

## Unemployment Insurance, Labour Market Programmes and Repeated Unemployment in Sweden

Susanne Ackum Agell,\* Anders Björklund\*\*  
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### Summary

■ The formal right for unemployed individuals in Sweden to placement in a labour market programme when unemployment benefits expire and thereby to qualify for new benefit periods has in practice created a system with an indefinite duration of unemployment benefits. This paper examines the likely consequences of limiting the right to renew the eligibility to unemployment benefits. Using new longitudinal unemployment data we find that long spells of benefit-programme-periods are indeed common in Sweden. Our theoretical framework implies that a limitation of benefits would create stronger incentives to escape unemployment among a significant number of prime-aged unemployed. However, we also find that those unemployed who run the risk of losing benefits have lower family income and are more likely to receive social allowances than other unemployed. Hardly surprisingly, an efficiency-equity trade-off seems to be involved. ■

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# Unemployment Insurance, Labour Market Programmes and Repeated Unemployment in Sweden

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The British economists Richard Layard, Stephen Nickell and Richard Jackman have formulated one of the most influential policy proposals of the 1990s on how to beat unemployment and avoid persistence, or hysteresis, effects (Layard *et al.*, 1991). The main ingredient in their recipe is a combination of toughness in regard to unemployment benefits and active labour market policy. Specifically, they advocate fixed and not excessively long benefit periods as well as effective "work tests" that require active search and acceptance of suitable job offers by the unemployed workers. Furthermore, as the date approaches when benefits will expire, the unemployed should have the right to participate in labour market training or job programmes; see also Jackman (1994). The idea is that such a policy mix can prevent the deleterious consequences of long-term unemployment. By preventing widespread long-term unemployment, the risk of persistently high unemployment rates can hopefully be reduced.

These policy recommendations are close to the traditional Swedish mixture of unemployment insurance (hereafter UI) and active labour market policy. Layard and his colleagues also argue explicitly that the favourable Swedish unemployment record during the post-war period, until the time when their book was published in 1991, is one of the strongest arguments in favour of their proposals.

Since 1991 the Swedish economy has been hit by its most severe downturn since the Great Depression in the 1930s. The open unemployment rate has risen to almost two-digit levels. The traditional Swedish

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model involving active labour market measures has not, however, been abandoned. In 1994 nearly 5 per cent of the labour force were involved in active measures: 1.3 per cent in job development schemes for young people (*ungdomspraktik*), 1.4 per cent in labour market training (*arbetsmarknadsutbildning*), and 1.5 per cent in relief work and job introduction projects (*beredskapsarbeten* and *arbetslivsutveckling*). As a result, open long-term unemployment has been avoided to a much greater extent than in most other Western European countries. If effective, this policy may prevent the unemployed from losing human capital and becoming passive UI recipients. If Sweden succeeds in returning to previous levels of unemployment, i.e., approximately near two-three per cent of the labour force, the policy recipe advanced by Layard *et al.* would undoubtedly be confirmed.

However, most Swedish economists are quite pessimistic about the prospects of returning to low rates of unemployment. In most public forecasts unemployment will remain at historically high levels for quite some years. There are several strong reasons for this pessimism. One is that the general growth prospects of the economy are considered poor, partly because a severe government budget deficit precludes further expansion of the public sector. Another is a rising fear that the Swedish mixture of cash benefits and active measures may actually promote passive behaviour. At first glance, the Swedish system may seem quite tough on unemployed workers. Benefits can only be collected for 60 weeks and the employment offices are supposed to test the willingness to work of benefit claimants. However, when the period of 60 weeks expires, the unemployed UI recipient has a right to be placed in a temporary job programme or in labour market training. After five months in such a programme, the individual is eligible for another period of 60 weeks with benefits. Since the right to placement in a programme is renewed after each new period with UI benefits, the system provides a safety net of indefinite duration.

In the economic debate in Sweden there is a growing fear that many of the unemployed will get used to living with reoccurring spells of benefits and programmes during the current recession, with insufficient incentives to interrupt the cycle. Inadequate incentives can e.g. prevent geographic mobility or acceptance of (maybe only initially) lower paid jobs in the regular labour market. For these as well as budgetary reasons, the former liberal-conservative government took measures to eliminate the possibility of perpetual transitions between benefits and active measures. This

legislation became effective in July 1994 and stipulated that an unemployed individual has a right to a maximum of two 60-week spells of UI benefits with one intermediate period of participation in a programme. In practice the maximum time of unemployment support (benefits or programmes) was therefore just under three years. After that, the unemployed individual would have had to qualify for a new benefit period by working in the regular labour market. However, the social democratic government which came to power in October 1994, rescinded the rules (for equity reasons) so that the system with a limited number of benefit periods was never implemented in practice.

No doubt, we need to know more about the likely consequences of a system with truly fixed periods of UI benefits. Many issues are involved here: How frequent are repeated spells of UI benefits and participation in programmes? What groups would be affected by limitations, and what would the distributional consequences be? It may seem quite straightforward to answer these questions on the basis of publicly available statistical information. However, most information on the "dynamics of unemployment" is limited to single spells (see e.g. Björklund, 1995), whereas we know very little about repeated unemployment over comparatively longer periods.

The purpose of this study is to use some previously unexplored longitudinal data to present some new facts about the importance and nature of repeated unemployment spells in Sweden. We do so with the aim of discussing the likely consequences of a fixed number of benefit periods.<sup>1</sup>

The rest of the paper is organised as follows. In Section 1 we outline the Swedish unemployment benefit system and how it is related to active measures. A theoretical framework is introduced in Section 2 and some new facts about Swedish unemployment are presented in Section 3. More specifically we try to answer three questions: (1) How frequent are repeated spells of unemployment? (2) What is the nature of repeated unemployment? (3) Who would be affected by a new rule limiting the number of benefit periods? We summarise and discuss our findings in Section 4.

<sup>1</sup> It should be kept in mind that the subsequent discussion does not depend on the particular design of the benefit system proposed by the former liberal-conservative government. Preferably, the paper should be read as a discussion of likely consequences of any benefit system with fixed duration.

## I. The unemployment benefit system

The benefit system can be divided into two parts – unemployment insurance (UI) and cash assistance (CA). While briefly presenting these parallel systems, of which UI is the more important,<sup>2</sup> we focus on the design of the system that facilitates – and thus helps us understand the nature of – repeated spells of unemployment.

### I.I. Unemployment insurance

An unemployed individual receives a daily benefit for five days a week. Compensation is income related up to a certain maximum amount. UI compensation was 90 per cent of previous income prior to July 1993, after which it was reduced to 80 per cent. Those under 55 receive UI for a maximum of 300 days and those over 55 for 450 days. This represents about 60 (90) calendar weeks, since only workdays count.

Payments of benefits are not unconditional. Perhaps the most obvious requirement is that the individual should be unemployed, but he/she also has to search actively for a job at the public employment office and be willing to accept a suitable job offer.<sup>3</sup> Other requirements are aimed mainly at excluding groups with only temporary connections to the labour market; this is summarised in a membership and a work requirement. The *membership requirement* implies that compensation is paid only to individuals who have been members of a certified UI fund for at least 12 months. (Almost all certified funds are administrated by the unions, though union membership is not a requirement for membership in a UI fund.) The *work requirement* means that an individual cannot receive UI benefits unless he/she has worked for about five months in the 12-month period preceding the unemployment spell.

An important *exception* to the work requirement is that instead of work in the regular labour market, an unemployed individual can qualify

<sup>2</sup> For a more comprehensive description see e.g. Björklund and Holmlund (1991).

<sup>3</sup> A job offer is considered suitable if: (a) the labour market situation and the insured worker's abilities, previous occupation, and personal circumstances are taken into account; (b) the terms of employment accord with the collective agreements, if such exist, and otherwise accord with those in comparable companies for workers with comparable tasks and qualifications; (c) no legal labour disputes occur at the work site; and (d) the work environment adheres to the legislation in that sector. An unemployed worker has the right to reject a job offer if the wage for the new job is more than 10 per cent lower than the benefit he/she receives, i.e., lower than 70 per cent of his/her previous labour income.

for a 60 weeks spell of UI by participating in a labour market programme. This exception used to apply only to temporary job programmes. But as of 1986, five month's participation in practically any measure fulfils the work requirement. Furthermore, in 1983 insured individuals were given the right to a relief work when their benefits were approaching termination; in 1993 this right to a placement in a programme was extended to include labour market training.

The possibility of unlimited renewals of the 60-week benefit period through participation in programmes eventually raised the question as to whether UI was actually fixed in time. In July 1994 the insurance system was amended to prevent endless transitions between benefits and programmes. According to the new system, individuals could only qualify for *one* additional period of benefits by means of *one* intermediate five-month period in programme. In order to qualify for a new 60-week period of UI, the unemployed had to fulfil the work requirement in the *regular* labour market.<sup>4</sup> The social democratic government which came to power in October 1994, rescinded the rules so that the system with a limited number of benefit periods was never implemented in practice.

Special rules that pertain to *part-time* and *seasonal* unemployment are related to the work requirement, and thus also of relevance to this study. Individuals who look for full-time work but are only able to get a part-time job can receive UI to compensate for their loss of income. The duration of this complementary benefit payment period has changed over time: until 1984 complementary benefits were paid for the equivalent of 50 full-time days (e.g. half-time unemployment benefits could be paid for 100 days); the rules were changed in July 1984, so that part-time unemployment benefits could be received indefinitely; in July 1987 a limitation was reintroduced but extended to 150 days, only to be abandoned

<sup>4</sup> In addition to the limitations on benefit periods, the work requirement was divided into a general and a specific component. According to the *general work requirement* the insured individual should, for a 12-month period preceding the unemployment spell, have worked for either (a) a minimum of 75 hours/month for at least five months or (b) a minimum of 65 hours/month for at least ten months. The general requirement was also fulfilled if the insured individual, instead of working had been notified of termination, on vacation or on other paid leave (except for sick leave, maternity leave or military service). According to the *special work requirement* members of a UI fund would qualify for benefits if, instead of working, they had (a) participated in relief work; (b) been prevented from searching actively for work due to caring for an elderly or handicapped person at home; (c) participated in labour market training or vocational rehabilitation (*yrkesinriktad rehabilitering*) for which training allowances are granted, or participated in job introduction projects, or (d) completed military service or been on parental leave.

again in 1993, and today there are no limits in duration of complementary payments. One consequence of this rather generous rule is that it may create incentives for individuals to report that they are looking for full-time work, although they may actually be quite content to work part-time and receive complementary UI benefits. According to Björklund and Holmlund (1991), employment officers indicated that the number of part-time unemployed collecting benefits increased substantially in 1984 when the rule regarding duration was abandoned.

In theory, insurance is preferable only when there is uncertainty that an event may occur, otherwise other options such as private savings are equally attractive. It therefore follows that in the case of income flows which are uneven but predictable with certainty, as may be the case with seasonal work, there is no need for an insurance system. Nonetheless, in Sweden, a seasonally unemployed individual receives benefits like everybody else, provided that the membership and work requirements are fulfilled. This possibility could also explain why some individuals receive unemployment benefits year after year.

In addition to the requirements introduced to exclude individuals with little connection to the labour market, there are some criteria to reduce the risk of moral hazard.<sup>5</sup> First, individuals who voluntarily quit a job have to wait four weeks until they receive UI benefits. (Before 1993 they had to wait five weeks.) Second, since 1993 there is also a qualification period of five days for involuntary job separation. The effect on the moral hazard problem is less clear in this instance, and the rule was probably introduced for budgetary reasons. Third, an insured individual will be suspended from benefits if he/she (i) is fired because of misconduct; (ii) turns down a suitable job offer or; (iii) behaves in a way that prevents re-employment. The suspension rule also applies to suitable proposals of labour market programmes. (In other words, proposals of programmes can be used as a work test, as discussed by e.g. Jackman, 1994.) The suspension period depends on the circumstances in the specific case.

Until 1987 an unemployed individual was also required to visit the employment office on a regular basis. The visiting requirement was abandoned in 1987 in favour of a system where contact takes place when the placement officer finds it necessary.

<sup>5</sup> Moral hazard in the case of UI arises because an insured worker can affect the probability that the event against which he/she is insured can occur; for example, an insured worker can voluntarily quit, he/she can make little effort to find a new job once he/she is unemployed and he/she can turn down new job offers and remain unemployed.



## 1.2. Cash assistance

The second part of the benefit system is cash assistance (*kontant arbetsmarknadsstöd*). Introduced in 1974, it provides unemployment benefits for those who are not members of a UI fund but still meet the work requirement.<sup>6</sup> The cash assistance (CA) system also includes a schooling requirement: individuals who enter the labour market directly from school receives CA after a waiting period of 90 days. The daily cash allowance is much lower than the daily benefit in the insurance system. The benefit period for those under 55 is 150 working days.

The main changes in the Swedish UI system since 1974 are summarised in Table 1. We start with 1974 because major changes in the system occurred at that time (e.g. CA was introduced). Table 2 presents the number of recipients and benefit levels of UI and CA since 1974. The numbers imply that UI is by far the most important benefit system in Sweden and we concentrate on this type of benefit in the subsequent analysis.

<sup>6</sup>All requirements that a UI recipient has to fulfil also apply to cash assistance recipients.

Table 1. Main changes in the Swedish unemployment insurance system since 1974

| Year | Membership requirement  | Work requirement  | Qualification for UI by labour market programme (LMP) participation | Benefit ratio            | Benefit period  | Qualifying period                                      | Part-time unemployment |
|------|---|---|---|--------------------------|---|--|------------------------|
| 1974 | 12 months   | Work for 5 months within a 12-month period                | Relief job qualifies  | 11/12 of previous income | 300 (450) days for those under (over) 55 years of age | 5 weeks for voluntary and 5 days for involuntary quits | 50 days                |
| 1983 |   |   | Right to a relief job if approaching benefit expiration             |                          |   |  |                        |
| 1984 |   |   |   |                          |   |  | No general limits      |
| 1986 |   |   | Labour market training qualifies                                    |                          |   |  |                        |
| 1987 |   | Work for 75 days during 4 months within a 12-month period |   | 90% of previous income   |   | No qualifying period for involuntary quits             | 150 days               |
| 1993 |   | Work for 5 months within a 12-month period                | All LMPs qualify and a right to training if benefits expire         | 80% of previous income   |   | 4 weeks for voluntary and 5 days for involuntary quits | No general limits      |
| 1994 | Payment of a fee (1% on labour income) for 12 months within a 24-month period | General and specific requirement (cf. footnote 4)         |   |                          |   |  |                        |
| 1995 | 12 months   | Work for 80 days during 5 months within a 12-month period |   |                          |   |  |                        |

Source: National Labour Market Board, various publications.

**Table 2. Number of UI and CA recipients (as a percentage of the labour force, 16–64 years old, in parentheses) and mean daily UI and CA benefits (as a percentage of mean daily wages for blue-collar workers in the industrial sector in parenthesis), 1974–1993**

| Year | Number of UI recipients | Number of CA recipients | Mean daily UI benefits<br><i>in SEK</i> | Mean daily CA benefits<br><i>in SEK</i> |
|------|-------------------------|-------------------------|---|---|
| 1974 | n.a.                    | 56 587 (1.4)            | 79 (55)                                 | 33 (23)                                 |
| 1975 | n.a.                    | 53 796 (1.3)            | 75 (44)                                 | 32 (19)                                 |
| 1976 | n.a.                    | 62 874 (1.6)            | 94 (48)                                 | 43 (22)                                 |
| 1977 | 137 523 (3.4)           | 79 881 (2.0)            | 124 (59)                                | 49 (23)                                 |
| 1978 | 178 550 (4.3)           | 101 593 (2.5)           | 141 (61)                                | 54 (23)                                 |
| 1979 | 174 592 (4.2)           | 101 776 (2.4)           | 153 (61)                                | 62 (25)                                 |
| 1980 | 182 200 (4.3)           | 100 861 (2.4)           | 162 (59)                                | 67 (24)                                 |
| 1981 | 259 055 (6.1)           | 121 019 (2.8)           | 179 (59)                                | 67 (22)                                 |
| 1982 | 301 061 (7.1)           | 144 457 (3.4)           | 194 (59)                                | 69 (21)                                 |
| 1983 | 332 169 (7.7)           | 160 774 (3.7)           | 226 (65)                                | 89 (25)                                 |
| 1984 | 339 932 (7.9)           | 131 634 (3.0)           | 240 (62)                                | 88 (23)                                 |
| 1985 | 331 223 (7.6)           | 87 869 (2.0)            | 255 (62)                                | 87 (21)                                 |
| 1986 | 341 496 (7.8)           | 68 095 (1.6)            | 276 (62)                                | 94 (21)                                 |
| 1987 | 339 546 (7.7)           | 57 967 (1.3)            | 307 (65)                                | 112 (24)                                |
| 1988 | 317 155 (7.1)           | 43 774 (1.0)            | 331 (64)                                | 130 (25)                                |
| 1989 | 274 499 (6.1)           | 34 762 (0.8)            | 361 (64)                                | 143 (25)                                |
| 1990 | 261 923 (5.8)           | 36 360 (0.8)            | 402 (65)                                | 158 (26)                                |
| 1991 | 360 135 (8.0)           | 70 999 (1.6)            | 445 (68)                                | 175 (27)                                |
| 1992 | 563 539 (12.7)          | 119 706 (2.7)           | 478 (70)                                | 184 (27)                                |
| 1993 | 770 201 (17.8)          | 148 361 (3.4)           | 476 (67)                                | 192 (27)                                |

*Source:* National Labour Market Board, insurance unit.

*Note:* The number of recipients refer to those who have received benefits any time during a calendar year, whereas the labour force is the average stock over the year.

## 2. Analytical framework

As indicated above, the main purpose of this study is to examine the likely consequences of an unemployment benefit system with fixed duration of benefits. In order to understand the mechanism in force – and its likely effect on the unemployment rate – we apply a search framework. A standard prediction within this framework is that limitations on the maximum benefit period have important incentive effects (see Mortensen, 1977). Thus an individual's reservation wage – the minimum wage at which he/she is willing to accept a job offer – is assumed to decrease as the time approaches when benefits will expire, thereby increasing the exit

rate to regular employment.<sup>7</sup> Earlier analyses, however, have been carried out in a framework without labour market programmes and it is not clear that such an incentive effect can be expected if individuals who risk running out of benefits have a right to participation in a programme which then qualifies them for a new 60-week period with benefits. To the extent that unemployed individuals value participation in a programme as roughly equivalent to the value of living on the dole, no decrease in the reservation wage would be expected at the time benefits expire.

The solid line in Figure 1 illustrates the evolution of the reservation wage in the case where the individual is indifferent between participation in a programme and living on the dole. Since the individual is assumed to be indifferent between these states, there is no decrease in the reservation wage when the benefit expires. Here, the incentive effect of a fixed benefit period on worker behaviour is eliminated by the income guarantee.

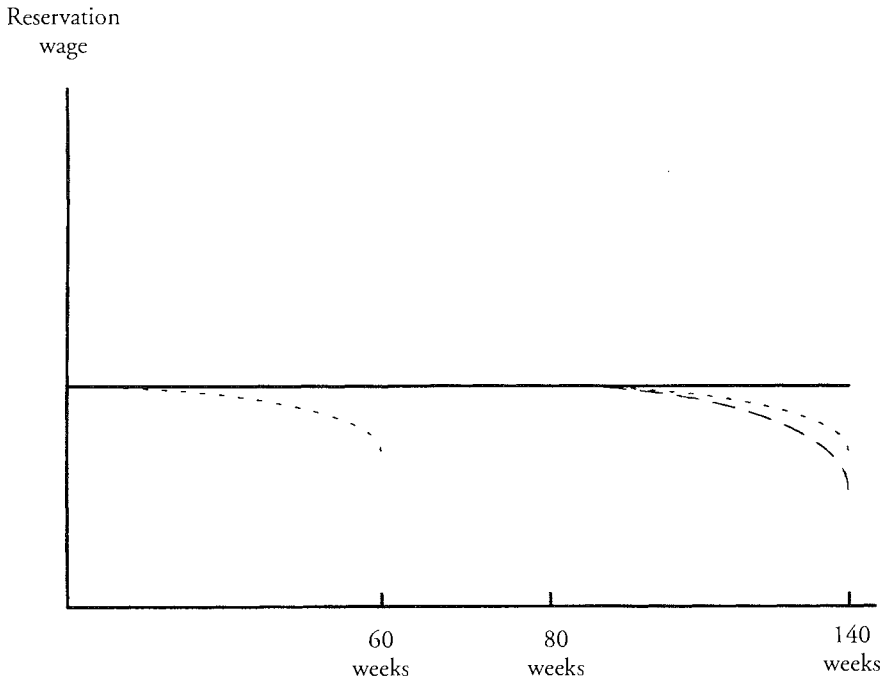
However, it is not self-evident that an individual is indifferent between participation in a programme and living on the dole. On one hand, utility may be higher in a programme than when living on benefits only. This is likely since some programmes offer compensation that is higher than the benefit level and active labour market programmes aim at enhancing future labour market prospects. If so, the reservation wage would be expected to increase at the time when benefits are about to expire (i.e., with a right to placement). On the other hand, it may be argued that an individual's relative utility decreases if he/she has to participate in a programme. For example, once placed in a programme, the individual loses the leisure associated with living on the dole. Relative utility may also be diminished if the individual regards participation in a programme as stigmatising. Here, reservation wages could be expected to fall at the time benefits are exhausted. Swedish evidence supports the latter view. Despite the income guarantee, the exit rate to regular employment increases close to the time when benefits expire (Carling *et al.*, 1994).<sup>8</sup> The dotted line in Figure 1 incorporates this finding. Here, the reservation wage falls when benefits are about to expire (at 60 weeks). In the second unemployment spell, the pattern from the first spell is assumed to repeat itself.<sup>9</sup>

<sup>7</sup> An equivalent effect is obtained if the individual increases his/her search intensity.

<sup>8</sup> This result may also reflect a change in the behaviour of the placement officers: when benefits are about to expire, there might be an increase in placement activity.

<sup>9</sup> Here, we assume that when an individual enters the second 60-week spell with benefits, he/she starts with the same reservation wage. Even though this assumption should be tested, it does not affect the main point we illustrate in Figure 1.

**Figure 1. Assumed evolution of the reservation wage in different unemployment insurance regimes**



*Note:* The examples are based on the assumption of a 60-week period of open unemployment with UI benefits, followed by participation in a programme (20 weeks), after which the individual is eligible for a new 60-week period with benefits. The solid line (—) represents the case where the individual is indifferent between placement in a programme and living on the dole, the dotted line (...) represents the case with an income guarantee through participation in a labour market programmes, and the dashed line (---) represents the case with a fixed limit (140 weeks) of benefit payments.

There is a drop in the reservation wage when the second 60-week period is about to expire (at 140 weeks).

Within this framework, what would be the likely consequences of a fixed duration of benefits? We illustrate this by the change in rules in July 1994 which meant a limitation in the duration of benefits of approximately 140 weeks. The dashed line in Figure 1 illustrates likely changes in the reservation wage. The key implication is that the incentive effects on the unemployed individuals behaviour are more pronounced here than in the case with an income guarantee. Furthermore, we assume that the decrease in the reservation wage come into force when the individual approaches the actual limit at 140 weeks. However, it could also be hypo-

thesised that the mere notion that benefits will eventually expire could well give rise to incentive effects at an earlier stage.

### 3. Facts

#### 3.1. How frequent are repeated spells of unemployment?

We began by exploiting a longitudinal data set incorporated in the Swedish Level of Living Surveys (see Erikson and Åberg, 1987). The first survey, including about 6 000 randomly selected Swedes, was conducted in 1968; the sample is also representative of the Swedish population in 1974, 1981 and 1991. For our purposes we used data from 1982 and onwards. As a complement to information from personal interviews, administrative registers were needed to obtain data on incomes and various transfers such as UI benefits and CA. Information regarding these transfers is available for each year during the period 1982–1992. This gave us an opportunity to see whether it was common to receive UI benefits in several consecutive years. We concentrate on UI recipients 20–53 years old.

The first row in Table 3 shows the proportion of the population aged 20–53 that received UI benefits at any time during a specific year. The proportions range from 0.054 (in 1990) to 0.118 (in 1992). The next three rows list those who *also* received UI benefits in consecutive years up to  $t+3$ . Of particular interest here are those who collected benefits for three consecutive years, since they were probably affected by the proposed limitation on the number of benefit periods. In our view, remarkably many continued to receive UI benefits (at least some of the time) during several subsequent years. As many as 26 per cent of those who received UI benefits some time in 1982 also received benefits in 1983, 1984 and 1985. As shown in the fourth row, the equivalent numbers for 1987 and 1988 were 19 per cent.

The last row in Table 3 reports the share of unemployed in a given year who were in the midst of a four-year spell with UI benefits. A substantial number, around 50 per cent were in this category.

Our second data set is from the National Labour Market Board. It comprises information on all job seekers registered at the public employment offices since August 1991. The data cover individual characteristics such as age, gender, education, and citizenship, as well as starting and ending dates of all unemployment and programme spells. This source

**Table 3. Repeated UI compensated unemployment as proportions of the total population**

|  | 1982          | 1983          | 1984          | 1985          | 1986          | 1987          | 1988          | 1989          | 1990          | 1991          | 1992          |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| UI recipients in year $t$ as a proportion of the population (sample size in parenthesis) | .064<br>(267) | .069<br>(287) | .066<br>(273) | .063<br>(264) | .064<br>(271) | .068<br>(291) | .066<br>(284) | .059<br>(255) | .054<br>(239) | .074<br>(327) | .118<br>(524) |
| Whereof also in years $t$ and $t+1$  | .66           | .61           | .59           | .60           | .68           | .64           | .55           | .52           | .62           | .75           |               |
| Whereof also in years $t$ , $t+1$ and $t+2$  | .42           | .37           | .37           | .38           | .43           | .36           | .27           | .33           | .44           |               |               |
| Whereof also in years $t$ , $t+1$ , $t+2$ and $t+3$                                      | .26           | .23           | .24           | .26           | .25           | .19           | .19           | .23           |               |               |               |
| Whereof in the midst of a four-year spell with UI in each year                           |               |               |               | .51           | .51           | .46           | .45           | .45           |               |               |               |

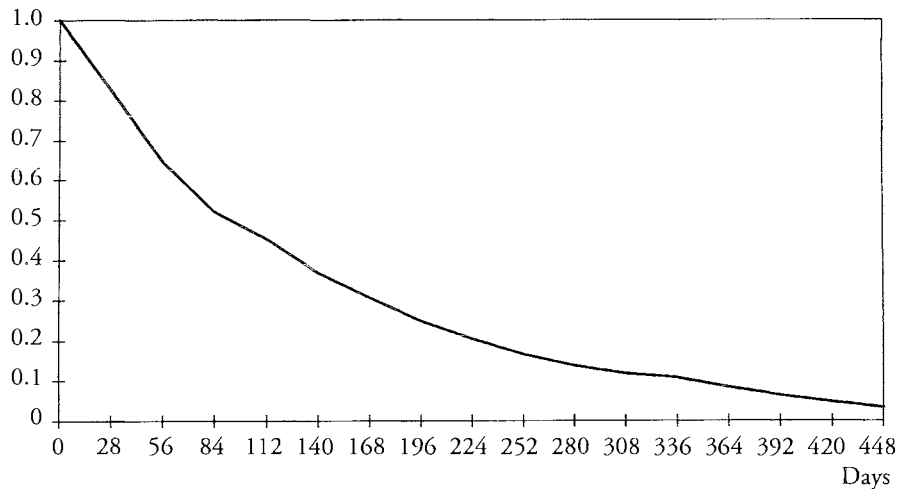
Source: Own computations from the Level of Living Survey.

Notes: The samples were restricted in the following way: the individuals are UI recipients in year  $t$ , have to be aged 20–53 in year  $t$ , and have to be living (*mantalsskriverna*) in Sweden during year  $t$ . Row 5: individuals received benefits either (i) in year  $t-3$ ,  $t-2$ ,  $t-1$  and  $t$ , or (ii) in year  $t-2$ ,  $t-1$ ,  $t$  and  $t+1$ , or (iii) in year  $t-1$ ,  $t$ ,  $t+1$  and  $t+2$ , or (iv) in year  $t$ ,  $t+1$ ,  $t+2$  and  $t+3$ .

provides a detailed picture of the frequency and nature of repeated unemployment spells. In order to use the maximum time span available, we concentrated on those who became unemployed in September 1991. This gave us an observation period of three years. (This corresponds approximately to the maximum benefit periods under the system of limited duration of benefits introduced by the liberal-conservative government in 1994.) We concentrated on UI recipients, aged 18–54, which gives us a sample of about 15 000 individuals.

Table 3 shows that it is common for an individual to receive UI benefits in several consecutive years. However, we could not ascertain whether this was due to repeated spells of unemployment or long single spells. The distribution by duration of the first completed unemployment spell for those who entered unemployment in September 1991 indicates that most unemployment spells were rather short (see Figure 2). The median duration of these spells was about 90 days and 8 per cent remained unemployed for more than a year. Only 4 per cent remained unemployed for the maximum benefit period of 60 weeks (420 days).

**Figure 2. Proportions of individuals remaining unemployed, by days since registration**



*Note:* The sample is restricted to individuals with UI benefits, 18–54 years old, who registered as unemployed with the public employment office in September 1991.

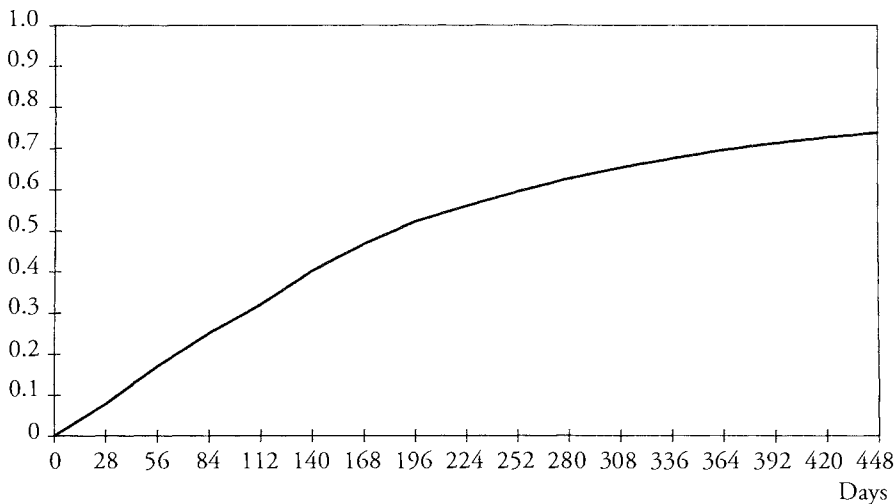
*Source:* Own computations from the registers of the National Labour Market Board.

In sum, most unemployment spells were rather short and the observation that many individuals were unemployed in several consecutive years is most likely explained by repeated spells of unemployment. The high frequency of repeated unemployment is further confirmed by data from the National Labour Market Board. After having completed their first (recorded) unemployment spell, 50 per cent were unemployed again within six months and 70 per cent within a year (see Figure 3). During the three-year period covered by our data, only 19 per cent of those who became unemployed in September 1991 experienced a single spell of unemployment, while 45 per cent had more than three spells (not shown).

Our first general conclusion then is that repeated spells of unemployment have been common in Sweden. This conclusion is also confirmed in an ongoing study by Korpi (1995).



**Figure 3. Proportions of individuals who re-entered unemployment after having completed their first unemployment spell, by days since last unemployment spell**



*Note:* The sample is restricted to individuals with UI benefits, 18–54 years old, who registered as unemployed with the public employment office in September 1991.

*Source:* Own computations from the registers of the National Labour Market Board.

### 3.2. What mechanisms create repeated spells of unemployment?

We believe that there are two main explanations for the fact that repeated unemployment spells are common in the Swedish labour market and that a majority of those who became unemployed in recent years have experienced more than one unemployment spell within a short period. The first is that quite a substantial proportion of unemployment spells end in a labour market programme. The second is that most of the new hirings that have taken place during the recent recovery are of a temporary nature.

Table 4 shows the reasons for leaving unemployment by duration of unemployment. About one third of the total sample left unemployment to participate in a programme. This share increased with duration, and was the dominant reason for exiting from unemployment for those who were out of work for more than a year.

We also distinguished between those who were placed in programmes and regular jobs in order to examine the extent to which they become unemployed a second time. A very large share of the participants in pro-

**Table 4. Reasons for leaving unemployment by duration of unemployment, per cent**

|                           | All | Less than<br>6 months | Between 6<br>and 12 months | More than<br>12 months |
|---------------------------|-----|-----------------------|----------------------------|------------------------|
| Labour market programmes  | 34  | 31                    | 37                         | 59                     |
| Regular employment        | 48  | 49                    | 44                         | 19                     |
| Leaving the labour market | 12  | 12                    | 12                         | 12                     |
| Unknown                   | 8   | 8                     | 6                          | 9                      |

*Note:* The sample is restricted to UI recipients, aged 18–54, who registered as unemployed with the public employment office in September 1991.

*Source:* Own computations from the registers of the National Labour Market Board.

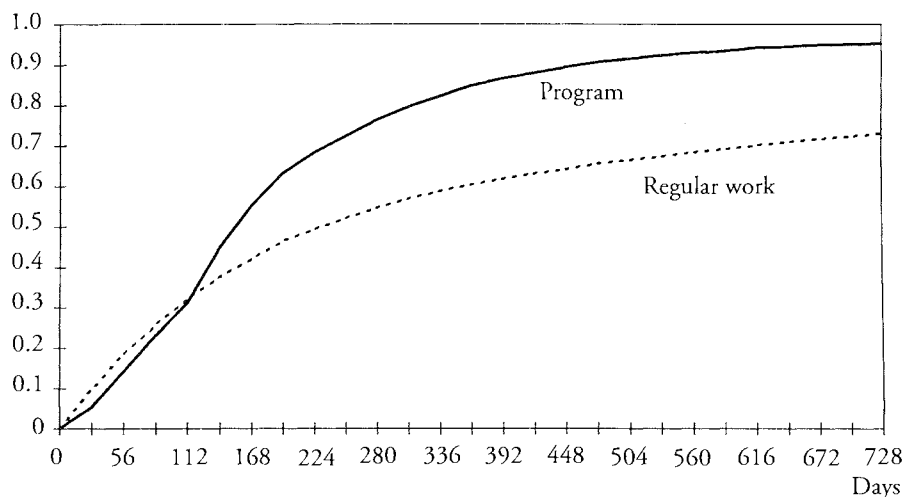
grammes re-entered unemployment: 60 per cent were unemployed again within six months and 85 per cent after one year (see the solid line in Figure 4). However, repeated unemployment was also common among those who found a regular job. In that group, 44 per cent had re-entered unemployment within six months, and 60 per cent within a year (see the dashed line in Figure 4).

Our second general conclusion is thus that transitions between unemployment and programmes were an important source of repeated unemployment during the early 1990s. However, there were also other sources, such as seasonal unemployment and a high frequency of temporary jobs (substitutes to replace employees on leave) in the public sector (see Korpi, 1995).

### 3.3. How many and who would be affected?

In order to examine the likely consequences of a fixed duration of benefits, we now turn to the question of who would be affected by a tougher line in the UI system. According to Section 2, the main purpose of fixed duration of benefits is to reduce the individual's reservation wage (or increase his/her search activity) and thereby generate an increase in the exit rate to regular employment. Our first purpose in this context is to try to determine how many people would get markedly increased incentives to find a way out of unemployment by reducing their reservation wages and/or increase their search activity. We identify this group by looking at how many who under the present system would be close to the expiring date of benefits if a 140-week limitation of payments was introduced. We

**Figure 4. Proportions of individuals who re-entered unemployment after going from their first unemployment spell to a labour market programme or a regular job, by days since last unemployment spell**



*Note:* The sample is restricted to individuals with UI benefits, 18–54 years old, who registered as unemployed with the public employment office in September 1991.

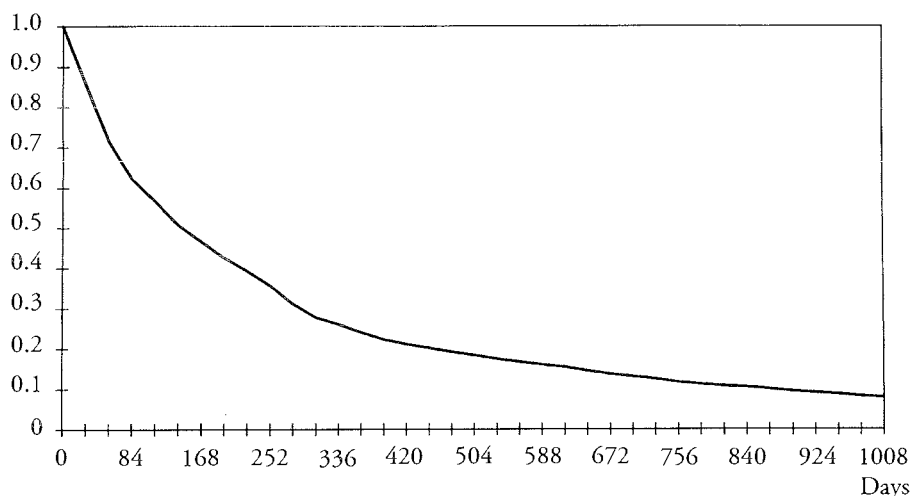
*Source:* Own computations from the registers of the National Labour Market Board.

will also identify those who would lose their benefits with an introduction of a 140-week limitation, i.e. the group of unemployed individuals who today have received benefits for more than 140 weeks. The latter group is also relevant for our second purpose, namely to come up with an estimate of the number of unemployed who would be financially affected by the new rules. Of course, we should also qualify the word “affected”, because changed behaviour (reduced reservation wages and/or increased search activity) might help these persons to avoid financial losses.<sup>10</sup>

We start by providing information on the occurrence of long uninterrupted spells of benefits and programmes. Figure 5 shows, for our National Labour Market Board sample, the share of those who were still in a benefit-programme-spell after certain periods of time: 24 per cent had spells longer than one year, 12 per cent longer than 2 years, and 8 per cent longer than 140 weeks. The latter figure is of particular interest here, since 140

<sup>10</sup> We also note that those who would get jobs by reducing their reservation wages would also be affected financially, although not as drastically as those who would lose their benefits.

**Figure 5. Proportions of individuals remaining unemployed or in labour market programmes, by days since time of registration**



*Note:* The sample is restricted to individuals with UI benefits, 18–54 years old, who registered as unemployed with the public employment office in September 1991.

*Source:* Own computations from the registers of the National Labour Market Board.

weeks is the maximum period for receipt of UI benefits according to the rules introduced in July 1994. This suggests that many individuals might be directly affected by an introduction of a tougher line on benefits.

We then turn to the stock of unemployed and programme participants by considering the number of individuals who remained in an uninterrupted benefit-programme-spell for at least 140 weeks. Among those who were registered as looking for work in October 1994, about 26 000 individuals (representing 8 per cent of the population of unemployed and participants in labour market programmes) belonged to that category.<sup>11</sup> This suggests that many individuals might lose their benefits if a 140-week limitations of benefit payments was introduced, unless a decrease in

<sup>11</sup> The actual number might be underestimated since some individuals may not have qualified for a full benefit period when they entered the spell. If e.g. someone leaves unemployment for a temporary job that lasts for less than five months, he/she will not qualify for a new 60-week spell of UI benefits when he/she re-enters unemployment. However, the individual has a right to benefits for the remaining days of the first benefit period. Thus, when entering the new benefit-programme-spell, he/she will be entitled to benefits for less than 140 weeks.

reservation wages and/or an increase in search activity would help them find a way out of unemployment. We also calculated the number of unemployed persons (in October 1994) who had only half a year left until their benefits would expire with the tougher line on benefits. They amount to 45 000 persons, representing about 1.1 per cent of the labour force. This group would, of course, get much stronger incentives to decrease their reservation wages and/or increase their search activity under a UI system with fixed duration of benefits than under the present system with indefinite renewal of benefits through participation in labor market programmes.

Who would be affected by a tougher line on benefit payments? In Table 5 (columns 1 and 2) we compare the characteristics of those who became unemployed in September 1991 with those who remained registered as unemployed or in a programme after 140 weeks. The overall impression from Table 5 is that there are, perhaps surprisingly, small differences in characteristics. However, a closer look reveals the following pattern: males, those over 30 years old, non-Nordic citizens, the handicapped, the low skilled (both with respect to formal education and work experience) and those who were looking for a job in manufacturing and construction are overrepresented among those who remained unemployed after 140 weeks. Thus, these are the groups that would be affected the most if a tougher line on benefits were introduced.

The fact that men and those who were looking for a job in the industrial sector are over-represented among those who remained unemployed after 140 weeks is probably a reflection of the business cycle. The industrial sector, which is dominated by male workers, was severely affected by the deep recession in the early 1990s. However, this sector also accounted for most of the new hirings which took place during the recent recovery, and today (in 1995) men seem to find a job more easily than females (see Ackum Agell, 1995). Thus, the observation that males in our sample seemed to experience more long-term unemployment than females might change over time. It is well known that foreign citizens (probably denoting a bad command of Swedish), the handicapped and the low-skilled have difficulties in finding a job. This has also been widely discussed (with particular emphasis on the low-skilled) among labour economists in other European countries (see, e.g. Drèze and Sneessens, 1994 and Jackman, 1994).

We also used data from the Level of Living Surveys to study the income distributional profile of unemployment. Many have feared that a

**Table 5. Characteristics of individuals who became unemployed in September 1991 and of those who remained unemployed or participated in labour market programmes after 140 weeks**

|  | Inflow to unemployment<br>in September 1991 | Still unemployed<br>after 140 weeks |
|--|---|-------------------------------------|
| Gender   |   |                                     |
| Male   | 55.5  | 70.7                                |
| Female   | 44.5  | 29.3                                |
| Age  |   |                                     |
| 18–24  | 22.6  | 17.2                                |
| 25–29  | 25.2  | 22.1                                |
| 30–54  | 52.2  | 60.7                                |
| Citizenship                                      |   |                                     |
| Swedish  | 93.0  | 90.3                                |
| Other Nordic                                     | 2.5   | 2.6                                 |
| Other  | 4.5   | 7.1                                 |
| Handicapped                                      | 7.1   | 14.9                                |
| Region   |   |                                     |
| Big cities                                       | 26.6  | 26.2                                |
| Forest counties                                  | 33.2  | 33.6                                |
| Other  | 40.2  | 40.1                                |
| Education  |   |                                     |
| Compulsory                                       | 31.2  | 35.6                                |
| Upper secondary                                  | 58.9  | 58.0                                |
| Higher   | 9.9   | 6.4                                 |
| Experience                                       |   |                                     |
| No   | 18.7  | 23.8                                |
| Some   | 34.1  | 33.1                                |
| Good   | 47.2  | 43.1                                |
| Occupation                                       |   |                                     |
| Technical, educational, artistic, military, etc. | 7.3   | 5.5                                 |
| Public health                                    | 15.7  | 5.4                                 |
| Administrative, financial and office             | 9.7   | 9.1                                 |
| Commercial                                       | 7.3   | 6.9                                 |
| Agriculture, forestry and fishing                | 3.4   | 2.9                                 |
| Transport, storage and communications            | 6.4   | 4.9                                 |
| Mining, manufacturing, construction, etc.        | 29.9  | 44.5                                |
| Services   | 11.9  | 8.6                                 |
| No occupation stated                             | 8.4   | 12.2                                |
| Sample size                                      | 15 154                                      | 1 181                               |

*Note:* The sample is restricted to UI recipients, aged 18–54, who registered as unemployed with the public employment office in September 1991.

*Source:* Own computations from the registers of the National Labour Market Board.

**Table 6. Share of social allowance recipients among persons in different unemployment categories, 20–53 years of age**

|  | 1982 | 1983 | 1984 | 1990 | 1991 | 1992 |
|--|------|------|------|------|------|------|
| No UI in year $t$                            | .039 | .045 | .044 | .049 | .047 | .049 |
| UI recipients in year $t$                    | .082 | .146 | .161 | .133 | .110 | .097 |
| UI recipients in year $t$ and $t+1$          | .085 | .149 | .167 | .146 | .123 |      |
| UI recipients in years $t$ , $t+1$ and $t+2$ | .097 | .181 | .196 | .189 |      |      |

Source: Own computations from the registers of the Level of Living Surveys.

tougher line against the unemployed would place a heavy burden on the local governments, which are responsible for the means-tested social allowances (*socialbidrag*). We tried to get an idea of this problem by looking at the frequency of social allowance payments among unemployed persons and UI recipients several consecutive years. Table 6 shows such data. We can see (by comparing the first and second rows) that UI recipients were more likely to receive social allowances than others. Whereas only about 4.5 per cent of those who did not receive UI in a given year had social allowances, between 8 and 16 per cent of the UI recipients had such means-tested allowances. Further, among those who were repeatedly unemployed (the third and fourth row in the table) the number was even higher. Therefore, it is reasonable to conclude that a tougher line against unemployed individuals will increase the burden on the system for social allowances.

The income distributional profile of unemployment may also be described by showing where the unemployed can be found in the distribution. In Table 7 we have used gross income plus child allowances per equivalent number of adults in the family and divided the income distribution into quartiles. This means that we have used the family, or more specifically, both spouses, as the "unit of income". We see that UI recipients are over-represented in the first quartile (with the lowest incomes). For example, of those who received UI benefits in 1988, 36 per cent were located in the lowest quartile in the income distribution and only 9 per cent in the highest. Among those with repeated unemployment, an even higher fraction were living in low-income families. To some extent this pattern might be explained by the fact that the unemployed individuals are relatively young.

A third general conclusion is that a tougher line against unemployed workers will have adverse distributional consequences.

**Table 7. Percentage of persons in different unemployment categories by quartile in the income distribution, 20–53 years of age**

|  |             | 1988 | 1989 | 1990 | 1991 | 1992 |
|--|-------------|------|------|------|------|------|
| No UI in year $t$                                    | Quartile 1: | 25   | 24   | 24   | 25   | 25   |
|  | Quartile 2: | 24   | 24   | 25   | 24   | 23   |
|  | Quartile 3: | 25   | 26   | 25   | 25   | 25   |
|  | Quartile 4: | 26   | 26   | 26   | 26   | 27   |
| UI recipients in year $t$                            | Quartile 1: | 36   | 39   | 41   | 31   | 28   |
|  | Quartile 2: | 34   | 35   | 34   | 39   | 40   |
|  | Quartile 3: | 21   | 16   | 18   | 20   | 21   |
|  | Quartile 4: | 9    | 10   | 7    | 10   | 11   |
| UI recipients in years $t$ and $t+1$                 | Quartile 1: | 39   | 39   | 43   | 30   |      |
|  | Quartile 2: | 34   | 33   | 33   | 40   |      |
|  | Quartile 3: | 18   | 17   | 16   | 20   |      |
|  | Quartile 4: | 9    | 11   | 8    | 10   |      |
| UI recipients in years $t$ , $t+1$ and $t+2$         | Quartile 1: | 44   | 38   | 49   |      |      |
|  | Quartile 2: | 24   | 32   | 28   |      |      |
|  | Quartile 3: | 22   | 18   | 14   |      |      |
|  | Quartile 4: | 10   | 12   | 9    |      |      |
| UI recipients in years $t$ , $t+1$ , $t+2$ and $t+3$ | Quartile 1: | 45   | 41   |      |      |      |
|  | Quartile 2: | 24   | 31   |      |      |      |
|  | Quartile 3: | 22   | 16   |      |      |      |
|  | Quartile 4: | 9    | 12   |      |      |      |
| UI recipients in the midst of a four-year spell      | Quartile 1: | 39   | 38   |      |      |      |
|  | Quartile 2: | 32   | 37   |      |      |      |
|  | Quartile 3: | 21   | 14   |      |      |      |
|  | Quartile 4: | 8    | 11   |      |      |      |

*Note:* Income is defined as gross income (*sammanräknad inkomst*) plus child allowances per equivalent number of adults in the family. The equivalence scale used is the square root of the number of persons in the family, which allows rather significant economies of scale in the family.

*Source:* Own computations from the registers of the Level of Living Surveys.

#### 4. Conclusions

Previous research on the dynamics of unemployment has not provided much information about the frequency of repeated spells of unemployment. Therefore it has been difficult to examine likely consequences of limitations on the number of benefit periods with only one intervening spell of participation in labour market programmes. The first conclusion from our work with two longitudinal data sources is that repeated spells of unemployment are common in Sweden, at least in the sense that people collect unemployment benefits several years in a row. Using panel data from 1982 until 1992 we found that of those who received benefits in a given year, between 19 and 26 per cent also received benefits in each



of three subsequent years. Since the duration of the benefit period is only 60 weeks, this pattern most likely represents repeated spells of unemployment with intervening periods of other activities.

We then employed data from the National Labour Market Board for the period 1991–1994, i.e., the years of a deep recession in the Swedish economy. These data gave us some indications regarding the importance of transitions between unemployment and programmes. Exits to programmes accounted for one third of all exits out of unemployment, whereas about half went to a job in the regular labour market. Further, within one year, over 80 per cent of those who left for a programme had another spell of unemployment. The corresponding number for those who exited from unemployment to a regular job was about 60 per cent. For these reasons it seems safe to conclude that transitions between unemployment and programmes are one quantitatively important mechanism behind repeated spells of unemployment. However, other mechanisms also “generate” such patterns. Seasonal fluctuations in some industries are probably another important source, and the propensity of the public sector to hire substitutes for shorter periods of time (to replace those on leave from their permanent positions) is yet another. The Swedish unemployment insurance system treats such cases very generously.

A more difficult question to answer though, is how a reduction in the number of benefit periods would affect the behaviour of the labour market in general, and of unemployed job seekers in particular. There is no doubt that those who at a given point in time would have lost their benefits would have very strong incentives to change their behaviour. The alternative for this group would be to apply for social allowances; for some it might also be a feasible and attractive alternative to try to get an early retirement pension. Social allowances could, however, be regarded as stigmatising and this might prevent some from using this option. Further, these allowances are means tested and will not be paid to a household with some wealth that can be easily realised on the market, like an own house/apartment or a second private car. Though it is a reasonable prediction that the number of social allowance recipients would be increased by the proposal, quite many would probably try to avoid applying for such allowances.

The data from the National Labour Market Board showed that in October 1994 about 26 000 persons, or about 0.6 per cent of the labour force had an uninterrupted spell of 140 weeks or more with unemployment benefits and participation in a programme. When interpreting this

figure, at least three considerations must be made. First, some of those who had short interruptions because of brief periods of work might also have lost their benefits with a tougher line on benefits. Our figure of 26 000 might therefore underestimate the true number. Second, a substantial fraction of the unemployed individuals were in their second period of unemployment benefits with an intervening spell of participation in a programme. This group would also have much stronger incentives to get a new job by reducing their reservation wage, raising their search intensity, or moving to a place with better labour market conditions. According to our analytical search framework, all unemployed would get stronger incentives to get a job by means of changed behaviour. However, those who are close to or have already exhausted the 140-week period (two benefit periods and one programme spell) would be most significantly affected. Our data suggest that this group is at least one per cent of the labour force and perhaps even larger. It was also the case that males, those over 30 years old, non-Nordic citizens, the handicapped, the low-skilled (both formal education and work experience) and those who are looking for a job in manufacturing and construction were overrepresented in this group. Third, we should recognise that our figures have been generated by a system with an unlimited number of benefit and programme periods. If the tougher lines on benefits had been in effect for some time, some might have been able to avoid long-term unemployment by a change in behaviour.

One can also speculate about other changes in the labour market. If the work requirement for a new period of benefits cannot be fulfilled by participation in a programme, temporary jobs in the regular labour market would become very attractive for unemployed job seekers. This in turn might be very beneficial for firms in industries that are exposed to seasonal fluctuations and for the public sector that needs substitutes for regularly employed personnel on leave for various reasons. Because an even more generous treatment of these industries might be considered problematic, there is a case for strengthening the general work requirement too. If, for example, the work requirement for jobs on the regular labour market is raised to a whole year the generous treatment of the industries exposed to seasonal fluctuations would disappear. The behaviour of the personnel at the public employment offices might also change if the proposal is realised. If placement officers give priority to those with the most acute financial problems – and we believe that this is how they often work – they would encounter a new group that drastically needs

help, namely those who are threatened by impending loss of their benefits. By concentrating their work on this group, their problems might be considerably reduced. However, this would – unless more resources are allotted to the employment offices – most likely take place at the expense of some other group.

Finally, we have described the individual characteristics of those who suffered from repeated spells of unemployment in Sweden during the period 1982–1992. We found that this group belongs to households with lower total income (including unemployment benefits and other taxable benefits) per equivalent number of adults in the family. Further, they were much more likely to receive social allowances than other unemployed. Of course, and hardly surprising, this suggests that a reduction in the number of benefit periods would have adverse distributional consequences. Again, we want to emphasise that these consequences might be mitigated by changed behaviour by the unemployed individuals. We would also like to draw attention to the fact that there is a final safety net for those who would meet with severe economic problems, namely the social allowances. Nonetheless, our general view is that this, as well as any policy proposal suggesting a cut in benefits, faces the traditional trade-off between efficiency and income distribution. On one hand, the incentives for many unemployed individuals to try to get a job in one way or the other would increase. On the other hand, those who would have to change their behaviour or lose their benefits are concentrated to the lower half of the income distribution.

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