



Universiteit  
Leiden  
The Netherlands

## **Barred from employment? A study of labor market prospects before and after imprisonment**

Ramakers, A.A.T.

### **Citation**

Ramakers, A. A. T. (2014, June 19). *Barred from employment? A study of labor market prospects before and after imprisonment*. Meijers-reeks. Retrieved from <https://hdl.handle.net/1887/26890>

Version: Corrected Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/26890>

**Note:** To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/26890> holds various files of this Leiden University dissertation.

**Author:** Ramakers, Anke Antonia Theodora

**Title:** Barred from employment? A study of labor market prospects before and after imprisonment

**Issue Date:** 2014-06-19

### ABSTRACT

This study is concerned with describing the employment history of prisoners. Past labor market performance is a major predictor of later performances. Yet, the substantial field of reentry research paid little attention to pre-prison employment patterns and the magnitudes of labor market disadvantage that prisoners already face prior to their imprisonment. Using data on nearly 2,000 Dutch prisoners and a representative sample of the Dutch labor force, we find that unemployment is a longstanding feature of prisoners' lives. Starting with a low educational attainment, their subsequent employment career is characterized by long periods of unemployment, off-the-books employment, dismissals and job shifts. This results in a marginalized labor market position prior to imprisonment. The findings emphasize that the labor market (re)integration of ex-prisoners is a pressing social and public policy challenge, and stress the importance of skill attainment and work experience among high-risk groups.

Key words: Imprisonment, employment history, prisoner reentry, the Netherlands.

---

■ An earlier version of this chapter was published in Dutch as: Ramakers, A.A.T., Van Wilsem, J.A., Nieuwbeerta, P., & Dirkzwager, A. (2012). Het arbeidsverleden van gedetineerden voorafgaand aan detentie. Een vergelijking tussen gedetineerden en de algemene bevolking. *Mens & Maatschappij*, 87, 272-301.

An earlier version of this chapter is accepted for publication as: Ramakers, A.A.T., Van Wilsem, J.A., Nieuwbeerta, P., & Dirkzwager, A. (forthcoming). Down before they go in? Pre-prison labor market attachment in the Netherlands. *European Journal of Criminal Policy and Research*. Available online as of February 22, 2014, doi:10.1007/s10610-014-9234-x.

## 2.1 INTRODUCTION

In recent decades, the prison populations of modern Western societies have increased substantially (see Kuhn, 1996; Tonry & Farrington, 2005). Only recently this prison growth has begun to slow and even stabilize. The growth has brought issues of prisoner reentry to the forefront (Petersilia,, 2003; Visher & Travis, 2003). Because labor market (re)integration can serve as a turning point for offenders, prisoners' employment experiences after release have received much attention within this research field (e.g., Sampson & Laub, 1993; Staff & Uggen, 2003; Uggen, 2000, Visher & Travis, 2003; Warr, 1998).

The expectation that a period of imprisonment deteriorates one's economic prospects is common to labor market economists and criminologists alike. Ex-prisoners' employment chances are relatively low (Apel & Sweeten, 2010; Pager, 2003; Ramakers, Van Wilsem, & Apel, 2012; Waldfoegel, 1994; Western & Pettit, 2000), as is their long-term earnings potential (Holzer, 2007; Waldfoegel, 1994; Western, 2002). Research on the attitudes of employers and the general public towards ex-prisoners further supports this negative image (Graffam, Shinkfield, & Hardcastle, 2008; Holzer, 1996; Holzer et al., 2004; Pager, 2003). Prisoners thus have unusually weak employment prospects following their release from prison.

Yet, another general expectation is that prisoners already have a low socioeconomic potential *prior* to their imprisonment. For instance, prisons have been frequently described as institutions that house the most disadvantaged segments of society (Wakefield & Uggen 2010; Western, 2006). If this is indeed the case, the growing research interest in *post*-prison labor market outcomes (and other life domains) might be inapt to address problems surrounding prisoner reentry. In the words of Bushway (2006): "...I believe the discussion about reentry is misleading in its focus on the need to *reintegrate* prisoners into the community. Prison did not cause these individuals to lose their integration with community – *they were not integrated before they entered prison.*" (p.565, lines 13-19). In the same light, a number of scholars has proposed a shift in reintegration policy from prison-interventions to investment in general preventative measures that stimulate the attainment of jobs skills and work experience (e.g., Pettit & Lyons, 2007; Sabol, 2007).

There is however surprisingly little empirical evidence for the expectation that prisoners were hardly integrated in society in general or the labor market in specific, before entering prison, especially outside the United States. Western (2006) similarly observed that "Racial disparities had been studied extensively, but I could find little work on the economic situation of prison and jail inmates..." (p. xii, lines 11-12). Administrative studies report low employment ratios, showing that approximately one-third of the prison population was employed (for some time) in the year before prison admission. In addition, wages often fall below the minimum wage in the run-up to imprisonment (Kling, 2006; Pettit & Lyons, 2007; Tyler & Kling, 2007; Sabol

2007). These employment measures are not only sparse in the sense that they ignore job stability and quality, they also refer to a short period of time, which is likely to be affected by the illegal activities that led to imprisonment. Moreover, most studies are restricted to formal labor market participation, and fail to capture all economic activity, especially for young men with a prior arrest (Kornfeld & Bloom, 1999). Only recently, the pre-prison labor market attachment was addressed using broader measurements on a larger sample of prisoners (see Visher et al., 2011 and related publications). Yet, also in these studies, the main focus is on post-prison employment outcomes. Another weakness is that existing studies are limited to prisoners, with no accompanying data on non-prisoners (but see: Western, 2006). Hence, scholars are unable to assess the magnitude of disadvantage prisoners face even prior to their prison experience.

The lack of research on pre-prison labor market attachment is unfortunate for three reasons. First, past and present labor market performance are strongly interrelated (Becker, 1964; Farkas, 2003; Mincer, 1974; Spence, 1973). Recently, Berg and Huebner (2011) and Visher and colleagues (2011) pointed out that ex-prisoners with little work experience are especially vulnerable on the labor market. Holzer and colleagues (2004) showed that employers were far less enthusiastic about hiring applicants with a spotty work history (59% “probably will” or “definitely will” hire them) than hiring other disadvantaged groups, such as welfare recipients (92%), low educated applicants (96%) and applicants that were unemployed in recent years (83%). Moreover, they favored individuals with a spotty work record only over offenders (38%). Second, effect estimates of incarceration on employment and wages might be plagued by selection processes when studies fail to include comprehensive measures of pre-prison work experiences. Third, systematic knowledge about the work experience and skills that prisoners possess (or lack) can help target efforts to guide ex-prisoners to jobs more effectively, and thereby increase the chances of a successful (re)integration into the labor market. Moreover, education and employment assistance is one of the few policy instruments a government can employ in an attempt to reduce recidivism.

The present study will use data of the first wave of the Prison Project – a unique prospective, longitudinal and nationwide data collection among 1,909 male prisoners in the Netherlands – to describe the employment history of prisoners. Do prisoners experience rapid deterioration in the months leading up to their prison spell – a time in which labor market activities are likely to be affected by the illegal activities that led to their imprisonment – or are their diminished prospects indicative of a longer-term trajectory that characterizes their entire employment history? The self-reported measures on labor market attachment span the entire life up to prison admission. Moreover, they offer a detailed insight into the quality of pre-prison jobs (occupational level, self-employed or salary worker, hours, wages, employment arrangement). Next to this, the present study offers a frame of reference for the relative position of prisoners on the Dutch labor market by com-

paring their employment history to the general population. By using data from the Netherlands we furthermore respond to a recently enounced request for research outside the United States. in order to overcome the “Americentric tendencies in correctional research” (p.639) and create insight into best practices (Frost & Clear, 2012).

## 2.2 THEORETICAL EXPECTATIONS

Several criminological theories support the general expectation that prisoners have a lower socioeconomic status (SES) than the general population, even before imprisonment. First, there are theories that expect that prisoners have a lower SES because individuals with a low SES have a *higher chance of committing criminal behavior* and becoming incarcerated. Merton’s (1938) anomie theory and Hirschi’s (1969) social control theory state that employed individuals commit fewer crimes because they are better capable to provide for themselves financially and have stronger bonds with conventional society. A second explanation presumes that individuals with a low SES are *treated differently by the criminal justice system* than similar individuals with a higher SES. The focal concerns theory of criminal sentencing (Steffensmeier, Ulmer, & Kramer, 1998) states that individuals with similar criminal histories can receive a different sentence because judges base their risk assessment and verdict on both the severity of the crime and the characteristics of the suspect, including socioeconomic position (Spohn & Holleran, 2000). As a result, offenders with a low SES may be confronted with higher chances to be sentenced to prison than other offenders. A third explanation concerns differences in *work preferences*. Although employment can increase an individual’s wellbeing, for instance by providing daily structure, not everyone is willing to work. In line with this, subcultural theories point to (deviant) subcultures with specific norms and values (Miller, 1958; Wilson, 1987). Motivation for legal employment can be absent within deviant peer groups, for example because they disapprove of such conventional behavior. A low SES among prisoners might therefore also be the result of different work preferences. Moreover, illegal activities might be more attractive for individuals with a low SES as they are only eligible for low-status jobs. Following these three theoretical mechanisms our first hypothesis is as follows: *Prisoners have a weaker employment history than the general population.*

In addition, we expect to find differences in the employment histories between two groups of prisoners: first-time prisoners and prison-recidivists. The vast majority of the prisoners in the present study’s sample have been in contact with the criminal justice system prior to their imprisonment and more than half have been imprisoned before. According to labeling theories, any previous judicial contact can stigmatize an offender and reduce his or her labor market opportunities. A prison record may raise an additional labeling effect and further complicate the labor market participation of individuals who went to prison earlier in life. It may also be indicative for a

deeper embeddedness in criminal behavior and a weaker attachment to the formal labor market. By distinguishing between the employment history of first-time prisoners and prison-recidivists we explore whether a more extensive criminal history is associated with a weaker employment history. Our second hypothesis reads: *Prison-recidivists have a weaker employment history than first-time prisoners.*

Finally, attention is paid to *selection bias* that might plague the group comparisons in employment history. Registered data show that a relatively high percentage of the prison population is poorly educated, member of an ethnic minority and young of age (Linckens & De Looft, 2011). In the same light, previous research has shown that individuals with these characteristics experience significantly more difficulties on the labor market (e.g., Pager & Shepherd, 2008; Wolbers, De Graaf, & Ultee, 2001). The sociodemographic group composition might therefore explain the poor employment history of prisoners. The third hypothesis is as follows: *Differences in employment history between first-time prisoners, prison recidivists and the general population reduce after taking account of sociodemographic group composition.*

### 2.3 PREVIOUS RESEARCH

Limited empirical evidence exists on the employment patterns of future prisoners. Still, three strands of studies can be discerned. Cross-sectional inmate surveys, arranged by prison administrations, represent a first source of information. While many Western countries survey their prison population, information on educational attainment and employment history is not always available. Moreover, some countries held national inmate surveys, while others surveyed a small (selective) group of prisoners. This compromises comparisons across countries. The available figures do seem to align the expectation that prisoners have a low SES in the immediate period before prison admission. Large shares of prison populations did not complete secondary education (e.g., Australia: 53%; Denmark: 48.5%; Finland: 34.9%; Germany: 57%; Netherlands: 30%; Norway: 42.5%; Sweden: 56%; United Kingdom: 46%; United States: 41%) and pre-prison employment rates are generally low (e.g., Australia: 55%; Netherlands: 35%; United Kingdom: 32%; United States: 75%) (Butler & Milner, 2003; Eikeland et al., 2009; Entorf, 2009; Hopkins, 2012; Linckens & De Looft, 2011; Mol & Henneken-Hordijk, 2008; Petersilia, 2003). These data sources lack retrospective measures pertaining to the long-term labor market attachment of prisoners as well as a general population sample for the purpose of comparison.

The second type of studies is solely based on American data and combines data from state correctional agencies and unemployment insurance systems (UI data) to report prisoners' quarterly employment rates or earnings in Florida (Kling, 2004, 2006), Ohio (Sabol, 2007), Washington State (Pettit & Lyons, 2007, 2009), and Illinois (LaLonde & Cho, 2008; Jung, 2011). These studies aim to estimate the effect of imprisonment on post-prison

employment outcomes and their pre-prison employment measurements can extend to several years. However, they mostly only report the pre-prison employment ratio and wages in the year prior to imprisonment: approximately one-third of American prison inmates are employed in the run-up to imprisonment and those who worked in the year prior to imprisonment earned relatively low wages.<sup>1</sup> Kling (2006) reports that only 10 percent of the prisoners that were employed before prison admission earned a wage above the poverty rate (\$2,340 per quarter). Besides the limited time span of pre-prison employment outcomes, a weakness of administrative studies is that measurements are restricted to formal labor market participation and earnings. The study of Kling (2004) is an exception, as he compared the self-reported employment rate (65%) with the registered employment rate in the year before imprisonment (~33%). This difference in level is not the result of false reporting by prisoners as a comparison with a national survey produced a similar self-reported employment rate.<sup>2</sup> Instead, at least half of the difference in self-reported and registered employment rates could be explained by uncovered employment such as out-of-state employment, off-the-books employment and short-term employment. Kornfeld and Bloom (1999) concluded as well that administrative data understate employment and earnings, particularly for young men with a prior arrest record. This indicates that UI data miss out on a significant part of the economic activities of prisoners and other high-risk groups that represent the core in criminological research.

Longitudinal survey data, based on interviews with prisoners, offer a third valuable source of information, yet few datasets contain detailed employment measures that span entire employment histories. Some notable exceptions can be found in the United Kingdom and the United States. Both Soothill (1974) and Martin and Webster (1971) studied a small (sub)sample of prisoners in the London area a few decades ago. Both studies documented that instability was a longstanding feature of prisoners' working lives. Many prisoners were found to be illiterate and the researchers also found a pattern of temporary jobs and unemployment. More recent findings of the Returning

---

1 Average quarterly employment ratio in first year prior to prison admission: Lalonde and Cho (2008): 25%; Jung (2011): 25%; Kling (2006): 33%; Sabol (2007): 35%; Tyler and Kling (2007): 31%.

2 For a proper comparison Kling (2004) weighted the data of the Current Population Survey (CPS) from 1993 to 2000 to reflect gender, race, education and age distributions of the sample of Florida inmates. Furthermore, he assessed the proportion of uncovered jobs for individuals with similar demographics as the Florida inmates as follows: "...I used the CPS April 1993 benefit supplement to calculate the fraction of those employed in the survey week whose employers withhold Social Security from their paychecks as a proxy for being in a job covered by UI. This analysis suggests that about one quarter of those with demographics like inmates who report themselves as employed are working in jobs not covered by UI. Since the only common characteristics in the inmate sample and CPS sample are gender, race and education and age, the CPS fraction with uncovered jobs is likely an underestimate for the true rate in the more disadvantaged inmate population." (p. 16, lines 13-22).



Home Project, corroborate this pattern for American prisoners. Visher, Debus and Yahner (2008) reported that half (52%) of their sample of prisoners completed high school. During the last six months before prison roughly two-thirds of the prisoners (68%) worked for at least some time. Yet, only a small majority of prisoners reported to ever have held a job for at least two years (53%). Moreover, one-third reported to have been fired from a job at least once (Visher & Kachnowski, 2007). The National Longitudinal Survey of Youth (NLSY '79/'97) also holds extensive information about the work experiences of a subsample of American prisoners. However, most researchers only report the employment rate (number of weeks worked) and earnings in the first year(s) before imprisonment. An important advantage of these data is that they offer a comparison group of non-prisoners. Western (2006) compared never incarcerated individuals with prisoners before incarceration, and showed that, in the year before incarceration, never incarcerated individuals obtained significantly higher hourly wages (white men: \$14.7 versus \$11.14; black men: \$12.34 versus \$10.25) and worked more weeks per year (white men: 44 versus 37; black men: 40 versus 35).

#### 2.4 THE CURRENT STUDY

The literature overview reveals that previous work relied on measurements of pre-prison labor market attachment over a short period of time, failed to provide an overview of all of prisoners' economic activities and often lacked a comparison group of non-incarcerated individuals. Moreover, findings are almost solely based on American data. It is uncertain to what extent American findings can be generalized to other Western countries because of the difference in, for instance, penal climate and incarceration rate (see Kuhn, 1996). The current study tries to address these limitations in order to examine (a) whether the apparent instability at the time of prison admission is a longstanding feature of prisoners' working lives, and (b) to create an insight into the magnitude of labor market disadvantages that prisoners face. First, we examine developmental patterns in labor market participation by distinguishing three stages in an employment history: the educational level at labor market entry, the work experience since leaving fulltime education, and the labor market position in the run-up to imprisonment. Second, the current study uses a wide array of self-reported employment measures that cover all different kinds of economic activity. Third, data on a representative sample of the Dutch labor force enable us to produce a frame of reference for the employment history of prisoners. Finally, we address the American domination in prisoner research by offering insight into the context of the Netherlands.

This context is comparable to other countries in (Northern) Europe in several features which are relevant for labor market participation. For instance, despite retrenchment in recent decades, the Dutch welfare system is still generous in international comparison (Becker, 2000; Esping-Andersen

1990; Lappi-Seppälä, 2011). A second relevant feature is the restricted access to criminal records. In many countries ex-offenders face a variety of statutory restrictions that categorically prohibit certain types of employment (see for instance Jacobs & Larrauri, 2012). In the Netherlands, every employer may ask applicants for a certificate of conduct. In recent years the certificate has become mandatory in more sectors and the rules for granting a certificate have become stricter (Boone, 2011). In contrast to some American states, Dutch, and most European laws, merely prohibit work activities that are related to the crime committed. Hence, regulations protect Dutch ex-offenders from labor market discrimination, whereas open access laws in the United States (leaving aside some variation in state laws) pose an additional burden for American ex-offenders (Briggs, Thanner, Bushway, Taxman, & Van Brakle, 2004).

## 2.5 DATA

### 2.5.1 *The prisoners*

The data for this study were collected as part of the Prison Project, a unique prospective, longitudinal and nation-wide data collection among Dutch pre-trial detainees. The project targeted male prisoners who entered a Dutch detention facility between October 2010 and March 2011, were born in the Netherlands, between 18 and 65 years old and did not suffer from severe psychological problems. The first wave was held at the beginning of pre-trial detention and consisted of a computer assisted personal interview and written questionnaire. In total, 2,945 pre-trial detainees who entered pre-trial detention between October 2010 and March 2011 met our selection criteria. No less than 95 percent of these men could be approached and 65 percent of the original sample agreed to participate in the data collection. This resulted in a sample of 1,909 pre-trial detainees (from here on referred to as “prisoners”). The sample was generally representative of all 2,945 prisoners that met the selection criteria in terms of age, marital status, type of crime and receiving an unconditional prison sentence for the index offense, but differed in some other characteristics.<sup>3</sup> For this study we selected only those prisoners eligible for the Dutch labor force (individuals between 18 and 65 years old, not in fulltime education). In addition, we excluded those prisoners for whom information on age, educational level, ethnic background or criminal history was missing. After these selections, our research group consisted of 1,708 prisoners.

---

3 Participants and non-participants differ with respect to age of onset (18.9 versus 17.4), employment status before imprisonment (45.7% versus 38.7%) and duration of actual time served (5.1 versus 4.1 months). In addition, a comparison of criminal history measures revealed that participants have a slightly less extensive criminal history than non-participants (on average: 3.4 versus 5.0 previous spells; 7.7 versus 9.8 previous convictions).

Information on previous prison sentences was collected using the General Documentation Files of the Criminal Record Office. These data were made available by the Research and Documentation Centre (WODC) of the Netherlands Ministry of Security and Justice, and contain information on all registered convictions beginning at age 12, the age of criminal responsibility. We found that more than half of the prisoners had been to prison prior to our research period (60.7 percent). We distinguish between *first time prisoners* ( $n = 671$ ) and *prison-recidivists* ( $n = 1,037$ ) in our analyses.

### 2.5.2 The general population

In this paper the employment history of prisoners is compared to the employment history of a representative sample of the Dutch labor force.<sup>4</sup> We use data from the Labor Panel from 2008 ([Organisatie voor Strategisch Arbeidsmarktonderzoek] OSA). This dataset is suitable as a comparison group because it contains information about educational attainment, work experience and recent labor market position. Yet, it does not contain information about criminal history. Similar to the inclusion criteria of the Prison Project, only males, born in the Netherlands and between 18 and 65 years old were included in this study. Consequently, the comparison group exists of 2,059 men from the *general population*.

## 2.6 MEASURES

*Educational attainment.* The present study distinguishes between three educational categories. Lower education characterizes those that did not complete primary school, only completed primary school or graduated from the lower levels of secondary school. Medium education symbolizes completion of a higher level of secondary schooling. High education refers to those who completed a higher vocational training or post-secondary education.

*Work experience.* We view an employment career as the work experience since leaving fulltime education. For both the prisoners and the general population we know the total number of employers and the total duration of unemployment since leaving fulltime education.<sup>5</sup> Both indicators provide insight into the instability of employment careers. Additional information is available of prisoners. They were asked to report their longest job duration.

---

4 It is necessary to weigh the data because of selective non response. This weight factor is based on the age distribution in the Survey of the Labour Force (EBB) of Statistics Netherlands. We used this weight factor only in the descriptive analyses. As the weight factor of the labor panel is based on an independent variable (age), it is preferred to perform regression analyses without weight factor (Winship & Radbill, 1994).

5 Total duration of unemployment is measured as follows in the Prison Project: "How many months and years did you not have paid employment since leaving fulltime education?" In the OSA dataset a different question was asked: "How long since leaving fulltime education have you received unemployment or disability benefits?"

Next to this we know the prevalence (“0” no, “1” yes) and the frequency of both getting fired (number of dismissals) and off-the-books employment (“0” never to “5” very often).

*Recent labor market position.* For prisoners, the recent labor market position reflects the employment situation just before entering prison (at time of arrest), and for the general population it concerns the situation at the time of survey participation. First, we know whether individuals were employed (minimum of 1 hour per week), unemployed or did not participate in the labor force (ill or disabled, student, works in household, pensioner). Second, we know if benefits were received (unemployment benefits, disability benefits, welfare or other benefits). Third and fourth, we know for an employed individual whether he was a salary worker or self-employed as well as his hourly wage. The latter measure was based on the reported net monthly income from employment and the average number of hours worked. Fifth, using the Standard for Classification of Occupations (SBC) of Statistics Netherlands, survey information on job title, type of business, (executive) tasks and wage was used to classify jobs into five occupational levels ranging from the elementary to the scientific level (Westerman, 2010).<sup>6</sup> Sixth, our data included information on the employment arrangement: permanent contract, prospect on permanent contract, temporary contract and other (e.g., off-the-books employment, employment agency).

*Sociodemographic measures.* Next to educational level, we will include age and a measure of ethnic background into the analyses as control variables. The data show that first-time prisoners are slightly younger than prison-recidivists, 29.4 years and 32.4 years respectively. The general population is on average more than ten years older (43.9). The failure to control for these age differences can especially bias indicators of work experience (for instance number of employers) as younger people have had less “exposure” time on the labor market. Individuals are identified as non-ethnic Dutch when one or both parents were born outside the Netherlands. We find that 36.8 percent of the first-time prisoners and 42.7 percent of the prison-recidivists are non-ethnic Dutch. Only 4.1 percent of the general population in this study is classified as non-ethnic Dutch.

## 2.7 RESULTS

### 2.7.1 Educational attainment

The results section corresponds to three phases in an employment history: educational attainment, work experience and the most recent labor market

---

6 The SBC is a classification of occupations based on the level of capabilities necessary to practice an occupation in a certain field. First, information on job descriptions were coded into occupational codes. The second step was to code the occupational codes into five occupational levels.

position. Table 2.1 demonstrates that many future prisoners start their employment career in an already disadvantaged position.<sup>7</sup> A sizable majority of the prisoners has a low educational level (56.9% of first-time prisoners; 68.2% of prison-recidivists), while only one-quarter (25.6%) of the general population is classified as low educated. Accordingly, only 6.9 percent of the first-time prisoners and 4.1 percent of the prison-recidivists are high educated. In contrast, more than one-third (38.8%) of the general population obtained a higher education. Further analyses showed also substantial differences between the groups with respect to the completion of secondary schooling. Only 2.4 percent of the general population, but 21.5 percent of first-time prisoners and 35.8 percent of the prison-recidivist did not (yet) finish secondary schooling.

Table 2.1 Position during labor market entry

	General population ( <i>n</i> = 2059)	First-time prisoners ( <i>n</i> = 671)	Prison- Recidivists ( <i>n</i> = 1037)	
	%	%	%	Sign.
<i>Educational level</i>				abc
Low	25.6	56.9	68.2	
Medium	35.6	36.2	27.8	
High	38.8	6.9	4.1	

<sup>a</sup> Sign. difference between general population and first-time prisoners ( $p < 0.001$ )

<sup>b</sup> Sign. difference between general population and prison-recidivists ( $p < 0.001$ )

<sup>c</sup> Sign. difference between first-time prisoners and prison-recidivists ( $p < 0.001$ )

### 2.7.2 Work experience

In Table 2.2 we present information about the work experience since leaving fulltime education. Both first-time prisoners and prison-recidivists have worked for significantly more employers than individuals in the general population, respectively 5.0 and 6.1 versus 3.6 employers. We also find substantial differences in the time spent in unemployment. On average the general population was unemployed for less than one year (0.7 years), while the two groups of prisoners were unemployed for 1.7 (first-time prisoners) and 4.4 years (prison-recidivists). These differences are remarkable, especially when we take into account that prisoners are on average more than ten years younger than the men from the general population sample. Moreover, the high number of employers among prisoners is also noteworthy. The employment histories of prisoners seem thus far less stable than the employment history of the general population.

<sup>7</sup> In the tables of this chapter, Chi-square tests were performed to test for significant differences between groups, and Mann-Whitney tests were used for ordinal or interval variables with skewed distributions.

Table 2.2 presents additional work experience measures for the two prisoner groups, which indicate the existence of a more severe labor market disadvantage among prison-recidivists. We find that first-time prisoners worked on average a maximum of 4.4 years in the same job, while prison-recidivists worked a maximum of 3.5 years in the same job. The latter group was also fired more frequently and worked more often in off-the-books employment than first time prisoners.

Table 2.2 Work experience

	Range*	General population (n = 2059)			First-time prisoners (n = 671)			Prison-recidivists (n = 1037)			Sign.
		N	Mean	Med.	N	Mean	Med.	N	Mean	Med.	
Nr. Employers	0-15	1942	3.6	3.0	669	5.0	4.0	1030	6.1	5.0	abc
Duration of unemployment (yr.)	0-12.5	1945	0.7	0.0	662	1.7	0.5	1014	4.4	3.0	abc
Duration longest job (yr.)	0-15				666	4.4	2.5	1025	3.5	2.0	c
Dismissal	0-1				671	0.5	0.0	1036	0.5	1.0	c
Frequency	0.10				310	2.3	1.0	528	3.0	2.0	c
Off-the-books employment	0-1				671	0.5	1.0	1036	0.7	1.0	c
Regularity	1-5				346	2.6	2.0	682	2.9	3.0	c

\* For the continuous variables all scores above the 95 percentile were truncated.

a Sign. difference between general population and first-time prisoners ( $p < 0.001$ )

b Sign. difference between general population and prison-recidivists ( $p < 0.001$ )

c Sign. difference between first-time prisoners and prison-recidivists (min.  $p < 0.05$ )

Bivariate comparisons of employment outcomes between groups might be confounded by the selection of individuals with specific sociodemographic characteristics into prison. Multivariate regression analyses were performed to investigate the influence of sociodemographic group composition on the outcomes presented in the previous tables. Table 2.3 shows the results of these analyses, where the dependent variables include the number of employers, ever having been unemployed and the total duration of unemployment.<sup>8</sup> In line with the bivariate results, both first-time prisoners ( $B=0.209$ ) and prison-recidivists ( $B=0.377$ ) have worked for more employers than the general population. While we interpret a high number of employers as evidence of an unstable employment career, switching employers can also signify upward social mobility. This is however unlikely to be the case

8 Natural logarithmic transformation of the dependent variables was performed to reduce the skewness of distributions: number of employers, duration of unemployment and hourly wage. In order to retain individuals who scored a zero on these variables – for instance: 69 percent of the general population said to have never been unemployed and 21 percent of the prisoners gave this answer – we substituted the zeros with a very small number (0.5) before taking the natural log. Sensitivity analyses showed that similar conclusions were reached when the individuals who scored a zero on these variables were excluded from the analyses.

here as there are large differences in the number of employers and in the time spent participating on the labor market between prisoners and the general population. We also find that prisoners have a higher chance of ever having been unemployed than the general population (first-time prisoners:  $B=1.276$ ; prison-recidivists:  $B=2.059$ ). And, both first-time prisoners ( $B=0.487$ ) and prison recidivists ( $B=1.268$ ) have been unemployed for a longer period of time than the general population.

We hypothesized that the inclusion of sociodemographic characteristics would reduce group differences in employment outcomes. A comparison of models in which the sociodemographic characteristics were included separately (not shown here), indicated that educational level and ethnic background indeed led to a decrease in group differences in the number of employers and the duration of unemployment. However, group differences increased substantially when age was included. In fact, when we controlled for the relatively short exposure time of prisoners, the differences in work experience exceeded the original group differences in the number of employers. This finding is counterintuitive, but actually provides further evidence for the unstable work pattern of prisoners: in spite of their young age, prisoners have worked for more employers, are more likely to become unemployed and have been unemployed for a longer period of time than the general population.

Table 2.3 Regression analyses on indicators for work experience

	Number of employers	Ever unemployed	Duration unemployment
	B	B	B
Intercept	1.297***	-0.362***	-0.078*
<i>Group</i>			
General population ( <i>ref.</i> )			
First-time prisoners	0.209***	1.276***	0.487***
Prison-recidivists	0.377***	2.059***	1.268***
<i>Control variables</i>			
Low education ( <i>ref.</i> )			
Medium education	-0.035	-0.418***	-0.304***
High education	-0.131***	-0.653***	-0.376***
Non-ethnic Dutch	-0.176***	0.307**	0.002
Age (centered)	0.011***	0.009*	0.019***
$R^2$	0.062 <sup>a</sup>	0.290 <sup>b</sup>	0.324 <sup>a</sup>
N	3652	3631	3631

\*\*\* $p<0.001$ ; \*\* $p<0.01$ ; \* $p<0.05$

<sup>a</sup> Adjusted  $R^2$

<sup>b</sup> Nagelkerke  $R^2$

### 2.7.3 *Recent labor market situation*

Table 2.4 shows descriptive statistics on several indicators for the most recent labor market situation before imprisonment. The percentage of employed individuals is much lower among prisoners: 51.1 percent of the first-time prisoners and 33.5 percent of the prison-recidivists had a job versus 87.5 percent of the general population. This difference is also reflected in the percentages of benefit recipients. Many prison-recidivists received social benefits (44.7%), whereas one-fourth of the first-time prisoners (27.6%) and only 15.7 percent of the general population reported to receive social benefits.

For those who reported to be employed, Table 2.4 also presents information on type of employment. The high percentages of self-employment among prisoners are remarkable: 30.0 percent of the first-time prisoners and 40.1 percent of the prison-recidivists reported to be self-employed, compared to only 8.0 percent of the general population. In addition, there are differences in occupational level between the groups. While we observe an even distribution among the general population, the majority of the prisoners are employed in a lower occupational level (e.g., production employee, cleaner) or medium occupational level (e.g., road mender, truck driver). In addition, we find that both prisoner groups earn a lower hourly wage than the general population. Half of the prison-recidivists earn a minimum hourly wage of €10.6 while half of the general population earn a minimum of €12.50 per hour. Furthermore, 34,1 percent of the prison-recidivists, 45.4 percent of the first-time prisoners and no less than 85.8 percent of the general population work in a permanent employment arrangement.



Table 2.4 Most recent labor market situation

	General Population			First-time prisoners			Prison-recidivists			
	N	%	Mean/ Median	N	%	Mean/ Median	N	%	Mean/ Median	Sign.
All:	2059			671			1036			
Employed		87.5			51.1			33.5		abc
Unemployed		1.9			35.2			49.0		abc
Non-participant		10.6			13.7			17.5		abc
Receives benefits		15.7			27.6			44.7		abc
Employed:	1801			343			347			
Self-employed		8.0			30.0			40.1		abc
Occupational level										
Elementary		4.2			6.4			8.4		ab
Lower		18.0			48.4			47.0		
Medium		34.4			24.8			25.6		
Higher		29.9			7.6			5.8		
Scientific		12.8			1.2			1.2		
Missing		0.6			11.7			12.1		
Hourly wage*			13.4/12.5			11.6/9.7			12.6/10.6	abc
Employees:	1657			240			208			
Work agreement										
Temporary		4.6			14.2			9.6		abc
Other		1.4			18.8			38.9		
Prospect on permanent contract		8.1			21.7			17.3		
Permanent contract		85.8			45.4			34.1		

\* All scores above the 95 percentile were truncated.

a Sign. difference between general population and first-time prisoners (min. p<0.05)

b Sign. difference between general population and prison-recidivists (p<0.001)

c Sign. difference between first-time prisoners and prison-recidivists (min. p<0.05)

In Table 2.5 we study the recent labor market position in a series of regression analyses, where the dependent variables are employment (yes/no), hourly wage and working in a permanent contract (yes/no).<sup>9</sup> In order to examine whether career development affected the recent labor market position, we added the total duration of unemployment and the number of employers to these models.

Even after controlling for demographic differences and career development, the recent employment rate is highest among the general population. Beyond the disadvantage of being low educated and having longer spells of unemployment, prisoners thus face an additional reduction in the chance to be employed.

Table 2.5 also shows that prisoners are less likely to work in a permanent contract than the general population, and again, this likelihood is lowest for prison-recidivists ( $B=-2.095$ ). Noteworthy is that the odds of working in a permanent contract are, besides age, especially determined by the indicators for work experience. Instable track records thus seem to lower chances for such a contract.

With respect to hourly wage, the multivariate approach shows a counterintuitive finding. In comparison with individuals from the general population with a similar educational level, ethnic background, age and work experience, prison-recidivists earn a significantly higher wage ( $B=0.092$ ) than the general population workers. Outlier analyses (not shown) confirmed the difference in hourly wage.<sup>10</sup> Misreporting by the prisoners could offer an explanation for the higher average wage. Yet, the type of jobs that prisoners occupy might offer an explanation for their higher hourly wage. Although few prisoners stated that their last job included off-the-books employment, the answers to more general questions about informal employment (as displayed in Table 2.2) indicate that prisoners often do supplement their income by working “under the table”. Moreover, many of them work in an occupation that is suitable for off-the-books employment (e.g., construction worker, painter). The high percentage of benefit recipients among the prisoner groups might offer another explanation. Perhaps these prisoners have a higher “reservation wage”, meaning that they only accept employment offers for jobs with relatively high wages and otherwise rely on social benefits.

---

9 A logistic regression analysis is not suitable for comparing parameters between models (Mood, 2010). As such we are cautious in interpreting a change in B-parameters across logistics regression models as a decrease or increase in group differences.

10 We found low Cook’s D values (maximum= 0.07), which indicates that none of the residuals potentially distort the outcome. Outlier analyses did reveal the presence of 13 extreme z-scores ( $z\text{-score}>3.29$ ). However, exclusion of the extreme cases did not alter our conclusions.

Table 2.5 Logistic and linear regression analyses on indicators for the recent labor market position

	Employed	Hourly wage	Permanent contract
	B	B	B
Intercept	1.833***	2.407	2.385
<i>Group</i>			
General population (ref.)			
First-time prisoners	-1.539***	-0.064*	-1.826***
Prison-recidivists	-1.544***	0.092**	-2.095***
<i>Control variables</i>			
Low education (ref.)			
Medium education	0.137	0.136***	0.314*
High education	0.598***	0.406***	0.376*
Non-ethnic Dutch	-0.476***	0.066	-0.011
Age (centered)	-0.024***	0.013***	0.076***
<i>Work experience</i>			
Duration of unemployment (LN)	-0.858***	-0.059***	-0.481***
Number of employers (LN)	0.001	-0.067***	-0.513***
R <sup>2</sup>	0.478 <sup>b</sup>	0.179 <sup>a</sup>	0.389 <sup>b</sup>
N	3620	2389	2017

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

<sup>a</sup> Adjusted R<sup>2</sup>

<sup>b</sup> Nagelkerke R<sup>2</sup>

#### 2.7.4 Linking hypotheses to findings

Our findings support the first two hypotheses: *Prisoners have a weaker employment history than the general population*, and: *Prison-recidivists have a weaker employment history than first-time prisoners*. Compared to the general population, prisoners entered the labor market with a lower educational level and in subsequent years they obtained spotty work records by working for more different employers and being unemployed for longer period(s) of time. These differences remained after accounting for differences in group composition: in spite of the overrepresentation of younger men (with shorter "exposure" times on the labor market) in the prison groups and due to their low educational level (and in lesser extent because of their ethnic background), prisoners have a highly unstable track record and a weak labor market position prior to prison entry. The analyses furthermore showed that there are larger differences in employment outcomes between prison-recidivists and the general population than between first-time prisoners and the general population. The findings only partly support the third hypothesis: *Differences in employment history between first-time prisoners, prison-recidivists and the general population reduce after taking account for sociodemographic differences in group composition*. While several group differences reduced after the inclusion of sociodemographic characteristics, others increased after controlling for age.

## 2.8 DISCUSSION

By using a wide array of employment measurements that spanned the entire employment history, this study showed that prisoners' marginal position at the time of prison admission is a longstanding feature of their working lives. We used data from the Prison Project, a prospective, longitudinal and nationwide data collection among nearly 2,000 prisoners in the Netherlands. The magnitude of socioeconomic disadvantage that prisoners face was shown by comparing their employment histories to a representative sample of the general population.

We motivated the current study's focus on pre-prison labor market attachment by pointing out the rather singular focus of existing reentry research on post-prison labor market outcomes. A more longitudinal perspective seems preferable since incarceration is often merely the consequence of pre-existing barriers, including a weak labor market position. A second reason for focusing on the situation *before* prison admission is the importance of pre-prison labor market performance for assessing incarceration's effects. Third, information on pre-prison labor market attachment can be meaningful to policy makers that are entrusted with the reintegration of ex-prisoners, since labor market (re)integration can serve as a turning point for offenders (Sampson & Laub, 1993; Staff & Uggen, 2003; Uggen, 2000; Visser & Travis, 2003; Warr, 1998).

In line with previous work we found that the majority of prisoners were low educated. Their subsequent employment career can be characterized as highly unstable because of the high number of employers, the long spells of unemployment and the high frequency of dismissal and off-the-books employment. Roughly 40 percent of the prisoners were employed before imprisonment. This percentage is consistent with previous research from the Netherlands (Dirkzwager et al., 2009; More & Weijters, 2011). Prisoners who were employed before entering prison often worked in low-status jobs and in temporary employment arrangement. Some effect studies found that many *ex*-prisoners work in the so-called "secondary labor market" (Western, 2006). The present findings suggest that prisoners already hold these low-quality jobs prior to their imprisonment. This raises the question to what extent a prison spell can cause further employment penalties. Future research could examine this further by linking pre-prison work experiences to post-prison work experiences and zooming in on the type of employment that ex-prisoners find. Another notable finding was that many prisoners reported to be self-employed. This is in line with previous work from other fields showing that entrepreneurship is preferred when the feasible employee-type arrangements do not pay a sufficiently high wage (Clark & Drinkwater, 2000; Parker, 2004). Moreover, further examination of the data led us to believe that, in line with earlier work from Soothill (1974), many of these men in fact worked as independent contractors or owned very small businesses.

The comparison with the general population made abundantly clear that prisoners are underemployed during their entire pre-prison employ-

ment career. These findings correspond with previous research on lower socioeconomic classes in society (Gesthuizen, 2004; Wilson, 1987). Prisoners, especially those with prior prison record(s), do not seem to succeed or do not strive to obtain a high quality job and stable work experience. Yet, we found that, among individuals with a similar educational level, ethnic background, age and work experience, prison-recidivists earn a significantly higher wage than the general population workers. The frequent combination of formal labor with off-the-books employment among prisoners might offer an explanation for this wage-difference. Differences in work preferences could offer another explanation. Perhaps these prisoners are more driven by short-term profits instead of jobs that offer security and promotion in the long term. Another potential explanation is misreporting among prisoners. Future research in which self-report data are compared with administrative earnings could offer more insight into the validity of this explanation. In any case, we are not the first to find higher earnings among offender population. Nagin and Waldfogel (1995) explain their finding that young convicted men earn higher wages by pointing out that they are more often employed in "spot market" jobs instead of "career" jobs. The first type of job pays relatively well but does not offer job stability (e.g., seasonal jobs). Also, this type of work has a flat wage line, whereas "career" jobs require more effort and training, have a lower starting wage but a steeper age-wage profile. Third, the higher hourly wage of prisoners can also be related to the supply of welfare benefits in the Netherlands. This alternative source of income might have led to higher reservation wages among Dutch citizens in general and among prisoners in specific. Further research is warranted to examine the validity of these explanatory mechanisms.

Despite the insights delivered in this study, some limitations should also be addressed. The first limitation concerns the data. We used rich datasets, but a downside of survey data is that social desirability and memory loss can potentially bias responses. Yet, in view of the magnitude of differences between first-time prisoners, prison-recidivists and the general population in labor market performance, we consider it unlikely that a different measurement strategy would lead to other conclusions. Moreover, administrative data from unemployment insurance systems, have shown to underestimate the economic activity of young men with prior arrest records (Kornfeld & Bloom, 1999). An important direction for future research is to study the labor market participation of (ex)prisoners by combining administrative data with survey data.

Second, caution should be exercised when generalizing the findings from this study, particularly the level of differences between prisoners and the general population, to a larger sample of prisoners and to other Western countries. We used data from the Netherlands, an interesting case study with a relatively mild penal climate, restricted access to criminal history records and a generous social welfare regime. It is therefore a matter of speculation whether we would find similar results using data of other countries. However, especially countries in Northern Europe resemble the Netherlands in

their policies and practices, and this could mean that our findings might apply to these countries. Perhaps, countries with less generous welfare systems find higher levels of labor market attachment among prisoners because employment is more necessary in those countries. Another possibility is that countries with open access to criminal history information might find even larger differences in labor market attachment between prisoners and the general population as convicted felons will encounter more problems finding employment (Pager, 2003). We encourage scholars to conduct comparative research to examine to what extent our results are country-specific.

To close, our findings demonstrate that prisoners face a severe human capital deficit, even before imprisonment. This lack of human capital will hinder them to find employment after release from prison. In fact, their poor labor market attachment might be more influential with respect to post-prison labor market performances than the prison experience in itself. As such our findings suggest that future reentry research on the (additional) negative effect of imprisonment on post-prison circumstances should extend their focus towards a more elaborative study of pre-prison circumstances. We view the study of and investment in general preventative measures that stimulate a higher level of education, the attainment of jobs skills and work experience among high-risk groups as an essential avenue for future research and policy makers.