Today, most modern welfare states face the challenge of an aging population and decreasing rates of labour force participation among older people. Despite increased life expectancy, improved living conditions, and better health status, the average time people spend in paid work is decreasing in most European countries. This rather paradoxical development is partly due to a delay of young people entering the labour market; however, even more important is that older workers are exiting the labour market in greater numbers. In most countries, the average age of permanent departure from paid labour is well below the statutory pension age. This development, the “early exit trend”, has been called “one of the most profound structural changes in the past 25 years”, a trend that is hardly sustainable because of growing financial pressure on governments. This trend is incompatible with anticipated labour shortages in the near future. Consequently, researchers and policy makers all over Europe are involved in studies and debates to find ways to “shift the vicious circle of early exit to the virtuous circle of active aging”.

Leaving the labour market before old age pension requires alternative sources of income. Across Europe, there are many ways to bridge the time between early exit and old age pension. Depending on the configuration, availability, and generosity of such pathways, countries use different strategies of externalisation and integration of older and/or disabled workers. Integration strategies support employment among these groups, whereas externalisation strategies transfer the risk of old or sick employees to the social security system. Because of generous entering conditions in different social security programmes, many countries have adopted such an externalisation strategy. As a result, the number of premature labour market withdrawals has increased dramatically.

To a very high degree, this also applies to the social security programmes that support people with reduced work capacity due to ill health, such as disability benefits/pensions. The number of people that are receiving disability benefits has increased continuously during the 1980s and 1990s. Scholars even speak about an uncontrollable expansion of disability benefits and costs. In fact, in many countries, there are more inactive working age people due to disability than due to unemployment, and disability costs are significantly higher than the cost of unemployment.

Thus, disability is a major social problem in most countries and disability benefit programmes are largely accountable for the early exit trend because they have been used (and misused) to bridge the gap between early exit from the labour force and old age pension.

WORK DISABILITY AND SOCIAL SECURITY

The vocabulary normally used to describe disability benefits can be somewhat confusing because it varies between countries, in the literature, and in everyday language. It is important to distinguish between different social security programmes that cover work disability. Most countries in Europe have three separate programmes (box 1) that differ according to causes and permanency of disability.

Terms like disability pensions, invalidity pensions, or ill health retirement are all used to describe the specific kind of social security programmes that support those individuals who, due to long term disabilities, cannot support themselves through work. There are some obvious reasons for this mixed terminology. First, disability benefits in several countries are closely linked to old age pension systems. Second, it is common that workers who receive disability benefits subsequently shift to the old age pension system once they reach the official retirement age. Third, although not intended to be a permanent benefit, disability benefits often work as a quasi-permanent payment for long term disability. In this article, the terms disability benefit and disability pension are used synonymously.

DISABILITY POLICIES IN DIFFERENT COUNTRIES

The main objective of disability benefit programmes is to maintain income security and improve the welfare of the disabled population. While some countries have two or more programmes with
The typical disability benefit/pension process.

This process is compulsory and a qualifying condition for Sweden and Germany, participation in a rehabilitation programme is not used often enough, and rehabilitation measures are that in many cases vocational rehabilitation and training is misused the inflow of those who enter the disability programme are important in order to minimise errors: the former refers to what extent benefits are granted to those who do not need them; the latter refers to refusals of benefit payments to those who need them most.6

An OECD study—Transforming disability into ability—reports that both inclusion and exclusion errors are quite common. This poses problems for disability programmes because exclusion errors indicate a misallocation of resources that jeopardise the legitimacy of the programmes, whereas high rates of exclusion errors put the welfare of many disabled people at risk.

One of the most important aspects of the performance of disability programmes is the rate of inclusion and exclusion errors: the former refers to what extent benefits are granted to those people who do not need them; the latter refers to refusals of benefit payments to those who need them most.5

An OECD study—Transforming disability into ability—reports that both inclusion and exclusion errors are quite common. This poses problems for disability programmes because inclusion errors indicate a misallocation of resources that jeopardise the legitimacy of the programmes, whereas high rates of exclusion errors put the welfare of many disabled people at risk.

DEFINITION OF WORK DISABILITY

Contemporary disability policies define disability according to a “social model” which can be distinguished from the medical definition that views disability as a biological characteristic of the individual.6,7 The social model is a societal/environmental construct that recognises the importance of the interaction between the individual and the social and physical environment. Therefore, disability is the inability to perform normal activities or fulfil conventional societal roles. This incapacity is caused by impairments defined as an anatomical or psychological loss that remain after a stage of active pathology and rehabilitation efforts. Work disability is determined in relation to functional limitations due to the impairment; only those impairments that prevent work and limit job performance are relevant. This means that work disability is related to a reduction of task performance and a restriction or incapacity to perform normal work. Because the impairment is related to normal work activities, the same limitation can result in different degrees of work disability. In one case, impairment may have no incapacitating effects at all, whereas in another case it may have severe consequences on the ability to perform certain work related tasks. Figure 2 summarises the relation between pathology and work disability.

One of the most important aspects of the performance of disability programmes is the rate of inclusion and exclusion errors: the former refers to what extent benefits are granted to those people who do not need them; the latter refers to refusals of benefit payments to those who need them most.5

An OECD study—Transforming disability into ability—reports that both inclusion and exclusion errors are quite common. This poses problems for disability programmes because inclusion errors indicate a misallocation of resources that jeopardise the legitimacy of the programmes, whereas high rates of exclusion errors put the welfare of many disabled people at risk.

DEFINITION OF WORK DISABILITY

Contemporary disability policies define disability according to a “social model” which can be distinguished from the medical definition that views disability as a biological characteristic of the individual. The social model is a societal/environmental construct that recognises the importance of the interaction between the individual and the social and physical environment. Therefore, disability is the inability to perform normal activities or fulfil conventional societal roles. This incapacity is caused by impairments defined as an anatomical or psychological loss that remain after a stage of active pathology and rehabilitation efforts. Work disability is determined in relation to functional limitations due to the impairment; only those impairments that prevent work and limit job performance are relevant. This means that work disability is related to a reduction of task performance and a restriction or incapacity to perform normal work. Because the impairment is related to normal work activities, the same limitation can result in different degrees of work disability. In one case, impairment may have no incapacitating effects at all, whereas in another case it may have severe consequences on the ability to perform certain work related tasks. Figure 2 summarises the relation between pathology and work disability.

One of the most important aspects of the performance of disability programmes is the rate of inclusion and exclusion errors: the former refers to what extent benefits are granted to those people who do not need them; the latter refers to refusals of benefit payments to those who need them most.5

An OECD study—Transforming disability into ability—reports that both inclusion and exclusion errors are quite common. This poses problems for disability programmes because inclusion errors indicate a misallocation of resources that jeopardise the legitimacy of the programmes, whereas high rates of exclusion errors put the welfare of many disabled people at risk.

DEFINITION OF WORK DISABILITY

Contemporary disability policies define disability according to a “social model” which can be distinguished from the medical definition that views disability as a biological characteristic of the individual. The social model is a societal/environmental construct that recognises the importance of the interaction between the individual and the social and physical environment. Therefore, disability is the inability to perform normal activities or fulfil conventional societal roles. This incapacity is caused by impairments defined as an anatomical or psychological loss that remain after a stage of active pathology and rehabilitation efforts. Work disability is determined in relation to functional limitations due to the impairment; only those impairments that prevent work and limit job performance are relevant. This means that work disability is related to a reduction of task performance and a restriction or incapacity to perform normal work. Because the impairment is related to normal work activities, the same limitation can result in different degrees of work disability. In one case, impairment may have no incapacitating effects at all, whereas in another case it may have severe consequences on the ability to perform certain work related tasks. Figure 2 summarises the relation between pathology and work disability.

One of the most important aspects of the performance of disability programmes is the rate of inclusion and exclusion errors: the former refers to what extent benefits are granted to those people who do not need them; the latter refers to refusals of benefit payments to those who need them most.5

An OECD study—Transforming disability into ability—reports that both inclusion and exclusion errors are quite common. This poses problems for disability programmes because inclusion errors indicate a misallocation of resources that jeopardise the legitimacy of the programmes, whereas high rates of exclusion errors put the welfare of many disabled people at risk.

DEFINITION OF WORK DISABILITY

Contemporary disability policies define disability according to a “social model” which can be distinguished from the medical definition that views disability as a biological characteristic of the individual. The social model is a societal/environmental construct that recognises the importance of the interaction between the individual and the social and physical environment. Therefore, disability is the inability to perform normal activities or fulfil conventional societal roles. This incapacity is caused by impairments defined as an anatomical or psychological loss that remain after a stage of active pathology and rehabilitation efforts. Work disability is determined in relation to functional limitations due to the impairment; only those impairments that prevent work and limit job performance are relevant. This means that work disability is related to a reduction of task performance and a restriction or incapacity to perform normal work. Because the impairment is related to normal work activities, the same limitation can result in different degrees of work disability. In one case, impairment may have no incapacitating effects at all, whereas in another case it may have severe consequences on the ability to perform certain work related tasks. Figure 2 summarises the relation between pathology and work disability.

One of the most important aspects of the performance of disability programmes is the rate of inclusion and exclusion errors: the former refers to what extent benefits are granted to those people who do not need them; the latter refers to refusals of benefit payments to those who need them most.5

An OECD study—Transforming disability into ability—reports that both inclusion and exclusion errors are quite common. This poses problems for disability programmes because inclusion errors indicate a misallocation of resources that jeopardise the legitimacy of the programmes, whereas high rates of exclusion errors put the welfare of many disabled people at risk.

DEFINITION OF WORK DISABILITY

Contemporary disability policies define disability according to a “social model” which can be distinguished from the medical definition that views disability as a biological characteristic of the individual. The social model is a societal/environmental construct that recognises the importance of the interaction between the individual and the social and physical environment. Therefore, disability is the inability to perform normal activities or fulfil conventional societal roles. This incapacity is caused by impairments defined as an anatomical or psychological loss that remain after a stage of active pathology and rehabilitation efforts. Work disability is determined in relation to functional limitations due to the impairment; only those impairments that prevent work and limit job performance are relevant. This means that work disability is related to a reduction of task performance and a restriction or incapacity to perform normal work. Because the impairment is related to normal work activities, the same limitation can result in different degrees of work disability. In one case, impairment may have no incapacitating effects at all, whereas in another case it may have severe consequences on the ability to perform certain work related tasks. Figure 2 summarises the relation between pathology and work disability.

One of the most important aspects of the performance of disability programmes is the rate of inclusion and exclusion errors: the former refers to what extent benefits are granted to those people who do not need them; the latter refers to refusals of benefit payments to those who need them most.5
Minimising exclusion and inclusion errors requires accurate assessment procedures. In most countries, assessing disability is performed by specialised (insurance) doctors and involves a judgement on the severity, curability, or permanence of the health condition and their limiting consequences for work performance. The final decision is most often made by an insurance officer, but in some countries the final decision is made by a team of experts. Despite the presence of different assessment procedures and methods, it is a well known fact that it is notoriously difficult, in practice, to determine what constitutes disability and work incapacity as well as to distinguish those who are able to work from those who are not able to work. Furthermore, disability assessments include distinctions between full and partial disability. In part, these difficulties are manifested as a tendency to broaden disability categories. The most obvious example of this is the widespread tendency to make a disability benefit decision based on social aspects such as labour market conditions, unemployment, and availability of jobs. For example, a study of disability recipients in the Netherlands reports that changes in the inflow rate were to one third explained by medical factors and two thirds by non-medical factors such as benefit generosity and unemployment. Thus, how work disability is defined, and how accurate the assessment procedure is performed, in terms of distinguishing between the disabled and the non-disabled, are of vital importance for the inflow and overall performance of the disability programmes.

**PREVALENCE OF DISABILITY BENEFIT RECIPIENCY**

The number of people who receive disability benefits differs according to the country. The OECD reports that around 6% of the working age population receive disability benefits (table 1). Poland has the highest prevalence of people receiving disability benefits (12%) followed by the Scandinavian countries and the Netherlands, where around 8% and 9% respectively of the working age population receive disability benefits. The remaining countries have rates between 4% and 6%.

In most countries, women are under-represented in contributory disability programmes, but they are over-represented in non-contributory schemes. This is a reflection of lower labour market participation rates among women. Generally, only in Nordic countries do more women receive benefits because these countries have disability programmes that cover the whole population and have a high level of female labour market participation rates. The number of people that receive disability pension increases with age. In many countries, 9 out of 10 recipients are aged 45 years old or older. The fact that age and disability benefits are positively correlated is no surprise because disability is much more prevalent among old age workers, but this pattern is also affected by the fact that old age workers often are treated differently in disability programmes: benefits can be higher for older people; requirements of geographical and occupational mobility can be less strict; and labour market conditions may be adequate for receiving benefits among older workers. Such age profiling enhances the early retirement character in disability benefit programmes. Table 1 also shows that the relative number of elderly recipients in non-contributory programmes is lower because this kind of programme supports people with limited or no social insurance records.

Obviously, a considerable number of working age people in Europe receive disability benefits. In addition, the numbers of recipients who leave the disability benefit programmes and return to work is extremely low. Furthermore, in countries where disability benefits are formally granted on a temporary basis, the outflow (those who leaves the programmes) is almost non-existent. In some countries, there is a strong focus on avoiding inflow in the programmes through compulsory rehabilitation and training. Under such circumstances the outflow could be expected to be low and that is also the case. For instance, in the Scandinavian countries around 1% of the people receiving disability benefits leave the disability schemes every year due to recovery or work resumption; however, in countries with no such focus on active rehabilitation measures, the outflow is equally low. There are only a few exceptions from this pattern; for example, the Netherlands and the United Kingdom have an annual outflow of 3–5%.

One important reason for this minimal return to work is that most disability benefits are granted permanently. Moreover, several countries do not require benefits to be reassessed according to improvement in a recipient’s health. In other countries, reassessments are actually performed on a regular basis, with a frequency of every 2–3 years. But not much is known about the relative importance of such reviews or how they are applied in practice. One known problem though is that lack of resources affects the possibilities to perform comprehensive assessments during re-tests of eligibility for disability benefit.

**CAUSES OF DISABILITY BENEFIT RECIPIENCY**

Mechanisms that explain disability are complex, and the causes that determine disability benefits are perhaps even more complex. In the literature on early retirement and disability pensions, different arguments are referred to as important explanations. A key question in this context is whether the withdrawal from the labour market is based on individual choice or is a result of exposure to structural and environmental factors.
environmental factors. The arguments are commonly categorised under the labels of pull and push factors.

**Pull factors** operate at an individual level and are typical for econometric analyses because they refer to the incentive/disincentive trade off within disability programmes. In other words, pull is about carrots and sticks. The basic idea here is that individuals voluntarily decide to leave the labour market because the benefit alternative is perceived as equal or more gainful compared to work. This means that the income levels in benefits are a crucial and decisive factor as people are pulled out of the labour market due to generous benefit programmes. Even if it is hard to determine the relative importance of the economic rationality argument, there is empirical evidence that shows the relevance of this argument. Comparative research shows that countries with high benefit levels also tend to have more people receiving disability benefits.5–7

This way of thinking also involves reasoning about the individual’s work/leisure preferences. The decision to leave work is not solely based on economic considerations, but also to what extent work is perceived as attractive in relation to other activities, such as hobbies, voluntary work, or family activities. This argument is sometimes called a “jump factor”.

From a pull perspective, it is not only replacement levels that are important. Who is eligible for a certain benefit has an unquestionable and important effect on the inflow in the programmes. Broad eligibility criteria include automatically more potential applicants to the programmes. For example, during the 1980s and 1990s, access to disability programmes was in many countries increasingly relaxed and often made accessible for other reasons than pure ill health. As previously mentioned, some countries have recognised unemployment as a reason for disability pension for older workers. In Sweden, for instance, about 10% of the annual inflow into the disability benefit scheme during the late 1980s was based on labour market reasons.

**Push factors** are basically work related and concern characteristics of the labour market and working life. The push perspective is based on the view that people are involuntarily forced from the labour market. This may be due to characteristics in the labour market such as technological development, increased competition, and organisational trends. Such characteristics influence labour conditions. In this process, a mismatch between the characteristics of available jobs and the characteristics of the labour force may occur. Certain vulnerable individuals (the old, sick, or those with the “wrong” education, competence, and skills) are “pushed” out of jobs and out of the labour market since they no longer fit in. The literature shows that this “pushing out” of certain individuals from the labour market is unequally distributed among different groups in society. Lower social classes come out worse than higher classes in this process. In fact, people’s positions in the hierarchical class structure are one of the most influential predictors of disability pension. In a study of Swedish disability pensioners, the risk was associated in a more or less linear manner with the hierarchical division of labour (fig 3). Manual workers score the highest risk, and white-collar workers score the lowest.2 11–15

One somewhat less abstract explanation of the social class gradient in disability beneficiary is exposure to a poor psychosocial work environment that affects health and work ability. The literature has also illustrated that personnel policies and an employer’s attitudes towards employees with limitations in their work capacity are associated with increased risk of disability pension. The fact that characteristics such as low education level, ethnic background, weak position in the labour market, and experience of unemployment tends to increase the risk of disability pension, further strengthen the push hypothesis.2 5–7

Because both the pull and push perspectives have been empirically supported, many scholars agree that early exit

<table>
<thead>
<tr>
<th>Pull factor</th>
<th>Definition of disability</th>
<th>Broad definitions of disability, incorporation of social aspects in disability programmes increase the inflow in the programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>The incentive/disincentive argument</td>
<td>Generous benefits tend to attract more applicants as the benefit alternative is found in comparison with work at least as profitable</td>
<td></td>
</tr>
<tr>
<td>Individual motivation</td>
<td>Leisure or other activities are perceived as preferable to work</td>
<td></td>
</tr>
<tr>
<td>Eligibility criteria</td>
<td>Eased accessibility in general increases the inflow in the disability programmes</td>
<td></td>
</tr>
</tbody>
</table>

**Table 2 Examples of pull factors**

![Figure 3 Age adjusted odds ratios for disability pensions in Sweden, 1998. Reference group: white collar workers higher.](http://oem.bmj.com/)

---

www.occenvmed.com
from the labour market through disability pension is affected by a number of factors. Most evidence today shows that it is not either push or pull that is important, it is both. The process of becoming a disability pensioner is therefore best described as a multifactor process. For example, employers have puzzled together bits and pieces of public and private early exit options as tools to help restructure and downsize firms. Such behaviour involves both push and pull elements. It can thus be stated that the room for individual choice is restricted by a number of factors such as eligibility rules, benefit levels, labour market conditions, work environment, age, social norms, and, most importantly in the case of disability pensions, health conditions.14

It should be noted here that disability pensioners often report that due to health problems they have involuntarily left the labour market, while early retirees in general more often retire voluntarily. In a Danish study, more than 8 out of 10 disability pensioners reported that they were forced to retire. Therefore, push factors are most likely to be very important for the selection of individuals entering the disability pension programmes. As a consequence, disability pensioners often report lower levels of quality of life and psychological wellbeing than other groups of retirees. In many cases, the nature and severity of the disability decisively influences the wellbeing of disability pensioners.14 16

THE FUTURE

Modern disability policies can be simultaneously characterised in terms of both success and failure.1 A success, as instruments for integration and normalisation of the disabled. Disability benefits are of vital importance for the economic and overall wellbeing of the disabled and have in this sense contributed substantially to the possibilities of independence and autonomy among disabled people. A failure, as the increase of disability benefit recipiency has occurred despite improved health and increased life expectancy in most populations, and without any convincing medical or epidemiological explanations. Since the disability programmes have served as an early retirement pathway, they have contributed to an ongoing exclusion from work and as an entrance into inactivity for millions of people.5 6

In the light of population aging and anticipated labour shortages, disability benefit programmes could be expected to be an area of policy reforms and change in the future. In the recent OECD report Transforming disability into ability, it is stated that no country has a successful policy for disabled people. This is a statement which suggests that future reforms are highly motivated. In the report a number of recommendations for future policy reforms are presented (summarised in box 2). The key words that capture the objective of these future reforms are economic and social integration of the disabled.

These suggestions will affect both the design of the disability programmes as well as labour market participants. This is important because the complex nature of the causes of disability pension requires comprehensive strategies if the objective to reduce the numbers of recipients is to be successful. Merely to restrict access to the programmes may result in benefit substitution, a shift of disability benefit claimants to other forms of social security programmes, leading to no real reductions in benefit dependency. The widespread increase in disability benefit recipiency indicates that the capability of the labour market to involve disabled people has decreased. An important aspect of the future is therefore to strive for a working life that is in tune with the capacities and qualities of the (aging) work force.

REFERENCES
4 A series of OECD publications, not yet completed, on ageing and employment in different countries. Of high relevance for the subject of employment, retirement and disability subjects.
7 A critical review of contemporary disability policies and a discussion about the future policy changes.
8 OECD. Transforming disability into ability. Policies to promote work and income security for disabled people. 2003.
9 A rich empirical and up to date account of disability policies in the OECD area. A comparative approach, including recommendations for the future disability benefits.

### Box 2: Recommendations for future policy reforms formulated in the OECD report Transforming disability into ability

- Redefinition of work disability making disability less equated with inability to work
- Stronger emphasis on putting disabled people back to work
- Removal of disincentives to work in the programmes
- Reassessment of benefits at regular intervals
- More flexible programmes with possibilities to combine work and benefit reciprocity
- Make benefit reciprocity conditional on active participation in vocational rehabilitation and other integration measures
- Promote early interventions
- Involve employers in the integration process through anti-discrimination legislation and employment quotas
- Design active disability programmes

### Table 3: Examples of push factors

<table>
<thead>
<tr>
<th>Push factor</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural change</td>
<td>Continuing technological changes, increased competition as the labour market creates a pressure in firms to adapt to new circumstances forces elderly and/or disabled workers from work</td>
</tr>
<tr>
<td>Business cycles/unemployment</td>
<td>During periods with low unemployment rates larger numbers of potential disability beneficiaries are active in paid work</td>
</tr>
<tr>
<td>Occupation/social class</td>
<td>Certain skills and competences become obsolete in changing labour markets; occupational characteristics expose employees to health hazards</td>
</tr>
<tr>
<td>Work environment</td>
<td>Physical and psychosocial work environment are important sources of ill health</td>
</tr>
<tr>
<td>Recruitment policies</td>
<td>Negative/stereotypical attitudes towards not fully fit workers increases the risk of exclusion of disabled workers</td>
</tr>
</tbody>
</table>


 QUESTIONS (SEE ANSWERS ON P 94)

(1) Disability benefits are:
(a) Social security programmes that cover loss of income due to short term sickness.
(b) Social security programmes that cover loss of income due to long term disability.
(c) Social security programmes that cover loss of income due to work injuries.
(d) Social security programmes that cover loss of earning during a period of vocational rehabilitation.
(e) Social security programmes that cover loss of earning during a period of medical rehabilitation.

(2) Disability benefit beneficiaries are often called disability pensioners because:
(a) They often receive the benefit in old age.
(b) The disability benefit programmes are pension schemes.
(c) The disability benefit is most often terminated by a transition to old age retirement.
(d) It is only retirees that receive disability benefits.

(3) Which one of the following best describes push factors:
(a) Voluntary, disincentives/incentives.
(b) Benefit generosity, unemployment, employers’ attitudes.
(c) Disability assessment, eligibility criteria, rehabilitation.

(4) Which one of the following best describes push factors:
(a) Work hazards, employers’ attitudes, structural change.
(b) Unemployment, job characteristics, disability assessment.
(c) Benefit substitution, psychosocial work environment.

(5) Exclusion and inclusion error means:
(a) Exclusion and inclusion of the wrong people in the working life.
(b) A broadening of disability categories and taking into account social conditions in the disability benefit decision.
(c) That people, due to poor recruitment policies, have not suitable occupations.
(d) Benefits are granted to those people who do not need them and those who need them most are refused benefit payments.