Long-term unemployment scarring and the role of labour market policies.

The case of Sweden in the 1990s

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Abstract

The experience of unemployment puts individuals at risk of long-term negative scarring and the longer the unemployment spell, the greater the risk of negative scarring. In Sweden, labour market policies aim at reducing such risks in the form of unemployment benefits, active matching and active labour market policy programmes (ALMPs). However, there is frequent discussion regarding the extent to which these kinds of policies actually reduce the risk of negative scarring. It is often argued that the programmes are of poor quality, particularly during economic downturns, and participants are often not motivated for the task. Likewise, it is claimed that unemployment insurance tends to counteract a quick return to the regular labour market. One problem related to labour market policies is that it has been difficult to examine the impact of such policies. Studies often present results that appear scattered due to differences in what is actually being measured and methodological problems.

The uniqueness of this thesis is that it is based on a large-scale longitudinal register of data that has provided important empirical information regarding the long-term effects of labour market policy investments. The quality of data has also enabled the use of evaluation techniques which largely can help to reduce the uncertainty of the findings. More precisely, the research questions examine (1) in what way the level of unemployment benefit functions as protection against unemployment scarring, (2) in what way the ALMPs protect long-term unemployed people from long-term unemployment scarring, (3) at what point in a business cycle the ALMPs are efficient and finally, (4) for whom do the ALMPs function to reduce the risk of negative scarring. In this thesis, scarring effects are measured as the risk of labour market exit, the risk of labour market instability and the risk of future negative wage trajectories. The methods used in most studies are Cox regressions in combination with instrumental variable analysis (the Heckman two-step procedure).

The empirical findings indicate that ALMPs worked well to reduce such negative effects both in times of booms (1999) and recessions (1993) and particularly among the youngest and oldest actors on the labour market. They also function particularly well for people with a low level of education. However, it is important not to exclude unemployed people who have a high level of education, in the belief that ALMPs have nothing to offer them, since such people are particularly helped by ALMPs as regards reducing the risk of future labour market instability. It was also found that generous unemployment benefit helped to reduce the risk of future negative wage scarring. In addition to these findings, some mechanisms were

identified which proved to be important tools for transforming policies into valuable resources for the unemployed. In this thesis, the value of the findings of these mechanisms is discussed from the perspective of the capability approach. Even if the same investments were made in all unemployed persons, the participants would respond differently to the investment. Some reasons for the inequality in outcomes were found within the programmes and were due to heterogeneity in the unemployment group but some reasons can actually be explained by the converters (mechanisms) that were identified in the studies.

Thus, the results emphasise the importance of investing in labour market policies, particularly during economic downturns. This is the time when cuts in unemployment benefit do not help the unemployed back to the labour market since there are very few available jobs to apply for. It is also the time when the long-term unemployed should participate in ALMP-training in order to be prepared for new challenges when the labour market improves again. As a matter of fact, the results show that skills from ALMP-training have a bridging effect which indicates that these skills will be valuable on the labour market for at least another five years after the year of investment.

The findings in this thesis are controversial since they differ from most research findings from the beginning of the 1990s which point to poor micro level outcomes. However, the long-term approach of this thesis is the main explanation for these new and different results. It is argued here that a long-term approach is needed to find out the long-term effects because ALMP participation, particularly ALMP-training, is meant to be a long-term investment in human capital. A long period of time needs to pass between ALMP-investment and evaluation before the effects can show. Reported effects from ALMP investments at the beginning of the 1990s have often been measured on a short-term basis. It is not suggested that short-term effects should be ignored but it is argued that a short-term analysis provides only a fragmental description of reality, and long-term effects should be given greater priority than is usually the case since they affect the labour market prospects of the individuals over a long period of time. This thesis dispels the "myth" about the negative effects generated from ALMPs during the 1990s.

Keywords: Unemployment, unemployment scarring, active labour market policy, unemployment insurance, active labour market policy programme, human capital, capability approach, business cycle, job-chances, reemployment income, heterogeneity.

Preface

How could this happen? I was only going to take a short break from work to study the D course in sociology. Then Basso turned up – an inspiring man but also a tough lecturer who places high demands on his students. You made me think, reflect and study sociological phenomena with the most critical of eyes. Moreover, you argued that I should be a PhD student and, of course, one cannot defy a lecturer. Therefore, I blame you, Basso, for my step into the world of research but thanks for making it happen!

This thesis has travelled with me all over the world, both mentally and physically. For instance, I solved some statistical problems in my room in the Paralympic village in Athens. Article 1 was finalised in my hotel room in Nottwil while preparing for competitions and Article 3 took shape on the terrace of my bungalow at a training camp in Tenerife. In the shade of the rhododendron tree in Stellenbosch, I suddenly grasped the Capability Approach and in my room in the Paralympic village in Beijing, the rising chapter summary took form. My work environment for the past years at the Department of Sociology is difficult to beat. It is unlikely that anyone can experience a better or nicer work environment. Almost every day has been stimulating in one way or another and apparently, quite a number of days have also been creative ones. Many people at the department have contributed to the enjoyable time I have had; in fact, everyone has done so. However, there is one person whom I must mention specifically and that is Mattias, my supervisor. I do not think I have ever met a person with the same enthusiasm as yours. Your delight over research, your methodological capability and patience definitely rub off. But that is not all; you have also had a remarkable ability to prepare my route along the "path of exploration" by removing obstacles. I have been able to walk along the path without having to stop to clear obstacles away. Nor have I had to turn back and choose an alternative, more practicable course. You have been so amazingly efficient and competent and I appreciate it more than you can imagine.

However, it was not only Mattias who read my texts and was willing to bandy thoughts and ideas. Another three sociologists have shared their ideas and opinions about my thesis: Mikael Nordenmark at the Mid Swedish University and Daniel Larsson at Umeå University when it was time for the mid seminar and later on, Ola Sjöberg at the Swedish Institute for Social Research, when it was time for the final seminar. Thanks to all of you for your invaluable comments on how to take my thesis to a higher level!

Mum – you reached the destination before me but I am sure I pushed you to finish your thesis sooner by accepting the challenge of becoming a doctoral student. Because quite frankly, I don't think you would have liked the thought of me finishing my thesis before you finished yours! In any case, the example you have set did in some way push me into research, simply because if Mum can do something, I want to be able to as well!

How was it possible that you Tim with a good share of enthusiasm had the energy to get through my texts about unemployment, the Search Theory, the Capability Approach, or whatever? You have been an excellent sparring partner and critic (possibly the toughest of all). With your very sharp mind and tongue, you have discussed and questioned my texts and provoked me to turn my casual thoughts into more precise ideas. Without our discussions around the dinner table, my days at work would probably not have been quite as creative. Perhaps you, as my trainer of athletics, have had an ulterior motive regarding your willingness to put energy into my academic problems? Could it be that you knew that those good, creative days at work on account of fruitful talks around the dinner table also generate successful training sessions out on the track? Thanks Tim!

Madelene, april 2010

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Article 1 Göra illa för att hjälpa eller hjälpa till att göra illa? Arbetslösas reservationslöner, jobbchanser och återanställningsinkomster. Published in *"Sociologisk forskning*", 3, 2008.

Article 2 Active labour market policy and unemployment scarring: A ten-year Swedish panel study. Published in the *"Journal of Social Policy",* 37:3, 2008.

Article 3 What works best when? - A study of how ALMPs can play different roles depending on when in a business cycle participation takes place. Published in the *"International Journal of Social Welfare",* August, 7, 2009 (on line).

Article 4 Who are the lucky ones? Heterogeneity in the outcomes of ALMPs. Forthcoming in the "*International Journal of Social Welfare*", 2010.

I. The thesis

When we move from unstable labour market periods with high unemployment rates to labour market stability and lower unemployment rates, most of us are relieved. But nevertheless there are still many unemployed people and even more previously unemployed who may still be suffering from the unemployment spell. We know what happened to the long-term unemployed (at least 180 days) in 1993. After ten years, 30 per cent had not regained their pre-unemployment wages and after ten years, 13 per cent had not had a job that lasted for at least one year while 16 per cent had completely left the labour market (Strandh and Nordlund, 2008). In Mars 2010, the number of long-term unemployed in Sweden amounted to 158 000 (SCB, 2010). What future are these individuals heading for? We are not only discussing the risk of negative effects in terms of economic scarring, but also the risk of reductions in individual capabilities that may in turn lead to, for instance, reduced self-esteem or impaired health.

The unemployed are put at direct, temporary risk of economic misfortune or even poverty, but unemployment also puts individuals at risk of long lasting negative scar effects. The longer the unemployment spell, the greater the risk of reduced human capital (see e.g., Arulampalam et al., 2000; Burgess et al., 2003), downward occupational mobility (Layte *et al*., 2000) and/or negative wage trajectories (see for instance Björklund, 1981; Arulampalam, 2001; Gregory and Jukes, 2001; DiPrete, 2002). Negative scar effects can however be alleviated. One way is of course to return to the labour market as soon as possible since the length of the unemployment spell does in fact influence the scarring damage (see e.g., Hipple, 1999; DiPrete, 2002; Gangl, 2004). It has also been established that educational activities during periods of unemployment reduce negative scar effects since education and training maintain or even extend individuals' stock of human capital (Gregg and Tominey, 2005; Groot, 1990).

In Sweden, the system of labour market policies aims at reducing unemployment scarring by providing unemployment benefit, active matching and active labour market policy programmes (ALMPs). This thesis studies how individuals who suddenly lost their jobs in the 1990s could, or could not, reduce the damage of unemployment with the help of unemployment insurance (UI) and the (ALMPs) that were offered at that particular time. More precisely, how did the UI affect the time until labour market entrance and the subsequent earnings of the unemployed persons, and were the long-term unemployed helped by ALMPs to reduce the risk of unemployment scarring, measured here in terms of labour market exclusion, labour market instability and future negative wage trajectories?

Studies related to this area have often presented results that appear scattered due to differences in what is being measured as well as methodological differences. For instance, participants are generally evaluated a short time after ALMP participation and evaluation is based on several specific types of programme that are difficult to compare. Furthermore, it is often difficult to draw conclusions about the effects of ALMP participation because the researcher does not know what the effect would have been if the unemployed person had not participated in the ALMP.

The question of inconclusiveness is however not only a matter of differences in effects between ALMP participants and the openly unemployed or differences depending on what particular kind of programme the unemployed person embarks on. The matter of inconclusiveness is also about differences between individuals undergoing the same programme. Even if the same investment were made in all individuals, the participants would respond differently to the investment. The search for mechanisms that actually succeed in converting ALMP investments into increased capabilities of the participants, also contributes to the explanation of differences in the outcomes of labour market policy investments. As Andersen (2009) points out, most evaluations regarding the effects of ALMPs are treated as black-boxes where something goes in and something comes out but what happens in between is an unknown factor. The "black-box" is problematic since it prevents finding out how policies work and thus how to design policies most efficiently (Friedlander et al, 1997; Andersen, 2009). Therefore, along with the main objective, the intention is also to at least peek a little inside the black-box in order to try to identify some mechanisms that can help explain when policies become effective for the individual.

The essence of this thesis is that it actually elucidates several problems related to inconclusive results. Most of the studies done in this thesis are based on a large-scale longitudinal register-data that eliminates some methodological problems in the measurement. For instance, each long-term unemployed person was followed for ten years after the year of ALMP participation. This long-term perspective is unique in comparison with most other studies. The large-scale set of data provides a reference group (the long-term openly unemployed) and it also facilitates the control of unobserved selection biases into unemployment and into ALMPs. Thus, the uniqueness of this thesis comprises its long-term approach and the identification of heterogeneity in effect over groups and over business cycles. The set of data enables the use of evaluation techniques that largely reduce the uncertainty of the findings, thereby providing important empirical results regarding the effects of labour market policy investments.

II. Disposition

In Chapter III, the design and purpose of labour market policies are presented from a historical and a modern perspective. The intention here is to give the less updated reader a better understanding of why labour market policies were once institutionalised. Another aim is to describe the way the content and availability of unemployment benefit and ALMPs have fluctuated over the years.

Chapter IV presents previously found effects of ALMP participation and the reasons behind variations in these effects. The OECD (1996) points to several different reasons for inconclusiveness regarding the effects of ALMP participation. Most of the studies in this thesis were designed to address the problems referred to by the OECD. Chapter IV is therefore one of the central chapters of this rising chapter summary.

Chapter V is another central chapter which presents the data and methods. This relates very closely to Chapter IV. The methods chosen are discussed here and since I argue that the data, in combination with the chosen methods, largely reduce the problem of selection bias, the methodology and technique are also described.

Chapter VI presents the aim of the thesis and the specific research questions of each article. Chapter VII summarises the findings of each article.

The purpose of the theoretical chapter (VI) and its position late on in this rising chapter summary need some explanation. Each article is empirically oriented and does not really require additional theoretical discussion other than that already mentioned in each respective article. However, there are two reasons why an extended theoretical chapter has been included in this thesis. Firstly, the analyses provide more important information than the research question explicitly asks for and this information (about the somewhat hidden mechanisms behind the failure or success of ALMP outcomes) should not be neglected. In the discussion about why it is important to search for such mechanisms, the extended theoretical section is of value. Secondly, how should the consequences of the found effects be understood from a more holistic perspective? The extended theoretical framework lends support to such a comprehensive and final discussion.

III. Unemployment benefit and active labour market policy programmes in Sweden.

A retrospective account

The purpose of economic and labour market policies has changed considerably during the last century. As wealth has increased, the level of ambition regarding labour market policy has changed. The extent to which full employment has been a goal has depended on the scope and direction of economic goals in general. At the beginning of the 20th century, it was believed that self-regulating components in each market economy would solve economic problems without any public intervention (Axelsson, 1985). However, this view was shaken during the depression of the 1930s and that was when it was understood that unemployment is not automatically regulated and eliminated (Keynes, 1936).

Labour market policy came on to the political agenda in connection with the great depression of the 1930s. However even before then, labour market policy had started to be established within the trade union movement. For instance, the first unemployment benefit fund was formed by the trade union movement in 1885 where the unemployed people in question were helped to finance their travel and moving costs to facilitate for them to broaden their geographic job-search area. At that time, pure economic help (i.e. cash) was not a possibility (Regnér, 2000). At the beginning of the 20th century, the negative consequences of unemployment became a topic for debate. For instance, in 1908 a motion was addressed to the Swedish parliament comprising an inquiry to review the situation for the unemployed in general but also to pay more specific attention to the need for economic insurance for the unemployed. Edvard Wavrinsky (member of parliament and member of the standing committee of the constitution in the early 20th century) expressed in a bill that the current situation, where poor relief was responsible for the unemployed and their families, resulted in negative consequences. (IAF 2007) Unemployment…

"… slår ned den fattigunderstöddes sjelfkänsla, lefnadsmod och arbetsenergi för framtiden".

(IAF, 2007)

[… destroys the self-esteem of people forced to live on poor relief. They lose their courage in facing life and willingness to work for their future (IAF, 2007)]

The motion was rejected but it did signal a need to institutionalize the labour market. Wavrinsky did not only work to introduce unemployment benefit. Thanks to his bills, the Swedish parliament introduced local employment offices in 1914.

Labour market policy as an institution has been growing constantly, ever since the day of the first unemployment benefit fund in 1885 and the first unemployment office in 1914. During the 1930s, public relief work with an income equal to market wages was introduced, as well as government subsidies to unemployment benefit insurances organised by trade unions (Regnér, 2000). And so, as a consequence of the difficult labour market situation during the 1930s depression, the Rehn-Meidner model (R-M) was developed at the end of the 1940s. This model contained broad outlines of how to develop economic policy while including labour market policy as a central feature. The purpose of the R-M was to create an economic model that simultaneously brought about low inflation, a low unemployment rate, substantial economic expansion and a fair distribution of income. It was commonly believed that low inflation leads to high unemployment while high inflation lowers unemployment levels. Therefore, in order to maintain low unemployment while at the same time promoting the other economic goals, tools were needed that would push workers into unemployment (via restrictive and tight fiscal policy that kept inflation in check and a wage policy that promoted equal wages for equal job effort) in combination with tools that would pull the unemployed back onto the labour market to decrease unemployment levels (i.e. unemployment offices and ALMPs). Changes that took place in conjunction with the development of the R-M form to some extent the basis of labour market policy as we know it today (Regnér, 2000).

In a modern institutional setting

Labour market policy today aims, on the macro level, to control unemployment caused by economic recessions, to improve the position of weak groups on the labour market and to improve the matching of a supply of manpower with job vacancies. For instance, through matching, employment offices are to facilitate the exchange of information between employers and employees. The passive policy, the UI, aims to eliminate social maladjustment in the case of involuntary unemployment while ALMPs are to create an effective labour market through directed educational and vocational activities to exposed groups on the labour market.

In order to accomplish the intention of policies, measures need to be adjusted to fit the overall labour market situation. The policies were therefore frequently reformed during the 1990s due to the very difficult labour market situation in Sweden at that time. At the beginning of the 1990s, Sweden was affected by the global labour

market crisis, just as most other European countries already had been. The level of unemployment grew rapidly from 1.6 per cent in 1989 to 9 per cent in 1993 (SCB, 2009) This wave of unemployment was the result of the general economic recession that initially mainly hit the private sector (Holmlund, 2003). The difficult situation within the private sector began to improve by the early 1990s but this was in fact only the beginning of a long period of severe labour market conditions. This was not a consequence of a general economic recession; instead it was a result of the state budget deficit. To finance the costs linked with spending during the difficult labour market situation within the private sector, cuts had to be made within the public sector. (See e.g. Johansson et al., 1999). In 1997, the total level of unemployment was still almost 9 per cent but from then on unemployment began to decrease, down to 4 per cent in 2002 (SCB:1, 2009). In total, almost 40 per cent of the individuals of working age suffered unemployment at least for a short period between 1991 and 2000. The number of people who experienced unemployment during that period amounted to about 1.8 million (Korpi and Stenberg, 2001).

All the studies included in this thesis are based on data from the early 1990s when the labour market situation was extremely difficult and when several important reforms were made in labour market policies. It is therefore also important to describe in more detail the reforming of unemployment insurance and ALMPs during the 1990s and the first decade of the 21st century.

Unemployment insurance (UI)

Because of the difficult labour market situation in the 1990s, several important changes were made to UI. One type of adjustment was a change in the maximum level of compensation during unemployment spells. In 1993, the level was reduced from 90 per cent to 80 per cent (or from a highest daily allowance of maximum SEK 598 to a maximum of SEK 564). Due to the general financial situation of the government, the tightening continued in 1996 when the compensation level was further reduced to 75 per cent. In addition, in order to be eligible for first-time unemployment benefit, the unemployed person had to have been properly employed, i.e. it was not sufficient to have participated in any ALMP activity (Arbetslöshetskassornas samorganisation, 2008).

In 1998, new laws were introduced to provide a more coherent UI. Without going into detail about the content of each of these laws, basically the aim was to make UI available to anyone with some link to the labour market. This meant that unemployed people who previously would not have fulfilled the work condition now at least were eligible for basic unemployment benefit. This law replaced KAS - kontant arbetsmarknadsstöd - which was a flat rate benefit for unemployed people

who did not fulfil the work condition attached to the unemployment benefit. A complementary unemployment benefit fund was also formed (ALFA-kassa). This fund was intended to provide some financial security until the unemployed person had some link to the labour market and could thus be transferred to other adequate trade funds (Arbetslöshetskassornas samorganisation, 2008).

A new kind of labour market policy took shape in 2000. Active job-searching became part of the basic requirement for the right to economic compensation during unemployment spells. The establishment of a plan of action (aktivitetsplan) for each unemployed person with the help of officials at the unemployment office was a measure intended to promote job-searching activities. The plan of action included requirements that regulated search activities regarding what jobs the unemployed people had to apply for and which jobs were considered to be "suitable jobs" (both in terms of geographical location and occupational field). During the first 100 days of unemployment, the unemployed person could limit the search area to her/his immediate surroundings but after that period, the search area was extended both in terms of occupation and location. The plan of action stated what type of jobs or what types of ALMPs were considered suitable. Moreover, ALMPs were no longer activities that qualified unemployed people for new periods of unemployment benefit (Arbetslöshetskassornas samorganisation, 2008).

The purport of a "suitable job" changed from the beginning of 2000 to around 2005, from meaning a job within or close to the unemployed person's qualifications or occupational field to a wider meaning. Today, a "suitable job" is any job that the unemployed person can perform, physically or mentally. Moreover, from the very first day of unemployment, the unemployed person must be prepared to accept jobs offered in other geographical areas (Arbetslöshetskassornas samorganisation, 2008).

2007 was another turbulent year for UI. The changes proposed in the government bill were called "an unemployment benefit for work" meaning that a more restrictive UI would encourage the return of the unemployed to the labour market. Therefore, the right to unemployment compensation was once again reduced both in duration and amount, with a gradual decrease of compensation from 80 per cent of previous income to 65 per cent. The demands of the work condition were also raised and the eligibility for unemployment benefit was increased from 70 to 80 working hours/month. Finally, the membership fee to the unemployment benefit fund rose dramatically which resulted in 300 000 individuals leaving the fund by July 1, 2007 (AMS, 2008).

The number of different types of ALMPs and their content has been continuously revised. Table 1 illustrates the shifting range of programmes over the years. While Table 1 illustrates ALMPs from 1990 and onward, some types of ALMPs were available much earlier on. For instance, "public relief work" can be traced back to the 1930s. Some of the programmes focus on direct training (ALMP- training) through education and skills development that serve to improve the human capital. The other type of ALMP (ALMP-employment) includes subsidized employment doing tasks that do not compete with regular jobs on the labour market. This type of investment is mainly to broaden individuals´ networks on the labour market and to increase the motivation of unemployed persons to work.

Table 1. **Number of participants in ALMPs during the 1990s (in thousands)** (Regnér, 2000, p 96 and a summary of IFAU, 2001-2009).

ALMP-Training

Year	Labour market training (AMU)	Youth programmes* (YP)	Work experience schemess (ALU)	Computer Activity Centre (DAT)	Workplace introduction**	Information Technology training programme	Temporary public employment (OTA)	Information Technology training programme
1990	38.6	4.8	-	-	-	-	-	-
1991	58.6	13.2	-	-	-	-	-	-
1992	86.3	34.6	-	-	-	-	-	-
1993	53.2	67.7	35.1	-	-	-	-	-
1994	59.5	56.9	44.5	-	-	-	-	-
1995	54.6	20.4	41.3	5.9	21.5	-	-	-
1996	45.6	-	52.3	11.9	32.4	12.6	-	-

1997	36.9	-	52.5	14.0	34.3	14.2	5.4	-
1998	41.9	-	38.9	11.5	19.4	12.2	7.8	0.7
2000-2008	DAT, YP, Activity guarantee, support to training of unemployed persons, preparatory measures, Projects with employment policy orientation, OTA							

ALMP-Employment (continue Table 1)

Year	Public relief work	Measures for disabled individuals ***	Recruitment support	Trainee replacement scheme	Start a business allowance	Individual recruitment incentive	Work as a resource in Public sector domain	Project work with unemployment benefit
1990	8.1	87.7	2.3	-	-	-	-	-
1991	10.8	86	4.8	-	-	-	-	-
1992	15.8	84.8	13.5	8.3	-	-	-	-
1993	14	84	9.2	9.8	-	-	-	-
1994	16.7	87.2	25.5	12.7	10.2	-	-	-
1995	14.5	92	21.0	11.2	10.1	-	-	-
1996	8.3	85.9	12.3	9.8	10.3	-	-	-
1997	7.1	85.2	3.7	3.5	12.3	-	-	-
1998	-	89.6	-	-	12.5	10.6	4.1	0.3
2000-2008	Start a business allowance, Measures for disabled individuals							

* Includes special and contracted acclimatization places.

** Replaced placements for academics, placements for immigrants and youth introductions from 1995.

*** Includes Samhall, wage subsidy, labour market institutes and sheltered public employment.

It is more difficult to put a specific date on reforms in the system of ALMPs than it is to identify reforms in UI. However, while the aim of the ALMPs during the 1970s was to counteract both long-term and short-term unemployment, since then there has been growing interest in reducing bottlenecks in sectors with labour shortages.

Until the mid 1990s, programme participation served not only to increase the human capital of the unemployed but also to prevent unemployed people from becoming excluded from UI. The great number of unemployed people who participated in programmes in the 1990s illustrates the large amount of new programmes at that time (Lundborg, 2001). To be more specific, about 50 per cent of the long-term unemployed participated in ALMPs in 1993-1998 (Björklund et al., 2000). The share of the labour force in ALMPs reached a post-war peak in 1994 with 7.3 per cent (Erixon, 2008). This was also the time when the ALU (demand-oriented work experience schemes) was introduced (1993), the purpose of which was to reduce the risk of unemployed people losing their right to economic compensation. Many unemployed people around this time moved from temporary unemployment to long-term unemployment. The OTA (among other alternative ALMPs) was therefore introduced in 1996 to give the long-term unemployed the possibility of a public job (Arbetslöshetskassornas samorganisation, 2008).

In the mid 1990s, an important reform was made regarding ALMPs. ALMP participation no longer became an eligible way of renewing periods of unemployment benefit and therefore the range of different programmes was also reduced. From the late 1990s and onwards, ALMPs have mainly targeted the long-term unemployed and older unemployed people. This is a clear deviation from the universal employment policy that R-M once set up in the model. Another deviation from R-M was the overall lower share of GDP put into ALMPs despite high or increasing unemployment (Erixon, 2008).

Another important change that has taken place during the last decade is that as of 2006, the number of days spent in ALMPs is included in the total time of financed unemployment days, which was not the case in the 1990s when the total time spent in ALMPs was omitted from the total days of eligible economic compensation from UI. This reform may have had the effect of reducing the number of unemployed people accepting ALMP activities since participation in a programme hinders them from regular job-searching.

As regards the aim of ALMPs today, in 2009 the Swedish government described the intention of ALMPs as follows:

De arbetsmarknadspolitiska programmen ska öka möjligheten för arbetssökande att få ett arbete samt motverka brist på arbetskraft.

(Regeringskansliet, 2008)

[The aim of labour market policy programmes is to increase the possibility for unemployed people to find work and to counteract labour shortages.

(Government Offices, 2008)]

We are now, once again, in the middle of a labour market crisis due to a worldwide economic recession and the government (Borg and Littorin, 2009) estimates that the number of unemployed people in ALMPs will increase from 85 000 in 2009 to 250 000 in 2010. The share of the workforce that is expected to participate in ALMPs will increase from two per cent up to about five per cent.

The supply of ALMPs is still relatively large, indicating that the Swedish state presupposes that ALMP activities are of value. A large number of international and Swedish studies have been carried out in order to study the micro level effects of ALMPs but the results are ambiguous. Found effects, and reasons for ambiguous effects, related to ALMP participation are discussed further in the following chapter. Whether or not these changes are positive at the micro level depends on whether ALMPs can produce the desired results in terms of reducing the risk of unemployment scarring. On the one hand, high quality programmes should increase the employability and labour market chances of the unemployed but on the other hand, if the quality is poor, the time spent in ALMPs may be wasted. In the case of overall negative effects, the unemployed persons might have benefited more from open unemployment with the opportunity to search for suitable vacancies.

IV. The variation in effects of ALMP participation

Innumerable evaluations have been carried out in order to measure the effects of ALMPs but both international and Swedish studies have produced very different results. Generally speaking, some evaluations indicate positive effects on the chances of a quick return to the regular labour market (see for instance Johansson, 1989; Harkman et al., 1996; Lubyova and van Ours, 1999; Eichler and Lechner, 2002; Gerfine and Lechner, 2002; AMS, 2005) while others indicate no or even negative effects (see for instance AMS, 1997; Larsson, 2000; Puhani, 2003). In the same way, some evaluations related to effects on post-unemployment income indicate positive effects (see for instance Edin, 1988) while others indicate negative outcomes (see for instance Ackum, 1991; Regnér 1993; Forslund and Krueger, 1995; AMS, 1997). It is quite clear that the effects of ALMP investments vary greatly and the diverse picture presented by these outcomes prevents far-reaching conclusions. According to the OECD (1996), there are two main reasons why the results of studies on the effects of ALMPs vary so much. One is linked to methodology – *in what way* effects are measured while the other is linked to the programmes, i.e. *when* effects are measured and *what* and *whom* is actually measured (OECD, 1996).

Firstly then, some of the reasons for inconclusive results originate from methodological problems (OECD, 1996), **in what way** effects are measured. One example is that most programmes are evaluated after a relatively short period of time after the end of the programme (ranging from a few months up to a couple of years) but it is possible that some effects will not be evident until much later. Reutersward (rendered in the OECD report, 1996) points out that programmes conducted at workplaces (ALMP-employment) produce results relatively swiftly and can be evaluated after a shorter period of time, while it takes longer to see the effects of ALMP-training, particularly if the training is meant to be a human capital investment. It is not uncommon that participation in ALMP-training leads to further studies within the regular educational system. The evaluation of the effects of such a chain of events can perhaps not be done even within a five-year period. This is why this thesis has adopted a long-term approach.

Another problem regards **what** is being measured (the type of programme, the length of programme etc). For instance, when comparing the effect of the main types of programmes for unemployed adults, it was shown that programmes similar to regular employment had the greatest positive effects as regards transition from unemployment to employment on the regular labour market. The most successful type of programme was subsidized employment and labour market training at workplaces (Sianesi, 2001). Taking all the different types of programmes into

consideration, it becomes clear that the quality of these may vary to a rather large extent. Differences in effects are also revealed when comparing programmes that vary in duration. Relatively long periods of skills training (longer than 100 days) generate more positive effects on reemployment than shorter training programmes while short programmes had no effect at all on reemployment and even had a negative effect on wages (AMS, 1997). Long programmes had positive effects on both reemployment and wages (AMS, 1997). For similar results, see for instance Dahl and Lorenzen (2003), OECD (1996) or Zippay (2001). Effects relating to type of programme, i.e. not specific programmes, and length of participation are investigated in Article 2.

Evaluations have also shown that variation in effects depends on ***when*** in a business cycle these are carried out, which the OECD (1996) also emphasizes. ALMPs may be particularly useful when unemployed people are having difficulty finding jobs and the reduction in job-search behaviour that often occurs during ALMP participation should have little negative impact on job chances when there are only a few jobs available (Ackum Agell, 1996; Regnér and Wadensjö (1999). However, the large number of unemployed people taking part in ALMPs when the unemployment rate is high may have a negative effect on the quality of programmes. It is possible that the unemployed persons in question would gain more by staying openly unemployed and searching for jobs instead of participating in low quality programmes during a difficult labour market situation. How the effects of ALMP participation differ according to at what point in a business cycle participation takes place is investigated in Article 3.

Another reason for the variation in effects of ALMP investments relates to heterogeneity. ***Whom*** is being measured? Some individuals may be wasting their time in ALMPs if the investment is not able to improve their likelihood of labour market entrance etc. Other individuals in ALMPs may be more fortunate if the programmes can help to reduce the risk of different types of unemployment scarring. For example, age may be an important factor for the outcomes of ALMPs and often programme evaluations focus on youth in some particular programmes and older unemployed people in other specific programmes. It is likely that young unemployed people have very different needs from older unemployed people when it comes to reducing the risk of unemployment scarring. Many young unemployed people have a low level of human capital and networks and may need additional education and skills training. If so, ALMP-training may be effective for this group in order to avoid negative scarring from the unemployment spell. Older unemployed people usually have a rather high level of human capital and might not need further education. They may perhaps benefit more from a quick return to work with the help of ALMP-employment in order to reduce the risk of early retirement, wage scarring etc. Another example of differences due to heterogeneity is the varying level of education of the participants. People with a lower level of

education probably have more need for education and skills training to improve their employability while people with a higher level of education are perhaps better helped by unemployment benefit which provides them with more time to search for suitable jobs on the regular labour market. These are only examples of variables that may explain the variation in effects due to differences in individual characteristics. For a more exhaustive discussion on the variation in effects due to age and level of education, see Article 4 in the summary of articles or Article 4 in its entirety where heterogeneity and ALMP outcomes are studied.

When evaluating the effects of ALMPs, there is always an element of uncertainty that relates to the counterfactual state (see for instance Carling and Larsson, 2000). What would have happened if the ALMP participant had stayed openly unemployed instead of participating in a programme? It is not possible to control for this since a person either participates in a programme or stays openly unemployed at a given point in time but it is plausible that ALMP participants possess certain characteristics which in themselves have an impact on the ALMP outcome, rather than the ALMP investment itself. There are very likely selection effects, systematic differences, between the individuals who participate and those who do not participate in ALMPs, which influences the reliability of calculated effects of ALMP participation. Some important information (variables) about participants is often known, such as age, sex, socio-economic background etc., while other variables are usually unknown, such as their motivation regarding participation. The Swedish system, at least in the 1990s, is based on the idea that most long-term unemployed people should participate in programmes and many of the individuals who were put on programmes were probably not motivated for the task. In the 1990s, a large number of the participants had been forced to take part in order not to lose their unemployment benefit. Lack of motivation and several other unknown selection effects cause problems in evaluations but it is difficult to assess to what extent these biases jeopardize the main effects of ALMP outcomes when compared with non-participants. To solve the problem of selection bias, it is common to use statistical methods. One such method is propensity score matching (PSM). The PSM is a correction strategy that compares a group under observation (ALMP participants) with a very similar control group (openly unemployed). "Twins" with very similar known characteristics are matched where one twin participates in an ALMP and the other stays openly unemployed. This statistical method helps to reduce observable selection effects. However, one problem with the method is that it demands very large samples. Another problem, and this is of significance to this thesis, is that it identifies observable selection effects but it cannot control for non-observable selection bias. To catch non-observable selection biases, other statistical techniques (instrumental variable analysis) are needed. (See for instance Heckman, 1976; 1979).

To avoid the problem of non-observable biases, instrumental variable analysis (for instance, the Heckman two-step procedure) can sometimes be used. The strength of this method is that it identifies causal relationships in non-controlled experiments and is therefore suitable to use when combining different types of regression models. However, the problem is that the researcher needs to be very careful when using the technique. The way the technique works is to include a variable in the regression model that corrects selection bias. When including such a correcting variable in the substantial regression model, the problem of multicolinarity often occurs. In addition, the inclusion of such a correcting variable may lead to estimation difficulties and unreliable coefficients if the instrument includes covariates that are weak or to a large extent relate to each other. Fortunately, in most of the analyses included in this thesis, it has been possible to use the Heckman two-step procedure in combination with Cox regression. This process is described more closely in the next chapter.

V. Data and Methods

Data

Article 1 studies the relationship between unemployment benefit level, the level of the reservation wage and future labour market prospects. To accomplish this, a longitudinal dataset "Long term unemployment project" (LUP) was used. This set of data is based on interviews with unemployed people who were interviewed in 1996 and then again in 1997. This dataset comprises 1800 cases and gives information about how unemployed people reacted to different levels of unemployment benefit and how they set their reservation wages etc. The dataset is in turn connected to a register of data from HÄNDEL (database for employment/unemployment events) that contains information about the individual day-by-day unemployment status of all individuals registered at Swedish unemployment offices since 1991.

The following three studies (Articles 2, 3 and 4) are based on the LISA database (Longitudinell Integrationsdatabas för Sjukförsäkrings och Arbetsmarknadsstudier). The LISA database is a micro-level register database, compiled by Statistics Sweden which, in the version used here, includes the entire work force (4.6 million Swedes) that resided in Sweden in 1991, born 1937-1975. These individuals can be followed for twelve years and the dataset suffers from no internal dropping off. The quality of the LISA register offers exceptional possibilities. Firstly, being able to follow unemployed persons for 12 years is without a doubt a sufficiently long time period to draw conclusions from. Secondly, the large number of study objects actually provides a control group (the openly unemployed) which is not usually the case. Thirdly, it considerably increases the possibility of eliminating instability as regards the study group and the statistical estimations. Exactly how this is done is discussed in the next section.

Methods

When the aim is to study if and when an activity takes place, it is appropriate to use Cox regression. This method controls for when individuals move from one stage (i.e. unemployment) to another (i.e. employment). This is a particularly suitable technique when the dataset is longitudinal and provides regular measuring points (i.e. each month or each year). Another advantage of Cox regression is that it accommodates censored cases, for instance, when there is no transfer from unemployment to employment. This is very useful since many unemployed people

never reach the events that are being controlled for. For example, some never return to the labour market, others do not achieve labour market stability and many never return to a job with an income equal to what they had before the unemployment spell. For a more detailed explanation of how Cox regression works and how to interpret the estimates, see Articles 2, 3 and 4, or Singer and Willett (2003).

The best option for the purpose of this thesis seemed to be to use the power of Cox regressions applied to strictly selected study/control groups, in combination with the Heckman two-step procedure that controls for the unobserved selection bias. Before modelling with Cox regressions, the strategy was to use pre-unemployment information in order to reduce the selection bias (both observed and unobserved) into unemployment. Both the study group and the control group were strictly selected to constitute a homogenous group, meaning that all individuals in both groups were very stable on the labour market the year before the year of unemployment (for exact criteria, see the methodological chapters in Articles 2, 3 or 4).

To minimise the risk of unreliable outcomes, an instrumental variable analysis, the Heckman two-step procedure, was applied in most regressions. (See for instance Heckman, 1976; 1979). As already mentioned in the previous chapter, the Heckman two-step procedure can reduce the selection bias into ALMPs that otherwise reduces the reliability of the results. However, due to the vulnerability of the technique and the risk of using it incorrectly, it is important to describe how the technique was applied in this thesis.

The first step of the Heckman two-step procedure is to capture unobservable heterogeneity (selection bias) into ALMPs among the unemployed. This is facilitated by the inclusion of all available independent variables in a probit regression where ALMP participation is the outcome variable. The residuals in this regression capture all unmeasured characteristics that identify who enters ALMPs and who does not. The residuals are saved as a new independent variable, a Lambda. In this case this first step has to be done twice since one probit regression identifies residuals related to ALMP-training (Lambda 1) and the other captures residuals related to ALMP-employment (Lambda 2). In sum, this first step captures the unmeasured effects on the probability of entering ALMP-training and ALMP-employment respectively. To ensure that the estimates do not become unreliable due to multicolinarity in the substantial analysis (in the next step), at least one independent variable (in the probit regression in the first step) must be identified that has an impact on the likelihood of entering ALMP-training and ALMP-employment respectively, but at the same time does not have a significant impact on the relation between ALMP participation and the outcome variable (i.e. labour market stability) (shown in Model 1 in each Cox regression in the appendixes). To

identify such variables, a Cox regression must be carried out for each outcome variable without Lambdas included. Identified variables must be removed from the list of independent variables (that would have been otherwise suitable in the substantial analysis) before carrying out the substantial analysis. At least one such independent variable must be identified; otherwise the Heckman two-step procedure should not be used. Such variables were identified in all cases in the analyses attached to this thesis and therefore the risk of multicolinarity was greatly reduced.

In the second step, the Lambdas are included in the substantial analysis and thus reflect the effect of unmeasured characteristics on a dependent variable (for instance, the chance of reaching labour market stability after open unemployment or after ALMP participation) related to participation in ALMP-training and ALMP-employment. Both Lambda 1 and Lambda 2 show a significant effect in all substantial analyses in this thesis, which indicates that there is unobservable selection bias that explains some of the effects on the outcome variables. However, at the same time the inclusion of Lambdas only marginally impacts the significance of the effects of ALMP-training and ALMP-employment. This indicates that the discussion of selection effects for the outcomes is not of major importance for the results.

The other problem with the Heckman procedure (also discussed in the previous chapter) is that the Lambdas may generate unreliable estimates in the substantial analysis. To ensure that this does not happen, the estimates from both Cox regressions (with and without the Lambdas included) need to be compared to make sure that the estimates in each respective regression are similar. No such problem occurs with the estimates relating to Articles 2 and 4 but estimates relating to the regressions in Article 3 indicate unreliability. The Heckman two-step procedure was therefore removed from all regressions in Article 3.

VI. Aim

The main objective of this thesis is to investigate how ALMP participation and UI function to prevent or reduce the risk of negative scarring among long-term unemployed people, focusing particularly on the long-term effects.

- Does the level of UI affect the length of unemployment spells and subsequent earnings?

- Do ALMPs reduce the risk of unemployment scarring in people who are long-term unemployed?

- At what point in a business cycle is ALMP participation efficient in order to reduce the risk of unemployment scarring?

- What categories of people are helped by ALMPs as regards a reduction in the risk of unemployment scarring?

VII. Summary of articles

Article 1 - Hurting to help or helping to hurt? Reservation wages, job-chances and reemployment wages of the unemployed.

European welfare states use several methods to adjust overall unemployment rates. While the liberal welfare states focus on low levels of unemployment benefit to force the unemployed back on to the regular labour market, the universalistic states, for instance, Sweden, have maintained relatively generous unemployment benefit, both in terms of amount and length. A key concept has been that the reservation wage, the lowest income at which an unemployed person would be willing to accept a job offer, affects the individual's time in unemployment, as high reservation wages are thought to reduce the job-chances of the unemployed person. This has been supported by a large number of international studies. From this perspective, scanty unemployment benefit should reduce long-term unemployment and thereby also reduce negative scarring from this. By looking at high reservation wages from a different perspective, we may find that they can have a preserving effect on human capital. A high reservation wage, possibly facilitated through generous unemployment benefit, allows individuals to wait for a suitable job, rather than have to take any job.

The aim of this study was to investigate the effects of how unemployed people set their reservation wages. The relatively extensive system of ALMPs in Sweden might affect outcomes differently in comparison with other welfare states. The first question here was whether or not unemployment benefit plays a central role in how unemployed people set their reservation wages or are there other more important mechanisms at work here? The next question concerned the relationship between the way the unemployed set their reservation wages and their future job-chances and post-unemployment wages.

Here it was found that the level of unemployment benefit was of significance when the unemployed set their reservation wages. In Sweden too, a high benefit level increases reservation wages. Another variable that was of importance was pre-unemployment position in the wage structure. Unemployed people with a low income before the spell of unemployment tend to set proportionally higher reservation wages than unemployed people with higher pre-unemployment wages.

Being aware of how the unemployed people set their reservation wages, it was most interesting to investigate what effects high and low reservation wages have on human capital. According to search theory, it would be likely to expect that high reservation wages reduce job-chances while low reservation wages have the

opposite effect. However, current data indicate there was no such significant relationship. High reservation wages did not affect the job-chances of the unemployed. Instead, it was found that reemployment wages were higher among the unemployed persons who had set high reservation wages. This indicates that high reservation wages made it possible for the unemployed people to wait for a job that matched their competence and from this perspective, high reservation wages served to preserve human capital.

This shows clearly then that reservation wages can be manipulated through the adjustment of unemployment benefit. It is possible that unemployed people with low reservation wages may return to the labour market sooner than unemployed people with high reservation wages, although no significant relationship was found. Instead it was significant that negative effects on human capital increased with proportionally low reservation wages. The idea that unemployed people are helped to exit unemployment by being punished economically is therefore questionable. The effect of this strategy might instead be hurting to hurt rather than hurting to help, which is presumably not a particularly marketable policy.

Article 2 - Active labour market policy and unemployment scarring: A ten-year Swedish panel study.

When summarising earlier findings regarding the effects of ALMPs on unemployment scarring, no unanimous answers can be found. Both positive and negative effects are found internationally as well as in Sweden. Studies are often evaluated rather soon after the end of a programme and they focus on specific programmes. The aim of this article was to measure the effects of ALMPs from a long-term perspective and on a more general basis. This meant that no particular programme was measured; instead the study investigated the two types of programmes (ALMP-training and ALMP-employment) which in turn included all the specific programmes. It has been shown that ALMP-training and ALMP-employment produce different types of human capital investments and the effects of the programmes are differently distributed over time. From this perspective, evaluations should be done on a long-term basis.

The hypothesis of this study was that ALMP-employment would produce rather immediate effects while the effects of ALMP-training should show much later. The effects were measured according to the following: the probability of reaching pre-unemployment income, the probability of one unemployment-free year and finally, the probability of labour market exit.

The conclusion was that ALMPs in general have positive effects in terms of reduced unemployment scarring among participants when compared with openly unemployed persons. On the one hand, ALMP-training has long-term positive effects in terms of increased competitiveness on the regular labour market while on the other hand, ALMP-employment has some impressive immediate positive effects but the long-term effects are more doubtful. ALMP-employment participation should be a useful tool if unemployment exit is near feasible.

The findings in this study produced some new questions. The study was based on data from the beginning of 1993 when Sweden experienced the worst labour market conditions in modern history. Due to the labour market situation, a large number of unemployed people participated in different types of ALMPs, thereby putting high pressure on the programmes. Taking this into account, it is likely that the quality of ALMPs during this time was relatively low. One question to ask therefore is: would the results be even better if the study had been conducted using data collected during better labour market conditions, or would ALMPs not be as important in maintaining human capital during such times since the unemployed people would enter the regular labour market rather quickly anyway? Another issue was whether the ALMPs in general, as well as the two different types of ALMPs, produce similar or diverse effects on different groups. For instance, it is probable that programme participation has different effects on participants with a high level of education. What do ALMPs have to offer well-educated people? And what do ALMPs have to offer young or elderly unemployed people?

Article 3 - What works best when? A study of how ALMPs can play different roles depending on when in a business cycle participation takes place.

One way to reduce unemployment scarring among the unemployed is to offer ALMPs. Such programmes can help individuals to improve or maintain their human capital during unemployment spells. The aim of this study was to investigate if and how ALMPs can serve different purposes depending on when in a business cycle participation takes place. Is it efficient to make unemployed people participate in programmes during difficult labour market conditions? Is it efficient to do so when the labour market is in better shape? It is likely that ALMP participation is particularly useful when jobs are difficult to find, since the reduced search behaviour that follows from ALMP participation would have little negative impact on job-chances. It is however also likely that the large number of unemployed persons who participate in ALMPs during economic downturns reduces the quality of the programmes, which in turn might reduce the chance of positive effects.

The effects of ALMPs were measured on unemployed people in Sweden on a medium-term basis (five years) where one group was unemployed in 1993 (ALMP participants and openly unemployed) and the other was unemployed in 1999. In 1993, Sweden was in the middle of a deep recession, while 1999 was a boom period. Labour market exit, stability on the labour market, and post-unemployment wages were used here as measures of human capital.

The first hypothesis suggested that *it is more efficient to participate in ALMPs than to stay openly unemployed, no matter the state of the labour market.* This hypothesis was supported by the results. The benefit gained from ALMPs is more fruitful than the possibility to stay openly unemployed searching for jobs, regardless when in a business cycle participation takes place.

The second hypothesis suggested that *despite the overall positive effects of ALMPs, even stronger positive effects should be expected during booms when there are plenty of vacancies to search for on the labour market.* Here it was found that the positive effects of ALMP-training were stronger in the boom than in the recession, while the opposite applied to ALMP-employment. However, it is interesting to note that ALMP-training has a bridging effect over economic downturns as such investments can pay off long after the end of a programme. No such bridging effects were found regarding ALMP-employment. A swift return to the regular labour market is important for ALMP employment participants, no matter what state the labour market is in.

The third hypothesis suggested that *participation in ALMP-training is more effective during recessions while participation in ALMP-employment is more effective during booms, when the two are compared with each other.* These assumptions were rejected. It seems impossible to deduce that one particular type of ALMP is to be preferred at a certain stage of a business cycle. Instead the results showed the importance of swift labour market entry among ALMP-employment participants, regardless of the state of the market. In practice, this implies that if the participant has the chance of further employment where ALMP-employment takes place, such an activity can be recommended at all times. If this is not likely, the unemployed person should participate in ALMP-training since such a human capital investment seems to act as a bridging mechanism over different labour market conditions.

Article 4 - Who are the lucky ones? Heterogeneity in the outcomes of ALMPs.

ALMPs in general seem to have positive effects on participants as regards reducing the risk of unemployment scarring but it was found that the two types of ALMPs produce significantly different outcomes. However, it is not clear whether or not

programme participation produces different effects depending on who the participant is. This article emphasises that the category termed "the unemployed" still bears a stamp of heterogeneity and should also be studied as such. The purpose here was to identify how age and education affect participants' possibilities to convert ALMPs into resources for capability growth.

In this piece of work the Lisa Longitudinal data material was used. The data contains information about the entire Swedish work force and after necessary selections, 51 542 long-term unemployed people remained as study objects. They were followed from the year of unemployment in 1993 when they either stayed openly unemployed or participated in ALMPs. The group was then followed over the next ten years in order to catch heterogeneity in the outcomes of ALMPs.

In terms of heterogeneity due to age, the results support earlier research suggesting that young and old people gain most from participation in ALMPs. However, while the young benefit most from ALMP-training for labour market stability, the older unemployed are best helped by ALMP-employment in order to reduce the risk of labour market exit. As expected, people with a lower level of education do benefit from ALMP participation although the effects were weaker than expected. Instead it was surprising that the well-educated people gained more from ALMP-training than those with less education, in terms of labour market stability. This result was interpreted in terms of a springboard effect for the well-educated, meaning that ALMP-training pushes them into further education on the regular educational arena. Such an effect can only be perceived through a long-term study. This may be the reason why previous studies have mainly indicated positive results among those with less education, since the positive effects for this group give rise to more immediate results.

VIII. Extended theoretical framing

Three articles in this thesis deal with the micro level effects of ALMP investments and, in order to identify and discuss the value of these effects, two different theories are used. The Human Capital Theory (HC) provides useful measures when it comes to the evaluation of labour market policies and all outcome variables are therefore based on human capital measures. However, the HC sometimes presents a rather narrow picture of the value of human capital investments. The capability approach (CA) is therefore used as well in order to broaden the discussion of individual values from labour market policy investments. The CA is mainly used in the concluding chapter of the thesis but it is also mentioned in Article 4.

The Human Capital Theory

"*The man without skills and knowledge leaning terrifically against nothing*"

(Schultz, 1961)

The above was written by one of the founders of the human capital theory, Teodore W Schultz, in the early 1960s. The use of investment in human beings became of interest after the Second World War. Individuals were now regarded as being important, valuable and completely indispensable for each country's productivity and economic growth. The increased average length of education (at least in the Western world) and the large investments in ALMPs being offered in many welfare states illustrate the importance of investment in the human being.

The individual alone is the main figure. His or her productivity is the basis for compensation. Productivity is determined by the actual investments individuals make in themselves combined with their ability (or expected ability). Each individual is expected to set limits for what and how much she/he is prepared to invest in herself/himself. According to the theory, there are no actual limits for our possibilities, provided that we exert ourselves to achieve skills necessary for promotion. Of course, the later in life these investments are made, the less time there is to gain from human capital increase (Becker, 1993).

Strictly speaking, the HC implies that educational investments (through for instance participation in ALMPs) lead to human capital increase. This increase in turn generates good chances of a job on the regular labour market, a rise in income, class or job mobility or even improved health. Becker (1993) suggests that education and

training are the most essential investments individuals can make in themselves to accumulate human capital. The more appropriate the investments, the higher the income and to some extent the higher the status the individual can count on (Figure 1).

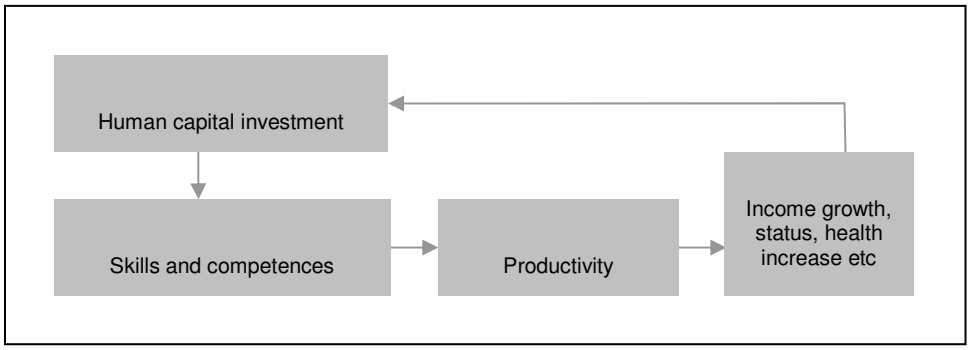

Figure 1. ***A human capital loop.*** *The loop illustrates how human capital investments increase the level of skills and competences which in turn leads to increased productivity and with that increased chances of income growth, higher status etc.*

The fact that education tends to raise individuals´ incomes is well recognized. The income of well-educated individuals is in many cases well above average. The component of education is concrete and relatively easy to investigate. As education increases, incomes also increase and to a certain degree educated individuals can also count on higher status. This variable is expected to have a relatively direct effect (Becker, 1993).

However, few individuals are pre-cut diamonds when they leave school and enter the labour market. The expansion of education has not eliminated the need for training at, or outside, the workplace. In HC, training involves all kinds of general and specific training, and also experiences as trainees etc. As with education, training is relatively easy to measure, even though different types of training have different effects on human capital. General training can be achieved within or outside a particular company. However it is rather hazardous for companies to invest in employees' general training since this type of investment makes the employee independent of the company and she/he can easily move on to other external jobs. Few companies are therefore willing to pay for general training. It is more common for society or the individual to pay for this type of training. Training that increases productivity within a particular company is called specific training. This type of training is not expected to be of much value outside the company

where the training is being given and therefore it is not as hazardous for companies to provide individuals with specific training. (Becker, 1993).

Studies on unemployment scarring are generally done from a human capital perspective, often in terms of the risk of labour market exit or wage scarring. Like many other studies, the articles included in this thesis are also based on measures of human capital estimates. This is a convenient approach since the measures are both relevant and measurable.

The Capability Approach

Although the HC is suitable for the purpose of this thesis, it is sometimes narrow in its way of approaching the value of human capital investments at a micro level. Here, the CA can function as a complement to the HC theory through its broader way of looking at the value of human capital accumulation.

Through human capital investments, new skills and competences are acquired. These competences increase individual capabilities. Capabilities are the opportunities individuals have to lead a life she/he has reason to appreciate, for her/him to choose what to do, or what to be - the actual functioning. Put in Sen's own words (the founder of the CA):

"A functioning is an achievement, whereas a capability is the ability to achieve. Functioning is in a sense more directly related to living conditions, since they are different aspects of living conditions. Capabilities, in contrast, are notions of freedom in the positive sense: what real opportunities you have regarding the life you may lead."

(Sen, 1987, p 36)

Like the HC, the CA argues that investments in human capital may lead to new jobs and subsequent increased earnings but the CA also includes additional micro level outcomes from educational investments that the HC seldom focuses on. By investing in human capital, a positive loop is created whereby the individual increases her/his capabilities (Figure 2). Here, capabilities are the collected opportunities that are available when individuals are about to direct/redirect their life plan (Figure 2).

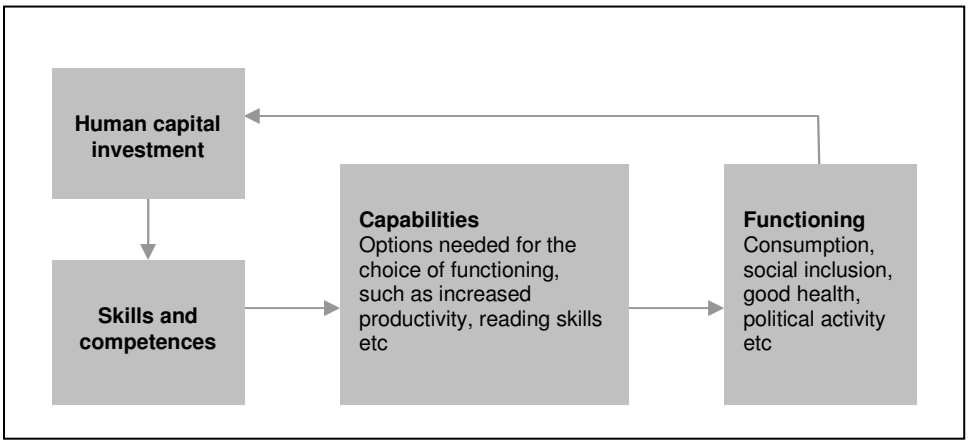

Figure 2. ***The capability loop***. *This illustrates how HC and CA both complement each other and differ from one another as to the type of achievements the theories focus most on, in terms of outcomes of human capital investments.*

Increases in capabilities therefore open up further choices of functioning which in turn makes individuals continue to invest in additional human capital (Figure 2). For instance, an occupation facilitates for an unemployed person to find a paid job (capability). In the next step, the income will facilitate for individuals to undertake other activities (functioning) that she/he can appreciate, for whatever reason. Figure 2 shows how human capital investments and human capital gains are part of the capability loop. It also shows how the value of human capital investments, when seen from a CA perspective, is greater than the value of typical human capital gains.

When it comes to a discussion of welfare policies, the advocates of the CA tend to accuse the HC for focusing too strongly on productivity increase (individual income growth and an increase in GDP). (See for instance Sen, 1985; Robeyns, 2005b). Both Sen and Robeyns argue that the goal of welfare policies should be more about the expansion of human capabilities. This way of looking at human achievements postulates that when making policy evaluations for instance, the focus should be on what individuals are able to do with the policy investment, and not foremost on their incomes or their capability of consumption (Robeyns, 2003). Even if human capital investments do not lead to a new job or a better wage, educational investments may still lead to an increase in capabilities (options) and this in turn may still lead to other achievements (functioning) that the investor may find desirable, for instance, being able to read, being healthy, being politically active,

improved influence on social changes etc. From this perspective, the benefit of investments will be greater than the benefits of improved human capital for more traditional HC outcomes, like wage increase. To look at policy investments in this way may in some cases change the effectiveness and desirability of policies (Robeyns, 2005b).

What about unemployment?

The capability loop (Figure 2) may face interruptions in the event of unemployment. In each society, rich or poor, the unemployed constitute a group that has something to lose. When they lose their jobs, they are also at risk of losing human capital and thereby their capabilities to function in society. Sen (2002) describes how unemployment in better-off European countries is a threat to the capabilities of individuals, their freedom and their possibilities of further development. The consequences of mass unemployment in Europe during the 1990s resulted in privation for individuals, which were not particularly well reflected in official statistics. Such privations are often underrated in countries where unemployment benefit systems are expected to compensate for income losses. Being unemployed is not only about not having an income; it is also about negative effects on the freedom of the unemployed, loss of skills, social exclusion, etc. This in turn can cause a loss of self-confidence and physical and psychological ill-health. Therefore, programmes such as ALMPs that aim more at minimizing the risk of reduced capabilities should be used as a complement to unemployment benefit (Sen, 2002).

Unemployment is not the only possible cause of a negative capability loop. A positive capability loop can also be interrupted in the event of misplacement on the labour market. Nussbaum (2000) draws attention to how routine jobs, for instance, may reduce individual capabilities. Individuals doing routine jobs may suffer a reduction in cognitive skills and learning abilities (depending on their overall level of capabilities). This will in turn have negative effects on life-plan options. Also, skilled professionals, to take another example, are likely to have low job satisfaction and reduced control over their work if they do not get a job in line with their education and skill (Nussbaum, 2000). This is misplacement on the labour market since the individual is not able to utilize her/his skills, and therefore misplacements, just like unemployment, may initiate a negative capability loop.

If unemployment and misplacements on the labour market can be linked to a negative capability loop, it is likely that labour market policies can fill the function of preventing or stopping such a negative loop from starting. This thesis has focused on UI which is an example of such a policy. Without a doubt, economic

compensation during unemployment spells reduces the immediate risk of economic misfortune. But, depending on the level of compensation, the UI may have different impacts on capability increase. On the one hand, low compensation levels are presumed to shorten the length of unemployment spells, according to ST, (see for instance Mortensen, 1977) and may therefore be effective in reducing the risk of unemployment scarring and in increasing individual capabilities. This strategy may reduce the risk of unemployed people being dragged into a negative capability loop. However, since the risk of being pulled into a negative capability loop is also a risk for post-unemployed people if they are misplaced on the labour market, generous compensation might, on the other hand, function to increase capabilities. Generous unemployment benefit may increase the length of unemployment spells but it may actually also function as a search subsidy since the unemployed can afford some selectiveness in order to find a more suitable job that corresponds to her/his stock of human capital.

ALMPs are another example of such labour market policy. Sen (2002) argues strongly that unemployment benefit needs to be complemented by other measures to reduce economic and social privations. One such measure should be in the form of ALMPs, since they aim to increase human capital and people's ability and motivation to work. This type of unemployment activity is expected to improve the employability of individuals and the long-term unemployed in Sweden during the early 1990s were therefore usually put in such programmes. The question is whether or not ALMPs have the power to increase capabilities. This will depend on the quality of programmes, the type of programmes, at what point in a business cycle the unemployed person participates, who the participant is etc. This opens up for further interesting studies, particularly on the group of unemployed people in the early 1990s when the unemployment rate was high and both the unemployed themselves and the ALMPs were under a lot of pressure. Were the ALMPs able to fulfil their purpose of existence at that time? If ALMPs are to be effective, the benefits from these must exceed the possible benefits from open unemployment with respect to making it easier for unemployed people to search for suitable jobs on the regular labour market.

Unequal treatment for equal policy outcomes – the conversion of investments into resources for capability growth.

The discussion so far has been about the value of human capital in starting a positive capability loop but Sen (1992) argues that even if the same human capital investment is made in all individuals, we will still find variations in capability growth. What is required for investments to actually become a resource for capability growth? This question is highly relevant in the discussion on how to

reduce the risk of starting a negative capability loop in the event of unemployment, and this is therefore the main reason why the CA has been added to the HC in this thesis. The CA addresses this problem to a larger extent than the HC does.

The importance of searching for mechanisms that determine ALMP outcomes is also (as mentioned in the introduction) discussed by Friedlander et al (1997) and Andersen (2009). They point to the black-box problem when it comes to the evaluation of ALMP effects. Unemployed persons enter ALMPs and on the basis of their participation, we evaluate micro level outcomes. Rather ambiguous effects are found but in many cases we do not know why effects differ, even when the unemployed people all do the same programme. What are the keys for success and what are the mechanisms behind failure?

According to Nussbaum (2000), individual abilities are built on the actual skill and knowledge of an individual, acquired through educational and training investments. But, individual opportunities to increase their stock of capabilities cannot only be determined by the level of individuals' human capital investments. If it had been, equal investments in all individuals would lead to equality in capabilities. This is of course not the case. In addition to the fact that policy design and the condition of the labour market may affect the outcomes of investments, different groups of unemployed people may also have varying degrees of success in converting the human capital investments into actual resources for capability growth. It is important to pay attention to individual diversity and individuals' different types and amounts of capability inputs in order to reach real functioning (Robeyns, 2005). This is also pointed out by Nussbaum (2000) who argues that internal qualities (sex, age, race etc.) together with external capabilities (such as formal rights, informal norms of behaviour etc) shape individual opportunities. Such external capabilities can change depending on individual qualities. Sen (1992) expresses this as follows:

> *"The powerful rhetoric of "equality of man" often tends to deflect attention from these differences. Even though such rhetoric (e.g. "all men are born equal") is typically taken to be part and parcel of egalitarianism, the effect of ignoring the interpersonal variations can, in fact, be deeply inegalitarian, in hiding the fact that equal consideration for all may demand very unequal treatment in favour of the disadvantaged".*
>
> (Sen, 1992, page 1)

These kinds of factors help to explain why some individuals convert investments into capabilities while others do not. For example, the labour market in Sweden is still fairly segregated (Jämo, 2007) where men and women work within rather different occupational fields. Depending on what labour market individuals belong to, the conversion of investments into actual resources may result in different outcomes. To achieve equality in capabilities from policy investments, individuals

should therefore be treated differently. What does it actually take for the unemployed person to convert policy investments into resources that are valuable for capability increase (Figure 3)?

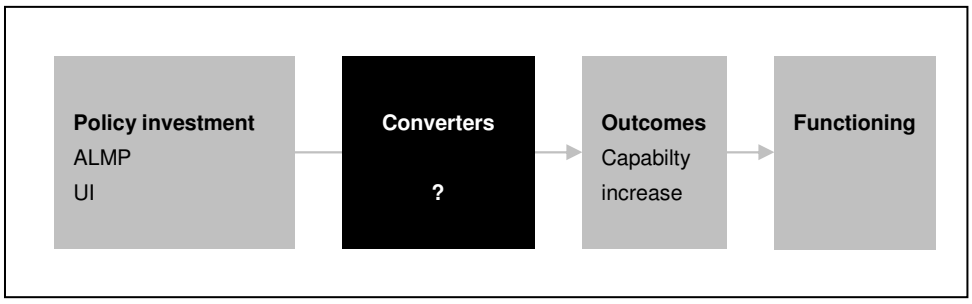

Figure 3. *The conversion process of human capital investments into capabilities and real functioning while taking into account the uncertainty of when investments convert into capabilities.*

It is important to keep this question in mind when evaluating traditional human capital outcomes. Outcomes from labour market policies cannot be decided solely by asking what policy, what type of programme and at what point in time the unemployed need support. The black-box problem draws attention to other mechanisms that contribute to the outcomes of labour market policy investments. Such mechanisms have been searched for in each article in this thesis and these will be discussed further in the concluding chapter.

IX. What has been found?

The findings in this concluding chapter are discussed from the point of view of what has been found and what is new. Furthermore, some mechanisms behind failure and success are identified and discussed later in this chapter.

The UI and the myth of the non-functioning system of ALMPs in the 1990s.

This thesis provides new knowledge about the UI, which is of relevance for labour market policy-makers. It opens up for a discussion on the incentive effects of unemployment benefit using a different perspective than the traditional one of the search theory. There is no significant evidence showing that unemployed people with generous unemployment benefits have prolonged spells of unemployment. Instead, one significant result shows that generous unemployment benefit has the effect of getting unemployed people back to jobs with the same level of income as they had before the unemployment spell. The empirical implication here is that generous unemployment benefit can be a valuable search subsidy instead of simply delaying entry to the labour market.

Researchers, politicians and the media often describe the 1990s as the time when ALMPs no longer served their intended purpose for the unemployed. In fact, it has almost become an accepted truth that the ALMPs became a malfunctioning system that generated poor micro level outcomes. It was argued that the poor outcomes were often related to low quality programmes, a lack of motivation among the unemployed people to participate, and a lack of time to look for jobs on the regular labour market while taking part in a programme. The results of this thesis prove that this was not the case. The ALMPs were efficient even at the beginning of the 1990s and they definitely reduced long-term negative scarring among participants when compared with the openly unemployed of the same period. It can be assumed that more resources into programmes or more motivated participants would have generated even better effects (which was in fact the case when the results were compared with the effects of ALMPs during the recession in 1993 and the boom in 1999), but nevertheless the ALMPs in 1993 did also produce positive effects. In fact, ALMP-employment gave very fast positive effects (particularly for the oldest actors on the labour market) while ALMP-training generated long-term positive effects (especially for the young people on the labour market).

These results are controversial but the main reason why these results differ from earlier findings has to do with the long-term approach of this thesis. Much previous

research that has supported the myth about the negative effects of ALMPs has been based on short-term outcomes. However, when studying effects (especially those of ALMP-training), the evaluations should be done much later than is usually the case since the investments from ALMP-training seem to have a bridging function over different labour market conditions. In other words, if ALMP-training is investigated on a short-term basis, its positive effects will not yet have become apparent.

The short-term effects are in some cases relevant and should of course not be ignored but they comprise a fragmental description of reality and should be considered as not being complete. The long-term effects must be given greater priority than is usually the case since they affect the labour market prospects of the individual over a long period of time. In this respect, this thesis should be of significance in a discussion on the value of ALMPs as a way of dispelling the myth of the negative effects of ALMPs at the beginning of the 1990s.

Active labour market policies from the perspective of the Capability Approach.

With increased knowledge regarding the outcomes from labour market policies among long-term unemployed people in 1993, it is now time to return to the ideas of the CA. The theoretical discussion in Chapter VIII explained how labour market interruptions can damage the capabilities of unemployed people and how human capital accumulation (or at least maintenance) during unemployment spells can reduce the risk of commencing a negative capability loop.

Maintaining or increasing human capital during unemployment spells also increases the capabilities of the unemployed. Maintained/increased capabilities should therefore enhance the chance of achievements in terms of desired life-plan options (functioning). The outcomes in terms of "functioning" are difficult to measure here since the content of functioning is highly individual. However, the results indicate that policies provide tools for each individual to determine for herself/himself what functioning should comprise. As Robeyns (2005b) points out, if policy investments are viewed in this way, the desired objectives of ALMPs would change and policy-makers would perhaps even change their priorities regarding the design and accessibility of ALMPs for the long-term unemployed.

However, as described in the theoretical chapter, it is not only the input of activities to increase human capital that decides the extent of capability gains. This is what the HC tends to focus on most when assessing effects but the CA focuses more on the output of investments, the results, the actual increase in capabilities. I argue that this is the main difference between the two perspectives and this is why it is so

important to include a discussion on the converters as they are what actually shape the results of labour market policy investments. This is discussed further in the next section.

The conversion of labour market policies into resources for capability growth.

In order to adjust policies effectively for the best possible outcomes, it is important to consider the mechanisms behind the outcomes, the mechanisms that have the power to convert policies into resources for capability growth. As Andersen (2009) points out, in most evaluations of the effects of ALMPs, the programmes are treated as black-boxes where something goes in and something comes out but what happens in between is not known. It would have been very convenient if the same effects came out regardless of who enters, when and to where but obviously, this is not how it works. The CA in particular has taken us one step further by allowing a discussion of the importance of unequal treatment for equal outcomes.

Let us first of all look for possible mechanisms, or "converters" that are linked to unemployment benefit. Sen (2002) argues that unemployment benefit alone does not help individuals back to the labour market. Economic compensation should be complemented with other measures that help to increase capabilities. However, (as already discussed in this chapter regarding the value of unemployment benefit), I argue that unemployment benefit in itself may be a resource and may therefore have positive effects on individuals' capabilities (Figure 4). As was shown in Article 1, generous unemployment benefit increases the chance of an individual returning to a job where her/his human capital is utilised. The money itself, as Sen emphasizes, is not a resource to help individuals back to the labour market but it can actually be a converter in the form of extended time, which is valuable when searching for jobs. This in turn serves to increase capability. The more time (at least to some extent) an unemployed person can afford to spend on job searching, the greater the chance that she/he will return to a suitable job where her/his human capital is used effectively.

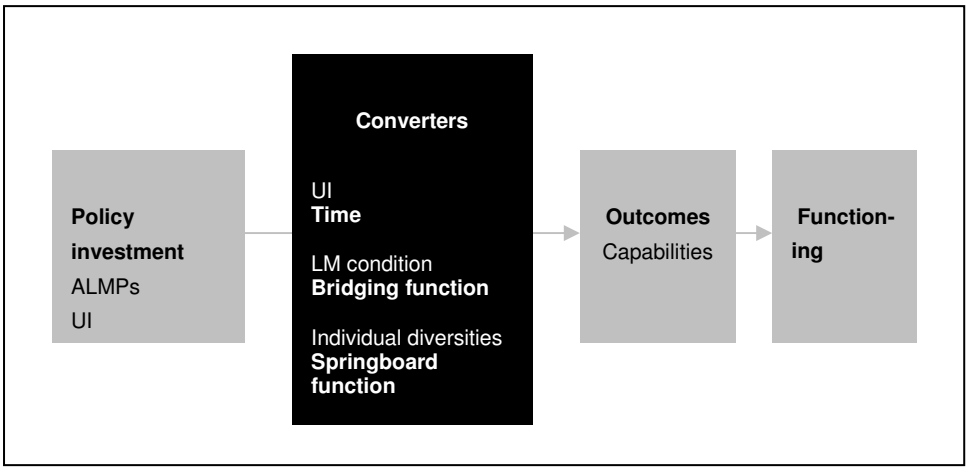

Figure 4. *Identified mechanisms that appear to be able to convert labour market policy investments into capabilities.*

In Article 3, it was found that timing plays a crucial role when it comes to transforming investments into resources. When examining how the overall labour market condition affects individual outcomes, it was found that the effects of ALMP-employment are rather short-lived and must be used soon after the end of the investment whereas ALMP-training has a more long-term effect. When investigating the effect of ALMP-training participation during economic downturns, a "bridging effect" was found, meaning that an investment in ALMP-training can be stored and become of value in a future possible boom period. I argue that this also exemplifies a time converter (Figure 4).

In Article 4, which focuses on how individual diversities affect the outcomes of ALMP investments, ALMP-employment was a very efficient converter for the older participants. Similarly, ALMP-training was particularly efficient for very young participants. Looking specifically at how ALMP investments were compatible with different educational levels of the participants, it was found, as expected, that investments were particularly fruitful for people with a lower level of education. However, surprisingly it was shown that ALMP- training was rewarding for well-educated participants too. The interpretation of this result is that ALMP-training in combination with higher education may produce a "springboard effect" (to some degree), where educational investments may lead to further educational investments within the regular educational system (among participants previously open to

educational efforts) (Figure 4). Therefore, this positive effect can only be identified through long-term evaluations.

In sum, generosity in the form of economic compensation and time is an important factor in order to achieve an increase in future labour market stability and endurance. The bridging effect of ALMP-training should be considered during poor labour market conditions and the springboard effect should not be forgotten. These converters seem to play a significant role for initiating a positive capability loop as regards the skills and competence of the unemployed.

If converters are recognised and acknowledged, the black-box may become a little more transparent. It is particularly important that the functioning inside the black-box is understood today when policies are being subjected to heavy restraints. A smaller share of unemployed people is now offered generous unemployment benefit and fewer are offered participation in long lasting ALMPs. In the early 1990s, unemployed people could take part in several types of programmes during unemployment spells, where some programmes probably did not contribute to increased capabilities while others certainly did have a crucial impact on them. In other words, there was more room for possible unsatisfactory matching between programme, timing and individual diversities. The limited room for "trial and error" due to reduced resources nowadays increases the need to acknowledge the activity within the black-box to make the most out of each placement. Otherwise we risk an increase in poor outcomes from policy investments. A situation with very poor outcomes would make policies mainly a tool to direct the work force to desired labour market behaviour, rather than to increase capability on a micro level. This would of course be regrettable since the design of policies in the 1990s had the ability to increase the capabilities of a large share of the unemployed participants.

Future research

Unemployment is a societal force that is studied by researchers from a broad range of disciplines. Economists, for instance, have provided us with important information about macro level unemployment policy outcomes. The topic is also a common subject for debate by politicians as well as by the general public. Discussions and debates become particularly frequent during economic downturns when uncertainty on the labour market increases. In fact, most people have some thoughts or ideas, whether academic or amateur, on how to design and distribute policies. Unemployment research is one of the most central research areas for sociologists but relatively few address the welfare effects of different labour market policy designs. Long-term outcomes in particular are neglected and unemployment tends to be discussed in terms of a temporary problem during economic

downturns. This is however not the case since a large proportion of the unemployed enter a process where negative effects (reduced labour market attachment, decreased income levels and so on) accumulate and may result in additional severe permanent scarring as defined in the concept of social exclusion.

During the current economic downturn, approximately 448 000 individuals or 9.4 per cent of the work force will enter unemployment in 2010 (AMS, 2009). Existing policies will therefore affect most unemployed people in one way or the other. Several unemployed people will leave the labour market or may return to the labour market at a later point in time, bearing traces of past unemployment spells. Considering the magnitude of the phenomenon, it is surprising that proportionately few sociologists have put their heads together in the search for more empirical knowledge about labour market policy outcomes. We need to show that welfare state policies, in this case labour market policies, have the function of providing relief for individual people. Seeking for more precise knowledge about long-term labour market policy outcomes is a search for protection against negative scarring. This is quite clearly a field for the sociologist and to balance the debate which forms the basis for how policies are designed, we should provide more empirical evidence regarding long-term micro level effects. This thesis shows how long-term effects differ from short-term effects. Thus, the next move should be to study how the design and supply of labour market policies can prevent long-term negative scarring in other welfare areas.

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