# Labour market transitions 

## and job satisfaction

First incompete draft (not to be quoted)
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#### Abstract

The paper investigates the relationship between job satisfaction and labour market transitions. Using a multinomial logit model, a model is estimated on the basis of individual data in which transitions are explained from individual characteristics, job characteristics, dissatisfaction with the job and discrepancies between the actual and the desired number of hours worked. Transitions can be changes in the hours worked, changes to a different job and/or employers, or combinations. Furthermore, people may lose their job and leave employment out of free will. The model has been estimated for three categories of workers according to the number of hours worked. The results show that both dissatisfaction with the job and discrepancies with respect to the hours worked have a significant impact on transition probabilities. Contrary to what is sometimes believed there is no structural increase in transition probabilities. We are still far away from a 'transtional labour market'. The paper also shows that transitions significantly increase job satisfaction. However, despite the strong improvement in the labour market situation in the 1990s, the percentage of the workers experiencing a dscrepancy between the actual and the desired number of hours has not diminished.


## 1 Introduction

This paper investigates the relationship between labour market transitions and job satisfaction. To what extent do workers adjust the number of hours worked when they experience a discrepancy between the actual and the desired number of hours? And does such a discrepancy or a more general dissatisfaction with the current job leads worker to move to another job? Finally, we deal with the question to what extend transitions reduce the discrepancy between actual and desired hours and increase job satisfaction. The analysis is based on data obtained from the OSA household panel. The data covers the period 1986-1998.

In recent policy reports the suggestion is given that nowadays labour market transitions occur more often than they used to. Three societal trends are seen as the factors responsible for this development. First, job contents will change more rapidly and skills will become obsolete more quickly when the pace of technological development is higher. The globalisation of the economy, the second factor, implies that economic activities are more sensitive for events happening elsewhere and are transferred to other places more quickly. Finally, cultural factors such as the individualization of society and women emancipation are considered important. Preferences are more diverse than they used to be. The traditional pattern according to which men do the paid work and women concentrate on the non-market activities is (slowly) disappearing. Both men and women wish to participate in the labour process and both may wish to vary the number of hours worked during their career in response to changes in the family situation.

However, the available information does not seem to confirm a structural increase in job-tojob mobility (OECD). It is still possible, however, that more frequently changes occur in the contents of jobs and in the number of hours worked, but within the context of a more durable contract with one employer. In this paper we try to test whether transition probabilities have increased structurally. The emphasis is the significance of job satisfaction for making a transition and the degree to which transitions lead to increased job satisfaction.

The paper is structured as follows. Section 2 deals with theory. Then section 3 deals with an analysis in which we model labour market transitions and relate them to job satisfaction and oither variables. In section 4 we analyse to what extent transitions lead to improved job satisfaction. Finally, section 5 makes some concluding comments. (THE FINAL PAPER WILL ALSO CONTAIN A DESCRIPTION OF THE DATA)

## 2 Theory

The relationship between labour market transitions and job satisfaction can be analysed with the help of the simple static utility maximizing model. We assume that the indivdual's preferences can be described by a utility function according to which utility is positively dependent on income Yand leisure time $L$.

$$
\begin{equation*}
U=U(Y, L) \quad \frac{\partial U}{\partial Y}>0 ; \frac{\partial U}{\partial L}>0 \tag{1}
\end{equation*}
$$

The individual is supposed to spend his income completely on consumption activities. Income consists of wage income and non-wage income.

$$
Y=w H+O
$$

where w denotes the hourly wage, H the number of hours worked and O non-wage income. Total time is equal to the sum total of leisure time, hours worked and time spent on housekeeping.

$$
\begin{equation*}
T=L+H+H K \tag{3}
\end{equation*}
$$

If (3) is substituted in (2) utility maximization can be graphically depicted as in figure 1. In the optimum the utility curve is adjacent to the budget curve. In the optimum Lopt hours are spent on leisure.

Figure 1 The choice between leisure and income

Income


An obvious case in which the worker feels a discrepancy is when the number of hours worked is fixed by the employer on a level differing from T-HK-Lopt.

Workers may accept a job in which the hours worked differ from the optimal number.
Accepting such a sub-optimal job and continuing job search may yield a higher utility than prolonging job search while staying unemployed.

However, it is also possible that initially the number of hours was optimal, but that this is no longer the case owing to changing circumstances. There are several possible reasons why the optimum is no longer valid:

- changes in the family household. If a child is born, the time spent on housekeeping will increase. As a result the budget line will move to the origin. What will happen to the number of hours also depends on the partner.
- $\quad$ changes in the labour market situation. When the labour market is tight it will be more easy to find a job which yields a higher utility. Better payment, more or less working hours and better working contents may all contribute to such an improvement.
- owing to work experience a person's competencies may exceed the requirement for the current job.

What matters is higher utility. At least in theory the new job may entail a discrepancy between actual and desired hours, but at the same time yield a higher utility. It is even possible that a worker moves from a job which yielded an optimal combination of income and leisure to a job with higher utility but without the utility curve being adjacent to the budget curve. The reason could be that the new job is better paid, but does not allow the worker to work the number of hours he would prefer given the new hourly wage. The increased wage income could compensate for the fact that the number of hours worked differs from the preferred number. However, in all cases we would expect the change to lead to a higher job satisfaction level.

Changes in family situation may be analysed through its consequences for the number of hours spent on house-keeping (if this concept is used in a broad meaning). When a family gets a child, the model predicts that both the hours worked and leisure will drop. When a person finds a partners, each one can spend less time on house-keeping, implying that he will increase both the hours worked and his leisure time. However, decision-making in a family context may imply that the partners also weigh off the opportunity costs of non-working for each partner. ${ }^{1}$ The results will also depend on the weight each partner has in the decisionmaking, which will partly depend on norms and values.

The model is too simple when we want to analyse the roles of job contents. In the model as presented so far, job contents do not influence utility. Obviously, this is a not a realistic assumption. Dissatisfaction with job contents may well be a reason for workers to move to a different job.

The model as presented so far will to some extent guide us in the specification of the models we use in the next sections. It gives suggestions as to the types of explanatory variables to be included in the models. Furthermore, the model helps us to interpret the results.

So far, transitions were seen as results of decision-making by individuals. may also be forced by the employer. However, the availability of jobs limits the opportunities for workers to realize their aspirations. Furthermore, some transitions such as the one from employment to unemployment may be forced upon the worker by its firm. Therefore, in explaining transitions we must also take account of the general labour market situation and the behaviours of firms. However, the period to which our empirical analyses in the next sections applies (the mid 1980s to the end of the 1990s), is characterised by a considerable improvement in the labour

[^0]market situation. At the end of this, the unemployment rate had diminished to a level below the natural rate. We would expect, then, that during this period transitions are particularly supply-induced.

## 3 To what extent does job satisfaction explain transitions?

## Introduction

In this section we give a systematic and comprehensive analysis of labour market transitions in the Netherlands based on data from several waves of the OSA Labour Supply Survey.

We addressed in section 2 how utility theory can explain the choices of individuals. A rational individual would only change her labour market position if such a change induces an utility gain. Employed people who want to reduce their labour hours if they conceive a higher utility in the new labour market situation. If they are satisfied with the other aspects of their job they will first try to change the labour hours of their current job. When this cannot be achieved or they are not satisfied with their current job they will search for another job satisfying their wishes. Transaction and search costs can withhold them from changing. Restrictions and developments on the labour market, from both the supply and demand side, can also restrict them from making a transition. Finally, changes in the personal situation and/or wishes can lead to a time-varying preference of the labour market position of an individual. Therefore, on the one hand, not every discrepancy between the current and the preferred labour market position leads to the expected transition. On the other hand, a change in the labour market position can also take place from a seemingly optimal situation.

On the basis of this background a model is developed that explains the transitions on the labour market. However, not all mentioned factors are available in the data set. The development of labour demand is unknown. The search- and transaction costs are also difficult to subtract from the data. It does, however, contain extensive information on characteristics of the individuals, the households they are part of and, the job they have.

Only data on the transitions of those who are employed at the time of the interview are used.

## Modelling the transition probabilities

A structural model in which all the transitions are a direct result from the perceived utility differences is too complex to estimate. Instead, we postulate reduced form multinomial logit
models ${ }^{2}$ in which the transition probability from employed at a certain number of hours at the date of interview to the new labour market position two years later depends on the available information in the OSA Labour Supply Survey on individuals.

The data used for the analyses consist of the those individuals in the OSA data who are employed at one of the seven interview moments ${ }^{3}$ from and for whom we have information on their labour market situation two years later. Thus, for each couple of consecutive interview moments we subtract the data for everybody who has been interviews at both interviews and who is employed at the first interview moment. All these data are pooled and then analysed separately according to the number of labour hours of each consecutive starting interview moment. This implies that some individuals have multiple entries in the data. We realise that the transitions of one individual over time is highly correlated we do not, however, develop a dynamic model to account for this. Neither do we model the possible selective attrition of the individuals from the panel. The range of working hours is grouped into three labour market situations: (i) small part-time job (0-24 labour hours a week); (ii) big part-time job (24-34 labour hours) and (iii) fulltime job (more than 34 labour hours). From table 3.1 we notice that the individuals with a big part-time job are the most mobile on the labour market; two years later only half of them are still in the same job with the same number of labour hours.

Tabel 5.1: Distribution of the transitions

| Situation 2 years later |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Startsituation | Same job |  |  | Unemployed | NP | Other job |  |  | Total |
|  | 0-24 | 24-34 | Fulltime |  |  | 0-24 | 24-34 | Fulltime |  |
| 0-24 hours | 63\% | 4\% | 3\% | 3\% | 10\% | 12\% | 3\% | 2\% | 2537 |
| 24-34 hours | 10\% | 50\% | 13\% | 3\% | 7\% | 5\% | 6\% | 7\% | 1159 |
| Fulltime job | 1\% | 3\% | 75\% | 2\% | 4\% | 1\% | 1\% | 13\% | 8615 |

With the models we try to hope to identify those factors that induce an employed individual to change working time and/or job. Of course is gender an important factor; women constitute most of the individuals with a small part-time job, while men mostly work fulltime. Other factors are education level, age and the existence of children in the household. A change in household situation (e.g. birth of a child) might be more important than having children. We

[^1]also include job related factors in the models, like the type of contract and the sector. Very crucial for the explanation of the transitions seems those factors that characterise, directly or indirectly, the labour market discrepancy. Possible indicators in the data set are job satisfaction, earnings satisfaction, whether somebody is looking for another job and the discrepancy between the preferred labour hours and the actual labour hours.

During the years the OSA Labour Supply Survey have been adjusted. Therefore, some interesting information is only available for a limited number of waves. For example, we only know how much time an individual spends a week on childcare and household care from 1994 on. For the years the question ${ }^{4}$ was not asked we imputed the missing data: (1) for continuous variables, like time on childcare, a linear regression function for the available data (separate models for men and women) is estimated. Based on these regressions the variable is imputed for the other years. If the variable is binary, like the partner has a job or not, a logit model is estimated for probability that the situation occurs on the available data (again different models for men and women). Based on these logit models we put the variable for the missing years to one if the estimated probability is greater than a half.

## Estimation results

For each of the three different groups divided by labour hours the multinomial logit model is estimated with the starting position on the labour market as the reference category. For each model we estimated up to 210 parameters. Because the parameters of a multinomial logit model are difficult to interpret we transformed them to marginal effects on the transition probability. Still this would imply immense tables with only a few interesting features. We have decided to present these marginal effects into six different blocks, separated according to the type of variables; (1) general characteristics (e.g. the economic situation at the time of interview); (2) personal characteristics (age, gender etc); (3) household characteristics (martial state, children etc); (4) properties of the job; (5) job satisfaction and (6) labour hours wishes.

In table 3.2 the marginal effects of the general labour market circumstances are given. The general unemployment rate seems to have a significant effect on a number of transition probabilities. Furthermore, a positive trend can be observed in the probability to remain in small part-time jobs, while full-timers tend to move less to other full-time jobs. These results reflect the general tendency in the Netherlands to part-time labour.

[^2]Table 3.2: $\quad$ Marginal effect of general background variables


## Small part-time

job

| linear trend | $0.025^{*}$ | -0.001 | 0.000 | -0.001 | - | -0.012 |  | -0.001 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $0.009 * *$ |  | 0.001 |  |
| Unemployment |  | -0.001 | 0.000 | 0.002 | -0.002 | - | - | - |
| rate | $0.049^{*}$ |  |  |  |  | $0.037{ }^{*}$ | 0.009 | $0.003{ }^{*}$ |


| Big part-time job <br> linear trend | 0.003 | 0.037 | -0.015 | 0.000 | -0.011 | -0.006 | - | -0.001 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  | 0.006 |  |
| Unemployment <br> rate | 0.004 | 0.058 | -0.018 | 0.001 | -0.007 | -0.008 | - | -0.008 |  |
| Fulltime <br> linear trend | 0.001 | 0.002 | 0.004 | 0.000 | -0.001 | 0.000 | 0.000 | - |  |
|  |  |  |  |  |  |  |  |  | $0.006^{*}$ |

$\begin{array}{llllllllll}\text { Unemployment } & 0.001 & 0.003 & 0.026^{* *} & 0.003 & 0.000 & -0.001 & - & - \\ \text { rate } & & & & & & & 0.001 & 0.030^{*}\end{array}$
** is significant at $95 \%$ and * is significant at $90 \%$.

Table 3.3 below depicts the impacts of work time wishes. As could be expected, transitions to a different number of hours worked are usually in line with the wishes as expressed at the start of the two-year period.

Table 3.3: Marginal effect of labour hour preferences

|  | Same job |  |  | Other job |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{0 - 2 4}$ | $\mathbf{2 4 - 3 4}$ | fulltime | $\mathbf{0 - 2 4}$ | $\mathbf{2 4 - 3 4}$ | fulltime |
| Small part-time job <br> Prefers to work 24-34 | $-0.072^{* *}$ | $0.082^{* *}$ | -0.002 | $-0.011^{*}$ | $0.015^{*}$ | $-0.001^{* *}$ |
| hours |  | $-0.078^{* *}$ | $-0.007^{* *}$ | $0.097^{* *}$ | $-0.012^{* *}$ | $-0.003^{* *}$ |
| Prefers to work <br> fulltime |  |  |  |  | $0.014^{* *}$ |  |

## Big part-time job

$\begin{array}{lllllll}\text { Prefers to work } 0-24 & 0.077^{* *} & -0.052^{*} & - & 0.019 & -0.005^{*} & -0.007^{* *}\end{array}$
hours
$\begin{array}{llllll}\text { Prefers to work } & -0.028^{* *} & -0.173^{* *} & 0.215^{* *} & -0.012 & -0.015^{* *}\end{array} 0.029$
fullime

## Fulltime job

Prefers to work 0-24 $\quad 0.014^{* *}-0.003^{* *}-0.020 \quad 0.012^{* *} \quad-0.001^{* *} \quad-0.003$
hours
$\begin{array}{lllllll}\text { Prefers to work 24-34 } & -0.001 & 0.021^{* *} & -0.023 & -0.000 & 0.007^{* *} & -0.003\end{array}$
hours
** is significant at $95 \%$ and * is significant at $90 \%$.
NB Trend removed

In the 3.4 the marginal effects of job satisfaction given. General dissatisfaction with the job plays a significant role in explaining the transitions of two groups: small part-timers and full-

Table 3.4: $\quad$ Marginal effects of job satisfaction

|  | Same job |  |  | Unemployed | NP | Other job |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-24 | $\begin{gathered} \hline 24- \\ \hline 34 \end{gathered}$ | fulltime |  |  | 0-24 | 24-34 | fulltime |
| Small parttime job |  |  |  |  |  |  |  |  |
| Satisfied with job | $0.178^{* *}$ | -0.008 | -0.010 | $-0.030^{* *}$ | $-0.060^{* *}$ | $-0.050^{*}$ | -0.010 | $-0.009^{* *}$ |
| Unsatisfied with wage level | -0.025 | -0.012 | 0.004 | 0.009 | -0.002 | 0.017 | 0.007 | 0.003 |
| Looking for another job | $0.120^{* *}$ | -0.003 | 0.014 | 0.009 | 0.033 | 0.043 | 0.008 | $0.015^{* *}$ |
| Big part-time job |  |  |  |  |  |  |  |  |
| Satisfied with job | -0.012 | 0.070 | 0.073 | -0.034 | -0.019 | -0.032 | -0.021 | -0.025 |
| Unsatisfied with wage level | 0.010 | -0.111 | -0.007 | 0.030 | 0.000 | -0.020 | 0.033 | $0.065 *$ |
| Looking for another job | -0.010 | -0.143 | 0.005 | -0.002 | -0.001 | 0.034 | $0.075^{* *}$ | $0.042^{* *}$ |
| Fulltimejob |  |  |  |  |  |  |  |  |
| Satisfied with job | 0.000 | -0.005 | 0.101** | $-0.011^{* *}$ | -0.010 | 0.001 | $-0.007^{* *}$ | -0.070** |
| Unsatisfied with wage level | 0.003 | -0.002 | -0.010 | 0.001 | -0.002 | 0.001 | 0.001 | 0.009 |
| Looking for another job | 0.002 | -0.007 | $-0.103^{* *}$ | $0.007 * *$ | 0.002 | 0.004* | 0.001 | $0.093 * *$ |
| ** is significant at $95 \%$ and * is significant at $90 \%$. |  |  |  |  |  |  |  |  |

timers. Only in the case of big part-timers dissatisfaction with the wage level has a significant effect. Frequently, 'looking for another job' is significant, although one could argue that job search is the result of dissatisfaction rather than an explanatory variable for transitions probabilities.

In the next four tables a variable is only mentioned when it has a significant marginal effect on, at least, one of the transition probabilities. The insignificant results are gathered in a couple of additional tables in the appendix.

Table 3.5: Marginal effect of personal characteristics

|  | Same job |  |  | Unemploye d | NP | Other job |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-24 | 24-34 | fulltim e |  |  | 0-24 | 24-34 | fulltim e |
| Small part-time job |  |  |  |  |  |  |  |  |
| High educated | -0.008 | $0.027^{* *}$ | 0.001 | -0.001 | -0.027 | 0.002 | 0.007 | -0.001 |
| Age (/10) | 0.042 | -0.015 | -0.001 | -0.006 | 0.010 ** | -0.021 | -0.006 | $-0.004^{*}$ |
| Age (/10) squared | -0.034 | -0.005 | 0.000 | $-0.003$ | $0.044^{* *}$ | -0.003 | 0.001 | 0.000 |
| Living in the North | 0.032 | -0.013 | 0.000 | $0.024^{* *}$ | -0.009 ${ }^{*}$ | -0.025** | -0.013 | 0.005 |
| Course taken | 0.012 | 0.000 | 0.016 | -0.006 | $-0.071^{* *}$ | $0.041^{* *}$ | 0.004 | 0.005 |
| Big part-time job |  |  |  |  |  |  |  |  |
| Age (/10) | 0.006 | 0.035 | -0.017 | 0.006 | 0.004 | 0.001 | -0.014 | $-0.022^{*}$ |
| Age (/10) squared | -0.003 | -0.026 | 0.011 | -0.003 | 0.022* | 0.004 | 0.004 | -0.009 |
| Fulltime job |  |  |  |  |  |  |  |  |
| Female | -0.002 | 0.027** | -0.053** | 0.007 | -0.003 | 0.004 | 0.012** | 0.008 |
| Low educated | -0.003 | 0.003 | 0.017 | 0.000 | 0.002 | 0.001 | -0.002 | -0.017* |
| High educated | $-0.002{ }^{*}$ | $0.009^{*}$ | $0.007{ }^{*}$ | -0.004 | $-0.007$ | 0.001 | $-0.001{ }^{*}$ | $-0.004$ |
| Age (/10) | $-0.003^{* *}$ | 0.001 | $0.039^{*}$ | 0.001 | $0.005^{* *}$ | 0.001 | $-0.002^{*}$ | -0.047** |
| Age (/10) squared | $0.004^{* *}$ | $0.005^{* *}$ | -0.019 | -0.001 | $0.009 *$ | 0.002 | $0.002^{* *}$ | -0.002* |
| Living in the North | 0.000 | 0.007 | 0.013 | 0.006 | 0.001 | 0.002 | -0.003 | $-0.025^{*}$ |
| Course taken | 0.003 | 0.002 | 0.004 | -0.005 | $-0.013^{* *}$ | -0.002 | -0.001 | $0.021^{* *}$ |
| Etnic minority | 0.000 | 0.000 | 0.013 | $0.016^{* *}$ | 0.000 | 0.000 | 0.000 | -0.002 |

** is significant at $95 \%$ and * is significant at $90 \%$.

Table 3.6: Marginal effect of low- versus high-educated

|  | Same job |  |  | Unemployed | NP | Other job |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-24 | 24-34 | fulltime |  |  | 0-24 | 24-34 | fulltime |
| Small part-time job | 0.012 | -0.027 ${ }^{\text {² }}$ |  |  |  | -0.014 | -0.002 | -0.002 |
| Big part-time job | -0.049 | 0.114 | -0.043 | -0.003 | 0.007 | 0.004 | -0.023 | -0.006 |
| Fulltime job | -0.000 | $-0.007^{* *}$ | 0.009 | 0.004 | 0.008 | -0.000 | -0.002 | -0.013** |

** is significant at $95 \%$ and $*$ is significant at $90 \%$.

Table 3.7: Marginal effect of household characteristics

|  | Same job |  |  | Unemployed | NP | Other job |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-24 | 24-34 | fulltime |  |  | 0-24 | 24-34 | fulltime |
| Small parttime job |  |  |  |  |  |  |  |  |
| Not single | 0.051 | 0.000 | 0.002 | $-0.060^{* *}$ | 0.039 | -0.014 | -0.022 | 0.003 |
| Child under 5 | 0.093 | $-0.047^{* *}$ | 0.001 | -0.015 | -0.002* | -0.038 | 0.002 | 0.006 |
| Child born | -0.053 | -0.005 | -0.005 | 0.004 | $0.036{ }^{*}$ | 0.025 | -0.004 | 0.002 |
| Big part-time job |  |  |  |  |  |  |  |  |
| Child under 5 | 0.022 | -0.059 | -0.042 | 0.003 | -0.026 | 0.046 | $0.074^{*}$ | -0.018 |
| Child born | $0.137^{* *}$ | -0.189 | -0.038 | 0.001 | $0.098^{*}$ | 0.023 | -0.013 | -0.018 |
| Fulltime job |  |  |  |  |  |  |  |  |
| Hours householdcare | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | -0.002* |
| Hours childcare | 0.000 | 0.000 | -0.001 | 0.000 | 0.000 | 0.000 | 0.000 | $0.001^{*}$ |
| Not single | -0.001 | 0.005 | -0.005 | 0.002 | 0.003 | -0.007** | 0.002 | 0.000 |
| Partner has a job | 0.005 | 0.001 | -0.020 | -0.004 | 0.000 | $0.007 * *$ | 0.003 | 0.008 |
| Female, not single | $0.029^{* *}$ | 0.004 | $-0.024$ | -0.001** | $0.012^{* *}$ | 0.002 | -0.001 | -0.020 |
| Female child under 5 | 0.007 | $0.024^{* *}$ | $-0.132^{* *}$ | $0.072^{* *}$ | 0.004 | 0.004 | -0.001 | 0.022 |
| Female, child born | $0.064^{* *}$ | 0.014 | -0.236** | $0.050^{* *}$ | $0.079^{* *}$ | 0.021 | -0.003 | 0.010 |

** is significant at $95 \%$ and * is significant at $90 \%$.

Table 3.8: Marginal effect of job characteristics

|  | Same job |  |  | Unemployed | NP | Other job |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-24 | 24-34 | fulltime |  |  | 0-24 | 24-34 | fulltime |
| Small part-time job |  |  |  |  |  |  |  |  |
| No tenure | $-0.128^{* *}$ | 0.007 | 0.002 | 0.021 | 0.039* | $0.054^{* *}$ | -0.003 | $0.007^{* *}$ |
| Industry sector | -0.089 | 0.003 | 0.010 | -0.009 | $0.068^{*}$ |  | 0.011 | 0.004 |
| Public sector | -0.023 | $0.035^{* *}$ | 0.015 | -0.005 | -0.008 | -0.008 | -0.006 | -0.001 |
| Long tenure | -0.017 | 0.021* | -0.004 | -0.011 | 0.033 | -0.018 | -0.001 | -0.003 |
| Big part-time job |  |  |  |  |  |  |  |  |
| None of the job characteristics have a significant marginal effect |  |  |  |  |  |  |  |  |
| Fulltime job |  |  |  |  |  |  |  |  |
| Logaritm of net income | 0.000 | 0.000 | -0.007 | 0.001 | 0.001 | 0.000 | 0.001 | $0.004 *$ |
| No tenure | 0.001 | 0.007 | $-0.078 *$ | $0.019^{* *}$ | -0.001 | 0.002 | 0.004* | $0.045^{* *}$ |
| Big company | 0.001 | 0.005 | 0.018 | -0.006 | 0.003 * | -0.001 | 0.001 | -0.022** |
| Industry sector | -0.003 | -0.003 | 0.019 | 0.003 | 0.001 | -0.002 | -0.003 | -0.013* |
| Public sector | 0.002 | $0.015^{* *}$ | $0.032^{*}$ | -0.005 | 0.002 | 0.001 | 0.000 | -0.047 |
| Two jobs | 0.009 | $0.018^{*}$ | $-0.121^{* *}$ | 0.013 | -0.007 | $0.009^{* *}$ | $0.012 * *$ | $0.067^{* *}$ |
| Works overtime | 0.000 | -0.001 | -0.044** | -0.001 | 0.000 | 0.000 | 0.000 | $0.047^{* *}$ |
| Commute time > 30 min | 0.000 | 0.000 | -0.019 | 0.000 | 0.000 | 0.000 | 0.000 | $0.020^{*}$ |
| ** is significant at $95 \%$ and $*$ is significant at $90 \%$. |  |  |  |  |  |  |  |  |

## 4 Do transitions increase job satisfaction?

## Introduction

In the previous section we concluded that dissatisfaction with the job and discrepancies between the actual and the desired number of hours induced people to change to a different job. But do transitions lead to an increase in job satisfaction? That is the question we want to adress in this section.

## Changes in job satisfaction

Using the data from the 1996 and 1998 waves of the Labour Supply Panel we could find out whether respondents experienced an increase in job satisfaction, a decrease in job satisfaction or whether their job satisfaction remained the same. Our analysis deals only with those respondents that had a job both in 1996 and 1998. So, we leave out the ones that had a job in 1996, but were out of work in 1998. Owing to this selection bias may occur. It might be the case that some unobserved factors influence both the process that causes the change in job satisfaction and the process that causes the transition from employment to unemployment. This is a matter for further research.

We used an ordinal regression model to estimate the impact of transitions in the change in job satisfaction. For each working hours category (less than 24 hours, between 24 and 34 hours and more than 34 hours) a model was estimated. The outcomes are given in table 4.1. Two variables are significant in all three regressions: the degree of job satisfaction in 1996 and being in search of a new job in 1998. One obvious variable is not included, namely the change in the hourly wage rate. No reliable data for this variable was available.

For the category of 'small' part-timers ( $<24$ hours) both a transition to a different job and/or a different employers and a change from a temporary to a permanent contract have significantly positive effects. An increase in the number of hours worked has also a positive impact on job satisfaction, but it is only weakly significant. Having found a partners increases job satisfaction. Probably, this has to do with the fact that having a partner offers more opportunities to choose a job which is in agreement with the person's preferences. Relatively
less hours have to be spent on household activities and more hours are avaible to work in a job. One content-related work aspect that influences the change in job satisfaction is whether people work in the open air or not. Those who changed to a job in the open air are more likely to experience a decrease in job satisfaction.

For the group consisting of 'large' part-timers the change to a permanent contract has a positive and significant impact. Changes in the number of hours worked are weakly significant. Persons in this group that were dissatisfied with the number of hours worked in 1996 have a lower probability of an increase in job satisfaction. The probability of an increase in job satisfaction tends to increase with age for this group.

For those who worked more than 34 hours in 1996, neither a change to a permanent contract nor a change in working hours influence the change in job satisfaction. However, only very few members of this group experience such transitions. The change to a different job an/or employers does give rise to an increased job satisfaction. Furthermore, those who followed at least one training course between 1996 and 1998 are more likely to experience an increase in job satisfaction. Those in the age between 31 and 50 years are also more likely to experience such an increase. Finally two work-related aspects are relevant for this group. Those wo changed to work that is more repitative or more heavy, have less chance to experience an increase in job satisfaction.

Tabel 5.1 Estimation results ordenial regression model change in job satisfaction between 1996 and 1998

| Dependent variable: change in job satisfaction between 1996 and 1998 (decrease $=-1$; no change $=0$; increase=1) |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Working hours in 1996 |  |  |
| Explanatory variable | <24 | 24-34 | >34 |
| Threshold 1 | 2.383 (0.310) | 2.963 (0.515) | 2.746 (0.192) |
| Threshold 2 | 6.324 (0.383) | 6.692 (0.603) | 6.701 (0.226) |
| Degree of satisfaction in 1996 | 2.287 (0.142) | 2.298 (0.203) | 2.301 (0.073) |
| Labour contract has become permanent | 0.349 (0.174) | 0.569 (0.303) |  |
| Change to other function and/or other employer | 0.285 (0.177) |  | 0.369 (0.082) |
| Change to more hours worked | 0.255 (0.156) | 0.357 (0.254) |  |
| Change to less hours worked | 0.104 (0.197) | 0.303 (0.254) |  |
| Dissatisfied with hours worked in 1996 |  | -0.416 (0.211) |  |
| Found partner | 3.095 (1.380) |  |  |
| In search of other job in 1998 | -2.458 (0.279) | -1.627 (0.333) | -2.116 (0.141) |
| Work is no longer outside | 0.529 (0.310) |  |  |
| No change in work outside or inside | $0.349(0.237)$ |  |  |
| Training course followed |  |  | 0.160 (0.080) |
| Age |  | 0.021 (0.010) |  |
| Age between 31 and 50 years |  |  | 0.188 (0.070) |
| Work has become less heavy |  |  | 0.422 (0.174) |
| Work has remained equally heavy |  |  | 0.303 (0.122) |
| Work has become less repitative |  |  | $0.464(0.148)$ |
| Work has remained equally repitative |  |  | $0.341 \text { (0.117) }$ |
| -2loglikelihood | 431.379 | 648.436 | 1077.683 |
| Pseudo R-square <br> Nagelkerke | 0.397 | 0.377 |  |
| Nagelkerke | 0.397 | 0.377 | 0.384 |
| Number of observations | 1095 | 506 | 4050 |

## Changes in discrepancies between the actual and the desired number of hours

Also logit models have been estimated in which the reduction in the discrepancy between the actual and the desired number of hours ( 1 in case of reduction; 0 other) is explained from transitions and individual characteristics. As could be expected changes in the number of hours worked were significant for all three groups. The change from a temporary to a permanent contract is significant for small and large part-timers, but not for full-timers. Transitions to a different job and/or employer are only significant in case of full-timers. Full-
timers have an increasing chance of a reduction in the discrepancies as they grow older. For both small and large part-timers this chance seems to diminish with age. Gender is only significant in case of part-timers: female fulltimers have a higher chance of a reduction in the discrepancies than male full-timers. (IN THE FINAL PAPER THIS PART WILL BE EXTENDED AND THE ESTIMATION RESULTS GIVEN).

## 5 Conclusions

A lot of attention has been paid to the concept of transitional labour markets since its introduction by Schmid (1998). However, in our analysis we do not find evidence for the Netherlands that there is a structural increase in transition probabilities since the mid 1980s. During the last decade an increase in job mobility has occurred, but this was totally due to the improved labour market situation.

It is important that the labour market is sufficiently flexible to allow individuals to adapt their jobs to their preferences as much as possible. People may accept suboptimal jobs when they enter the labour market or when they are unemployed. Once in possession of a job, they can then try to find a new one which yields a higher utility. A suboptimal situation in the job may also arise when the household situation changes. Furthermore, people may be able to improve their job when they have acquired sufficient work experience, which allows them to take a new career step. A favourable labour market situation will, of course, make it more easy to find a better job.

From our analysis it appears that discrepancies between the actual and the desired number of hours worked significantly increase the probability of a transition. It is also more probable that a worker makes a transition when he is not fully satisfied with the job. Transitions lead to a significant reduction in the discrepancies and to a significant increase in job satisfaction.

Still, a considerable part of the working population experience discrepancies between the actual and the desired number of hours worked. Some 15 to 20 per cent of the working population indicates they the number of hours worked differs from the desired number. This figure did not change during the significant improvement in the labour market situation during the 1990s. Therefore, we conclude that still the labour market is not flexible enough. People need to have more opportunities to adjust their situation to their preferences and aspirations. Since 2001 a law applies that gives workers the right to adapt the number of hours worked. It is still to early to say what the impact of this law is in practice. The government is also intending to introduce a law which will make it possible for workers to save working days, which they can then take up at some other time as free time for a specific purpose (education, care-taking, etc.). When a worker takes up the time saved to use for education or other purposes the government gives a premium to partially account for the loss of income. This may also help workers to

## References (additional references to be added)

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## Appendix: additional tables

This appendix contains all the non-significant marginal effects removed from the tables in section 3.
Table B.1: Marginal effect of personal characteristics (insignificant)

|  | Same job |  |  | Unemploye d | NP | Other job |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-24 | 24-34 | fulltim e |  |  | 0-24 | 24-34 | fulltim <br> e |
| Small part-time job |  |  |  |  |  |  |  |  |
| Man $\dagger$ | 0.080 | 0.002 | 0.001 | -0.002 | -0.016 | 0-066 | -0.005 | 0.007 |
| Trend man $\dagger$ | -0.001 | -0.004 | -0.002 | 0.006 | 0.005 | -0.002 | -0.004 | 0.001 |
| Low educated | 0.005 | 0.000 | -0.003 | 0.006 | 0.004 | -0.013 | 0.005 | -0.004 |
| Big part-time job |  |  |  |  |  |  |  |  |
| Trend female | -0.001 | -0.059 | 0.007 | -0.001 | 0.005 | 0.005 | -0.009 | -0.000 |
| Low educated | -0.020 | 0.058 | -0.015 | -0.005 | -0.012 | -0.003 | 0.012 | -0.015 |
| High educated | 0.027 | -0.057 | 0.027 | -0.002 | -0.018 | -0.007 | 0.037 | -0.008 |
| Living in the North | -0.009 | 0.016 | -0.034 | 0.014 | -0.017 | 0.008 | 0.020 | 0.003 |
| Course taken | 0.003 | 0.083 | 0.001 | -0.006 | -0.056 | -0.012 | -0.006 | -0.007 |
| Fulltime job Trend female | -0.001 | 0.001 | 0.004 | 0.001 | -0.001 | 0.000 | 0.000 | 0.003 |

$\dagger$ Because most of the individuals with a small part-time job are female the reference category is female instead of male.
Table B.2: Marginal effect of household characteristics (insignificant)

|  | Same job |  |  | Unemployed | NP | Other job |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-24 | 24-34 | fulltime |  |  | 0-24 | 24-34 | fulltime |
| Small part-time job |  |  |  |  |  |  |  |  |
| Hours householdcare | 0.002 | -0.001 | 0.000 | 0.000 | -0.001 | 0.001 | -0.001 | 0.000 |
| Hours childcare | -0.003 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.000 | 0.000 |
| Partner has a job | 0.013 | 0.000 | -0.009 | 0.009 | -0.008 | 0.000 | 0.004 | -0.009 |
| Big part-time job |  |  |  |  |  |  |  |  |
| Hours householdcare | 0.002 | 0.000 | -0.002 | 0.000 | 0.002 | 0.000 | 0.000 | -0.001 |
| Hours childcare | -0.001 | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | -0.001 | -0.001 |
| Not single | 0.028 | 0.013 | 0.043 | -0.029 | 0.042 | -0.056 | -0.036 | -0.004 |
| Partner has a job | -0.001 | 0.012 | -0.034 | 0.012 | -0.016 | -0.006 | 0.046 | -0.013 |
| Female, not single | 0.088 | 0.024 | -0.108 | -0.002 | -0.039 | 0.074 | -0.021 | -0.016 |
| Fulltime job |  |  |  |  |  |  |  |  |
| Child under 5 | 0.002 | 0.010 | -0.004 | -0.001 | -0.002 | 0.001 | 0.000 | -0.006 |
| Child born | 0.000 | -0.003 | 0.016 | -0.003 | 0.003 | -0.002 | 0.004 | -0.016 |

Table B.3: Marginal effect of job characteristics (insignificant)

|  | Same job |  |  | Unemployed | NP | Other job |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-24 | $\begin{gathered} 24- \\ 34 \\ \hline \end{gathered}$ | fulltime |  |  | 0-24 | 24-34 | fulltime |
| Small part-time job |  |  |  |  |  |  |  |  |
| Logaritm of net income | 0.008 | -0.002 | -0.001 | 0.000 | -0.003 | -0.005 | 0.004 | 0.000 |
| Big company | 0.047 | -0.011 | -0.002 | -0.009 | 0.003 | -0.019 | -0.009 | 0.000 |
| Health sector | 0.049 | 0.007 | -0.010 | -0.004 | -0.016 | -0.023 | 0.000 | -0.003 |
| Big part-time job |  |  |  |  |  |  |  |  |
| Logaritm of net income | 0.013 | -0.015 | -0.011 | 0.007 | 0.003 | 0.001 | 0.002 | 0.002 |
| No tenure | 0.001 | -0.180 | 0.060 | 0.026 | 0.033 | 0.036 | 0.011 | 0.013 |
| Big company | -0.024 | 0.041 | -0.008 | -0.010 | 0.011 | -0.012 | 0.003 | -0.002 |
| Industry sector | -0.015 | 0.008 | 0.020 | -0.005 | 0.000 | -0.016 | -0.007 | 0.014 |
| Health sector | 0.023 | 0.019 | -0.054 | -0.009 | -0.010 | 0.017 | 0.041 | -0.027 |
| Public sector | -0.007 | 0.004 | 0.028 | -0.013 | 0.006 | -0.013 | 0.000 | -0.005 |
| Fulltime job |  |  |  |  |  |  |  |  |
| Health sector | -0.001 | 0.017 | 0.004 | 0.001 | 0.005 | 0.003 | 0.002 | -0.030 |


[^0]:    ${ }^{1}$ For a review of the literature and a more general discussion of the basic model, see Ehrenberg and Smith (1997).

[^1]:    ${ }^{2}$ The multinomial logit model puts a heavy restriction on the interdependence of the probabilities. We also tried more general models like the nested multinomial logit (see Greene (1997) and the heteroscedastic Extreme Value Model (see Bhat (1995)). However, we did not get convergence of neither of these models.
    ${ }^{3}$ The information on the transitions between 1985 and 1986, the first and second interview moment, are removed from the analyses because this concerns a one year period while all the other interviews are conducted every two years.

[^2]:    ${ }^{4}$ Other (partially) missing data was on the labour market situation of the partner (from 1992 on) and years of tenure at current employer (from 1994 on).

