

Leaving “Hotel California”: How Incentives Affect Flows of Benefits in the Netherlands

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Summary: This paper discusses developments in the Netherlands concerning unemployment insurance, unemployment assistance and disability insurance. The emphasis is on how financial incentives for individual workers and firms affect flows of benefit recipients. The main message is that it is indeed helpful to screen workers who want to enter the benefit system, to establish counseling and monitoring of workers that are in the benefit system and to impose sanctions on workers or employers that abuse the system. The Dutch experience in reconstructing social security provides clear lessons for other countries.

Zusammenfassung: Dieser Beitrag untersucht die Entwicklungen und Reformen der Arbeitslosenversicherung sowie der Renten- bzw. Erwerbsunfähigkeitsversicherung in den Niederlanden. Betrachtet wird vor allem, wie die damit verbundenen Anreize für Arbeitnehmer und Arbeitgeber die Ein- und Austritte in die Versicherungssysteme beeinflussen. Das wesentliche Ergebnis ist, dass es hilfreich ist, die Leistungsbezieher beim Eintritt zu untersuchen, vorhandene Leistungsbezieher laufend zu beraten und zu überprüfen und Missbrauch zu sanktionieren. Insoweit sind die niederländischen Erfahrungen für andere Länder hilfreich.

“We are programmed to receive. You can check
out any time you like. But you can never leave.”

Hotel California – The Eagles, 1976

1 Introduction

Recent surveys of the effectiveness of active labor market policies indicate that most of these programs have limited effects. Kluve and Schmidt (2002) survey about 50 recent evaluation studies to conclude that programs with a large training content most likely improve employment probability. Furthermore, both direct job creation and employment subsidies in the public sector almost always fail. Kluve (2006) follows up on this and presents an analysis of about 100 evaluation studies of active labor market policy programs in Europe, most of them operating after 1990. He finds that the effectiveness of programs is quite independent of contextual factors such as labor market institutions and macroeconomic environment. Whereas traditional training programs appear to have at most a modest effect on transitions from unemployment to work private sectors incentive programs, services and sanctions perform significantly better. Direct employment programs in the public sector are rarely effective and frequently detrimental for the employment prospects of participants. Providing job search assistance and counseling and moni-

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toring accompanied by appropriate sanctions for noncompliance are especially effective and they are often quite cost-effective because their rather inexpensive nature.

The emphasis on stronger incentives in labor market policy programs is a major characteristic of recent labor market policy in the Netherlands. Whereas in the 1970s the Netherlands were famous for the "Dutch disease" in the 1990s there was a "Dutch employment miracle". In recent years employment growth has diminished and unemployment has increased somewhat but from a European perspective unemployment rates are still quite low. What explains this long-lasting high performance of the Dutch labor market? According to Visser and Hemerijck (1997) three policy shifts are responsible for the "Dutch miracle". First, there was wage moderation which started in the early 1980s and was concluded in negotiations between unions and employers in 1982. Because of this the competitiveness of the Dutch industry increased a lot. Second, there was of reform of the social security system, starting with a freezing of benefits in 1983 and an overhaul of unemployment insurance in 1987. The major reforms in social security took place in the early 1990s when disability insurance and sickness leave schemes were reformed. The third policy shift concerns the innovation of labor market policies and the emphasis on activating measures of various kinds. Nickell and Van Ours (2000) conclude that the unemployment rate in the Netherlands went down because of a significant reduction of the equilibrium unemployment rate since the early 1980s. Responsible for this are wage moderation, the popularity of part-time work and the re-enforcement of financial incentives for work for unemployed workers collecting benefits.

Indeed, an important characteristic that distinguish the Dutch labor market from other European countries is the emphasis on financial incentives to get unemployed back to work or prevent them from entering the pool of workers collecting disability benefits. In terms of unemployment insurance benefit sanctions the Netherlands and Switzerland are the two most strict European countries where in the late 1990s almost 40% of the unemployment benefit recipients was confronted with a sanction.¹ Benefits sanctions refer to temporary or permanent reductions in benefits. They affect the behavior of unemployed workers in two ways – through an ex ante and through an ex post effect. The ex ante effect refers to the optimal search intensity of unemployed workers who did not yet received a benefit sanction but who are aware of the possibility that they might be confronted with a benefit sanction. Then the optimal search intensity is higher than it would be if workers would not face the possibility of getting a sanction imposed. The ex post effect refers to the effect on search of having lower benefits once a sanction is imposed. The effect of benefit sanctions goes beyond the direct effects of workers searching more intense. The increase in search intensity may also stimulate employers to open up new vacancies. Boone and Van Ours (2006) show that this macro spillover effect may be an important mechanism to reduce unemployment in addition to the micro behavioral effect of increased search intensity which reduces unemployment duration. Benefit sanctions require a system of monitoring in which counseling may be important too. Finally, there are sanctions which may be imposed to employers because of lack of effort to prevent workers from entering the system of disability benefits.

¹ See Boone and Van Ours (2006) for details and Lalive et al. (2005) for an overview of the Swiss system of benefit sanctions.

This paper gives an overview of important changes in the social benefits system in the Netherlands and presents empirical evidence on how financial incentives affected stocks and flows in social benefits over the past decades. The focus is on three types of benefits: unemployment insurance benefits, unemployment assistance benefits and disability benefits. The studies discussed here concern policy interventions to strengthen financial incentives. One of the main problems in the analysis of policy effects is accounting for selectivity. It may be that a policy is imposed on a group of workers that have different characteristics than another group of workers which is not confronted with the policy. If the imposition of a policy is randomized finding the “treatment” effect is rather simple. If an administrative officer decides on which individuals a particular policy is imposed complications may arise. Then, a simple comparison of labor market outcomes of the two groups is unlikely to give an unbiased estimate of the effect of the policy. If the differences between the two groups are observed multivariate analysis can account for these differences but in case of unobservables – like the motivation of the worker – there is no simple solution to account for selectivity.

This paper does not provide new empirical evidence that is not already published elsewhere. The aim is to present and discuss Dutch studies where selectivity of policy interventions has been taken into account. The paper does not give an overview of all empirical studies either but discusses some important studies in more detail to illustrate how incentives work in practice.

The set-up of the paper is as follows. The next section describes developments in the Dutch labor market over the past decades with an emphasis on the three types of benefits. Sections 3 to 5 present the characteristics of these benefits in more detail and discuss a limited number of relevant empirical studies. Section 6 concludes.

2 Economy and Labor Market

Figure 1 presents the evolution of the unemployment rate in the Netherlands over the period 1970 to 2005.² As there is some discussion about which numbers should be used two series are presented. The first series concerns “registered unemployment” favored by the Netherlands Central Bureau of Statistics, collectors of data. The second series concerns “job seekers without a job” which is the favorite series of the CPB – Netherlands Bureau for Economic Policy Analysis, data crunchers and important advisers of Dutch government and parliament. The main difference between the two series concerns the questions of when an individual is looking for job and what type of job the individual should be looking for. As is clear from Figure 1 there are differences between the two series but the general pattern of development is very much the same.³ In the 1970s unemployment rates in the Netherlands slowly rise from about 1% to about 4%. Then, in the beginning of the 1980s unemployment rates virtually explode to reach a peak of 11–12% in 1983. From then on until the early 1990s unemployment rates drop steadily to 6–7% and after a short

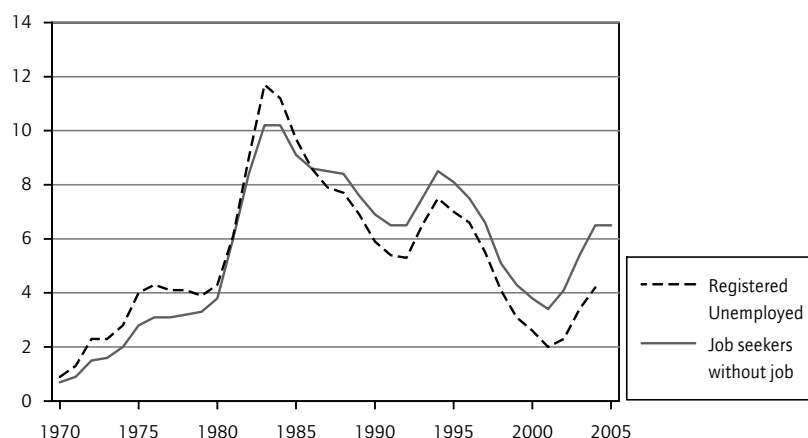
² All data used in this paper are from the Netherlands Central Bureau of Statistics (CBS) and from the Netherlands Institute for Social Insurance (UWV).

³ The ‘registered unemployment’ series is close to the OECD standardized unemployment rate but unfortunately this series is discontinued in 2004 due to lack of information about particular characteristics of the search behavior of unemployed workers.

Figure 1

Unemployment Rates 1970–2005

In %



Source: Netherlands Central Bureau of Statistics.

recession in the mid 1990s unemployment rates decline further to about 2–3% in the early 21st century. In the first years of this century unemployment rates increase but are stabilizing in 2005.⁴

The current Dutch welfare state originates from the introduction of many social security programs in the post-World War II period some of which are discussed in more detail in the next sections.⁵ In the 1960s and 1970s, welfare state expenditures expanded rapidly. In the 1970s the social security system was focused on income support, rather easy to enter with little incentives to leave – a kind of “Hotel California”. When the Dutch economy was hit by severe shocks in the seventies, generous benefits in combination with lax administrative controls caused an inflow of redundant workers in social security schemes with open-ended benefits. When the second oil crisis hit the economy at the end of the 1970s, the Dutch economy was confronted with declining employment and rising unemployment. In the beginning of the 1980s taxation and social security contributions accounted for about half of GDP and for every ten employed persons there were more than eight persons on social benefits. In the course of the 1980s the reform of the welfare state began, initially with changes in benefit levels and later on with institutional reforms that also included the public sector. As a result public sector wages and social benefits no longer increased as much as private sector wages. Furthermore, replacement rates in UI benefits were reduced from 80% to 70% of gross wages and the minimum wage, to which the minimum social benefits are linked, was frozen in nominal terms, which reduced the minimum wage from 61% of the median wage in 1980 to 47% in 2000. The cut in disability benefits was partly offset through supplementary arrangements negotiated in collective la-

⁴ See Van Ours (2006) for details of recent developments.

⁵ This stylized description of developments is based on De Mooy (2006).

bor agreements. Moreover, generous early retirement schemes were introduced which reduced the effective retirement age of elderly workers. In the 1990s, institutional reforms continued: eligibility criteria for social benefits were tightened, the legal definition of the appropriate job was widened in the disability scheme, the government reduced the discretion of decentralized administrations by issuing specific criteria for determining disability and residual earning power, and a program of reassessment of disability claims started in 1994. Furthermore, sickness insurance was privatized and competition in disability insurance was introduced to achieve efficiency gains in the implementation and administration of the insurance. In the early years of the 21st century institutional reforms continued in the systems of unemployment insurance and disability insurance. The responsibilities for unemployment assistance benefits were decentralized and early retirement schemes were transformed in actuarially more fair schemes.

Recent information about employment rates and unemployment rates in the Netherlands is provided in Table 1. As shown employment rates (employment as a percentage of the relevant population) are rather low among individuals aged 15 to 24, which is not surprising since many of the youngsters are still in the educational system. For women employment rates are highest in the age group 25 to 34 to decline at higher ages. In the highest age group only about 1 in 4 women has a job. For men between 25 and 54 employment rates are about 85%. Also for men employment rates among older individuals are quite low; about half of the men in the age group 55 to 64 have a job. In 2004 the unemployment rate among women is on average slightly higher than among men but the difference is small – 4.5% and 4.2%. There are hardly any differences in unemployment rates between the age groups.

Table 2 shows information about benefit recipients by gender and age group. For both women and men aged 15 to 24 the share of workers collecting unemployment insurance is very low. This mainly has to do with entitlement effects; workers with little work experience are usually only entitled to 6 months of unemployment insurance while older workers are entitled to longer UI benefit durations. For the age categories 25 to 54 the percent-

Table 1

Employment Rates and Unemployment Rates in the Netherlands 2004/2005

Age	Women		Men	
	Employment	Unemployment	Employment	Unemployment
15 to 24	36.8	4.7	39.8	5.0
25 to 34	73.3	4.8	86.9	4.0
35 to 44	65.7	4.3	87.5	3.8
45 to 54	60.8	4.4	85.2	4.2
55 to 64	26.9	4.2	52.3	4.6
Total	54.1	4.5	72.1	4.2

Note: Employment rate = Employment as a percentage of the population (2005).

Unemployment rate = Registered unemployment as a percentage of the labor force (2004).

Source: Netherlands Central Bureau of Statistics.

Table 2

Benefits by Age Group 2004 (population 15 to 64 years)

	Women			Men		
	UI	UA	DI	UI	UA	DI
Numbers (1000)						
15 to 24	9	19	3	9	14	1
25 to 34	34	42	37	32	32	18
35 to 44	41	50	77	46	40	58
45 to 54	32	41	109	43	33	121
55 to 64	23	39	129	52	28	213
Total	139	191	355	182	147	411
Percentag of labor force						
15 to 24	2.1	4.5	0.6	1.8	3.0	0.3
25 to 34	3.9	4.8	4.3	3.1	3.1	1.7
35 to 44	4.5	5.6	8.5	3.7	3.2	4.7
45 to 54	4.3	5.6	14.8	4.1	3.2	11.6
55 to 64	9.1	15.0	49.9	9.8	5.2	39.7
Total	4.4	6.0	11.1	4.2	3.4	9.5

Note: UI = Unemployment Insurance, UA = Unemployment Assistance, DI = Disability Insurance.

Source: Netherlands Central Bureau of Statistics.

age of workers collecting unemployment insurance is about 4% while for the age category 55 to 64 this is about 9–10%. Concerning unemployment assistance there is not a lot of variation by age group with the exception of women in the highest age category. Among women aged 55 to 64 a number equal to 15% of the labor force collects unemployment assistance. Combining unemployment insurance and unemployment assistance of the women in the age category 55 to 64 about 24% collects benefits while for men in the age category this is about 15%. Note that there is a big difference between the age dependency of the unemployment rate and the benefit recipient rate. The unemployment rate among older workers is very similar to the unemployment rate among prime age workers. However, the benefit recipient rate among older workers is substantially higher than among prime age workers. This has to do with search requirements. For a long time workers older than 57.5 years were not obliged to search for a job to remain eligible for UI benefits. Therefore, a large part of them was counted as "registered unemployed".⁶

In terms of percentage of the labor force the number of individuals collecting disability insurance is larger among women than men.⁷ Furthermore, the use of disability insurance is highly age dependent. Among young individuals the use is less than 1% of the labor force

⁶ In addition to that some older workers may be part-time employed while at the same time collecting unemployment benefits. Also these workers would not be counted as "registered unemployed".

Table 3

Stocks and Flows in Dutch Benefits 2005 (population 15 to 64 years)

	Women			Men		
	Inflow	Outflow	Stock	Inflow	Outflow	Stock
Numbers (1,000)						
Unemployment Insurance	182	181	140	210	226	167
Unemployment Assistance	51	49	191	59	56	147
Disability Insurance	10	40	325	10	43	378
Percentage of labor force						
Unemployment Insurance	5.7	5.7	4.4	4.9	5.2	4.4
Unemployment Assistance	1.6	1.6	6.0	1.4	1.3	3.4
Disability Insurance	0.3	1.2	10.2	0.2	1.0	8.7

Note: Average duration calculated as the ratio of stock and outflow: Women (UI: 9.3 months, UA: 3.9 years, DI: 8.2 years) Men (UI: 8.9 months, UA: 2.6 years, DI: 8.9 years).

Source: Netherlands Central Bureau of Statistics.

but among individuals aged 55 to 64 the use is about 50% for women and about 40% for men. For every age group the use of disability insurance is higher among women.

Information about dynamics in recipients of unemployment insurance, unemployment assistance and disability insurance is shown in Table 3. Unemployment insurance is characterized by a lot of dynamics. For women for example the average stock collecting unemployment insurance in 2005 is about 140,000 while the inflow and outflow are about 180,000. Using the ratio of stock and outflow as a proxy for the duration, the average duration of unemployment insurance is about 9.3 months for women and about 8.9 months for men. For unemployment assistance the average flows are far below the average stocks indicating durations of several years. Indeed, using the same proxy the average duration of unemployment assistance for women is about 3.9 years, while for men it is 2.6 years. For disability insurance the dynamics are even smaller. The average duration of disability insurance is 8.2 years for women and 8.8 years for men.

3 Unemployment Benefits

3.1 Characteristics and Developments

Figure 2 presents the developments in stocks and flows of unemployment insurance benefits. It is clear that the cyclical fluctuations in the number of UI benefits are the same as those in the unemployment rate but the magnitudes are quite different. Whereas the peak in the unemployment rate is in the first half of the 1980s the peak in the number of UI benefits is in the first half of the 1990s. The main reason for this difference is the average du-

7 Note that individuals collecting disability insurance usually are no part of the labor force but the percentages are in terms of the labor force to make comparisons between the different types of benefits easier.

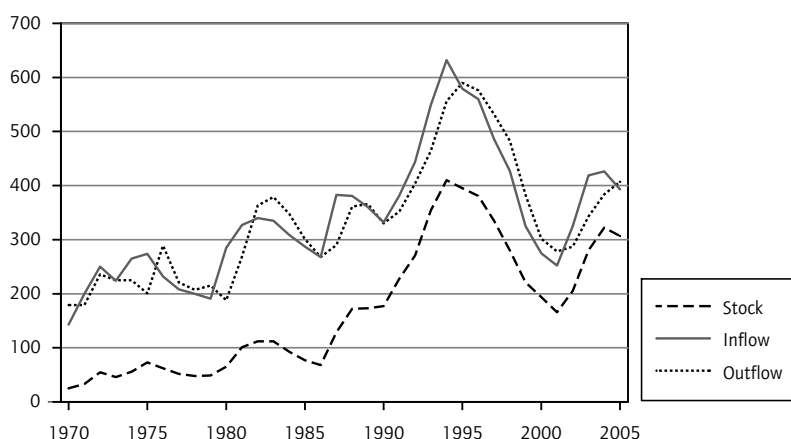
ration of unemployment benefits which has substantially increased over time, in particular after the reform of the UI insurance in 1987. As will be discussed in more detail below this reform introduced age-specific entitlement rights for UI benefits which could last for several years for older workers while up to the reform UI benefits lasted for at most 6 months. In 1970 the average duration of UI benefits was about 2 months, in 1986 this was about 3 months but from 1993 onwards average UI duration was about 9 months. Figure 2 also shows that inflow into UI and outflow from UI fluctuate closely together, with the inflow leading the outflow.

The law on unemployment insurance benefits was introduced in 1949 to insure workers against the financial consequences of unemployment. If workers that became unemployed had worked for at least 156 days in the calendar year before they entered unemployment they were entitled to UI benefits; usually they received 80% of their previous wage for a period of maximum 6 months. The increase in unemployment in the early 1980s triggered a discussion on the characteristics of the UI system and the nature of the insurance was adjusted through changes in eligibility and entitlement criteria. For example in 1985 the replacement rate was reduced from 80–70%. January 1, 1987 there was a major restructuring of the UI system. Part of the UA benefits were transformed into UI benefits, potential benefit durations were made dependent on previous work experience et cetera. Although some of the characteristics have changed since 1987 by and large the 1987 rules still hold. Entitled to Unemployment Insurance (UI) benefits are all employees who involuntarily become unemployed and lose their earnings for at least 5 hours or half of their working hours. They must have been employed for a particular part of the period before they enter unemployment. Initially this was at least 26 consecutive weeks out of the 52 weeks prior to unemployment (26 out of 52 weeks condition); later on this changed into 26 out of 39 weeks. Excluded from UI-benefits are individuals who receive full-time disability benefits or have reached the age of 65. Benefits end when individuals are no longer unemployed or

Figure 2

Unemployment Insurance Benefits 1970–2005

In 1,000



Source: Netherlands Institute for Social Insurance.

reach the maximum benefit duration. The potential benefit duration (PBD) and the benefit level depend on the type of UI-benefits that can be collected. Individuals may be eligible for short term benefits, wage dependent benefits or extended benefits. Eligibility for these three benefit types depends on labor experience and the age at which the individual becomes unemployed. If an unemployed individual meets the 26 out of 39 weeks condition and has also received wages for at least 52 days in the 4 calendar years during the 5 years prior to unemployment (4 out of 5 years condition), he or she qualifies for wage dependent benefits. These benefits last for at least 6 months and are extended with 3 months to 4.5 years, depending on labor experience. Initially, labor experience was calculated as the number of years in the 5 calendar years prior to unemployment in which the individual has received wages for at least 52 days, plus the number of calendar years between the year that the individual turned 18 and the 5 years prior to unemployment. In 2005 a larger part of actual labor market experience was used to determine potential benefit durations. As a result of the 4 out of 5 years condition, the PBD for wage related benefits depends almost completely on the age at which the individual becomes unemployed. All individuals who received wage related UI-benefits were also entitled to extended benefits. From August 11, 2003 on, extended benefits have been abolished.

In the course of 2006, the Dutch government intends to introduce a new Unemployment Insurance Act (De Mooij, 2006). Compared to the old scheme, a number of changes will be implemented. First, the new act will reduce the maximum duration of unemployment benefits from 60 to 38 months. The maximum period will only apply to people with an employment record of 38 years. Second, the benefit level will be raised from 70% to 75% of the last wage during the first two months of unemployment. After this initial period, benefits will be reduced to 70% which is equal to the current level. Third, the new act will have more stringent entitlement conditions. In particular, entitlement will require that someone has worked 26 out of 36 weeks prior to the application in stead of the current 26 out of 39 weeks. The 4 out of 5 years condition will still hold. People who meet these conditions will be entitled to unemployment benefits for the duration in months that is equals to the employment record in years prior to the application. Hence, if an applicant has worked 7 years, he/she receives 7 months benefits. People who meet the 26 out of 36 criterion but not the 4 out of 5 criterion will only be granted benefits for a period of 3 months.

In recent years there have been a couple of studies on incentives for unemployed workers to find jobs. Three types of incentives will be discussed in more detail to illustrate the structure of the incentives. The studies are on monitoring and benefit sanctions, counseling and monitoring (and benefit sanctions), and eligibility and entitlement effects for older workers.

3.2 Monitoring and Benefit Sanctions

Concerning monitoring and benefit sanctions there are a few theoretical studies. Boone and Van Ours (2006) find that a system with monitoring and sanctions represents a welfare improvement relative to other alternatives. Benefit sanctions will affect job search behavior of the sanctioned because of the benefit reduction (ex-post effect) but also the search behavior of the non-sanctioned due to stricter monitoring of job search requirements (ex-ante effect). Boone et al. (2006) analyze the design of optimal unemployment insurance in

a search equilibrium framework where search effort among the unemployed is not perfectly observable. They examine to what extent the optimal policy should involve monitoring of search effort and benefit sanctions if observed search is found insufficient. The results suggest that the introduction of a system with monitoring and sanctions represents a welfare improvement.

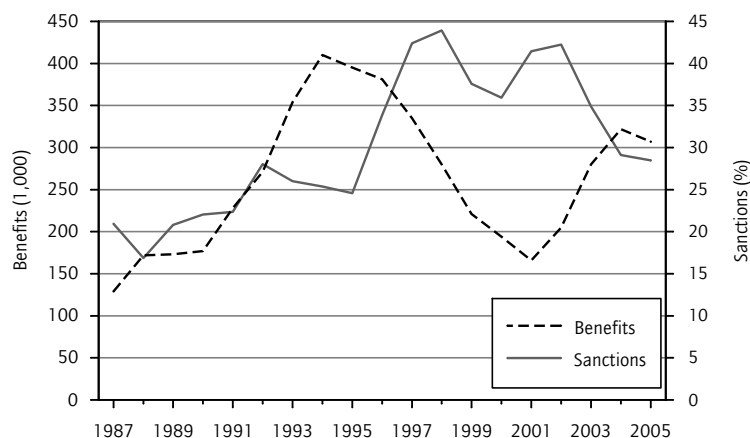
In August 1996 a new law on benefit sanctions was introduced in the Netherlands. Under this law people who receive UI benefits got a reduction of their benefits if they didn't follow the rules related to the benefits. Figure 3 presents information about the use of UI benefit sanctions over the past 20 years. As a percentage of the stock of UI benefits the sanction rate increased substantially from 1996 onwards, from about 25% to 45%. In recent years there is a decline in the sanction rate which is due to the number of sanctions being imposed to be roughly constant while the number of UI benefits increased.

Abbring et al. (2005) analyze how benefit sanctions affect the transition out of unemployment using data from the early 1990s. To illustrate how the system of benefit sanctions operates their description is used. According to the UI Law, an unemployed worker has three obligations in order to be entitled to UI benefits. First, he has to prevent unnecessary job loss. Second, he has to take actions to prevent him from staying unemployed (search for a job and accept appropriate job offers, register as a job searcher at the public employment office, participate in education and training, et cetera). Third, he has to keep the administrative organization informed about everything that is relevant to the payment of the unemployment insurance benefits. Related to this there are four categories of infringements for which workers can have benefit sanctions imposed: blameworthy unemployment after dismissal, lack of effort to find a job (search intensity too low, declining job offers), administrative infringements (reporting too late), and other infringements (fraud, inaccurate information).

UI agencies were authorized, but not obliged, to impose a sanction on a UI claimant who did not comply with the rules. The sanction is a temporary or a permanent full or partial reduction of the benefit level. In practice, the temporary partial reduction of the benefits ranged from 5% during 4 weeks to 25 or 30% during 13 weeks.

In the process of imposing a sanction there are a number of phases. The first phase is the observation of an infringement. Some offenses are more easy to detect than others. At the start of his unemployment period the worker has to give the UI administration agency information about his previous job and the reason he became unemployed. Therefore, it is quite easy to establish whether or not the worker is to blame because of insufficient action to prevent job loss. A first investigation as to whether the unemployed search sufficiently is based on the "declaration of activities" the worker has to fill in at regular time-intervals. This declaration gives an overview of activities to find a job. The general rule is that there should be at least one real application per week. A real application is one that can be checked by contacting the employer to which the application was addressed. The unemployed worker should accept offers concerning a "suitable job", defined by the UI agencies in terms of characteristics like previous occupation, education and earnings. Generally, the longer the duration of unemployment the more workers have to adjust their preferences in terms of temporary work, less pay, longer commuting or even moving. The second phase is the administrative preparation of a decision to impose a sanction. Ideally,

Figure 3

Unemployment Insurance Benefits (in 1,000) and UI Sanctions (in %)

Source: Netherlands Institute for Social Insurance.

during this phase the worker is asked to give his opinion about the infringement and, depending on the type of infringement, employers are contacted. However, in practice these steps are often omitted as the UI agencies have limited resources. In the third phase, a decision about the sanction is made by a committee consisting of representatives of unions and employers' organizations. In the fourth phase, there may be an appeal against the decision to impose a sanction in which case a judge of the Council of Appeal scrutinizes the decision. If the worker or UI agency object the decision of this judge, they may appeal at the Central Council of Appeal. However, in the early 1990s only 2% of the workers who got a benefit sanction imposed actually appealed against the decision. The sanction procedures are careful, but do not take a lot of time. UI agencies usually react within a week to failures to provide information on e.g. search activities. Since individuals are closely monitored after a sanction they have an incentive to comply with the search requirements in order to prevent additional punishments. All this is likely to increase the search intensity of the individual from the moment at which the sanction is imposed onwards.

Abbring et al. (2005) analyze how benefit sanctions affect the transition out of unemployment using data on UI spells that started in 1992 and are followed up to September 1993. The focus is on two industries, the metal industry and banking sector. The metal industry sample contains about 8000 spells of which a quarter is female; the banking sector sample concerns about 32000 spells of which half relates to females. The sanction rates are not very high; on average 2-3% of the individuals in the sample were confronted with a benefit sanction. The main problem in the empirical analysis is the potential endogeneity of sanctions. If the imposition of benefit sanctions is selective – for example because they hit only unmotivated workers – the estimated sanction effect will be biased if this selectivity is not accounted for. The authors deal with the selective imposition of benefit sanctions by modeling both the process by which unemployed find jobs and the process by which they are confronted with benefit sanctions, and allowing these two processes to be correlated

through observed and unobserved determinants. The authors find that re-employment rates are significantly and substantially raised by imposition of a sanction. Individual re-employment rates of males increase by about 60% in the metal industry and by about 35% in the banking sector. For females, these effects are 100% for the metal industry and 85% for banking. Estimates on data in which the metal and banking industries are pooled with other industries suggest economy-wide sanction effects of 60 to 65%. The main explanation for the considerable effects of benefit sanctions is that benefits change concerns workers with a low income who have limited possibilities for consumption smoothing to deal with the shock in income. The authors also note that in their data set sanctions are only imposed in a small fraction of the UI cases. Therefore, one should be careful in extrapolating their findings to a much stricter monitoring and sanction regime without considering the equilibrium effects of such a broad reform of the UI system.

3.3 Counseling and Monitoring

In theory, counseling i.e. job search assistance should lead to an increase of the effectiveness of search and therefore to an increase in the job finding rate. After all, if this would not be the case, the counseling would not be "true" counseling but merely a nuisance to unemployed workers. Monitoring of search activities in theory leads to substitution from informal search methods to formal search methods. After all, if monitoring of insufficient search leads to the imposition of benefit sanctions the unemployed worker has an incentive to search through methods that are easy to monitor (Van den Berg and Van der Klaauw, 2006).

The effectiveness of counseling and monitoring has been studied in detail by Gorter and Kalb (1996) and by Van den Berg and Van der Klaauw (2006). The studies differ in terms of the type of unemployed workers investigated. When workers become unemployed in the Netherlands they are classified into one of four categories. This profiling of the unemployed is based on individual characteristics such as age, education and work experience but also on subjected measures such as expected job search behavior, flexibility, and language skills. Type I individuals are expected to have sufficient skills to find a job. Type II and III individuals are considered not to have the skills to find work without training and schooling. Type IV individuals are the most disadvantaged and need more care. They are often unable to work or not obliged to search for work and concern for example lone parents with dependent children or drug addicts. Gorter and Kalb (1996) investigate the effects of counseling and monitoring in a sample of type II-IV unemployed workers collected at the end of the 1980s, whereas Van den Berg and Van der Klaauw focus on a sample of type I unemployed collected at the end of the 1990s.

Gorter and Kalb (1996) analyze data from a field experiment with random assignment of counseling and monitoring to UI recipients that started their unemployment spell in the period November 1989 to January 1990. Individuals were interviewed every four weeks about their search activities, the number of applications they made, the number of search channels they used for this applications and the number of job offers they received. In the end the authors had 722 individuals for which they had full "search histories". The control group of unemployed workers got the traditional counseling and monitoring treatment where progress in finding a job is discussed regularly and there is an occasional check of information. The treatment group got more intense counseling and monitoring where more

time is spent to discuss the applications thoroughly and more time is investigated to check search efforts so that the probability is higher to be “caught” for lack of search efforts or reporting of “fake” applications and to be penalized accordingly. The authors find that more intense counseling and monitoring on average reduces the time unemployed need to find a job. For workers who came from temporary jobs counseling and monitoring did not help but for those that lost a permanent job counseling and monitoring increased their application rate with 20%; and, because the match probability decreased with about 5% the job finding rate increased with 15%.⁸

Van den Berg and Van der Klaauw (2006) investigate the effect of counseling and monitoring on the individual transition rate to employment of type I UI recipients. They use data from a field experiment. All UI recipients had to send in weekly reports concerning job search activities. Once every four weeks, the UI agency determined whether the individual was still eligible for UI benefits. The experiment consisted of randomly assigning counseling and monitoring to part of the workers. So some workers got “treated” with counseling and monitoring while others did not receive counseling and monitoring. The counseling and monitoring started with an intake meeting within three days after the start of the payment of the UI benefits. During this meeting the quality of application letters and the resume were examined, potential search channels were discussed and a plan was made about what the individual should do until the next meeting. An important element of counseling and monitoring was also to stimulate the unemployed worker to frequently contact the public employment offices for information about available job vacancies. During the intake meeting it was stressed that a positive and active attitude toward job search is expected. Follow-up meetings focused on applications to specific job vacancies and employers. During these meetings the plan of the previous meeting was evaluated and a planning for the next period was made. If the unemployed worker did not comply with the plan, he could have been punished with a sanction in the form of a reduction of the UI benefits. The average sanction for insufficient job search was a 10% reduction of the UI benefits for a period of 2 months. Note that the counseling and monitoring requirements came on top of the reports on search activities that all workers had to send in every week. The scale of the field experiment was modest. The database contains administrative information on about 394 individuals who participated in the experiment. They entered the UI system in the last months of 1998 and the first months of 1999. The results of the analysis show that low-intensity job search assistance programs have at best small effects. High-intensity job search assistance programs may have a more positive effect on the exit rate to work. Furthermore, monitoring of relatively well-qualified individuals in favorable macroeconomic conditions leads to inefficient substitution of search methods or channels. This also generates small net effects on the exit rate to work. Individuals with worse prospects may have less scope for substitution, and monitoring of their search activity may lead to an increase in the exit rate to work. Van den Berg and Van der Klaauw (2006) argue that it may make more sense to focus monitoring on individuals with worse opportunities.

⁸ The authors attribute the difference to the fact that workers who came from temporary jobs are more used to find a job quickly anyway; therefore more intense counseling and monitoring does not help.

3.4 Entitlement and Eligibility Criteria for Older Workers

Whereas many unemployed workers are confronted with strict search requirements and have to find a job to prevent a drop in income because they run out of UI benefits older workers face a different incentive structure. First, because eligibility criteria are less strict and second because potential benefit durations are expanded. An indication of how eligibility criteria and entitlement effects influence job search behavior of older workers is provided by Heyma and Van Ours (2006) who study UI-inflow between January 1999 and December 2001. Up to January 1, 2004 in the Netherlands all unemployed workers were obliged to register at the employment office and had to accept a 'suitable job' but once workers reached age 57.5 they were no longer required to actively search for work. The removal of the search requirement may affect the job finding rate since this removal is equivalent to removing the threat of benefit sanctions and removing the "moral pressure" to actively look for a job. Heyma and Van Ours (2006) also investigate the effects of extending the potential UI benefit duration up to the retirement age. In the Netherlands – up to August 2003 – once workers reached the age of 57.5 they were entitled to unemployment benefits up to the age of 65 after which they could collect old age benefits. Since workers above age 57.5 knew from the start of their unemployment spell that they could keep their benefits until they retired it was advantageous for workers to prevent entering unemployment just before age 57.5. If workers who were bound to be dismissed had some control over the timing of their dismissal they would try to become unemployed after the age of 57.5. This appears to be the case as there is a clear spike in the inflow into unemployment after age 57.5. Heyma and Van Ours (2006) find that the abolition of the requirement to actively search for a job as soon as a worker reaches the age of 57.5 has a large negative effect on their job finding rate. Furthermore, even before age 57.5 the job finding rate decreases with age suggesting that there is a negative anticipation effect. Workers close to the age of 57.5 do not expect to be confronted with a benefit sanction. The authors also find that the entitlement rule which states that from age 57.5 onwards workers entering unemployment can keep their unemployment benefits until the age of 65 has a large negative effect on the job finding rate. Also for older UI recipients it is clear that incentives affect behavior.

4 Unemployment Assistance

4.1 Characteristics and Developments

Unemployment assistance benefits are part of the system of welfare benefits. Currently, for a couple welfare benefits are 100% of the minimum wage; a single parent gets 70% of the minimum wage and single persons – from 21 years onwards – are entitled to 50% of the minimum wage. Young individuals age 18 to 21 are supposed to be supported financially by their parents. UA benefits recipients have the obligation to search for a job in order to remain entitled whereas other welfare benefit recipients do not have such an obligation. Figure 4 shows the development of number of UA benefits over the past decades. Up to the end of the 1980s the number of UA benefits resembles the development of the unemployment rates indicating that the fluctuations in unemployment in the Netherlands lead to workers ending up collecting UA benefits. The change in the UI benefits system in 1987 – discussed in detail in the previous section – led to larger fluctuations in UI benefits and smaller fluctuations in UA benefits. Indeed, the increase in unemployment rate in the

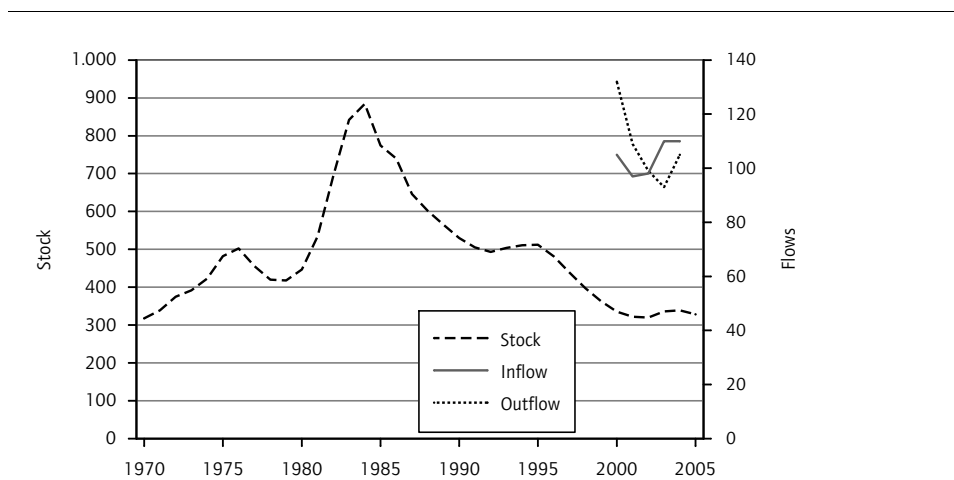
early 1990s is hardly shown in the development of UA benefits. Figure 4 also shows some observations of inflow and outflow which are much smaller than the stock of UA benefits indicating that the average duration of UA benefits is quite high. Note that also in the early 21st century the numbers of UI and UA benefit recipients no longer move together; in the period 2001–2003 the annual inflow into UI went up from 250,000 to 420,000 whereas the annual inflow into UA went up only from 100,000 to 110,000.

UA benefits support people without income who are not entitled to any other benefits scheme. In addition, the individual must (i) be legally allowed to stay in The Netherlands, and (ii) be over 18 years. UA benefits are means-tested. If the unemployed worker has a partner with a sufficiently high income out of labor, or if the worker has a sufficiently high amount of assets (like a house), then in general he does not qualify for welfare. Municipalities have power to provide bonuses on top of the basic benefits level. For example, some municipalities pay bonuses for the use of sports facilities and public transport, or for health-related expenses. The types of bonuses, the rules on entitlement to a bonus and the levels of the bonuses vary considerably across municipalities. For a long time the municipalities could claim a large part of their expenditures on UA benefits from the central government. The new Welfare Act introduced in 2004 changes this. It makes local authorities financially responsible for the UA benefits they provide. In particular, local governments receive a fixed budget for UA benefits and activation. If they succeed in getting UA recipients back to work, saved funds can be used for other local spending. This encourages local governments to invest in efficient administration, tight monitoring and tough activation programs. While no evaluation of the new Act has been carried out yet, it seems that indeed fewer people receive UA benefits (De Mooij 2006).

Figure 4

Unemployment Assistance 1970–2005

In 1,000



Source: Netherlands Central Bureau of Statistics.

4.2 Benefit Sanctions

Van den Berg et al. (2004) analyze the effects of sanctions on the behavior of UA recipients. To illustrate how the sanction systems operates their description is used. A recipient of UA has similar obligations as a UI recipient in order to remain eligible for a benefit. He has to prevent unnecessary job loss, take actions to prevent him from staying unemployed and keep the welfare agency informed about everything that is relevant to the payment of UA benefits. The exact guidelines may be determined by the municipalities. However, most municipalities have not formulated strict rules and leave some room for the discretion of the case worker. Therefore, the rules to which the UA recipients must comply do not only vary between municipalities, but also between case workers of the welfare agency.

A benefit sanction consists of a temporary reduction of the UA benefits level. The duration and size of the reduction depend on the nature of the infringement. According to the official guidelines there are four categories of sanctions. If a UA recipient does not register or renew his registration at a public employment office, a benefit reduction of 5% during 1 month is recommended. A sanction of 10% during 1 month is recommended if a UA recipient insufficiently searches for a job, neglects appointments at the welfare agency and does not cooperate in the search for appropriate training programs. If the welfare recipient's behavior interferes with searching for a job or if he refuses training, a sanction can be imposed with a reduction of 20% during 1 month. A benefit reduction of 20% during 2 months is recommended if the UA recipient refuses an appropriate job offer or did not prevent unnecessary job loss prior to entering welfare. The duration and size of the benefit reductions are relatively low in comparison to those for unemployment insurance (UI) recipients. Most UA benefit sanctions are only for one or two months and the maximum reduction of the welfare benefit is 20%. Sometimes sanctions are imposed to punish UA recipients because of administrative reasons like returning late from holiday, filling in forms incorrectly, etc. Nevertheless, the main reason to impose sanctions is noncompliance with job search guidelines.

The procedure of imposing a sanction consists of two steps. In the first step, it is established that a UA recipient does not comply with the guidelines of the welfare agency. Information on possible offenses can come from the monthly form a UA recipient has to fill in, or from conversations between the employees of the welfare agency and the welfare recipient. In the second step of the sanction procedure, it is decided whether or not the non-compliance will be punished. Noncompliance does not always lead to a sanction. Local or district governments are responsible for the payment of UA benefits, but the national government has set binding rules and procedures concerning the imposition of sanctions. The case workers of the welfare agency have some discretion to interpret the rules. According to the procedures, the decision to impose a sanction on a particular UA recipient is taken by the local welfare employee after consulting a so called "decision maker". The decision maker checks the proposal to make sure that all the right legal steps in the procedure have been taken. The employee of the welfare agency takes the state of the local labor market into account when deciding whether or not a sanction should be imposed. Furthermore, conditional on noncompliance with the guidelines, the decision to impose a sanction also depends on characteristics of the UA recipients like attitude, appearance and motivation.

Once a sanction has been imposed, the welfare agency provides the UA recipient with some assistance on how to improve his behavior to avoid future sanction and on how to search for jobs more effectively. At the same time the behavior of the UA recipient is more closely monitored. If a sanction is imposed because of insufficient job search activity, then the welfare agency is obliged to re-examine the job search activities of the UA recipient within 3 months after the imposition. Based on the outcome of the renewal examination, the welfare agency may decide to renew the sanction or punish the UA recipient with a higher sanction. The period between the establishment of noncompliance by the case worker of the welfare agency and the imposition of a sanction is usually 1 to 2 months. In rare cases it may take years before noncompliance is established.

Van den Berg et al. (2004) study the effect of benefits sanctions imposed on UA recipients. The analysis concerns all unemployed individuals who started to collect UA benefits in the calendar year 1994 in Rotterdam, the second largest city of the Netherlands. The individuals were followed until they found a job or left the register for other reasons but ultimately until October 1996. By that time about 40% of the workers had found a job. In total about 15% of the individuals were confronted with a benefit sanction. In the empirical analysis it is again important to account for selectivity in the imposition of a benefit sanction. As in Abbring et al. (2005) the authors account for selectivity by modeling both processes of finding jobs and getting benefit sanctions imposed, and the correlation between the two through observed and unobserved determinants. They show that if selectivity is not taken into account the effect of benefit sanctions on the job finding rate is underestimated to the extent that no effect is found. If selectivity in the imposition of benefit sanctions is accounted for a strong positive effect is found. A benefit sanction raises the transition rate from welfare to work by more than 140%, so the job finding rate more than doubles. The benefit sanction itself is temporary, but the effects turn out to be long lasting. Even after the sanction period expires the transition rate from welfare to work is higher than before the sanction was imposed. Apparently, for UA recipients consumption smoothing is so difficult, that a relatively small sanction (and the threat of an additional severe punishment in case of recidivism) can have a large effect on search behavior.

5 Disability Benefits

5.1 Characteristics and Developments

Figure 5 shows the evolution of stocks and flows concerning disability benefits for employees.⁹ The number of disability benefits increases quite rapidly from about 200,000 in 1970 to 750,000 in 1990. The inflow and outflow increase up to 1980 to fluctuate from then on. Over the whole time period up to the early 1990s the inflow into disability benefits is substantially larger than the outflow from disability benefits. In the 1990s there are a number of reforms which are discussed in more detail below and over a couple of years in the mid 1990s the outflow is larger than the inflow causing the stock of disability benefits to decline. In the early 21st century there was again a major reform of the disability insur-

⁹ There are also disability benefits for self-employed which are ignored in this paper. Note that persons collecting disability benefits may be part-time disabled and may have a (part-time) job as well. In July 2002 for example there were 975,000 persons collecting disability benefits of which 245,000 had a job and 730,000 did not have a job.

ance system and the past couple of years outflow is again larger than inflow. Recently, the inflow into disability insurance has gone down in a spectacular way.

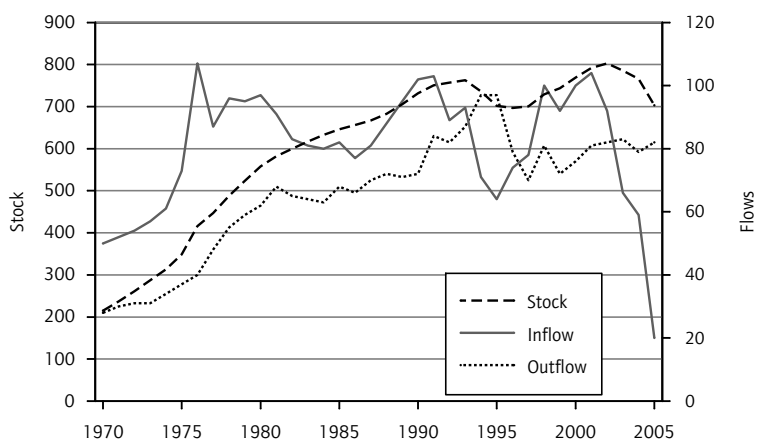
The incidence of disability benefits in the Netherlands is quite high compared to other OECD countries. One of the reasons is that while other countries make a distinction by whether the disability is work-related or not and only the first category is eligible for DI benefits, in the Netherlands this distinction is not made.

In 1967 when disability insurance for employees (WAO) was introduced. Under the terms of this law workers were insured against wage loss due to long-term disability. From then on if a worker became ill, he was allowed to claim a benefit under the illness scheme for a maximum period of one year. After that he could claim a disability benefit. Workers were entitled to disability benefits after a so-called disability examination, which consisted not only of a medical examination but also of an investigation of the labor market position of the worker. A worker could be considered disabled if there was no suitable job for him at his own educational level in his previous occupation. Furthermore, unemployment was 'internalized', which means that those workers who were considered to be partially (more than 15%) disabled, could collect full disability benefits because it was assumed that partially disabled were doomed to remain unemployed. The benefit had a maximum of 80% of the wage in the last job. Disability benefits could be collected until age 65. Since the introduction the number of workers collecting DI benefits has increased massively. This huge increase in the numbers on disability benefits induced the government to adjust the system several times. In 1985 the maximum replacement rate was reduced from 80% to 70%. In 1987 there was a major restructuring of the DI benefit system of which the main objective was to reduce the inflow into disability. The most important change was the abo-

Figure 5

Disability Insurance Benefits – Employees

In 1,000



Note: The peaks in the inflow into disability insurance are sometimes statistical artifacts. In 1976 the disability insurance was expanded. In 1998 civil servants were also covered under the disability insurance. The through in the inflow in 2005 is due to the extension of the waiting period from 1 to 2 years (see the main text for details).

Source: Netherlands Institute for Social Insurance.

lition of the 'internalization of unemployment' rules. Partially disabled workers were considered as such and were expected to find a job or claim unemployment benefits for their remaining work capacity. The reform of the disability insurance in 1987 was very important. Empirical studies find that before the 1987 reform of the disability benefit system up to 50% of the disability enrollment was related to redundancy of workers. Hassink et al. (1997) show that at the end of the 1980s employers in the still used disability enrollment as an alternative to dismissals. They find that about 10% of the transitions into disability are due to redundancy of the worker. An implication of this result is that even after the social security reform of 1987, some employers and employees used disability enrollment to avoid dismissals. In the early 1990s there were some further changes. The disability insurance premium was experience rated, the disability examination no longer took the availability of suitable jobs with respect to education and previous occupation into consideration, the duration of the benefit was limited to five years after which a re-examination had to take place and, all disabled workers younger than 50 years had to be re-examined. In 2002 the so called "gatekeeper" model was extended. In this model employers and workers carry more responsibility concerning the inflow of workers into disability.

In 2006, the government replaced the disability scheme by the Law on Work and Income According to Labor Capacity – WIA (see De Mooij (2006) for details). Just like the WAO, the WIA offers insurance for occupational diseases and employment injuries (*risque professionnel*) and for other risks (*risque social*). People can apply for WIA after a period of two years of sick leave, which are covered by employers. The WIA consists of two schemes: one for the fully and longterm disabled (IVA), and one for the partially disabled (WGA). Fully and long-term disabled means that someone will never be able to earn more than 20% of his previous salary. The IVA equals 75% of the final wage until retirement. It is financed by uniform national premiums paid by employers. The WGA applies to people who are less than fully disabled, but who have lost more than 35% of their previous work capacity. During the first period, the WGA entitles a partially disabled worker to a benefit based on his last earned wage. If he still works, the benefit equals 70% of the difference between his last salary and his new (lower) wage. If he does not work, the benefit is 70% of the last wage. The duration of the benefits is in accordance with the rules of the UI. When this duration expires, a WGA claimant is entitled to a follow-up benefit. This benefit is lower if the WGA claimant does not work, which gives an incentive to maintain in the labor market. Partially disabled workers who incur less than 35% drop in wages are not entitled to WGA benefits. From 2007 onwards, the WGA will be partly privatized. In particular, employers will have the opportunity to opt out of the public system and switch to private insurance companies. The premium in the WGA will be experience rated. This gives employers an incentive to prevent disability.

5.2 Screening DI Applications

De Jong et al. (2006) investigate the effects of intensified screening of disability insurance benefit applications under the previous system when sick employees had a one year waiting period before entering DI. During this period employers were responsible for financing sickness payments. Collective bargaining agreements ensured that sick workers received 90 to 100% of their net salary. After 13 weeks of sickness absence the employer reported the sick employee to the public administrator of the UI and DI schemes. If the worker had not fully returned to work before 39 weeks, the worker and employee filed a

DI benefit claim which should have been accompanied by a reintegration report, containing the reintegration plan as drafted after 8 weeks of sickness absenteeism, and an assessment on why it has not (yet) resulted in work resumption. The case worker checked this reintegration report. If the report was delayed, incomplete, or proved that the reintegration efforts by the sick worker and employer had been insufficient the DI benefit application was not processed and the case worker could decide to start a sanction procedure. In almost all cases of noncompliance the employer was held responsible, which means that almost all sanctions were imposed on employers. A sanction to the employer implies that the employer is obliged to continue sick pay for some additional months after the regular waiting period elapsed.

De Jong et al. (2006) use the results from an experiment, where case workers at some local administrative offices were instructed to implement a more intensive screening policy of the reintegration reports. The standard (national) procedure was to screen the reintegration reports "on paper" and to only contact the employer and/or sick worker directly if there were clear signals of negligence. In the "treatment" offices the case workers always had to contact or visit the employer and/or the sick employee. The behavior of the case workers was monitored to check that screening in the treatment offices was indeed more intensive than in the other offices. Indeed, in the treatment offices the time spent on screening reintegration reports by the case workers was 40% higher than in the other offices. The data cover the period from 2001 until 2003. The more intensive screening of reintegration reports became effective in January 2003 and was not announced beforehand. The authors find that the intensified screening decreases long-term sickness absenteeism and DI applications, both with about 5%. They argue that the reduction in long-term sickness absenteeism is due to self-screening by potential DI applicants and that for DI applications the decline is due to a direct effect on work resumption during sickness absence. And, because the costs of intensified screening are only a small fraction of the benefits of averted DI payments it is very much cost efficient.

6 Conclusions

This paper presents information about the evolution of the Dutch labor market in particular about the developments in unemployment insurance, unemployment assistance and disability insurance. The emphasis in the presentation is on how incentives affect the dynamics in these benefits. In the 1960s and 1970s the social security system in the Netherlands rapidly expanded. Its main characteristics were easy access and little incentives to leave. In the early 1980s unemployment increased rapidly and the system was no longer sustainable. In 1987 there was a major restructuring of the system and in the 1990s further changes were introduced with a focus on financial incentives. Now in the early year of the 21st century there is again a major reconstruction emphasizing incentives even more.

In UI benefits the emphasis shifted from paying money because workers face a drop in their income to paying money to give them time to find a new job. This is observationally equivalent except for the strong emphasis on incentives. The same holds for UA benefits. The emphasis shifted from providing income support to finding work. To some extent this even holds for the system of disability benefits.

It is difficult to find the characteristics of an optimal social security system. Not only does the economic environment change continuously, social attitudes and the political arena also change. Over the past decades there has been a shift in perception about unemployment and disability: from exogenous events that are difficult to influence to events for which the individual worker and firm bear at least some responsibility. And because of that strong incentives are needed. The main conclusion of this paper is that indeed these incentives affected the behavior of the individual workers and firms. In order to protect the benefit system from deteriorating or even collapsing the right financial incentives have to be provided to all actors – workers, employers and benefit administrators. These financial incentives concern screening of workers who want to enter the benefit system, counseling and monitoring of workers that are in the benefit system and sanctions for workers or employers that abuse the system. It is also clear that one cannot simply reorganize one type of benefits ignoring others. Benefits are communicating vessels. Reorganizing UI benefits may lead to more inflow into disability benefits, restructuring disability benefits may lead to more inflow into UI and UA benefits. Only a comprehensive reform of the benefit system will have beneficial effects for the functioning of labor markets. There was no blueprint for the reform of the social security. There have been many smaller and larger changes that occurred along the way of the reconstruction. Not everything was carefully planned. The Netherlands started the reform of the social security system in the mid 1980s while it took until the second half of the 1990s before the Dutch employment miracle occurred.

All in all, the Dutch experience has four main lessons which may be helpful for other countries that want to reconstruct their system of social security. First, the introduction of financial incentives for workers, employers and benefit administrators is helpful in improving the functioning of the labor market. Second, in the reconstruction the whole system has to be taken into account and not just a single part of it. Third, to find a system that is optimal or close to the optimum requires trial and error. Fourth, one should not expect quick results. It may take some time before the beneficial effects of the reform materialize.

References

- Abbring, J.H., G.J. van den Berg and J.C. van Ours (2005): The Effect of Unemployment Insurance Sanctions on the Transition Rate from Unemployment to Employment, *Economic Journal*, 115, 602–630.
- Boone, J., P. Fredriksson, B. Holmlund and J.C. van Ours (2006): Optimal Unemployment Insurance with Monitoring and Sanctions, *Economic Journal* (forthcoming).
- Boone, J. and J.C. van Ours (2006): Modeling Financial Incentives to Get Unemployed back to Work, *Journal of Institutional and Theoretical Economics*, 162 (2), 227–252.
- De Jong, Ph., M. Lindeboom and B. van der Klaauw (2006): *Screening Disability Insurance Applications*. Mimeo. Tinbergen Institute, Amsterdam.
- De Mooij, R. (2006): *Reinventing the Welfare State*. The Hague, CPB Netherlands Bureau for Economic Policy Analysis.
- Gorter, C. and G.R.J. Kalb (1996): Estimating the Effect of Counseling and Monitoring the Unemployed Using a Job Search Model. *Journal of Human Resources*, 31, 590–610.
- Hassink, W.H.J., J.C. van Ours and G. Ridder (1997): Dismissal through Disability. *De Economist*, 145, 29–46.

- Heyma, A. and J.C. van Ours (2006): *How Eligibility Criteria and Entitlement Characteristics of Unemployment Benefits Affect Job Finding Rates of Elderly Workers*. Mimeo. CentER, University of Tilburg.
- Kluve, J. (2006): *The Effectiveness of European Active Labor Market Policy*. IZA Working Paper No. 2018. Bonn.
- Kluve, J. and C.M. Schmidt (2002): Can Training and Employment Subsidies Combat European Unemployment? *Economic Policy*, 35, 411–448.
- Lalive, R., J.C. van Ours and J. Zweimüller (2005): The Effects of Benefit Sanctions on the Duration of Unemployment. *Journal of the European Economic Association*, 3, 1386–1417.
- Nickell, S.J. and J.C. van Ours (2000): The Netherlands and the United Kingdom: A European Unemployment Miracle? *Economic Policy*, 30, 137–175.
- Van den Berg, G.J. and B. van der Klaauw (2006): Counseling and Monitoring of Unemployed Workers: Theory and Evidence from a Controlled Social Experiment. *International Economic Review*, 47, 895–936.
- Van der Klaauw, B., G.J. van den Berg and J.C. van Ours (2004): Punitive Sanctions and the Transition Rate from Welfare to Work. *Journal of Labor Economics*, 22 (1), 211–241.
- Van Ours, J.C. (2006): Has the Dutch Miracle Come to an End? In: M. Werding (ed.): *Structural Unemployment in Western Europe: Reasons and Remedies*, Cambridge, MA, London, MIT Press, 133–158.
- Visser, J. and A. Hemerijck (1997): *A Dutch Miracle, Job Growth, Welfare Reform and Corporatism in the Netherlands*. Amsterdam, Amsterdam University Press.