

Sick pay in Israel is not provided by a public authority and is not centralized. Responsibility for sick pay lies with employers, some (but not all) of whom insure themselves against this risk with semi-public or private insurance funds. The maximum cumulative sick pay period, as stipulated by law, is 90 days. Collective agreements applying primarily to the public sector may extend these rights. The pay amounts to 75 percent of the wages that the worker would have received had he continued to work.

Occupational pension plans insure employees against the risks of old age, death and disability; they are anchored in collective or individual agreements and in a state law that guarantees budgetary pensions to civil servants. These plans constitute the second tier of Israel's pension system, supplementing the basic NII benefits. In contrast to the almost universal NII benefits, coverage of occupational pensions is partial.

There is no **quota** for employment of disabled workers in Israel.

Main features of the General Disability Benefit programme

Israel's General Disability programme is a contributory one and it covers all residents (including the self employed and housewives) from age 18 until the age of entitlement to old-age benefits (60 for women and 65 for men).¹ It offers the following benefits: general disability benefit, attendance allowance, mobility allowance and vocational rehabilitation.

Who is eligible for general disability benefit?

The general disability benefit is provided to persons who, due to a physical, mental, or emotional disability resulting from illness, accident, or birth defect:

- have been diagnosed with a medical disability of at least 40 percent (50 percent for housewives);
- are unable to earn a living from work² or whose earning capacity has been reduced by at least 50 percent as a result of their disability. Housewives are eligible only if their ability to manage their household has been reduced by at least 50 percent as a result of disability.

1. The plan also includes payment of benefits to families with disabled children.

2. Disabled persons whose wages are equivalent to or lower than 25 percent of the average wage as defined in the National Insurance Law are considered unable to earn a living.

Medical disability is assessed by a medical committee that confirms the medical impairments.

Reduced earning capacity is determined according to the effects of the medical impairments on the ability to work and earn a livelihood at one's previous occupation or *any* other occupation. Earning capacity is based not only on actual ability to work but also takes into account work skills and environmental conditions, such as local unemployment rates. Inability to earn a living is determined by *claim officers*, based on the expert opinions of the NII physician and rehabilitation officer.

In determining the extent to which earning capacity has been reduced, differentiation is made between disabled persons who worked prior to the occurrence of their disability and those who did not.

Persons who worked before incurring disability. Reduction in earning capacity is generally determined by comparing earnings before and after the disability was incurred. The maximum earnings taken into account for the former figure is three times the average wage, so that an individual who worked before becoming disabled and who currently earns 150 percent or more of the average wage would not be eligible for a disability benefit.

Persons who did not work before incurring disability are credited with earnings according to three levels of education, set at 75 percent, 90 percent and 110 percent of the average wage. Considering the criterion demanding loss of at least 50 percent of earning capacity, such persons will be eligible for a disability benefit only if their incomes do not exceed 37.5 percent, 45 percent or 55 percent of the average wage respectively.

Earning capacity loss and eligibility for benefits

The full disability benefit is paid only if earning capacity has been reduced by 75 percent or more. If earning capacity has been reduced by 50-74 percent, partial disability benefits (60 percent, 65 percent or 74 percent) are paid. Table 10.1 shows the relationship between the benefit level (full or partial) and earnings after the onset of disability, according to employment status (working or non-working), earnings prior to the onset of disability, and the education level of those who did not work previously. The problem with this benefit structure is that once earning capacity loss has been determined, earning an additional shekel beyond the designated ceiling rules out eligibility for benefit altogether.

Benefit level and other income test parameters

The full benefit for a single person is equivalent to 26.7 percent of the average wage. The benefit may be supplemented by a dependent's increment of 12 percent of the average wage for the beneficiary's spouse and 10 percent for each of the first two children. Since 1995, another 7 percent of the average wage is added to the total benefit. Until 2003, benefits were adjusted according to changes in the average wage.

Table 10.1 Earning capacity and benefit eligibility

<i>Income from work after incurring disability (percent of average wage)</i>	<i>Full or partial benefit</i>	<i>Employment/education before incurring disability</i>
Up to 25 percent	Full	All types of disabled
25-37.5 percent		No matriculation diploma; did not work or earned less than 75 percent of the average wage before incurring disability
25-45 percent	Partial relative to reduction in earning capacity	Matriculation diploma; did not work or earned less than 90 percent of the average wage before incurring disability
25-55 percent		Higher education; did not work or earned less than 110 percent of the average wage before incurring disability
37.5-150 percent	Full or partial	Earned between 75 percent (90 percent or 110 percent, according to education) and 300 percent of the average wage
45-150 percent		
55-150 percent		

Besides the reduced earning capacity test, calculation of the level of the general disability benefit and eligibility for it also takes other sources of income into account, such as occupational pension and earnings of spouse.

Waiting period and eligibility reassessment

Eligibility for a general disability benefit requires a waiting period of 90 days after the determining date (the date on which the applicant became disabled). Claims may be submitted retroactively for 36 months for insured persons and 12 months for housewives.

Most beneficiaries receive benefits permanently and there is no reassessment of eligibility, except for new applicants whose medical condition is diagnosed as reversible or

who appear capable of rehabilitation. Such persons (who constitute slightly more than half of all new applicants) receive benefits for a defined temporary period, following which they are summoned for reassessment of their eligibility. This screening procedure is responsible for most exits from the benefit system not due to old age or death.

Attendance and mobility allowances

Disabled persons who are dependent on the help of others for the performance of daily functions, or are in need of constant attendance or supervision, are entitled to attendance allowance if they receive a general disability benefit and have at least a 60 percent medical disability, or if they do not receive a benefit and their medical disability is 75 percent or higher. The allowance is paid in addition to the disability benefit. Those who become eligible for old-age benefit may continue to receive the attendance allowance, unless they choose to receive a long-term care benefit.

A disabled person with a mobility limitation is entitled to mobility allowance. This benefit includes a standing loan to cover the (very high Israeli) taxes on purchase of a car — as well as purchase of automobile accessories needed due to his disability — and a monthly allowance to cover the expenses of maintaining the car. Entitlement to mobility allowance is not conditional on receiving a general disability benefit.

Vocational rehabilitation

Disabled persons (except disabled members of the Israeli Defense Force, who receive their rehabilitation services from the Ministry of Defense) are entitled to vocational rehabilitation services — including diagnosis, vocational training, workplace placement, accommodations and accessibility, and the coverage of all rehabilitation-related expenses — from NII local branches dispersed throughout the country. Eligible for these services are the work-disabled with a medical impairment of 10 percent or over, the general disabled and those disabled as a result of hostile actions with an impairment of 20 percent or over. Since eligibility for rehabilitation requires a lower disability threshold than the general disability benefit (40 percent), mildly disabled persons should theoretically be able to apply directly to the Rehabilitation Department. However, because medical impairment is determined by the benefit system, the procedure is such that persons first apply to the NII General Disability Insurance Branch for benefit, and only after medical impairment is determined are they referred to the Rehabilitation Department. Under the Israeli administrative procedure, unlike those of some European countries, rehabilitation is usually preceded by the benefit. Even so, under law, failure to cooperate with the rehabilitation authorities may adversely affect eligibility for benefits. In practice, however, no disabled person has ever been compelled to participate in a rehabilitation programme.

Under the Israeli legislative system, the income of rehabilitated individuals is based on the disability benefit; there is no "rehabilitation allowance." However, a disabled person in a full rehabilitation programme (at least 20 hours of morning study a week) who would not otherwise be eligible for a full General Disability benefit is entitled to

an upgrade to the full benefit level during the rehabilitation period, with the increment (in addition to what he would have received had he not been in rehabilitation) considered a "subsistence allowance."

Interchangeability between General Disability benefits and other benefits

The National Insurance Law does not allow the payment of more than one type of disability benefit for the same incident, even if entitlement is due from a non-NII programme. In such cases the claimant must choose only one type of benefit. For example, a worker who becomes disabled due to work injury can choose to receive his or her benefits from one of two disability benefit programmes: the Work Injury programme or the General Disability programme. In practice, however, the disabled worker is likely to choose the work injury benefit, which usually provides higher wage replacement and is not subject to an income test. Similarly, a person receiving a disability benefit cannot receive sick pay, survivors', or old-age benefits.

In practice, unemployment benefits are not a substitute for the disability benefit since entitlement to the former is conditional on being suitable and ready for full work. In any case, its duration is quite short and its wage replacement level for medium and high earners is rather low. However, a disabled person who received a disability benefit while working may be entitled to an unemployment benefit as well.

The income support benefit constitutes the most immediate alternative to the disability benefit for persons of poor health who do not meet the qualifying conditions for the latter. However, eligibility criteria for income support benefit are very stringent in Israel and include a family income test and mandatory job seeking for both claimant and spouse. Also, car ownership rules out eligibility for benefit. General disability recipients whose benefit is partial may be entitled to a supplementary benefit from the income support programme.

Another possible wage replacement for a disabled worker is the early occupational pension. If its rate is low, it can be supplemented by a general disability benefit (although the pension is taken into account in the income test) or by an income support benefit.

Appendix A presents the main features of the programmes that may substitute for or supplement the general disability benefit.

Various related bonuses are provided to recipients who are entitled to the full general disability benefit or to an income support benefit, without an additional income test. The principal such bonuses offered in Israel are housing assistance for those living in rented or public housing, discounts on payments of municipal taxes and services such as health care, public transportation and day care for children. Working persons and families are eligible for some of these types of assistance, subject to an income test.

Changes in the law and current debate

From the introduction of the General Disability Law until the end of the 1990s, only a few minor changes were introduced. In contrast to recent developments in most other Western countries, all these changes expanded entitlement or raised the benefit level. The most significant amendment was an increase in the basic benefit by 7 percent in 1995, as part of government efforts to reduce poverty. Another amendment worth noting is the shortening of the minimum period of residence in Israel from 24 to 12 months in 1999 (entitling more new immigrants to disability benefit).

In late 1999 and again in early 2002, organizations of disabled individuals led to two very long sit-in strikes, extensively covered by the media. An agreement between these organizations and the government resulted in a significant improvement in benefit levels and in the expansion of rights, especially to the most severely disabled. The major amendments were as follows:

- Introduction of a supplementary benefit for severely disabled individuals with a medical disability degree of at least 50 percent and a degree of earning incapacity of at least 75 percent. The level of this benefit increases with medical impairment.
- Provision of both attendance and mobility allowances in addition to disability benefit to disabled persons with 100 percent mobility limitation and to the wheelchair-bound.
- An increase in the level of attendance allowance for housewives and in mobility allowance for the non-working disabled.
- Introduction of an additional type of attendance allowance for disabled persons limited in most of their daily functions.

One of the most important results of the agreement was the establishment of a special commission to examine means by which work incentives could be enhanced through changes in the benefit structure. The commission, which is still deliberating, is giving particular attention to the earning incapacity test as a criterion for determining entitlement to benefit as well as to the income test parameters — especially disregarded earnings and the rate at which the benefit should decline with earnings.

In contrast to these improvements, in 2002-2003 the government adopted a very strict economic policy that included deep cuts in NII allowances. Disability benefits, like most other NII benefits, will not be adjusted in line with the average wage or inflation until 2006, and thereafter will be indexed to price rises only. This new policy is in contrast with the approach prevailing since the mid 1970s, under which NII benefits were linked to changes in the average wage in order to maintain the relative standard of living of benefit recipients. The impact of the new policy on the level of benefits will be felt in the long run. The new economic policy also introduced deep cuts in income support benefit and tightened the eligibility conditions for unemployment benefits. Since the disability benefit has escaped these cuts for the time being, it has become much more generous and attractive than income support or unemployment benefit. Therefore it is most probable that additional pressure will be exerted on the disability benefit system in the near future.

Disability benefit programmes: Main trends

Recipients and expenditure

During the first decade of implementation of the General Disability Insurance Law (1974-1983), the system primarily absorbed persons whose disability occurred before the law came into effect. The number of disability benefit recipients increased more than tenfold between 1975-1983. Absorption of "previously" disabled persons was more or less exhausted by the mid 1980s, when 2.9 percent of the working age population (men aged 18-65 and women aged 18-60) received general disability benefits.

Table 10.2 General Disability Benefit (GDB) recipients — Veteran Israelis and immigrants, 1983-2003¹

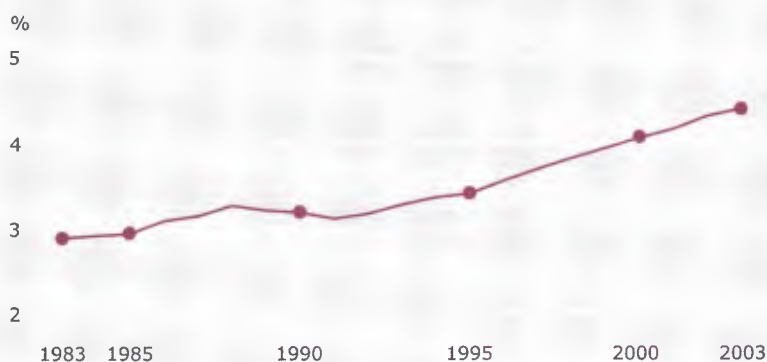
	Total		Veterans		Immigrants		Per-centage of total
	Number	Rate of change	Number	Rate of change	Number	Rate of change	
1983	60,781		60,781		—	—	—
1984	62,788	3.3	62,788	3.3	—	—	—
1985	63,798	1.6	63,798	1.6	—	—	—
1986	68,270	7.0	68,270	7.0	—	—	—
1987	70,386	3.1	70,386	3.1	—	—	—
1988	71,453	1.5	71,453	1.5	—	—	—
1989	74,295	4.0	74,295	4.0	—	—	—
1990	76,785	3.4	76,785	3.4	—	—	—
1991	80,004	4.2	80,004	4.2	—	—	—
1992	84,755	5.9	82,882	3.6	1,873	—	2.2
1993	91,136	7.5	86,114	3.9	5,022	168.1	5.5
1994	96,858	6.3	89,786	4.3	7,072	40.8	7.3
1995	101,582	4.9	92,898	3.5	8,684	22.8	8.5
1996	109,152	7.5	98,336	5.9	10,816	24.6	9.9
1997	116,498	6.7	103,512	5.3	12,986	20.1	11.1
1998	124,291	6.7	109,086	5.4	15,205	17.1	12.2
1999	132,464	6.6	114,528	5.0	17,936	18.0	13.5
2000	139,934	5.6	119,616	4.4	20,318	13.3	14.5
2001	147,179	5.2	124,818	4.3	22,361	10.1	15.2
2002	155,559	5.7	131,002	5.0	24,557	9.8	15.8
2003	161,549	3.9	135,356	3.3	26,193	6.7	16.2

¹ The data refer to December each year.

Table 10.2 presents the number of disability benefit recipients for the years 1983-2003 (December of each year) and shows the annual rate of increase. In contrast to the period up to 1983, the years 1986-1991 witnessed a remarkable slowdown in the growth of disability benefit recipients — to an annual average rate of 3 percent. The beginning of the 1990s was a turning point. During this decade, the number of disability benefit recipients rose by a higher annual rate: 6-7 percent. This trend began with mass immigration to Israel from the Former Soviet Union, but continued even after the absorption of the new immigrants into the benefit disability system. During the years 1990-1994, Israel absorbed approximately half a million immigrants, a number that grew to about one million by the end of the 1990s. The impact of immigration on the number of disability benefit recipients was felt only in 1992 and thereafter, since the immigrants were entitled to disability benefits only after two years from their arrival in Israel. By the end of 2003, 161,549 individuals were receiving general disability benefits,³ of whom about 16 percent were new immigrants. The growth in disability benefit recipients has been moderated since 2000; in 2000-2003 the number of disability benefit recipients grew, on average, by an annual rate of 5 percent.

Figure 10.1 presents the disability benefit reciprocity rate, defined as the number of benefit recipients as a percentage of the working age population. The reciprocity rate remained more or less stable during the years 1986-1992, at a level of 3.1-3.2 percent, but rose to 3.4 percent in 1995 and to 4.3 percent in 2002-2003.⁴

Figure 10.1 GDB reciprocity rate, 1983-2003
(per 100 of the working age population)



3. In 2003, about 23,500 disabled individuals received attendance allowance, 16,000 of these receiving it in addition to their general disability benefit. The number of mobility allowance recipients reached 22,300 in 2003, when most of them (75 percent) received disability benefits as well.

4. The source of the working age population data for all figures is the Israeli Central Bureau of Statistics (CBS, 1980-2002). Data by age is not available for 2003.

The growth in disability benefit recipients also characterizes the work injury programme. The number of recipients in this programme rose in 1983-2003 by an average annual rate of 5 percent, whereas the years after 1990 witnessed a higher rate of increase: 6.2 percent as compared to 3.6 percent during 1985-1990. In 2003, the number of work disability benefit recipients reached 25,600, of whom about 20 percent were above 65 (60 for women). It should be emphasized that elderly recipients are allowed to choose between the old age benefit and the work disability benefit. The work disability reciprocity rate (excluding elderly recipients) increased from 0.35 percent in 1985 to above 0.52 percent in 2002.⁵

It is worth noting that a considerable number of people who receive income support benefits suffer from health problems. According to a special survey conducted in 2000 (King et al., 2003), some 48 percent of income support beneficiaries or their spouses reported that health problems precluded them from working full or part-time. Their medical disability apparently fell short of the medical impairment threshold for the general disability benefit that is rather high in Israel (40 percent). Yet most could not be placed in work because of a combination of poor health and lack of job skills. 4.5 percent of income support recipients received a partial disability benefit. They were entitled to an income supplement because they were unemployed and not eligible for unemployment benefit.

Figure 10.2 GDB expenditure as a percentage of GDP, 1980-2003

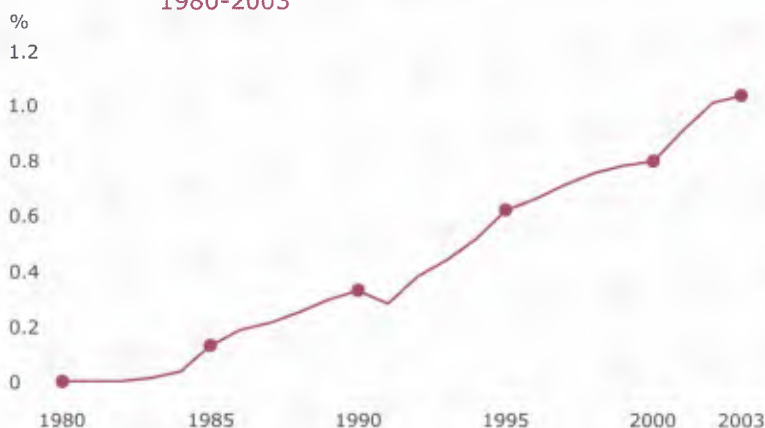


Figure 10.2 presents the trend in total general disability benefit payments as a percentage of GDP. The figure shows a steady rise over the last twenty years, from approximately 0.13 percent in the mid-1980s to 0.63 percent in the mid-1990s and

5. A further 50,000 war casualties and 2,400 hostile action beneficiaries received disability benefits in 2003 (Persons with Disabilities, 2003).

up to 1.03 percent in 2003.⁶ The share of all disability benefit payments out of total NII benefit payments was between 9-11 percent during 1980-2000, but rose to 13 percent during 2000-2003 as a result of the legislation enacted in 1999-2002.

Administrative costs involved in the payment of all disability benefits as a proportion of total disability benefit payments rose from 6.4 percent in 1985 to 7.2 percent in 1990, but declined steadily thereafter, down to 4.5 percent in 2003. Administrative expenditure on all disability benefits was 35 percent of all NII administrative expenditure in 2003, compared to 45 percent in 1985. The high share of disability administrative expenses is explained by the fact that determining entitlement for these benefits is a long and resource-consuming process which includes many tests and assessment procedures.

General Disability Benefit reciprocity rate by demographic and medical variables

The increase in the reciprocity rate over the last 20 years characterizes both men and women, as well as all age groups. Figure 10.3 shows the reciprocity rates for men aged 18-64 and 18-59 and for women aged 18-59. Over the period under study, reciprocity rates among men were higher than those for women. Since 1998, gender discrepancy has grown even wider: the reciprocity rate ratio of women to men (aged 18-59) declined from about 93 percent in 1990-1997 to about 89 percent in 2002. The lower reciprocity rates among women can mainly be attributed to the fact that the medical disability threshold for housewives is higher (50 percent compared to 40 percent for others). The proportion of women out of total recipients remained more or less stable (42-43 percent), and the share of housewives out of total women receiving disability benefits decreased slightly, from 12 to 10 percent, due to the growth in female labour force participation.

As expected, the reciprocity rate increased with age, and among men it was about 3.5 times higher at ages 60-64 than at ages 35-49 in 2003. Since the mid 1980s, the increase in the reciprocity rate has been more prominent in the 35-49 age group than in other age groups. While the reciprocity rate for the total benefit population grew by nearly 50 percent, it increased by almost 80 percent in the 35-49 age group. The reciprocity rate for the 18-34 age group increased by 45 percent, but by around 30 percent only in the above-50 age groups. These trends are presented in Figure 10.4.

A comparison of age-specific reciprocity rates between men and women reveals that in both genders, the highest increase occurred in the 35-49 age group, yet it was more prominent among males: the reciprocity rate ratio of women to men for the 35-49 age group was around 96-97 percent until 1996 and declined to 87 percent in 2002. The same trend was detected in the 18-34 age group, as the reciprocity rate

6. Total benefits paid by the Disability Insurance branch (including attendance and mobility allowances and expenditure on rehabilitation) amounted to 1.27 percent of the GDP in 2003 as compared to 0.17 percent in the middle of the 1980s, while expenditure on work disability benefits (including rehabilitation) paid by the Work Injury branch grew from 0.03 percent of GDP in 1985 to 0.36 percent in 2003.

ratio decreased almost continuously, from 88 percent in 1983 to 76 percent in 2002. The opposite trend was revealed in the 50-59 age groups and particularly in the 55-59 group, for which the reciprocity rate ratio of women to men rose steadily from 80 percent in 1983 to 94 percent in 2002.

Figure 10.3 Gender-specific GDB reciprocity rates, 1983-2002
(per 100 of the working age population in each group)

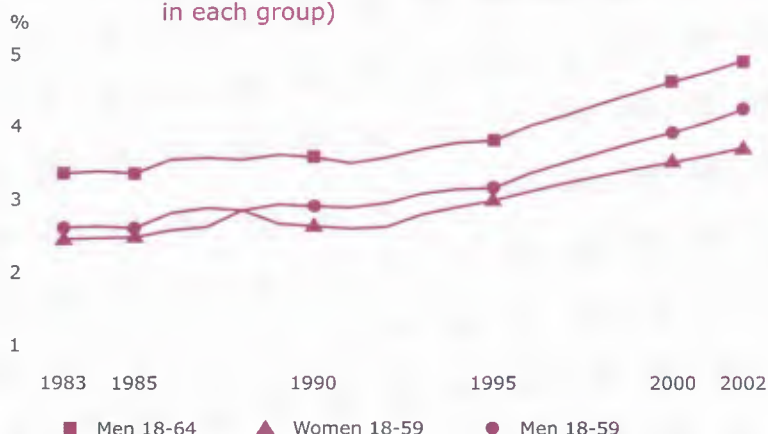
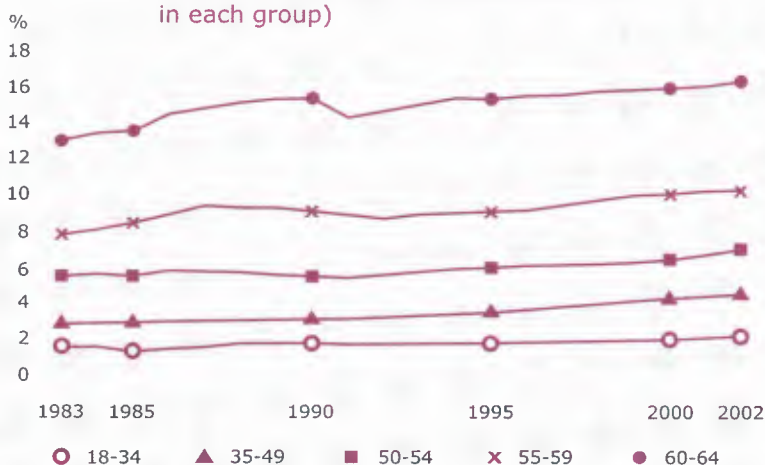
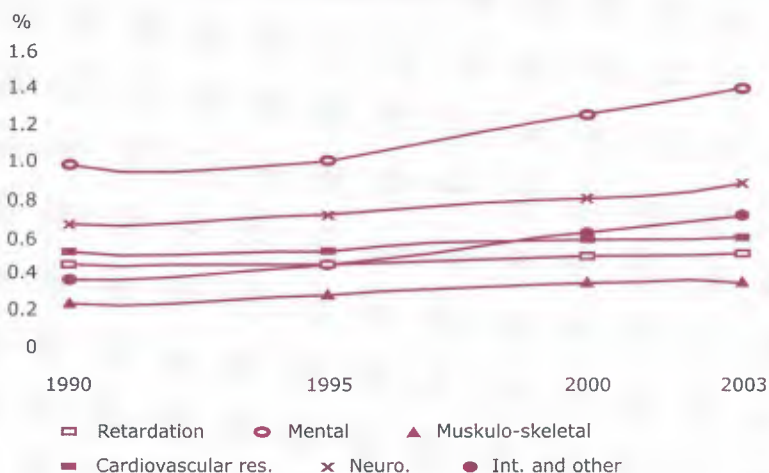


Figure 10.4 Age-specific GDB reciprocity rates, 1983-2002
(per 100 of the working age population in each group)



Data on medical impairment for all recipients are available only from 1990 (Figure 10.5). The recipients are classified into impairment groups according to their main impairment. As shown in the figure, the reciprocity rate for the "internal and other" impairment group, which includes mainly internal diseases (including sensory, skin, and other), doubled from 3.6 per 1000 of the working-age population in 1990 to 7.2 in 2002. The reciprocity rate for the mental impairment group grew by nearly 46 percent (from 9.5 to 13.9 per 1000) and by 33 percent (from 6.6 to 8.8 per 1000) for the neurological impairment group. In the other three impairment groups, the reciprocity rates rose to a much lesser extent.

Figure 10.5 GDB reciprocity rates by impairment, 1990-2003
(per 100 of the working age population)



Reciprocity rates by medical disability degree (6 categories) increased significantly for the three lower disability categories, particularly in the 40-49 medical disability degree group, but rose slightly or remained stable for the three higher categories. Over the entire period under study, most of the disability benefit recipients had lost their earning capacity by 75-100 percent and were therefore entitled to the full benefit, unless the benefit was reduced due to income. However, the rate of recipients with an earning capacity degree of 75 percent increased from 1.2 percent of the working-age population in 1990 to 2.8 percent in 2003. The percentage of those with an earning capacity degree of 100 percent decreased from 1.3 percent to 0.9 percent respectively. The rate of recipients who lost their earning capacity by 60 percent rose, while the rate of those who lost their earning capacity by 65 percent and 74 percent remained stable. Currently, most of the recipients receive a permanent benefit, and their share has been increasing since 1992. They constituted 4 percent of the working-age population in 2003, compared to 2.6 percent in 1990.

Analysis of inflow/outflow trends

Trends in inflow rates

New recipients are defined according to the date of benefit payment. Since detailed data on disability recipients are available only for December of each year, a new recipient is a disabled person who received benefit in December of a certain year, but not in December of the previous year. Individuals who were in the system, exited it

Table 10.3 Inflow to General Disability Benefit: Total and immigrants, 1984-2003

	<i>Total</i>		<i>Immigrants</i>		<i>Percentage of total recipients</i>
	<i>Number</i>	<i>Rate of change</i>	<i>Number</i>	<i>Rate of change</i>	
1984	8,166		—	—	—
1985	8,235	0.8	—	—	—
1986	11,280	37.0	—	—	—
1987	10,057	-10.8	—	—	—
1988	9,197	-8.6	—	—	—
1989	10,518	14.4	—	—	—
1990	10,229	-2.7	—	—	—
1991	10,537	3.0	—	—	—
1992	12,444	18.1	1,869	—	15.0
1993	14,392	15.7	3,396	81.7	23.6
1994	14,315	-0.5	2,699	-20.5	18.9
1995	14,377	0.4	2,575	-4.6	17.9
1996	17,003	18.3	3,186	23.7	18.7
1997	17,542	3.2	3,470	8.9	19.8
1998	18,470	5.3	3,740	7.8	20.2
1999	19,172	3.8	4,322	15.6	22.5
2000	19,500	1.7	4,354	0.7	22.3
2001	19,628	0.7	4,348	-0.1	22.2
2002	20,929	6.6	4,632	6.5	22.1
2003	19,456	-7.0	4,168	-10.0	21.4

and then re-entered, are regarded as new recipients in more than one year. The number of "returning" individuals, most of whom re-entered the system once, constitutes 8-10 percent of all new recipients. Those who exited the system are defined in a similar manner — persons who receive benefits in one year (December), but not in the following year.

Table 10.3 presents the number of new recipients in 1984-2003 for the entire population of disabled claimants, and separately for veterans and new immigrants. The number of new recipients more than doubled (2.4 times) during this period, and since 1992, new immigrants have constituted on average about 20 percent of new recipients. Figure 10.6 depicts the annual inflow rate of new recipients, where the inflow rate is defined as the number of new recipients per 1000 of the working age population. The figure shows that the inflow rate increased from 4.12 per thousand on average in 1984-1986⁷ to 5.8 in 2002, constituting a 40 percent rise. Most of the increase occurred in 1991-1996, while during 1997-2002 the inflow rate remained quite stable. It should be mentioned again that the working-age population increased in 1990-1992 due to mass immigration, but the new immigrants became entitled to disability benefit only from 1992. This explains why the inflow rate fluctuated, declining in 1990-1991 and rising in 1992-1993, before going down again in 1994-1995.

Figure 10.6 GDB inflow rate, 1984-2003
(per 1,000 of the working age population)



As shown in Figure 10.7, inflow rates among men were higher than among women over the entire period under study, which is also evident for the age span 18-59 (controlling for women's earlier retirement age). In addition, more or less the same trends emerged for both genders. Compared to the average inflow rate in 1984-1986, the

7. The exceptional figure for 1986 can be attributed to the introduction of a computerized system in 1985. Apparently, some of the new claims in 1985 were handled in 1986. Therefore we prefer to refer to the average figure for 1984-1986.

inflow rate in 2002 was higher by almost 50 percent for men aged 18-59 and for women. However, a difference between the 1992-1995 and the 1996-2002 periods was observed: in the former period, inflow rates for women increased faster than for men, while the opposite occurred in the latter period. From 1996, the gender gap widened, since the inflow rates for women remained stable in 1996-2001.

Figure 10.7 Gender-specific GDB inflow rates, 1984-2002
(per 1,000 of the working age population in each group)

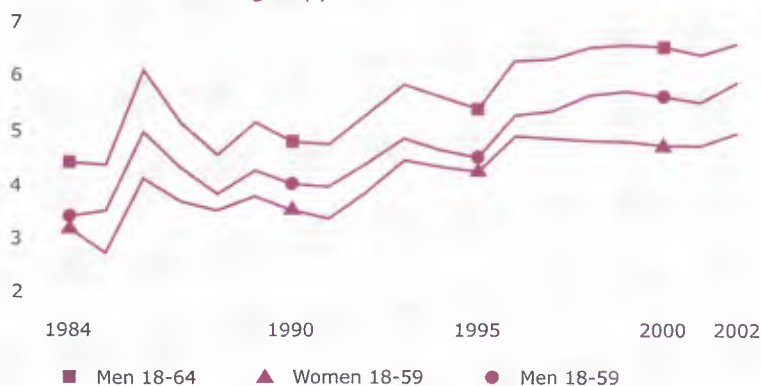
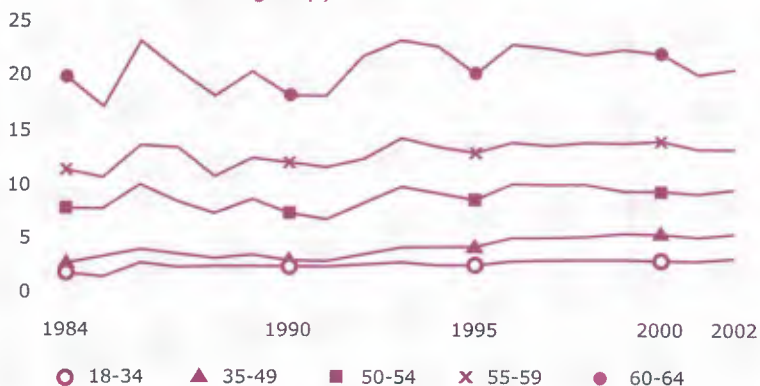


Figure 10.8 Age-specific GDB inflow rates, 1984-2002
(per 1,000 of the working age population in each group)



Examination of the age-specific inflow rates (Figure 10.8) reveals that during the entire period the inflow rates grew continuously and substantially for the two youngest age groups, but only moderately for ages 50-59. The rise in the inflow rate for the latter group occurred mostly until the mid 1990s, and thereafter has remained almost steady.

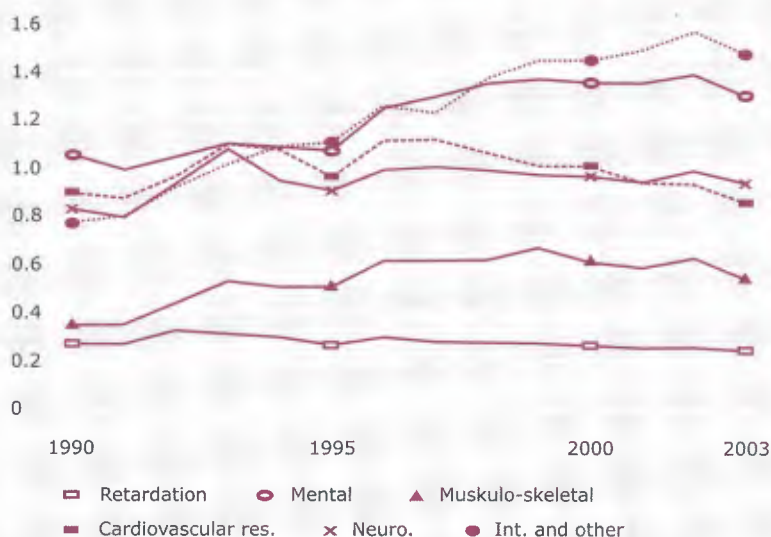
In general, trends in the age-specific inflow rates were the same for both genders. Table 10.4 presents the women to men inflow rate ratio for all age groups. Similarly to reciprocity rate ratios, the women to men inflow rate ratios were lower in the 18-34 and 55-59 age groups than in the middle-age groups over the entire period.

Table 10.4 Inflow rate ratio of women to men aged 18-59, by age group, 1984-2002

	<i>Total</i>	<i>18-34</i>	<i>35-49</i>	<i>50-54</i>	<i>55-59</i>
1984	93.2	84.5	103.2	97.2	75.7
1985	89.3	74.8	96.3	95.4	79.8
1986	82.4	78.8	92.6	80.7	67.3
1987	88.9	84.6	97.9	86.3	75.9
1988	97.3	102.4	99.8	91.4	72.0
1989	90.5	78.9	101.7	95.5	82.3
1990	89.2	82.5	100.2	91.5	76.8
1991	84.9	74.8	96.4	89.7	76.0
1992	88.8	76.8	103.2	93.8	77.2
1993	92.8	81.9	105.7	101.9	77.3
1994	93.9	83.1	105.3	99.7	80.8
1995	93.4	79.3	105.6	97.5	84.5
1996	92.6	79.3	102.1	104.9	80.9
1997	91.0	78.8	98.8	103.5	80.1
1998	85.0	71.4	92.5	96.5	76.3
1999	84.6	75.1	90.1	94.9	73.3
2000	83.4	77.4	85.3	93.0	72.6
2001	84.5	75.0	85.7	100.8	76.7
2002	84.7	74.3	90.9	90.4	79.2

The inflow rates by medical impairment, presented in Figure 10.9, indicate that the greatest increase occurred in the "internal and other" and "musculo-skeletal" groups. Since 1987, inflow rates have more than doubled in the former group and increased by 60 percent in the latter. The inflow rate of the mental impairment group rose by 25 percent (mostly since 1992), while inflow rates in the remaining impairment groups changed only slightly. In 2003, nearly 14.5 and 13 individuals per 10,000 of the working-age population began receiving disability benefits due to internal and other and mental impairments respectively.

Figure 10.9 GDB inflow rates by medical impairment, 1990-2003
(per 1,000 of the working age population)



The inflow rates of the two lowest medical disability degree groups (40-49 percent and 50-59 percent) and of the upper group (85-100 percent) increased almost continuously, but the inflow rates of the middle disability degree groups either remained stable or increased slightly. The most remarkable growth characterized the 40-49 percent group, for which the inflow rate nearly doubled between 1990-2003. Most of the new recipients had lost their earning capacity by 75-100 percent. Within this category, most had a 75 percent disability degree. The rate of recipients with a disability degree of 75-100 percent rose from 3.2 per 1,000 of the working age population in 1990 to 4.5 in 2002, while the inflow rates of the other groups did not change.

The proportion of new disability benefit recipients that receives temporary benefits (at the time of entry) out of total new recipients rose from 41 percent in 1985 to

55 percent in 1991 and thereafter stabilized at a level of 53-54 percent. The rate of new recipients with temporary benefits rose from 2.2 per 1,000 of the working age population in 1990 to 2.5 in 2002.

Trends in outflow rates

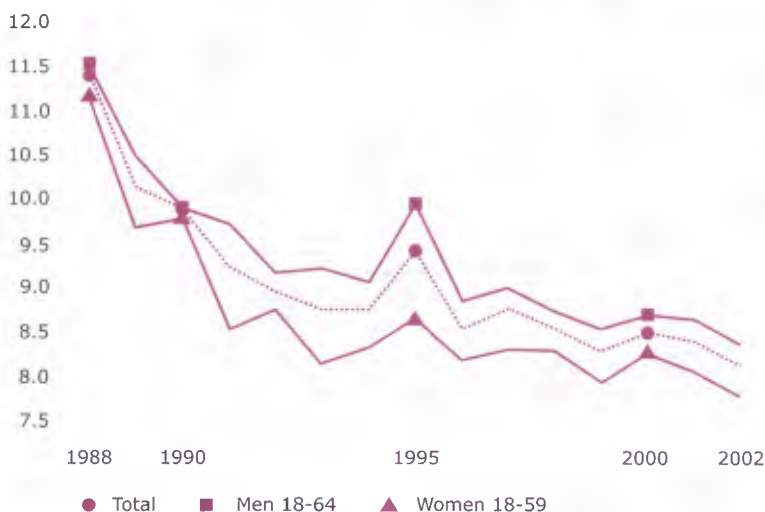
Table 10.5 presents the number of disability benefit recipients who exited the system in 1988-2003, and the distribution of exits by reason for exit. The administrative data enable us to identify three reasons for exit: death, entitlement to old-age benefit (which replaces the disability benefit) and termination of entitlement due to health improvement, work resumption, or denial of benefit following an increase in income. The percentage of recipients who ceased to receive benefits due to termination of entitlement declined from 34 percent of all exits in 1988 to 25 percent in 1992, but increased again gradually to 35 percent in 2002. The opposite trend was observed in the share of exits due to entitlement to old-age benefit, whereas the share of exits due to death was more or less stable at an average rate of 26 percent.

Table 10.5 DB recipients outflow, by reason for exit, 1988-2002

	<i>Total</i>	<i>Percent</i>			
		<i>Total</i>	<i>Death</i>	<i>Age</i>	<i>Other</i>
1988	7,905	100.0	24.2	41.9	33.9
1989	7,392	100.0	24.3	46.0	29.7
1990	7,456	100.0	27.1	47.2	25.7
1991	7,182	100.0	27.1	46.1	26.8
1992	7,459	100.0	28.5	46.3	25.2
1993	7,841	100.0	27.8	45.5	26.7
1994	8,361	100.0	26.5	45.4	28.1
1995	9,434	100.0	25.8	43.7	30.5
1996	9,201	100.0	27.3	43.5	29.2
1997	10,023	100.0	26.3	43.3	30.4
1998	10,462	100.0	26.1	42.0	31.9
1999	10,786	100.0	26.1	42.1	31.8
2000	11,713	100.0	24.6	40.7	34.7
2001	12,133	100.0	25.0	39.2	35.8
2002	12,636	100.0	25.0	39.9	35.1

The outflow rates (defined as the percentage of exits due to all reasons, out of current recipient stock in the same year) declined throughout the designated period, primarily between 1988 and 1991, dropping from 11 percent in 1988 to 9 percent in 1993 and to 8 percent in 2002 (Figure 10.10). Outflow among new immigrants was stable (10 percent) although slightly higher than that among veteran Israelis.

Figure 10.10 GDB outflow rates (total and gender-specific), 1988-2002 (per 100 of the total DB recipients)



Outflow rates were only slightly higher among men aged 18-64 than among women of these ages, and more or less the same for all age groups, except for the 55-59 and 60-64 age groups for women and men respectively. 25-27 percent of the recipients in these age groups exited the system, mostly because they became eligible for old-age benefit. No significant difference was observed in the age-specific outflow rates between men and women. Outflow rates by medical impairment indicate that exits were much more frequent among the internal and other, the cardio-vascular and respiratory, and the musculo-skeletal impairment groups than among the mental and the neurological impairment groups. Moreover, outflow rates in all impairment groups decreased over time, albeit only slightly.

Outflow rates due to termination of entitlement were negligible, declining from 3.7 percent in 1988 to 2.2 percent in 1992 and rising to 2.8 percent in 2003. They were higher among the youngest age groups. 90 percent of those who exited due to termination of entitlement had a temporary benefit when they entered the system. In addition, outflow rates due to termination of entitlement increased only in the internal and other and the musculo-skeletal impairment groups.

Duration of stay in the benefit system

In order to examine duration of stay in the system, *new* recipients in each of the years 1988-1992 were tracked through the administrative system during a 10-year period. The most interesting finding is that the duration patterns remained more or less stable throughout the years 1988-1992:

- 15 percent of new recipients exited after the first year;
- 9-10 percent exited in the second year;
- 7-8 percent exited in the third year;
- 11 percent exited in the fourth or fifth year;
- 16-17 percent exited after 6-10 years;
- 40 percent continued to receive benefit after 10 years of duration in the system.

A follow-up after a 5-year period in the system for new recipients entering in 1993-1997 indicates the same findings.

Explaining trends in Disability Benefit reciprocity

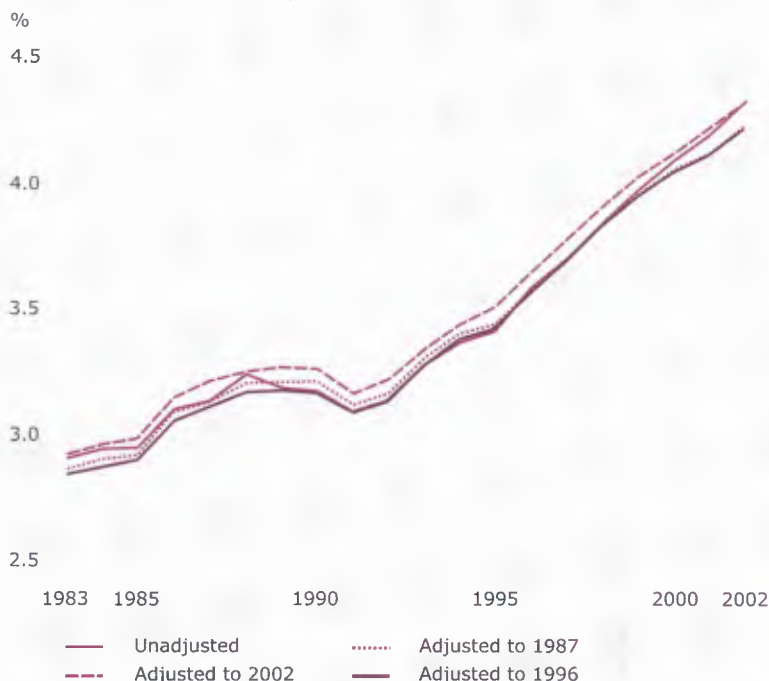
The effect of demographic changes

The changes over time in the disability benefit reciprocity rate (as well as in inflow and outflow rates) are affected by changes in the population's age and gender structures and by changes in the incidence of disability in each age or gender group. Although the population of Israel is relatively young, it has become older during the last two decades. The share of the 18-34 age group in the working age population has declined continuously, from 52.6 percent in the mid 1980s to 48.5 percent in 2002, whereas the share of the 35-49 age group first grew from 28.5 percent to 35 percent in 1996, declining gradually thereafter to 31.8 percent in 2002. The share of the 50-54 age group was 7-8 percent until 1992, and rose to 10 percent in 2002, whereas the share of the above-55 age group went down throughout the entire period.

To neutralize the effect of changes in the population age structure, we estimated the disability benefit reciprocity rates for a fixed age distribution (for 1987, 1996, and 2002). Figure 10.11 displays the relevant data, with and without age adjustment. The four curves (one curve unadjusted and three curves adjusted to a fixed age structure) nearly coincide, meaning that changes in the age structure of the population had no effect on the reciprocity rates. The same conclusion emerged for inflow rates.

Examining the effect of changes in the age structure of the working age population on the reciprocity rate separately for men and women leads to the same observation: changes in the age structure within each gender had no effect on the gender-specific reciprocity rate. Moreover, the gender structure has changed only slightly and has had no effect on the total reciprocity rate.

Figure 10.11 GDB reciprocity rates adjusted and unadjusted to population age structure in 1987, 1996 and 2002, 1983-2002



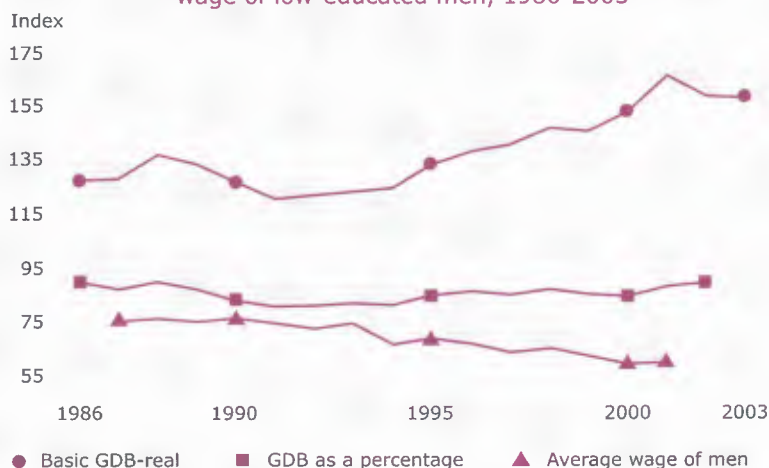
The conclusion is that the increase in the total reciprocity and inflow rates should be attributed to the rise in the incidence of disability rather than to changes in age or gender structures.

Another demographic development relates to the mass immigration into Israel. As described above, new immigrants were gradually absorbed into the General Disability programme, constituting 15.7 percent of total recipients (compared to 18 percent in the total working age population) in 2002. However, their share is much higher among the 50-54 and 60-64 age groups. The inflow rates of immigrants were higher than those of the total population, particularly in the years 1992-1998. Even in 2002, 7.5 per 1,000 working age immigrants entered the programme, compared to only 5.8 per 1,000 of the total working age population. On the other hand, the outflow rates of immigrants were to a certain extent higher, mainly because they were older than the veteran population. These differences, together with the fact that the duration of immigrants in the programme is still relatively short, explain why the reciprocity rate among immigrants is slightly lower than that of veteran Israelis.

The effect of changes in the labour market

The labour market in Israel has gone through deep structural changes in the past two decades. The shrinking of traditional and labour intensive industries and the parallel expansion of advanced industries, accompanied by the drastic rise in the number of foreign workers in Israel, has brought about a significant decline in the demand for low-skilled workers and a sharp fall in the low wage rate (Dahan, forthcoming). These developments resulted in a decrease in the labour force participation of men, especially of the low-skilled and older men. Even the labour force participation of low-skilled women declined, despite an increase in overall women's participation. Moreover, the Israeli economy has been going through a long recession since the late 1980s, which, except for a short break between 1993 and 1996, is still continuing, and is reflected in the expansion of unemployment. The groups that were discouraged out of the labour force were also those most hurt by the long-lasting and growing unemployment.

Figure 10.12 Basic GDB index in real terms and as a percentage of the average wage (1980=100) and average wage of low-educated men, 1986-2003*



* Men (aged 25-54) with up to 10 years of schooling, relative to the average wage in the economy.

The fall in the wage of low-educated workers, relative to the average wage in the economy, is important in this context, as a significant share of disability beneficiaries is low-educated. Data on the education and professional skills of disability beneficiaries are available only for 1998, from special survey findings (Gordon, 2003) which indicate that disability benefit recipients are characterized by a low level of education:

7 percent have no formal education, and another 51 percent have up to a high-school education without a matriculation diploma. Only 11 percent studied at an academic institution. In the total population, the respective percentages are 2 percent, 33 percent and 25 percent.

The deterioration in both the employment and wages of low-skilled workers most probably limited the employment opportunities of disabled persons and increased the attractiveness of receiving benefits as opposed to working at a low wage. This is illustrated in Figure 10.12, which shows that while the level of the disability benefits relative to the average wage remained more or less stable, the gap between the disability benefit in real terms and the average wage of low educated workers has widened in last decade.

The above trends in the labour market apparently explain the growth in the reciprocity and inflow rates as well as the decrease in the outflow rate, particularly among relatively young groups. It is worth mentioning, however, that the growing share of early retirees who retired with an occupational pension may have acted to reduce the adverse effect of labour market developments on the inflow rate of the oldest groups.

Rehabilitation and reintegration

Since 1997, the annual ratio between new rehabilitation participants and new general disability benefit recipients has been around 28-30 to 100 (Inbar, 2003). As explained earlier, these two populations are not identical: some of those eligible for rehabilitation are not entitled to disability benefits, and in any event, application for rehabilitation and referral for benefit need not take place in the same year. The median period of time between entering the benefit system and entering rehabilitation is two years, the benefit usually preceding the rehabilitation process.

5,500 new applicants began rehabilitation during 2003. The average monthly case-load of the Rehabilitation Department in 2003 was approximately 8,000 rehabilitees, while about 7,000 terminated treatment during this year.

The distribution of the stock of rehabilitees by type of rehabilitation programme has changed very little over time. Slightly over a fifth are engaged in vocational education, another 3-4 percent are trained to work in sheltered workshops, while the remainder receive other interventions, such as promotion of self-functioning or pre-training. The median stay in a rehabilitation programme is two years (Quarterly Statistics, NII, 1980-2002).

The efficiency of reintegration efforts can be measured by the proportion of rehabilitees reintegrated into the labour market, by the proportion of those exiting the benefit system, or both.

Nearly 60 percent of the rehabilitees who exited rehabilitation in 2003 had completed their rehabilitation programme; the remainder left before completing the programme. Nearly 48 percent of those who completed the programme were working at the time of completion, while most of those who left before completion were not

working. However, working did not necessarily mean exit from the disability benefit system: 73 percent of working rehabilitees remained in the benefit system, most of them continuing to receive the full benefit (Table 10.6).

Table 10.6 Rehabilitees who exited rehabilitation, by work and status of disability benefit on exit (percentages), 2003

	<i>Total</i>	<i>Working</i>	<i>Not working</i>	<i>Unknown</i>
Total	100.0	30.7	44.6	24.7
Ineligible	100.0	37.0	33.8	29.2
Partial benefit	100.0	31.8	40.4	27.8
Full benefit	100.0	28.3	49.3	22.4
Total	100.0	100.0	100.0	100.0
Ineligible	22.7	27.4	17.2	27.0
Partial benefit	13.1	13.5	11.8	14.8
Full benefit	64.2	59.1	70.9	58.3

Altogether, 23 percent of all rehabilitees who exited the rehabilitation process (including those who completed their programme and those who did not) also left the disability benefit system. Of these, 37 percent were working upon exit, compared to 28-32 percent working among those who stayed in the system.

These findings show that rehabilitation is more successful in getting the disabled into the labour market than it is in getting them out of the long-term benefit system. A possible explanation for this finding is that the rehabilitation process in Israel generally begins only after a claim is submitted for disability benefit, or in other words, quite some time after disability has been incurred, mostly even after becoming eligible for a benefit. Furthermore, many of those who undergo rehabilitation are severely disabled and with low labour market skills, which at most enables them to work part-time and/or in low-wage jobs.

In order to estimate the contribution of rehabilitation to exits from the benefit system, we examined benefit status twice: upon entry to and upon exit from rehabilitation. 15 percent of those who left rehabilitation in 2003 had not received benefit when they entered the process, and most of these remained out of the benefit system upon completing rehabilitation. For these it may be asserted that the rehabilitation process prevented them from entering the benefit system. 72 percent of those who exited rehabilitation had been eligible for the full disability benefit when they entered rehabilitation; of these, only 10 percent left the benefit system upon exiting the rehabilitation process (Table 10.7).

Table 10.7 **Rehabilitees who exited rehabilitation, by benefit status on entry to and exit from rehabilitation, 2003**

<i>Benefit status at entry into rehabilitation</i>	<i>Benefit status at exit from rehabilitation</i>			
	<i>Total</i>	<i>Ineligible</i>	<i>Partial</i>	<i>Full</i>
Total	100.0	22.7	13.1	64.2
Ineligible	100.0	92.6	2.8	4.6
Partial	100.0	12.3	75.5	12.3
Full	100.0	9.8	4.6	85.6

Conclusion

The Israeli General Disability scheme is contributory and universal, with a flat-rate benefit. Sickness benefit is the employer's responsibility, with no connection to the NII long-term disability benefit. The disability benefit reciprocity rate increased from about 3 percent of the working age population in the mid 1980s to 4.3 percent in 2002, an increase of about 45 percent. The increase was moderate in 1991-1995, and has been much greater since 1996. During the period under study, inflow rates rose by 40 percent, from 4.1 to 5.8 per 1,000 of the working-age population. Most of this increase occurred in 1991-1996, after which inflow rates remained relatively steady. The inflow rate trends were more or less the same for men and women until 1997. Thereafter, they grew among men but remained stable among women. The most prominent increase in inflow rates was observed in the 35-49 age group, especially among men, whereas in the older age groups the increase in inflow rates was greater among women. In addition, the relative share of new recipients with mild medical disability and with internal and musculo-skeletal impairments increased over time. Almost half of the new recipients entered the programme with a permanent benefit.

Outflow rates declined from 11 percent of the current stock of recipients in 1998 to 8 percent in 2002. Outflow rates due to termination of entitlement decreased from 3.7 percent to 2.8 percent. Analysis of the probability of exiting the system among new recipients shows that young persons are more likely to exit than are old persons, males more than females, new immigrants more than veteran Israelis, persons with temporary disability more than those with permanent disability, persons with mild disability more than those with severe disability, and persons having internal disorders more than those with other medical impairments.

The growth in the number of disability benefit recipients can be explained by several apparently inter-related developments: demographic (age structure and immigration), labour market, and the attractiveness of receiving benefits as compared to working at a low wage.

Although the population in Israel is relatively young, it has become older during the last two decades. As incidence of disability varies according to different age groups, changes in population structure are expected to affect the disability benefit reciprocity rate. After controlling for age, however, we found that changes in the age structure of the working age population exerted only a marginal effect on reciprocity and inflow rates.

The mass immigration during the 1990s, which brought around a million people to Israel in one decade, led to a prominent increase in benefit inflow and total reciprocity numbers as well as rates. However, although immigrants' inflow rates are higher than those of veterans, their share of total benefit recipients is still a little lower than their share in the working age population overall. The reason for this is probably their shorter duration in the benefit system and higher outflow rates due to old age.

Like most industrial countries, Israel has also witnessed a notable increase in the labour force participation of women. Yet, since housewives are entitled to disability benefit in Israel, there has been no change in their share of benefit recipients, and gender distribution did not change during the period under study.

In the last two decades, and particularly since 1990, the Israeli economy has been going through enormous structural changes, from traditional to human capital intensive and IT industries. During most of this period (except for 1993-1996), unemployment was relatively high. The result has been a profound decrease in demand for low-skilled workers which, in turn, has led to a deterioration in the wages of low-skilled workers. These developments have most probably limited the employment opportunities of disabled persons and increased the attractiveness of receiving benefits as opposed to working for low wages.

Rehabilitation usually follows claim and even award of disability benefit. In 2003, 60 percent of those who exited the rehabilitation process completed their rehabilitation programme. Out of these, 40 percent were working at the time of completion, but most — 73 percent — remained in the benefit system. Out of all those who exited rehabilitation in 2003, 23 percent exited the benefit system, and only 37 percent of these were working at the time of exiting.

These findings can be summarized by stating that the rehabilitation system in Israel is more successful in getting beneficiaries to work than in getting them out of the benefit system. One reason for this may be that interventions come quite some time after disability has been incurred, and people who are referred to rehabilitation — usually after they have claimed benefit — have relatively severe impairments. Another reason may have to do with the structure of the benefit and its related income test, in which some work disincentives are inherent. These issues are now being discussed in Israel with the aim of changing the benefit structure, by introducing more work incentives into it, and particularly by lowering the rate at which the benefit decreases with the rise in income from work.

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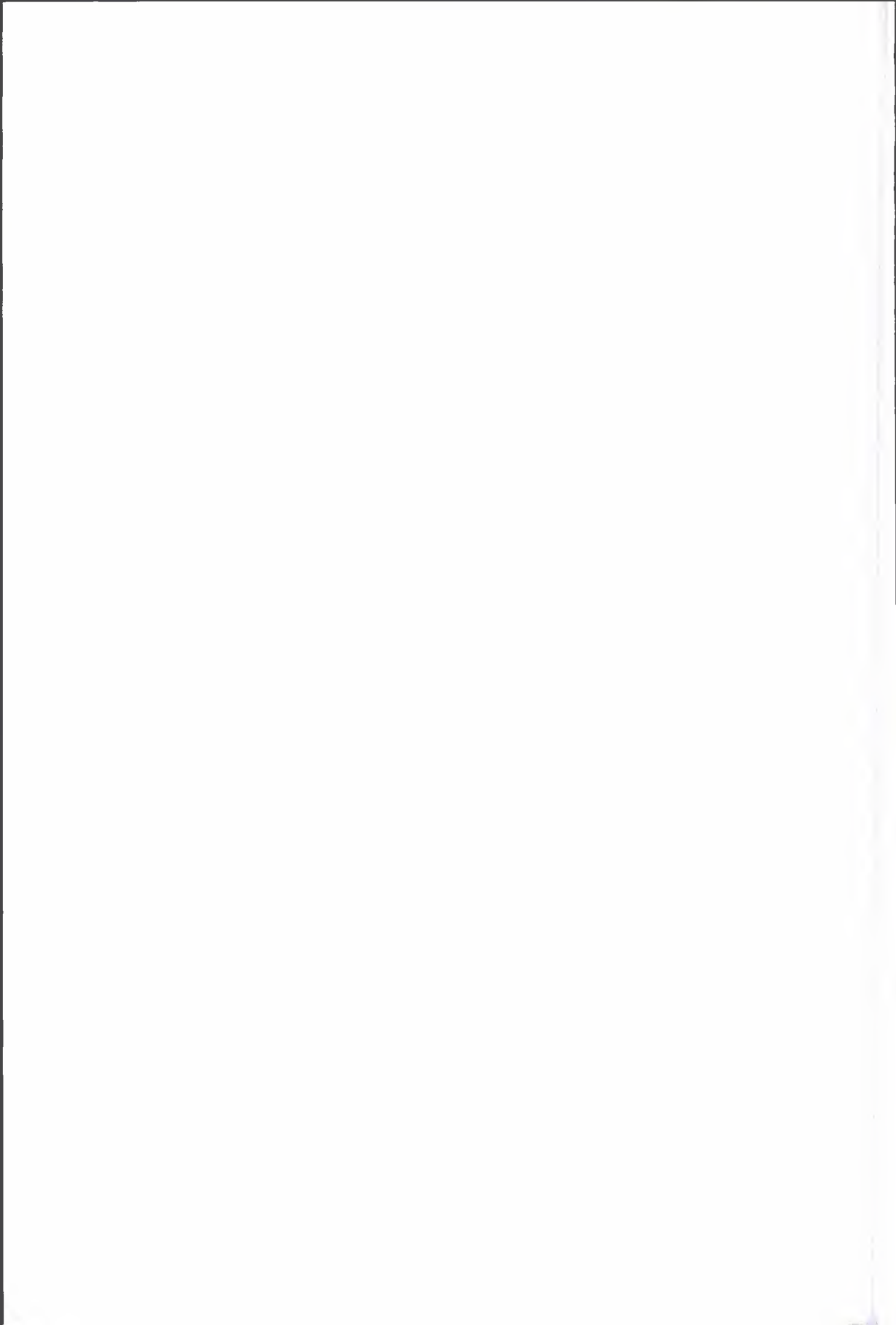
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Appendix A Disability benefits and related bonuses, 2003

<i>Scheme</i>	<i>Main eligibility conditions</i>	<i>Duration</i>	<i>Rate of pay</i>	<i>Income test</i>	<i>Re- lated bon- uses</i>	<i>Empirical rate of pay — as per- centage of average wage</i>	<i>Respon- sibility</i>
Sickness benefit	Sickness — certificate by general practitioner	Up to 90 days	75 percent of regular wages	No	No	—	Employer
Disability benefit	40 percent medical disability + reduction of 50 percent in earning capacity	Unlimited	25 percent of average wage ¹	Yes	Yes	34.8	NII
Work injury	Injured at work	90 days	75 percent of regular wages	No	No	65.1 ²	NII
Work disability	Long-term work injury	Unlimited	75 percent of regular wages	No	No	40.2 ²	NII
Rehabilitation	Disabled suitable for rehabilitation	Unlimited	No pay	No	No	— ⁴	NII
Attendance allowance ³	ADL test	Unlimited	50 percent-150 percent of full disability benefit	No	No	27.2	NII
Mobility allowance ³	Mobility limitation	Unlimited		No	No		NII
Accident benefit	Injured in accident	Up to 90 days	75 percent of wage/ 25 percent of average wage	No	No	51.0	NII

Income support	Family income and employment tests	Unlimited	20 percent of average wage ⁵	Yes	Yes	24.0	NII
Unemployment	12 months of employment out of past 18 months	50-176 days	4 groups of descending function of previous wage up to average wage	No	No	50.1	NII
Old-age pension	Aged 60/65+	Unlimited	16 percent of average wage ⁵	No	No	25.0	NII
Old-age pension + income supplement	Age 60/65+ with no income	Unlimited	26.5 percent of average wage ⁵	Yes	Yes	30.7	NII
Survivor's pension	Widow; widower with children	Unlimited	16 percent of average wage ⁵	No	No	23.9	NII
Survivor's pension + income supplement	Widow; widower with children/ no income	Unlimited	26.5 percent of average wage ⁵	Yes	Yes	29.0	NII
Hostile action casualties	Injured by hostile action	Unlimited	Wide range of payments	No	No	—	NII
War casualties	Was a soldier when injured	Unlimited	Wide range of payments	No	No	—	Ministry of Defense

¹ For single disabled with 100 percent medical disability. ² For employees. The self-employed also are entitled to this benefit. ³ Can be collected in addition to the disability benefit. ⁴ Maintenance allowance at rehabilitation period is the disability benefit. The rest of the payments include financing of vocational education, etc. ⁵ For a single person, not including increments. ⁶ Widower without children can receive benefit after income test.



Conclusions

Peter A. Kemp

This book has examined trends in disability benefits over recent decades. In all six of the countries covered in this book, disability benefit caseloads increased substantially from about the 1970s onwards. Although growth has tailed off in five of the countries (the exception being Israel), caseloads remain high. This phenomenon is not peculiar to the six countries in this study, but is one that is shared by most of the OECD nations (see OECD, 2003; Wilson et al., 2005).

High caseloads have in turn led to concerns about the cost of disability benefit programmes. As van Oorschot and Hvinden (2000: 293) noted, "the governments in many modern welfare states ... see their levels of expenditure on disability benefits as excessive and as threatening the sustainability of income maintenance regimes." Concerns about programme costs have led to periodic attempts to reduce the inflow or increase the outflow from disability benefits.

The evidence from this study suggests that the drivers of the increase in disability benefit caseloads are complex. Supply side drivers include the widening scope of disability benefit programmes over time, the generosity of benefits relative to low paid work and unemployment benefits, and the role of employers in relation to workers with health problems. Demand side drivers include the increase in female labour force participation and, the explicit or implicit use of disability benefits as an early retirement programme. Perhaps surprisingly, increasing disability prevalence appears not to be a major driver of this expansion. Instead, it seems that an increasing proportion of the long-term sick and disabled working age population is claiming disability benefits.

Chapter 2 showed that disability benefit caseloads have not simply *increased*, they have also *changed* significantly in composition. In general, the share of disability benefit recipients that are female or young has grown, while the shares accounted for by males and older recipients have fallen. Disability benefit recipients are also much more likely now to be diagnosed with mental disorders, particularly mental health problems, including stress and depression. Indeed, the recent growth in the disability benefit caseload seems to have been particularly driven by these "new disabilities" (Overbye, 2005), which in many cases are better described as long-term chronic illnesses. As noted in Chapter 1, these kinds of illnesses are to an extent more subjective, and often less visible, than physical impairments (Moncrieff and Pomerleau,

2002); and as such are more likely to generate concerns about malingering and "inappropriate" claims for disability benefits.

In Chapter 2, Kemp argued that these trends in the size and composition of the disability benefit rolls are associated with the transition to post-industrial society. This shift has involved decline in manufacturing (and agriculture), rapid growth in the importance of service sector employment, growth in part-time and other "non-standard" jobs, increasing female participation in the labour market, growing importance of high levels of education and skills, decline in the demand for low-skilled workers, organizational restructuring, increased intensity of work, and possibly a rise in the "employability threshold".

Many of the people laid off as a result of deindustrialisation — especially older, male, low-skilled workers with health problems — have had difficulty competing for jobs in the post-industrial economy. Some of those people with health problems or impairments were unable to find work and ended up claiming disability benefits instead of unemployment benefit. Moreover, the experience of unemployment is known to cause or exacerbate health problems, which in turn can lead to a claim for disability benefits. Meanwhile, the widening disparity in wages and the progressivity of benefit computations have increased the replacement rate for low wage workers in countries such as the United States, thereby increasing the financial incentive for people with little or no skills to claim disability benefits rather than seek work.

Those who do have the requisite levels of education and skills to obtain work in the new post-industrial economy are also exposed to health risks. As Esping-Andersen (2002) noted, the transformation of work has affected the health risks associated with employment, from dangers to physical health in the old economy to stress-related health risks in the new economy. This may be one of the factors behind the increase in mental ill-health, including depression, anxiety and nerves. Certainly, there is growing evidence to suggest that stressful working conditions and organizational downsizing are associated with an increased risk of claiming disability benefits (Vahtera et al., 2005).

One implication of this thesis is that some of the growth in disability benefit claims, particularly that which occurred in the 1970s and 1980s, may possibly turn out to be a one-off adjustment or cohort effect associated with de-industrialisation. Once this surge of recipients has worked its way through the caseload, it is possible that the numbers of recipients may decline somewhat, especially in economies where there are labour shortages. But another implication is that the ranks of disability benefit recipients will be fuelled by the stress and related health problems generated by the intensification and restructuring of work in the post-industrial economy.

In the meantime, governments are likely to continue seeking ways to reduce or at least contain the growth in their disability benefit caseload and its associated costs. This pressure arises both from the perceived need to keep social security expenditure under control and from the need to augment the labour supply as a result of population ageing (though the importance of the latter imperative varies from country to country). Notwithstanding these pressures, the disability benefit rolls are not proving

easy to reduce. Indeed, it is clear that the problem of high rates of disability benefit recipiency is a complex one to which there are no easy solutions. This makes it especially important to understand which interventions are the most effective and in what circumstances.

In Chapter 3, Bakker Tauritz discussed the interventions that governments have employed to help people with health problems or impairments to retain their employment, or to return to work if they are on disability benefits. He distinguished between rehabilitation interventions, incentive mechanisms and special employment measures. The chapter also stressed the importance of being clear about the goals of interventions — for example, is the aim employment retention or work resumption? — and the characteristics of interventions in terms of when intervention takes place, the mechanism of the intervention, whether the intervention is generic or targeted, and who participates in the intervention. Finally, Bakker Tauritz argues that the effectiveness of interventions depends crucially on the settings and context within which they take place. This implies that the lessons that may be derived from an evaluation of an intervention need to take into account the interaction between the intervention and its context. There are no off-the-shelf policy solutions that necessarily work in the same way, or as effectively, in every setting. Understanding the interaction between the characteristics of an intervention and its context leads to insights into the reasons why an intervention works. Lessons learned in this way make it possible to better identify areas where interventions make a difference in the national disability benefit scheme and where there is room for improvement.

A previous ISSA-sponsored study of return to work in six countries highlighted the diversity of impacts that broadly similar policies can have in different international contexts (Bloch and Prins, 2001). This project involved tracking over two years between 300 and 600 people in each country who had been off work for at least three months due to lower back pain. The project involved the same six countries as this study of disability benefit trends, except that it included Germany rather than Great Britain. Return-to-work rates after two years varied significantly between countries, ranging from 35 percent in Germany to 72 percent in the Netherlands. In addition, similar levels of pain intensity were accompanied by rather different rates of work resumption. However, where it did occur, work resumption mostly took place in the early stages, emphasizing the importance of early intervention. Surprisingly, health care interventions had relatively little impact on return to work rates (Bloch and Prins, 2001).

However effective they may be, interventions often have unanticipated and even undesirable effects. In particular, attempts to restrict the inflow to disability benefits or to increase the outflow into work may simply displace claimants onto other programmes such as unemployment benefits. Meanwhile, the provision of relatively generous disability benefits may encourage people in low paid work to enter the disability benefit programme (Bound and Burkhauser, 1999; Gruber, 2002). It may also give long-term unemployed people with health problems an incentive to claim disability benefits instead of unemployment benefits. This diversion of unemployed people onto disability benefits is sometimes referred to as 'hidden unemployment' (Beatty and Fothergill, 2004).

In Chapter 4, Rasmussen et al. examined substitution effects between disability benefit, early retirement programmes and unemployment, using data from Denmark, the Netherlands and the United States. Their examination of the evidence suggested that, to some extent, substitution does take place. For example, had it not been for the extension of the early retirement programme to older unemployed people in the mid-1990s in Denmark, the number of disability benefit recipients would have been even higher than it was. In other words, some older workers with health problems opted for the early retirement programme instead of claiming disability benefits. Chapter 4 also showed that, in the United States, the number of disability benefit recipients among men is more sensitive over time to unemployment than is the case for women. Thus, there appear to be gender differences, at least in the United States, in substitution effects. Nevertheless, over time the rates of disability benefit receipt among men and women converged in the United States.

Finally, Rasmussen et al. also find evidence that there are substitution effects between unemployment and disability benefits in the Netherlands. This suggests that there is a considerable amount of "hidden unemployment" in the disability benefit programme in that country. The same also appears to be true of Britain (Beatty and Fothergill, 1996) as well as some other countries not included in this study, such as Australia (O'Brien, 2004).

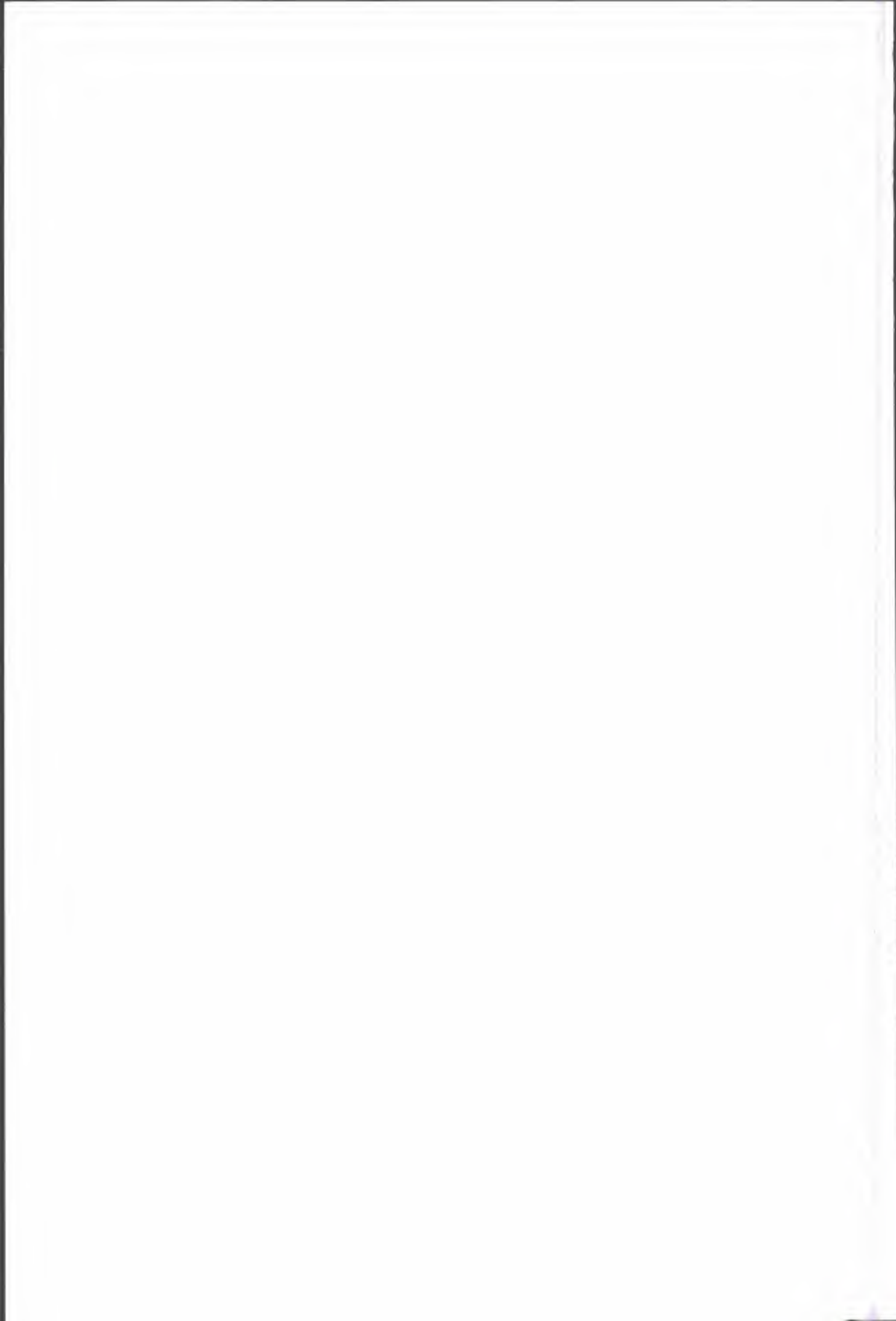
The existence of substitution effects suggests that the success of attempts to reduce disability benefit caseloads should not only be assessed in terms of their effects on the inflow and the outflow; they should also be investigated in relation to what happens to people who have left the programme or who would otherwise have joined it. Did they retain their employment or move back into work (as the case may be), or instead claim unemployment benefit or social assistance benefits? Simply moving the problem (or rather, claimants with health problems or impairments) from disability benefits to social assistance benefits may save the taxpayer money — because the latter tend to be less generous than the former — but the result may be to push those who are displaced into poverty.

It is clear, then, that the problem of high levels of disability benefit recipiency in post-industrial societies is a complex and intractable one that is not going to disappear anytime soon. Although it is easy to say, we need to better understand the pathways that lead people onto disability benefits, the routes that are taken by the small minority of recipients who move back into work, and the effectiveness of the interventions that can — in different contexts — inhibit the former and foster the latter.

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SICK SOCIETIES?

Trends in disability benefits in post-industrial welfare states

Despite significant improvements in population health, many welfare states have witnessed a substantial increase in the number of people receiving long-term sickness and disability or incapacity benefits over the past two decades. This paradox has become one of the most pressing and yet intractable problems facing the welfare state.

Attempts to stem the rising tide of disability benefit recipients have generally had only limited or temporary success. Meanwhile, many welfare states have experienced an increase in disability benefit claims from women, younger workers, and people suffering from mental illness.

Sick societies? explores these trends in disability benefits. It looks at the factors driving the increases in benefit recipients and examines the success of government attempts to tackle the problem. As well as documenting developments in six advanced welfare states, the book includes chapters that compare experiences and draw more general lessons about the problem of long-term sickness and disability benefits in post-industrial societies.

The book is essential reading for policy-makers and researchers concerned with social security and social policy more generally.

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