

Evidence and policy implications from a new disability and work reintegration study

A summary

International Social Security Association Research Programme



This document summarizes the outcome of a comparative study undertaken by the International Social Security Association (ISSA) on work incapacity and reintegration and analyzes the policy implications of these findings. A full account of the project, including all major findings of the study, are presented in the publication **Who Returns to Work and Why? A Six-Country Study on Work Incapacity and Reintegration**, published by Transaction Publishers in 2001 (see back cover page for full publisher information and table of contents of this publication.

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The opinions expressed are solely those of the authors and do not necessarily reflect those of the International Social Security Association nor of any other social security agency involved in the study.

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WHO RETURNS TO WORK AND WHY?

Evidence and policy implications from a new disability and work reintegration study Executive summary

Work incapacity has become a major social problem in most industrialized countries, resulting in increased social expenditures for sickness and disability programs and declines in labor force participation rates. This booklet provides a synopsis of a unique comparative study of work incapacity and reintegration (the WIR Project) undertaken in the mid-1990s under the auspices of the International Social Security Association. Drawing on data compiled in six longitudinal studies of day-to-daypractices and experiences in Denmark, Germany, Israel, the Netherlands, Sweden, and the United States, the Project permitted researchers to measure the effects of such factors as the duration of work absence, medical and vocational interventions, labour market policies and practices, and other social or demographic aspects such as living alone or the availability of social supports. The Project also examined a wide range of interventions directed at work incapacity and reintegration that are used currently by social security institutions, health care providers, and employers in an effort to address two key questions: do the various interventions (by social security and health care systems) found in different countries make a difference as to work resumption patterns; and if so, what are the most effective interventions?

This booklet focuses on several key results of the WIR Project and discusses the policy implications that follow from those results. In each of the six countries participating in the study, between 300 and 600 persons who were out of work for a period of at least 3 months due to lower back pain were followed for two years. The most striking finding was the large difference in return-to-work rates among the various national cohorts: from 32% to 73% after one year and from 35% to 72% after two years. Other important observations concerned the different patterns of work resumption, which occurred mostly in the early stages, great variations in income replacement for non-workers, and the fact that similar pain intensity can lead to quite different work resumption rates. These and other findings raise important policy implications: in contrast to current practices, early intervention is essential for successful work resumption; although older age and limited education make return to work more difficult, work-place adaptation and flexible work hours are significant overall determining factors for

increased work reintegration; job protection rules greatly facilitate return to work; and while the effect of health care on work reintegration is very limited, often the best therapy is early work resumption.

This booklet also addresses additional implications of the WIR Project and the need for further research. For example, greater emphasis should be placed on the relationship between employees and employers. Moreover, the Project could inform the study of other topical issues in social security, such as the integration of low-skilled workers in the labour market and the increasing participation of ageing workers, and the applicability of its findings could be tested in relation to other types of work incapacities - in particular those due to mental illness.

The WIR Project was designed to be of interest not only to researchers, doctors and practitioners in the field of social security and rehabilitation, but also to policy makers and administrators. The full results of the Project are reported in Who Returns to Work and Why? A Six-Country Study on Work Incapacity and Reintegration, published in 2001 by Transaction Publishers and in numerous national publications, and its international database is available for further analysis.

National sponsors of the WIR project



The Netherlands Ministry of Social

Affairs and Employment, The Netherlands

National Social Insurance Board, Sweden

Social Security Administration, **United States**

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IDENTIFICATION OF THE ISSUES

The International Social Security Association (ISSA) has recently published Who Returns to Work and Why? a report on a six-country comparative study of return to work after disability due to back problems. One of the reasons behind the study was that many industrialized countries are experiencing large increases in long-term social security benefit payments based on work incapacity. Moreover, the common experience has also been that disability pensioners, once on the rolls, rarely leave to return to work. From the perspective of pay-as-you go social insurance systems, the growth in the disability payments impacts negatively on the financial stability of the system and is all the more alarming given other increasing pressures notably aging workforces and declining birthrates. Given this common experience, the social policy makers in the participating study countries wanted to determine which types of work reintegration measures were effective. Unlike other studies in this subject area, this project concentrated on interventions, incentives and disincentives aimed at returning beneficiaries to work. Its research goals were to determine whether the various interventions found in different countries make a difference as to work resumption patterns and if so, what are the best interventions.

This paper summarizes the major findings of the study and analyzes the implications of these findings primarily for social policy makers, but also for health care providers, employers, insurers and others involved in rehabilitation and reintegration.

The paper is organized under four headings. Following this introduction, the second section describes the six-country study design and methodology, the next section presents an overview of the findings of the study and their policy implications and the last section looks at further implications for social policy and suggestions for further research.

Why a comparative study?

Social policy administrators in most countries have long been comfortable with using both comparative exchanges to learn new strategies and quantitative research to track the progress of their own programs. However, until the International Social Security Association (ISSA) decided to undertake this project called the Work Incapacity and Reintegration (WIR) Project, few if any attempts had been made to do longitudinal comparative research on the efficacy of various approaches to social policy problems. Certainly, in the area of return to work after disability, there has been little or no effort to do longitudinal research using quantitative analysis in a comparative setting. In fact, it

has often been argued that because social insurance programs in different countries were so different, comparison was difficult. Before discussing this project in greater detail, it is important to explore further why the study countries and the ISSA felt such a project was worth undertaking.

Why a study on back problems?

In the industrialized countries back problems are typically the leading physical cause of receipt of disability benefits and the second leading cause of disability benefits for any reason.

The book *Who returns to work and why?* cites numerous earlier studies that find that back problems and their effects on the working population are the main reason that symptoms from the back are one of the most expensive health problems and the most expensive industrial injury in the industrialized world. In most societies, back problems are the most common reason for physician appointments after the common cold and the most common reason for work disability. Although the majority of back problems are of short duration, for a minority of sufferers, the problems become chronic (i.e. longer than 3 months). Unlike some conditions which improve with time, generally, the prognosis for recovery from back problems is inversely dependent on time, i.e., the longer the duration of the problems, the more decreased are the chances for a complete recovery. Not surprisingly, an exponential relation has been found between the duration of back problems and their costs – the longevity of the problem is the strongest predictor of high costs.

STUDY DESIGN AND METHODOLOGY

Caveats and explanations

Before discussing the findings and their policy implications, some explanations and caveats are required. The social insurance systems of the industrialized countries are markedly different, making even descriptive comparisons difficult and qualitative ones perilous. The WIR project researchers were, of course, acutely aware of the pitfalls but nevertheless felt that the value of what might be learned and the uniqueness of any data collected outweighed the recognized risks. Therefore, they attempted to design a methodology to create a common core research design that stipulated a minimum set of requirements to allow for sound cross-national comparability of results. Specifically, these concerned (1) the choice and definition of a cohort of employees to be included in the study; (2) the cohort characteristics, interventions, incentives and disincentives, and outcomes to be measured; and (3) the observation period, points of measurement and methodology to be applied.

The WIR Project was designed to study a well-defined category of persons at repeated measurements in order to gain insights into the timing and effects of actions taken to regain health and work capacity. From the outset, the proposal was to measure both medical and vocational interventions in a cross-national study.

Since the main goal of the study was to learn how to improve the return-to-work process for people with work incapacity, it was necessary to identify several basic features for a common design. Thus there are six key features in the project's core design as follows:

- (1) Each study had to be prospective (rather than retrospective) focusing the analysis on the dynamics of interventions;
- (2) The cohort of subjects had to be homogeneous regarding the basic medical condition at the onset of the study. Owing to their high prevalence among social security recipients, low back disorders were chosen as the medical criterion;
- (3) The cohort was to be composed of persons who were employed, or were employed immediately before work incapacity and who had furthermore been work incapacitated for 3 consecutive months upon entering the cohort;
- (4) The study had to cover a full range of interventions and incentives applied by social security, healthcare and employment agencies;

- (5) These interventions were to be evaluated according to critical social security indicators, such as work resumption or receipt of benefits or services;
- (6) An observation period was established lasting two years from the onset of work incapacity with at least three measurements to allow for a valid evaluation.

Social security agencies in six countries – **Denmark, Germany, Israel, the Netherlands, Sweden and the United States** – agreed both to sponsor their own national research efforts and teams as well as to cooperate in the cross-national study of Work Incapacity and Reintegration (WIR). The project was carried out under the auspices of the Advisory Board on Social Security Research of the International Social Security Association. The Research Unit of the ISSA Secretariat took up the overall coordination of the project, and AS/tri Research and Consultancy Group, Leiden (Netherlands) was responsible for the scientific coordination.

Nature of the study

The social security organizations and social or health departments in the six countries named above cooperated on the design of the cross-national study. The participants developed a core design, which called for prospective two-year studies of medical, and rehabilitation interventions and their outcomes on comparable diagnostically homogeneous cohorts of clients who had been fully work-incapacitated for a minimum period. The core design was essentially a minimum set of requirements intended to allow for cross-national comparability of results. However, from the outset, each country was free to extend their national studies beyond the minimum requirements of the design in order to address national aims and options.

Cohort criteria

To qualify for inclusion into the cohort, subjects had to meet four sets of entry criteria, relating to medical diagnosis, employment conditions, work incapacity and demographics:

- (1) Work incapacity had to be caused primarily by low back pain, i.e. pain between the lower edge of the 12th rib and the gluteal folds. Persons with spinal fractures or any type of surgery within the past 12 months were excluded, as were those whose cause of back pain resulted from infectious or malignant causes.
- (2) Subjects had to be employed (either full or part-time) at the onset of the work incapacity and covered, through employment, by the relevant social insurance system for sickness or disability benefits.
- (3) Subjects had to have stopped working due to back pain 3 months before the date of entry in the cohort, and

(4) Subjects had to have stopped work completely (not only for a part of working hours) and had to be fully incapacitated for their jobs.

The choice of three months for inclusion in the cohort was driven by administrative reasons – it was the earliest point where all countries were able to identify clients. Demographically, the subjects had to be aged between 18 and 59 years at the moment of inclusion in the cohort and had to have some fluency in the native language. Each country was supposed to aim at having at least 300 persons to be followed up through the entire observation period of 21 months.



Number of subjects in cohorts

Differences in the cohorts

The approaches towards recruiting cohorts differed from country to country. For example, in Germany, due to the cooperation with three social security agencies, mostly blue-collar workers were recruited. In the United States, clients were selected from two states (California and New Jersey) because they were among just five that have temporary disability programs, and therefore allowed the United States to identify subjects who had been work incapacitated for 3 months. Otherwise, identification of the United States cohort would have been more problematic because the disability insurance programme under the Social Security Administration requires that individuals must have been out of work due to the impairment for at least 6 months before the application for benefits can be processed. In Israel, participants were recruited from the Work Injury programme, which, while part of the social insurance system, is not the general disability programme. The cohorts from Denmark, the Netherlands and

Sweden were drawn from the general social insurance disability program, making them more similar to each other, at least in many respects. In short, the recruited cohorts cannot be assumed to be fully representative samples of the countries' labour forces, but instead, should be regarded as six different cohorts that are comparable with respect to major variables known to affect work incapacity.

Measured cohort characteristics

The operational orientation of the WIR study lent itself to the use of a simple inputprocess-output model.

Input was measured by characteristics of the client at the time of onset of work incapacity in the following areas:

- Socio-demographic characteristics including age, gender, educational level, household composition, income, and occupation. Also included were work characteristics such as employment history and working conditions. The health status characteristics measured included: life style; risky habits; exact medical condition and perceived health status. The socio-psychological aspects measured were: work motivation, attitudes on work and health, coping behavior, and opinions on incentives and disincentives offered by social security regarding work resumption.
- Employment characteristics sampled the local labour market situations, the employer's company size and branch, the economic prospects of the company, absence strategies, reintegration policy, working conditions and the employer's opinion on interventions, (dis)incentives and re-employment of the client.

Process was measured by a set of medical and vocational interventions. A clear set of medical interventions aimed at recovery was created. An inventory of vocational interventions showed a high variation among the study countries. On the basis of the information gathered from the national teams, a conceptual clarification was developed identifying 26 vocational interventions and (dis)incentives. These were classified into five categories:

- Training and education (general vocational);
- Work accommodations (e.g. adaptations in workplace, transportation, working hours);
- Motivators (e.g. wage subsidies, negative sanctions);
- Assessment of work capacity/incapacity (including rehabilitation inquiry); and
- Services (e.g. job search, daily care of children).

The obvious measure of **output** or outcome is full or partial work resumption. The client's social benefit status was also a relevant outcome, which did not necessarily coincide with work resumption. While the theoretical model was influenced by the fact that the medical, social security and labour contexts of work incapacity and the operation of interventions and (dis)incentives on reintegration differ in some respects among the countries included in the project, the study draws on the many similarities in the various countries' approaches.

Observation period and measurement points

An observation period of 24 months after the first day of work incapacity was chosen to monitor interventions and their outcomes for each subject. As arrangements for temporary work incapacity in most countries cover duration from less than a year up to 18 months, the interventions and outcomes related to those schemes are fully covered. The cohorts are defined by 3 months work incapacity that – in several countries – marks the point for social security intervention.

To allow adequate assessment of actions and outcomes in the cohorts, three measurement points were used:

The first (T1) was measured as soon as possible after 3 months of work incapacity. It covers a range of issues and variables, including relevant retrospective data on employment, health and work incapacity in the first 3 months. The measurement was set to coincide with the creation of the cohort. The actual time of sampling T1 shows differences between countries due to national circumstances that prolonged the inclusion period into the cohort.

Usually the period of time for inclusion (and for measuring T1) was between 90 and 120 days after the date subjects stopped work and went on sick leave (referred to as sicklisting), but in some countries, clients had to be included into the cohort far later due to administrative reasons. In these countries, efforts were undertaken to make clear to the client that some questions (e.g. regarding health status) referred to the situation at 90 days after the date of sicklisting. Analyses on the effects of late date of testing T1 showed very few significant deviations.

- The second (T2) point of measurement occurred approximately 1 year after the first day of work incapacity. It focused retrospectively on interventions carried out and subjects' opinions concerning incentives and disincentives between T1 and T2, as well as outcomes for T2.
- Finally, the last measurement (T3) was taken about 2 years after the start of work incapacity. It addressed the interventions in the second year and the outcomes of these and earlier interventions, as well as certain other data relative to the relevant social security context. Thus the second year focused on the consequences of interventions during the first year as well as the actions taken to prevent permanent disability.

FINDINGS AND THEIR POLICY IMPLICATIONS

The most striking finding was that, within the two-year observation period, the national differences in return-to-work rates were very different, namely: 40 percent in Denmark and Germany; 60 percent in Israel, Sweden and the United States; and over 70 percent in the Netherlands. Even accounting for cohort disparity, it is clear that the differences in return-to-work outcomes in the study countries can be explained on a variety of factors independent of the cohort makeup. Therefore, a careful examination of these factors should be particularly enlightened for all those interested in facilitating work resumption of out-of-work disabled persons.

The following figure shows the percent of the cohort working at T2 and T3.



Work status at T2 and T3 (% of cohort working)

As can be seen, one year after onset, the percentage of those working ranged from 32 percent in Denmark to 73 percent in the Netherlands, with the other countries ranging between 41 to 63 percent. In Denmark, Israel and Sweden, the percentage of those working two years after onset showed an increase but in Germany, the US and the Netherlands that percentage decreased somewhat.

The above figure shows that there was considerable correlation between work status at T2 and T3, meaning that people working after one year were more likely to be working after two years. It seems that whatever happened with regard to resumption or non-resumption largely happened in the first year, the second year only adding marginal improvement. In this regard, the study identified four patterns of work resumption:

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- Continuous working: those who worked at T2 and still worked at T3;
- Late resumers: those who were not yet working at T2, but who worked at T3;
- Relapse: those who were working at T2 but not working at T3;
- Non-resumers: those neither working at T2 nor at T3. (Note: these patterns were based on measures at two points in time. It is possible that those not working at either T2 or T3 nevertheless might have worked for some time during the first or second year but had relapsed to non-working status by T2 or T3).

The distribution of these work resumption patterns for all cohorts is shown in the following figure. Only a small percentage of subjects fall into the "late resumers" or "relapse" categories. The vast majority of subjects followed either the pattern of continuous resumption or the pattern of continuous non-resumption.

Work resumption patterns (% of cohort)



Another striking difference was found concerning whether work resumers did so with their former employers or with new employers. In the cohorts from Denmark and Israel, about 50 percent were working with a new employer. In the United States, this figure was almost 40 percent. However, a totally different pattern was found in the cohorts from the Netherlands and Germany where 80 percent or more of the subjects who resumed work returned to their old employer. In Sweden, about 70 percent who went back to work did so with their former employer. In the latter three countries, labour rules and practices, employers' personnel management policy or rehabilitation services

provide more opportunities for workers with long-term work incapacity to retain employment. There was also some cross-national differences concerning the quality of work resumption. Thus certain categories of workers resumed work at lower quality jobs than those they held prior to becoming work incapacitated. This was particularly true of the cohort from Israel and, to a lesser extent, of the cohort from Denmark. In those cohorts, 55 percent and 33 percent, respectively of resumers were working at jobs with lower qualification levels.



Work resumption by type of employer (%) at T3

Patterns of resumption of work

There were significant differences in the pattern of work resumption among the countries. For example, in the Netherlands and the United States, these high return-to-work rates were already reached within one year. In Germany, the Netherlands and the United States, at the one year measurement point, the maximum percentage of resumers had already been reached and no net gain (even some loss) was added in the second year. In Denmark, Israel and Sweden however, there was some further net increase in work resumption rates during the second year. Even when cohort differences are taken into account (e.g., age, occupational status), these differences in work resumption patterns are still striking.

The policy implications from this outcome seem very clearly to underscore the importance of intervening early with effective strategies. Most cohorts achieved little gain in year two (and there were even some losses). While it was likewise important for the study to identify effective strategies, the implications are clear that delays in application of those strategies will nullify the likelihood of success.

The construct of the design and methodology required that the second and third measurement points were only after one and two years so further refinement of the optimum intervention period within the first year will need to be the subject of further studies.

Benefit status after 1 and 2 years

From an economic perspective, benefit status is a relevant outcome quite apart from work status. As the cohorts were selected from employees covered by sickness benefit programs, they all can be assumed to have been on the benefit rolls at 3 months' sickness. The more relevant question, however, is their benefit status 1 or 2 years after sicklisting. Owing to differences in national insurance systems, the benefit status can be quite independent of work status. In some European countries, an employee who resumes work may also be receiving some sickness, disability or work injury benefits at the same time. This is because their benefit programs provide partial benefits (i.e. a percentage of the award for total disability) for those who retain or regain some (but not all) of their capacity to work. However, such a combination of benefits and work is extremely rare in the public social security programs of the United States and Israel.¹



Working and benefit status at T3 (% of cohort)

Note: no data available for Germany.

1. If the disability was work-related, the individual might be working and receiving a benefit for Workers' Compensation at the same time. For non-resumers, various benefits may apply. If still unable to work due to back problems or other health problems, they may receive sickness, disability or work injury benefits. Otherwise, they are possibly unemployed and may receive unemployment benefits or social assistance. In some countries, several benefits may coincide. The study found huge differences among the cohorts concerning benefit status for those not working at the two-year point. In the United States and Israel, the majority received none of the benefits mentioned. In Denmark, Sweden and the Netherlands, those who were not working after two years usually received sickness or disability benefits. In the Netherlands, a substantial number of non-resumers received either unemployment benefits or a combination of benefits (usually a combination of partial disability and partial unemployment benefits). Not surprisingly, the differences in coverage of benefit programs also impacted on non-resumers reported income status at the two-year measurement point. The following figure reflects the changes in reported income after two years.



Development of total personal net income from T0 to T3 in non-workers at T3 (%)

In the United States and Israeli cohorts, more than half of the non-working respondents at the last measurement point reported a drop of over 30 percent in personal income compared to their pre-sickness income. As can be seen by the figure above, the United States and Israel cohorts of non-resumers suffered the most with 64 and 56 percent respectively, incurring a greater than 30 percent decrease in income. The income loss among the European cohorts was generally much less; only one-fifth to one-third of the non-workers reported drops in income of over 30 percent. In other words, the availability of a combination of benefits in the European countries provided a greater level of income protection for those disabled workers who were not able to resume work. Moreover, a nominal increase in personal income was fairly common especially in Sweden and the Netherlands.

From a policy perspective, these findings are troubling. Although it is generally considered to be good social policy that work should pay – i.e., that working should be more lucrative than being on benefits, nevertheless, social insurance is also based on principles of equity and adequacy. Part of the underpinning of public support for pay-as-you-go systems is the notion that workers who are contributing know that if they were to become too disabled to work, the system would replace their income at a level commensurate with a livable wage, not at mere subsistence. Therefore, planners must consider whether benefit replacement rates that cause income losses in excess of 30 percent for workers who become too disabled to work are in keeping with principles of adequacy and fairness. This question is particularly significant if the system takes an all or nothing approach that does not permit partial work, thereby forcing a worker who cannot work full-time to choose no work at all and then to have to exist on a low level of benefits.²

Demographic characteristics

The study also measured a variety of background factors related to the work status at two years after the onset of sickness. Specifically, the study explored whether there were marked differences in work resumption related to demographic, health and (former) job characteristics. Most characteristics showed some association with work status at the two-year point in at least some of the study countries.

Below is a summary of some of the patterns in the association between demographic characteristics and work status that appeared in all or most of the cohorts:

- Age: In all of the cohorts (with the exception of the Netherlands), the oldest group (age 55 and over) was less likely to be working at T3, in several cohorts, this result also held true for the next-oldest group (45-54). Generally, the highest work resumption rates were found not in the youngest (under age 24), but in the next two youngest groups (ages 25-44).
- Gender: In most cohorts, females had a lower work resumption rate than males.
- Educational Level: A low educational level (lower secondary level or below) was associated with lower resumption rates.
- Household Composition: Respondents who lived alone had a consistently lower than average resumption rate. For other types of household composition (i.e., living with partner only; living with children only; living with partner and children; and other), the association with work status was less consistent across the cohorts.

2. The issue of level of income replacement is further exacerbated if we take into account that there is a ceiling on the level of income covered by social insurance programs. Those previously earning above that ceiling would have an even larger drop in income.

Most of the study findings regarding the demographic characteristics were not too surprising in that in all the cohorts, the age 55 and older groups were the least likely to return to work; that women were less likely than men to resume work; that low education rates were associated with low resumption rates and that living alone negatively affected return to work.

However, despite the seemingly universal direction of these associations, there were huge cross-national differences in work resumption rates within subgroups. Even between the subgroups that have the lowest resumption rates within cohorts, resumption rates vary widely. For example:

- In the oldest age group (age above 55), resumption rates varied from 17 percent in the German cohort to 68 percent in the Dutch cohort;
- Within the lowest educated group, rates varied from 31 percent in Denmark to 68 percent in the Netherlands;
- Among those living alone, rates ranged from 13 percent in Germany to 55 percent in Sweden.



Age at T1 and work resumption at T3 (% of cohort)

Note: for age -24 and Germany and Sweden: not specified as less than 10 observations.

From a policy planning perspective, the finding that the youngest (under age 24) age group did not do as well as the next younger age group (25-44) in work resumption may well be a cause of some concern. It is certainly logical that the explanation may be that the younger age cohort is likely to have less work experience to draw upon and therefore would understandably have more difficulty in finding suitable new work after developing a disabling condition. However, the end result of this difficulty portends serious consequences both for social insurance systems as well as for the individuals involved. The financial impact for social insurance systems of young workers not returning to work is twofold. First, the system would likely have to support the under 24 year-old disability beneficiary for approximately 40 years before converting to the old-age system. Secondly, since pay-as-you-go systems depend on the contributions of current workers to fund pensioners and many of the study countries already have low worker to beneficiary ratios, every young person out of the labour force is one less long-term contributor to the system. Policy planners must make intense efforts to build effective returnto-work strategies that address the particular needs of this young population.

Similarly, the findings about gender differences should be examined as to causality. Is it simply that women who develop a disabling condition do not attempt return to work as readily because they have working spouses; or they cannot manage their household duties along with work after developing a disability; or they have fewer skills or less experience than men in their same age cohort making transition to other work more problematic; or, is there greater discrimination by employers against women who develop disabilities versus men who do? None of these answers can be ascertained from the study, but the findings should stimulate further research along these lines that would help inform future return-to-work policies.

Health status

All associations between health indicators at onset and work status after two years were consistently linear: the less pain and the better functional capacity at onset, the higher resumption rates in all cohorts. However, it is most interesting that pain intensity was the only characteristic that had a highly significant association in all of the cohorts. Nevertheless, there were marked differences among the cohorts as to the resumption rates within equal levels of pain intensity and functional capacity. In fact, in some countries, the resumption rate of those with severe pain and low functional capacity at onset was twice that in other countries. In respondents reporting severe back pain (at T1), resumption rates varied from 27 percent to 54 percent, and in those reporting low functional abilities, rates ranged from 28 percent to 59 percent (in Denmark and the Netherlands respectively). The study also examined other factors that might influence work resumption rates including job characteristics such as physical demands and job stress (defined as imbalance between socio-psychological demands and control). Again the findings are not surprising in that the study found that the lower the physical demands, the higher were the resumption rates and that the lowest job strain was related to highest resumption rates in all cohorts.



Pain intensity at T1 and work resumption at T3 (% of cohort)

The policy implications of the findings concerning health status are at first glance not particularly surprising – the less pain and the better functioning capacity, the higher the resumption rate in all cohorts. However, far less logical are the findings that there were marked differences in resumption rates within equal levels of pain intensity and functional capacity. In addition, as mentioned, within subgroups there were huge cross-national differences.

Hence, the disparities brought to light by these findings cannot fail but to prompt new questions as to why there are such differences among cohorts and subgroups regarding work outcomes when health status is the same. The implications are that further study should be conducted to understand coping with pain and the role that personal motivation plays in pain management. Clearly too, return to work among those with higher levels of pain intensity and more limited functioning may well be influenced positively or negatively by non-medical factors such as work flexibility, employer attitudes and accommodations.

In summary, the outcomes in terms of work resumption varied widely between the six cohorts. Even though some "baseline variables" were consistently related to resumption rates in all cohorts, these universalities do not account for the cross-national differences: also within socio-demographic subgroups, resumption rates varied considerably between cohorts. Therefore, the next question was whether the cross-cohort differences in resumption rates could be ascribed to differences in the repertoire of interventions that were undertaken in the six cohorts.

Findings concerning medical providers and interventions

In addition to the existence of a "platform" of sickness benefits that helps support return to work, the actual type of medical treatment and who provides it have long been regarded as important factors to successful work resumption outcomes. Therefore, study participants were asked several questions in order to capture (1) who provided the treatment; (2) what medical treatments were used; and (3) which treatment or course of treatments seemed to yield the best results. Subjects were asked what types of medical providers (family doctor, company doctor, specialist, or physical therapist) they had seen for their back condition. The responses were quite similar for each cohort in relation to the proportion of respondents who were working at the two-year measurement point. The only variations were that work resumers from the German cohort were more likely to have been treated by a company doctor, whereas resumers from the Danish and United States cohorts were less likely to have seen a company doctor.

Medical diagnoses and treatments used in the study countries included a variety of commonly used approaches including x-rays; hospitalization; back surgery; acupuncture; pain relieving injections/medicines; and muscle training/range of motion treatment among others. Generally, however, the **introduction of medical interventions added little to what was already predicted by initial health and a few significant baseline characteristics.** In short, **it turned out that, with one exception, there was no significant relationship between medical treatments and return to work.** However, the study authors note that this may not be taken as proving that medical interventions are not effective. Rather, poorer back function may have been a reason for, instead of the effect of, the treatment; if that is the case, even an effective intervention might nevertheless result in an seemingly insignificant improvement in functioning.



Frequency of surgery (% of cohort)

WHO RETURNS TO WORK AND WHY? 2'

The only positive effect of medical interventions was found in the Swedish cohort, where surgery during the first 3 months provided a small improvement in back function. Interestingly, the Swedes had the lowest frequency of early surgery of all six cohorts – this may indicate that the selection process for back surgery is more successful in Sweden. The low but successful use of back surgery in the Swedish cohort contrasted dramatically with its use in the United States cohort – a fivefold higher surgical rate was found for the subjects from the United States than for those from Sweden during the same time period, but with no better outcomes.

In Sweden, for example, acute surgery is considered usually only in the few cases where the pain is intolerable or when it is combined with serious neurological impairments. The low surgical rates for subjects in Sweden, Germany and Denmark could be an effect of a systematic tendency to wait and see whether the symptoms decrease spontaneously or remain at a level indicating surgery. The upper time limit for such a wait-and-see approach is thought to be less than 3 months.

The book *Who returns to works and why?* cites findings from the medical literature that the outcome of surgery becomes less favorable when performed after more than 3 months. At least hypothetically, there are some possible explanations for the high rate of surgery in the United States and the Netherlands. One explanation could be that the indicators for surgery differ between the countries. Another explanation could be that the cohorts represented different populations, and that for a larger number of subjects in those countries, surgery, as opposed to waiting for surgery, was the reason for work incapacity in the first place. And finally, a third explanation could be the different economic incentives of the different health care systems. Certainly, in a privatized system as in the case of the United States, there may well be greater financial incentives for orthopedic specialists to recommend surgery than in a system like Sweden's where doctors are more likely to be on a fixed monthly salary.



Back function — ADL score (mean) and work status at T2

As illustrated in the previous figure, in all six cohorts, **subjects who had resumed work within one year had a statistically significant better back function than those who did not.** The ADL³ score in which higher is better, ranged between 52 in the Israeli cohort and 73 in the Dutch cohort, among those who were working at one year and between 32 in the Israeli cohort and 50 in the Swedish cohort among those who did not work at one year. The only distinct positive dependency among those who were working and had improved their back function was found among those who had undergone back surgery in Sweden and resumed work. In Sweden, Germany and the United States, general health was better among subjects who had resumed work within one year than among those who had not. One effect of medical treatment was obvious, in each cohort, in most cases, medical treatment resulted in an improvement of the subject's subjective health status. However, this did not necessarily correspond with an improvement relative to back function and pain intensity, the two health indicators that were most related to work resumption.

The policy implications from the findings concerning medical interventions are truly surprising and worthy of further study. The Swedish cohort had the lowest frequency of surgery, yet the best surgical outcomes as far as work resumption is concerned. It would seem that they have come closer than most countries in perfecting the selection process for good surgical candidates, and/or the way it is administered so that it has a positive effect on the improvement of health. The United States cohort was five times more likely to have had back surgery than were the Swedish cohort but with no better outcomes. Given that the United States is spending several percentage points more (as a percent of Gross Domestic Product) and in some cases, twice as much on health care than any of the other countries in the WIR study, it seems reasonable to guestion the efficacy of health care policy that promotes surgery as a frequently used intervention for common conditions such as back problems. The latter is particularly significant considering that the study found that, in all six cohorts, subjects who had resumed work within one year had a statistically significant better back function than those who had not. Such findings argue not only for intensified medical and vocational efforts especially in the first year after onset, but more importantly for labour market policies to support keeping the job open for that period.

Finally, the number of treatments given to the subjects was significant. Even those who did not report a better health status after a year nevertheless continued to receive many treatments. While on the one hand, this approach seems reasonable as their condition remained unimproved, on the other hand, it seems striking that so many treatments and interventions could have no beneficial effect on health status. From a health policy perspective, these findings suggest strongly that more research needs to be done in the area of measuring both the effectiveness, or lack thereof, of medical interventions as well as the most efficacious timing of such interventions.

3. ADL refers to the Hanover Activities of Daily Living (ADL) scale that collects current limitations of functions on the basis of back pain using 12 items of daily use. The range of values on the scale is 0 (greatest possible limitation) to 100 (no limitations). A score of 70 points or below is deemed to be clinically relevant.

Job protection status

In addition to other factors such as the employee's health status, working conditions or the operation of the benefit system, the study found that whether an employee returned to work with the previous employer is also significantly affected by his or her job protection situation. At issue is the right of the sicklisted employee to retain his or her job or conversely, the right of the employer to dismiss a worker for prolonged absence due to sickness or disability. The WIR study revealed that not only was there considerable variation among the study countries regarding this issue, but also that the strength or weakness of the protection proved very significant to the outcomes.

In the United States, Denmark and Israel, dismissal during a period of work incapacity (sickness absence) is allowed. In Denmark, for several categories of workers, the employer has the right to dismiss an employee after 120 days of sickness absence in a year (since 1997, this is no longer the case for public sector workers). In the United States and Israel, employees lack job protective regulations of a salary continuation nature, related to frequent or long-term sickness absence. In the United States, the Family and Medical Leave Act of 1993 does provide important job protection for workers by allowing up to 12 weeks of leave in a 12-month period when the employee is unable to work because of a serious health condition. However, it must be noted that this is unpaid leave, so the protection is simply against dismissal during this 12-week period only.

On the other hand, the rules and practices concerning sickness dismissal in the other three study countries stand in marked contrast. In these three countries, the weight of the protection is given to the ill or incapacitated worker. Thus in Germany, the employer may include regulations in the labour contract that specify when dismissal due to sickness absence will be applied, but in essence, there is at least some job protection for work-incapacitated workers. It is forbidden in the Netherlands to dismiss sick-listed employees during the first two years after onset of illness or incapacity. The Dutch public employment service has the right to examine the legitimacy of any planned dismissal with the main criterion for dismissal being the organizational and economic consequences of frequent absences ("disturbance of the production process"). Finally, in Sweden, dismissal is allowed only under certain conditions i.e., only after all possibilities of rehabilitation and work resumption to the original place of work were tried and found unsuccessful (this is particularly true for large employers).

In summary, the findings revealed that whether or not a worker incapacitated by sickness or disability returns to work with a previous employer is significantly affected by his or her job protection status. The study found that in countries where employers had the right to dismiss workers after a relatively short time, they generally did so and thus the workers possibity of ever returning to work was negatively impacted.

From a policy perspective, the issue of job protection status takes on even more importance when consideration is given to the findings mentioned above i.e., that subjects who had resumed work within one year had a statistically significant better back function than those who had not. Certainly guick dismissal provisions may pre-empt any possibility of return-to-work with the current employer, but the findings show that they may also result in delayed and lower rates of work resumption overall. On the other hand, the US findings showed a rather high rate of work resumption overall (62 percent, of which 35 percent was with the old employer, 24 percent with a new employer; and 3 percent self-employed), which may be despite or because of the quick dismissal practices more prevalent among US employers. It must therefore be considered whether in the rush to dismiss and replace the ailing worker, employers might not be doing both the worker and themselves a great disservice. In the case of the worker, such an action is likely to impede and possibly prevent his or her return to work because of the need to find a job with a new employer, a situation that can be especially problematic after acquiring a disabling condition. Furthermore, quick dismissal may also be bad policy from the employer's perspective because of the loss of an experienced worker who, if given more time, might in fact be able to return to work and whose recovery might be aided by working.

The policy lesson from these findings for employers is that they should carefully consider adopting a wait-and-see attitude towards a valued worker's absence due to illness or disability, at least for the first year after the initial absence. Certainly employers should think of using temporary workers or shifting duties if necessary, rather than resorting to dismissal too soon, because there is a definite cost to hiring a replacement worker, training him or her and waiting until productivity reaches the levels of the dismissed worker. On a macro level, countries whose labour policies permit employers to exercise liberal dismissal options may inadvertently be contributing to the growth of their own disability rolls because opportunities for sick or incapacitated workers to try returning to work with accommodations or adaptations, especially during the first year after onset, may be lost.

Warnings of or actual dismissal

The study found that warning of dismissal by the employer was fairly frequently used and that it had the effect of accelerating work resumption. In Germany, warning of dismissal during the two-year follow-up period was relatively frequent – 32 percent of the clients received such a warning. Surprisingly though, most of the warnings of dismissal in Germany were not actually carried out – only 9 percent of the workers of the cohort were actually dismissed. Use of warning procedure was also quite frequent in Israel and the United States too – about one-fifth was warned that they might be dismissed. In Denmark and the Netherlands, 13-15 percent received warnings but in Sweden, only 4 percent did.

The findings also showed that the threat of dismissal played the expected role – i.e., those who were threatened by dismissal but not actually dismissed, had a higher rate of work resumption at the end of the follow-up period. In Denmark, Israel and the United States, most of the warnings and actual dismissals occurred during the first year (median up to 5 months). In Sweden, all of the few warnings and dismissals happened during the second year. However, actual dismissal was high in the Danish cohort, where 65 percent were dismissed during the two years following the onset of work incapacity. In the Israeli and United States cohorts, substantial numbers of subjects were dismissed as well (34 percent and 23 percent respectively).

On the other hand, the WIR study findings also demonstrated the value of job protection measures versus liberal dismissal policies through the very different outcomes for two otherwise similar countries.



Warning of dismissal and dismissal at T2 or T3 (% of cohort)

Specifically, the difference in the outcomes for the Dutch and the Danish cohorts in the study is highly instructive. Using cluster analysis, the study found that that the two cohorts in the Netherlands and Denmark were "country-couples" i.e., they had the most similarity in the most number of variables including: age; educational level; average number of years in the present job; functional limitations; and pain intensity. However, in Denmark because of the above-mentioned right of employers to dismiss employees after 120 days of sickness absence, 62 percent of the Danish cohort faced unemployment during the first year and had to find a new job or change occupations. The result was that for those who did resume work at the two-year point in Denmark, only 44.6 percent did so with their old employer. This finding was in strong contrast to the Netherlands where 81.9 percent returned to their old employer in the same timeframe. Not only did the protective atmosphere of the Netherlands contribute to a greater return-to-work success rate (71.6 percent compared to 39.7 percent in Denmark), it did so in the first year after sickness onset.

From a policy perspective, there is a vast difference between warnings of dismissal, especially if the employer suspects that the worker is malingering, versus the actual use of dismissal. Moreover, the timing of actual dismissal is particularly critical to the return-to-work outcomes. However, there are policy implications to be considered concerning the use of warnings especially if the worker is still not able to return to work or does return to work, but is not better. On the one hand, the Swedish findings indicate that the best therapy may be work itself. On the other hand, threats of dismissal alone run the risk of setting up an adversarial relationship between employers and workers. Obviously, the ideal response relies on carrots with the use of sticks only when necessary. Threats of dismissal must be preceded by offers of rehabilitation, accommodation and adaptations and used judiciously lest they weaken the employer/worker relationship and adversely affect return-to-work outcomes.

Work flexibility

The actual findings with the cohorts in this study indicate that the general flexibility of the Dutch system seemed to have helped return-to-work efforts. Work resumption in the Dutch cohort was often supported by temporary or permanent interventions. The Dutch, in particular, seemed to use what the study called "therapeutic" work resumption to the greatest effect. Specifically, therapeutic work resumption is return to work with job training and compensation of fewer hours a week initially. The Germans call this principle "stepwise return to work" meaning that the hours are gradually increased as the person's functioning improves.

However, there is a possible flip side of the coin that may explain the very high return to work outcomes for the Dutch cohort in this study. Possibly the Dutch cohort contained more cases of "prolonged short-term sick persons" than did the cohorts of other countries. In other words, cases of work incapacity that might already have been terminated within 90 days in the other countries, may still have been ongoing in the Netherlands because of the protective and relative softness of the system. Indeed, to the degree that such statistics were available, the comparisons showed the Netherlands with a very high rate of 3-month absent employees. This higher frequency of long-term absence in the Netherlands could mean that the Dutch cohort was actually less incapacitated for work than were cohorts from other countries.

The Dutch also support return to work by providing workplace adaptations and changes of job content, if necessary. Moreover, the study found that the overall work accommodations (including adaptation of workplace; adaptation of working hours; job redesign or change of the workplace; and therapeutic work resumption) were begun the soonest in the Netherlands (at about 6 months) and the latest in the United States (at about 9 months). There is no data for Germany but in the other countries, these interventions typically occurred after about 7 months although only the Netherlands and Sweden reported the use of therapeutic work resumption as a strategy. The study findings were quite revealing with respect to the flexibility of the labour laws and especially, employer practices concerning how workers were or were not helped to return to work by the system in place. Of particular interest was the contrast between the practices in the Netherlands versus those of Danish employers. Despite the close similarity of their two cohort groups, almost 72 percent of the Dutch returned to work whereas only about 40 percent of the Danes did.

The policy implications from these findings are quite stunning. Not only does job protection seem to play a significant role in explaining this finding, but also whether appropriate supports are in place is extremely important. The findings indicate that the Dutch system provides a variety of supports that permit the returning worker to come back gradually and to draw on the supports needed including not only the typical job accommodations such as equipment, but also adapted working hours; change of workplace; job redesign and so forth.

The Dutch reforms of the 1990's not only brought job protection and a shift of the financial burden from the public sector to the employer, but they also put the onus on employers to take an active role in the reintegration of sicklisted employees. Employers are required to have a formal sickness prevention and absenteeism policy and are responsible for creating reintegration plans for incapacitated employees and doing everything within their means to reintegrate them in the company. The employer must hire a publicly approved privatized consulting firm to assist in the implementation of a prevention and reintegration policy.

Hence, it can be seen that the Dutch situation, wherein employers are holding the job and paying the sick or injured worker's benefits also does a great deal to promote job retention through encouraging cooperation and flexibility between the employer and the worker. In contrast, in systems where the sick or injured employee is forced to leave the current position and find work with a new company, the likelihood that the new employer would agree to be flexible about work resumption in a stepwise manner or with diminished duties is exceedingly slim and, at best, probably would only be for a short duration. Labour policies that allow for and/or encourage early dismissal of sick or disabled workers such as in Denmark may be preempting the possibility of bringing the worker back to work for the previous employer. Furthermore, social insurance disability programs in countries such as the United States that require job severance with the former employer as a prerequisite to qualifying for disability benefits may unwittingly be contributing to the problems of job reintegration for workers who develop serious illnesses or impairments.

Early intervention strategies

Another recognized principle of good rehabilitation policy is early identification and early intervention if indicated. Hence the formal process for receipt of sickness benefits typically also dictates the timing. In all the countries studied, employees had to notify their

employer close to onset concerning work absence due to work incapacity. Furthermore, in all countries except the Netherlands, certification from a doctor was required at some point in the process, typically fairly quickly after onset. However, although there seems to be some common approach to the certification process, it must be recognized that such requirements are really administrative formalities and do little to affect the likelihood of return to work. The real issue in this respect involves availability of rehabilitation measures and the timing of such measures. The study found that in Sweden, social security coordinated and planned the rehabilitation programme, in collaboration with the employer starting with the 8th week. In the Netherlands, social security supervised rehabilitation potential was assessed, planned and financed by social security 3 months after the onset of work incapacity. In Germany, social security initiated rehabilitation at the onset of social security payments. In Israel, public financed rehabilitation starts only after disability benefits are granted.

The policy implications of linking decisions about provision of rehabilitation services to the benefit payment agency cannot be overstressed. In several of the study countries, the provision of vocational rehabilitation services was an integral component of the benefit process and typically was the responsibility of the same agency that pays the benefits. In such integrated models, there is a vested financial interest of the system to return the beneficiary to work as quickly as possible. Therefore, countries that have such systems also tend to understand and practice early identification and intervention.

These early intervention strategies contrast sharply with the situation in countries where the provision of vocational rehabilitation services is independent of benefit payment and/or is the responsibility of a different agency from the one paying sickness or disability benefits. The policy implications of these structural or administrative practices can be illustrated by the situation in the United States where the Social Security Administration has no responsibility for provision of rehabilitation services. All decisions related to payment of disability benefits are made prior to and independent of any possibilities of the efficacy of rehabilitation services. The policy implications of the United States example should be obvious - the Social Security Administration can only refer its' claimants to rehabilitation, but the actual decision concerning provision of such services is the authority of another agency. If rehabilitation takes place, it does so only after the claimant has been declared permanently and totally unable to work because of a serious impairment. Moreover, as previously stated, the claimant for such benefits cannot be working at the time he or she files for disability benefits, thus obviating any possibility for work reintegration with the current employer following rehabilitation. The study outcomes for the United States were probably positively influenced beyond what they would typically be for the majority of the states in the United States because the two states used for the study - California and New Jersey - have temporary disability programs that pay cash sickness benefits. In the case of New Jersey, the benefits are paid first 26 weeks and in California for the first 52 weeks. Hence the two state models operate more like their foreign counterparts in that they provide

an opportunity for rehabilitation or other interventions to be tried while still maintaining the incapacitated worker in his/her current job for at least 26 weeks and possibly a full year. In summary, it is very likely that the results for the United States cohort would have been far less successful had the participants been from the other 45 states that do not provide such opportunities for reintegration back to the former job or employer.

Reintegration into a changing economy

As mentioned earlier, the participating sickness fund in Germany represented only blue-collar workers. Thus, the German cohort had much lower levels of educational achievement on average than any other cohort did, and were considerably older (by 10 years) than any other country's cohort.

The end result is that it is often difficult to draw any implications from the findings concerning the German cohort's overall poor showing. Is the German low rate of return to work explainable by their more advanced age? Possibly, but if age is the reason, how does one account for the fact that in the age 55 and older group of workers in the cohort, only 17 percent of the German workers returned to work, whereas 68 percent of the Dutch did? Similar large cross-country disparities were found when comparisons were made regarding education levels. In short, the very different characteristics of the German cohort confounded the ability to measure the specific variables for them, making it difficult to disaggregate which factors were significant and which were not.

The likelihood is, however, that in reality their poor results are in actuality a **combination** of several of these factors – i.e., older age, low education levels and the very nature of blue-collar work that typically requires more strenuous effort. Hence, workers with back problems would be less likely to be able to continue doing such work, the low education levels would likely preclude a transition to clerical or more sedentary work and their older age might mitigate against social insurance agency efforts at vocational rehabilitation. Although it is always dangerous to generalize, it is probable that the combined nature of the characteristics of the German cohort would result in similar results with like cohorts, in many other countries. Especially given that the German system has been long recognized for its devotion to the principle of rehabilitation taking precedence before granting a pension, the negative outcomes for this cohort of workers carry serious policy implications for social insurance systems everywhere.

For example, as the technology revolution expands and requires more educated and trained workers, **what will happen to those with low education?** Furthermore, as a result of the pressures of globalization, the nature of manufacturing has changed drastically in the industrialized countries. Many western countries have seen the virtual disappearance of trades, such as the garment and shoe industry, that long provided employment for less educated individuals. Similarly, well-paid laborers in heavy industries such as steel and automobile manufacturing are losing jobs to the many new technological advances such as robotics that require more skilled workers to operate them. The rapid

growth of the computer industry and especially, of the information technology field, will require individuals to constantly update their skills to stay current. For those with only low education or skills, the current alternative to employment is the widening service sector. However, these low-skilled service sector jobs are an unlikely option for older workers with back problems because the jobs are usually physically demanding or require good stamina and they tend to pay low wages.

Moreover, many scholars have expressed new concerns that in the developing countries, the rapid shift towards globalization that often creates demands for cheap labour may be responsible for producing a new underclass. The arguments that globalization will intensify the disparity between the low skilled and the highly skilled both in developing and industrialized countries is often mentioned.

It is claimed that increased trade between industrialized and developing countries reduces demand for low skilled workers in the industrialized countries. Developing countries thus concentrate on the production of goods using low-skilled, low cost labour while industrialized countries specialize in goods produced with highly skilled labour, at higher wages. In industrialized countries with flexible labour markets, wages for low-skilled labour will fall, while in those with rigid labour markets unemployment will increase.

Whether these gloomy predictions concerning the effects of globalization will prove valid or not, the fact is that social insurance systems must be prepared to deal with the creation of new at-risk populations of workers. In short, although there will be those who will decry as scientifically less valid that the German cohort did not conform to the study design as much as was intended, for policy makers this accident might be a blessing.

The policy implications of the disappointing return-to-work outcomes of the German cohort are a clear warning sign, especially to the industrialized countries, that new strategies must be devised to train or retrain workers with low education or limited skills into meaningful, viable occupations. Policies must be developed that recognize the knowledge and expertise of older workers and must be crafted in ways that utilize such skills in new ways or to train younger workers. For example, older workers with low education levels might still be able to "teach" younger workers such trades as bricklaying, carpentry, cabinetry, metal work and so forth. Trade unions should play a greater role in helping to retain as trainers and mentors, older workers who develop impairments or disabilities that prevent them from actually performing the tasks of the job on a regular basis. Such policies would serve a twofold purpose of retaining older workers in the labour force as well as perpetuating valuable skills.

In addition, care must be taken regarding the policy implications inherent in some countries use of immigrant or former welfare recipient labour, lest these groups suffer similar problems.

Currently several of the industrialized countries (for example, the United States, the United Kingdom and Australia) are devoting considerable funding and effort to develop transition-to-work programs for people who are on social assistance (welfare benefits). While there may well be general approval for the social and economic goals of moving people off welfare and into jobs, policy makers should be careful that they are not settling for easy, temporary solutions. Especially in a time of high demand for people to take low skill jobs, care must be taken not to set them up for failure down the road as they age or develop impairments. In the industrialized countries, a particularly vulnerable group in this regard is the immigrant populations. Immigrants often lack basic reading and writing skills in the native language(s) of their adopted country, a situation that often relegates them to manual labour. Countries who rely on younger, healthy immigrants to take these kinds of jobs without ensuring their educational advancement now, will have to contend with large numbers of them on the disability or unemployment rolls later. In summary, the experience of the combination of characteristics that translated into low return-to-work outcomes for the German cohort should be an object lesson for administrators and programme specialists concerning other groups of vulnerable workers.

FURTHER IMPLICATIONS FOR SOCIAL POLICY AND SUGGESTIONS FOR FUTURE RESEARCH

As mentioned earlier, the uniqueness of this study was its methodological approach to cross-national comparisons of return-to-work practices in six industrialized countries. In addition to the study findings themselves, the research produced a wealth of data that can be further examined for other purposes or could serve as background for further research. For example, in addition to the cross-national and cross-cohort comparisons, national reports were also prepared as part of the project. As might be expected, these national reports focused mainly on the "domestic" cohort within the context of national policies on social protection, prevention or reintegration. The national studies may also provide conclusions or determinants (predictors) of work resumption or on the impact of interventions, which may have a validity that would be of interest to readers in specific countries. In addition a searchable CD-ROM contains the international database.

Moreover, many of the cross-national findings were indeed surprising, most notably the highly positive return to work results of 72 percent for the Dutch cohort – far higher than any other country in the study. The Dutch had the misfortunate of being labeled by some social economists as the "sick man of Europe" and their disability programme as the "Dutch Disease" because of the high number of people on sickness and disability benefits. However, the WIR study findings seem to validate the effectiveness of their disability programme policy efforts of the last several years. Although their participants did not necessarily return to full time work, nevertheless, the outcomes were still highly valid and instructive. In particular, the Dutch findings show the importance of the relationship between the employer and the employee for successful work resumption. The fact that employers cannot quickly dismiss ill or impaired workers coupled with a more flexible atmosphere for returning to work gradually, seemed to explain the difference between the otherwise quite similar Dutch and Danish cohorts' success rates.

Lessons for employers and policy planners

The need for flexibility on the part of the employer may have even greater application to the countries that did not have particularly good return-to-work outcomes. While it is tempting to "blame" poorer reintegration results on the composition of the cohort (i.e., they are older, less educated, less skilled etc.), such an explanation begs the question

from a policy perspective. In other words, all of the countries in the study are facing to a greater or lesser degree, the problem of aging workforces. Looking beyond the disappointing showing of the German cohort, for example, reveals that utilization of medical and vocational rehabilitation was guite low in that cohort and suggests a considerable amount of underutilization. Coupled with the knowledge that almost all of the persons who returned to work in the German cohort did so in the first year, the findings led the country researchers to recommend (1) the process of accessing medical rehabilitation within the German health care system should be reviewed critically and (2) rehabilitative interventions should be undertaken as early as possible. Readers may wish to consider the degree to which these lessons might also be applicable to specific populations in their own countries. As the discussion concerning the German cohort mentioned above, the combined effects of age, low education and limited blue collar skills that can no longer be utilized in current work settings nor transferred to new jobs, pose particular return-to-work challenges. Social policymakers in most industrialized countries need to be cognizant of this problem and need to encourage more research on this specific combination of factors.

Moreover, the findings, particularly those of Germany and Israel, suggest that the **timing of medical and vocational interventions plays a critical part in whether work resumption is successful or not**. In addition, in at least some of the countries, such as the United States, the provision of workplace adaptations, job training and/ or vocational education also seems to be positively correlated to successful reintegration. In general, work accommodations proved to be a relevant supporting condition for work resumption in cohorts with high return-to-work rates. As has already been discussed, certainly highly effective is the flexibility of the employer concerning work schedule accommodations including gradual return-to-work and part-time work. The application of this type of intervention requires a willingness and commitment on the part of the employer, which means that this type of intervention is likely to function particularly well when labour relations are favorable.

Questions of health status

The WIR study was confined to workers who went on sick leave as a result of back problems only. While it is certainly true that back problems are a very high cause of work sickness absenteeism and incapacity in most of the industrialized world, there are also other conditions that have become almost or even more problematic to social insurance disability programs. In particular, mental illness has become the leading cause of work incapacity in many industrialized countries. The question then becomes **to what degree are the findings and the lessons learned from the back study also applicable to return-to-work efforts for those with mental illness**, for example? Would some of the interventions and techniques that seemed to have a positive effect on subjects with back problems work for those with mental illness or does the very different nature of the condition require very different solutions and strategies? Again more research is needed to explore these issues. Consequently, the whole question of health status with regard to long-term work incapacity should be reconsidered in future research. Even when measured with international validated instruments, health condition turned out not to be an absolute indicator of the probability of work resumption. In fact, in several cohorts, **work resumption took place without substantial improvement of health condition.** The study findings are that health, work environment, skills, and attitudes all are important determinants of work capacity. Perhaps one key to the issue of work capacity is the worker's attitude towards perceived work ability. However, although changes in motivation and other aspects of work attitude can occur as a side effect of the medical or vocational interventions taken, no interventions actually focus directly on attitudes. Relevant issues for further research could be **the role of motivation and ways to influence the motivation of the employee and the employer.**

The question of aging and disability

Just as the growth in the disability rolls is the result of many complex economic and demographic factors, so too are the effects on social insurance systems very multi-faceted and at times, contradictory. For example, for the demographic and fiscal reasons mentioned above, several countries have already raised or are in the process of raising the age for full retirement pensions. In fact, it is rather ironic that the growth in the disability rolls in the industrialized countries has occurred despite continual advances in the field of medicine that have resulted in improved health status and increased longevity among people living in these countries. In fact, some researchers argue that not only has **the health status of the elderly improved**, but that a growing body of evidence points toward **declines in disability rates among the elderly.**

While elderly populations are clearly not the focus of this study, research into this area is mentioned here as an example of the sometimes-contradictory pressures and influences on social policy planners. It is not clear at least from the social insurance disability rolls, that people in the industrialized countries are living with less impairment or disabling conditions. Certainly, there has been no overall net gain in terms of fewer people on disability benefits in these countries. Even if it is true that general disability rates have declined among aging populations, the rate of working age and younger populations who receive disability benefits has escalated sharply. Furthermore, the nature of disability has changed in recent years, especially in the developed economies. For example, people with mental illness represent an increasing proportion of individuals on disability benefits in industrialized countries;mental illness is also the fastest growing condition among younger workers receiving disability benefits.

In conclusion, the industrialized countries are struggling with various shifting demographic and labour market factors. Populations are aging, work is becoming more complex and requiring new types of skills and expertise while previously well-paid lower skilled jobs are disappearing due to the effects of globalization. At the same time, life expectancy is increasing, retirement ages are being raised, people are living fairly comfortably with once fatal conditions and, in many industrialized countries, employers are struggling to find and keep good, skilled workers. Social policy planners are concerned about the growing rolls of disability beneficiaries while also being mindful of the recognized linkage between aging and disability. All of these issues are complex and inter-related and require thoughtful solutions based on sound research findings. The Work Incapacity and Reintegration Project is an excellent first step in that direction and should pave the way for more such comprehensive, comparative, in-depth and methodologically sound research.

For further information on this project, please consult:

Who Returns to Work and Why? A Six-Country Study on Work Incapacity and Reintegration

Frank S. Bloch & Rienk Prins, Editors 2001, xxiii + 306 pages, 134 tables and figures

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This unique study on disability, work incapacity and work resumption provides new evidences on the success or failure of work reintegration through medical and vocational intervention in six industrial countries.

- Who is likely to return to work and who is not?
- Are there significant differences in work resumption in different countries?
- What are the predictors of success or failure?
- What effect does time have on the likelihood of returning to work after back injury? Does early intervention matter?
- What interventions are used and which ones are effective?
- What are the commonalties that make a condition so disabling that people are unable or unlikely to return to work?
- Based on the evidence, what policies could improve work resumption?

These and many other questions have been explored and more importantly, measured in this unique cross-national project. The results are often surprising and the findings dispel many commonly held beliefs and will call into question many prevailing practices.

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