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Not just whether, but also where

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Abstract

Using survey data of public sector employees in the Netherlands, this paper shows that workers' satisfaction with various job domains not only affects whether but also where workers search for another job. An intuitive pattern emerges. Workers try to leave their current employer when their job search is instigated by dissatisfaction with an organisation-specific job domain, like management. Conversely, more job-specific problems, like a lack of autonomy, lead workers to opt for another position within their current organisation. Dissatisfaction with job domains which may have an industry-specific component, such as job duties, drives workers out of their industry. These findings suggest that on-the-job experience provides workers with information about the quality of their own job as well as of other jobs in their organisation and industry.

Keywords: Job search, Job satisfaction, Public sector employees.

JEL-codes: J28, J45, J63, M54.

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1 Introduction

Labour mobility is an important phenomenon. It is a means to reduce inefficiencies arising from imperfect information about worker and job characteristics. Moreover, worker flows are needed to accommodate differences in growth between firms, industries, or nations. The mobility decision of an individual worker is based on his personal situation. When a new job opportunity yields higher expected utility than the current job, net of mobility costs, the worker changes jobs. Similarly, workers start searching for another job when they feel that some aspects of their current job can be improved upon. In the voluminous economics literature on the causes and consequences of labour mobility, much attention is paid to the role of easily measurable job aspects, like wages and working hours. Other job aspects have been studied less, mostly because it is not easy to obtain objective measures of, say, a worker's relations with his colleagues and superiors, or his enjoyment of tasks. Hence, one has to rely on workers' own assessment of these 'unmeasurable' job aspects in order to analyse their influence on labour mobility and job search.

Despite the traditional reluctance of economists to trespass on the area of subjective variables, the literature has identified several robust relations between subjective variables and actions of economic importance. Most notably, the negative effect of a worker's self-assessed job satisfaction on the probability that the worker quits his job is firmly established. The economics literature sparked by the effect of job satisfaction on turnover can be roughly divided into three branches. First, a number of studies delve into the determinants of job satisfaction. Most of these studies have tried to establish and explain links between socio-economic variables and workers' perception of their job. Second, following a vast literature in psychology, job satisfaction has been related to employees' intentions. Job satisfaction decreases turnover by increasing employees' willingness to stay in their current occupation, as reflected by their intentions to quit or their job search efforts. Third, the general concept of job satisfaction has been divided into satisfaction with several job domains. This allows for a ranking of the influence of domain job satisfaction on workers' decision to

quit.[1]

This paper attempts to initiate a fourth branch. We want to convey that satisfaction with specific job domains not only affects employees' decision *whether* to search for a new position, but that it also influences *where* they try to take up this new position. More precisely, we show that domain job satisfaction affects whether job seachers seek to change jobs within their organisation, seek to move to another organisation within their industry, or seek to leave their industry altogether. In other words, workers' satisfaction with specific job aspects relates to both the intensity and the direction of their job search efforts.

Using data from a survey conducted in 2003 among public sector employees in the Netherlands, this paper relates employees' self-proclaimed motives for searching for a new job to their decision on where to search. We show that when job search is triggered by dissatisfaction with rewards, work pressure, facilities at work, management, contract duration, or commuting time, employees are more likely to search outside their current organisation. By contrast, job search instigated by an upcoming restructuring, unsatisfactory working hours, or insufficient training opportunities lead workers to search for other jobs within their organisation. Moreover, the desire for a promotion appears to be an important motive behind internal job search, as workers who search out of dissatisfaction with financial prospects, future job duties, or autonomy are also more likely to search within their current organisation. Lastly, we analyse workers' decision whether to search for a new job within or outside their current industry, given that they seek to leave their current organisation. When commuting time or autonomy are important reasons for searching, workers are more likely to search within their industry. In contrast, workers for whom work pressure, job duties, or financial prospects are important reasons for searching for a new job are more likely to search outside their current industry.

Overall, the pattern of the effects of domain job satisfaction on the direction of workers' search efforts is rather intuitive. Employees dissatisfied with a job domain which varies little across jobs within an organisation, such as commuting time or management, try to leave their organisation.

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[1]An extensive overview of this literature is contained in Section 2.

On the contrary, when problems are job- rather than organisation-specific, as in case of a lack of autonomy, employees are more likely to try to improve their situation by changing positions within their current organisation. Dissatisfaction with job aspects that have an industry-specific component, like work pressure and job duties, may even drive employees out of their current industry. These findings suggest that on-the-job experience provides workers with information about the quality of their own job as well as about the quality of other jobs in their organisation and industry. Hence, workers use their on-the-job experience to decide both whether and where to look for alternative employment.

To sharpen intuition, consider a junior nurse on the lookout for a new job. If her job search is driven by a lack of autonomy, she may try to find a senior position in her current hospital. Conversely, she would prefer a job in another hospital if her dissatisfaction is caused by commuting time, whereas if she realises that her dissatisfaction stems from a dislike for caring for patients, she may decide to leave the industry altogether.

We make two other contributions to the literature, by replicating, and thereby strengthening, findings of earlier work. Our main motivation for these replications is to assess how our data compare to the data used in the literature. First, we show that many of the relations between socio-economic variables and job satisfaction found in the literature carry over to our sample of Dutch public sector workers. Second, we replicate the finding that job satisfaction has a strongly negative effect on workers' job search efforts. This holds for both overall job satisfaction as well as for satisfaction with nearly all job domains. Besides being interesting in their own right, these findings bolster our confidence that the main contribution of this paper carries over to the populations studied in earlier work.

The remainder of this paper is organised as follows. The next section discusses the literature on job satisfaction. Section 3 describes the survey and the data. Section 4 analyses the relation between job satisfaction and workers' decisions on whether and where to search for another job. Section 5 concludes.

2   Related Literature

Much of economists' work on job satisfaction has been inspired by findings that job satisfaction is related to labour mobility. Freeman (1978) shows that job satisfaction reduces the probability that a worker voluntarily leaves his job, even after controlling for several worker and job characteristics, including earnings. The robustness of this relation has been shown in subsequent work, see for instance the studies by Akerlof et al. (1988), Clark et al. (1998), and Kristensen and Westergard-Nielsen (2004).

A first line of research sparked by this negative effect of job satisfaction on the likelihood of a quit analyses the socio-economic determinants of job satisfaction. A series of studies use the 1991-wave of the British Household Panel Survey (BHPS). Clark (1997) finds that females report higher job satisfaction than males. He attributes this gender gap to lower aspiration levels of females, possibly due to less favourable labour market opportunities. Clark et al. (1996) find that job satisfaction is U-shaped in age. The authors argue that middle-aged workers may be better able to judge their current situation than younger workers, whereas older workers may leave the labour force when dissatisfied, or reduce their aspiration levels. Clark and Oswald (1996) find that job satisfaction decreases with educational attainment, and argue that this may stem from higher expectations of the better educated. Clark and Oswald (1996) also show that the number of hours worked is negatively related to job satisfaction, and that income has a positive but small effect. They argue that not absolute income, but income relative to some reference level matters to individuals. Even though this argument is appealing, it raises the issue of finding an appropriate measure of comparison income (cf. Lydon and Chevalier, 2002). Other findings from the BHPS 1991 are that being healthy, having a partner, and working in small establishments are positively related to job satisfaction (Clark, 1996).

Studies using other data sources have replicated most of these findings, although the specifications of the estimations vary substantially in the literature, mostly for data reasons. Especially the high job satisfaction of females has been widely documented (Lydon and Chevalier, 2002, Grund

and Sliwka, 2003, Ahn and Garcia, 2004, Bender et al., 2005).[2] Using US data, Bender et al. (2005) show that the gender gap vanishes once the estimation controls for (self-assessed) job flexibility, suggesting that women sort into jobs offering high flexibility. Furthermore, they confirm the negative effects of education, working hours, and organisational size on job satisfaction, as well as the positive effect of income. Ahn and Garcia (2004), using data from the European Community Household Panel survey (ECHP) 1994-2001, also find that job satisfaction decreases with education and increases with workers' health, and that the positive effect of income on satisfaction is moderate.[3] Using data from two cohorts of British university graduates, Lydon and Chevalier (2002) find a positive effect of income and negative effects of hours and establishment size. Grund and Sliwka (2003) use data from the German Socio-Economic Panel 1994-1995 and report similar effects for income, health, and education, but not for working hours.[4]

Following the psychological literature, another series of papers concludes that the negative effect of job satisfaction on labour mobility runs through workers' turnover intentions or job search behaviour.[5] Sousa-Poza and Henneberger (2004) find a strong negative relation between job satisfaction and intentions to quit in a cross-national analysis covering 25 countries, as do Shields and Price (2002) in a sample of British nurses. Using Finnish data, Böckerman and Ilmakunnas (2004) report strong relations between job satisfaction and both intentions to quit and job search. The link between turnover intentions or job search and ac-

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[2]Sousa-Poza and Sousa-Poza (2005) use Swiss data to show that dissatisfied women are not more likely to leave the labour force than dissatisfied males.

[3]Kaiser (2002) also uses ECHP data, but for a shorter period (1994-1997) and for a subset of 5 countries. He reports that both gender and education have a negligible impact on job satisfaction. A possible explanation for these deviant results is that his estimations do not include income as explanatory variable.

[4]Another finding that has received quite some attention is that union workers express lower levels of job satisfaction than non-union workers, see Clark (1996), Bender and Sloane (1998), and Heywood et al. (2002). Competing explanations for this phenomenon are sorting and unions encouraging workers to voice discontent. Our dataset does not include information on union membership.

[5]A meta-analysis of the psychological literature on job satisfaction, turnover intentions, and actual turnover establishes that job satisfaction and turnover intentions are strongly related, and that turnover intentions is the best predictor of actual turnover (Tett and Meier, 1993).

tual turnover has been established by e.g. Hartog et al. (1988), Hartog and Van Ophem (1996), and Keith and McWilliams (1999). Recently, Kristensen and Westergard-Nielsen (2004) show that job search is a good predictor of actual quits in Denmark.

Clark (2001) uses the first seven waves of the BHPS to show that not only overall job satisfaction, but also satisfaction with specific job domains correlates with the probability that a worker quits. Moreover, he ranks the importance of seven job domains with respect to their impact on turnover. Job security appears to be the most important job domain, followed by pay, the use of initiative, the work itself, and hours of work. Kristensen and Westergard-Nielsen (2004) perform a similar analysis using data from the ECHP for Denmark, and report that satisfaction with the type of work and with earnings have most predictive power, whereas satisfaction with job security appears to have little impact on the probability that a worker voluntarily leaves his job.

3   Data

In 2003, the Dutch Ministry of the Interior and Kingdom Relations undertook a large-scale survey among employees who worked continuously for one public sector organisation in 2002. Aggregate data were collected from the salary administration of the participating employers. A sample of 78,800 workers received a questionnaire, 28,312 workers returned it. Weights have been applied to reflect the aggregate information on gender, age, tenure, province, and wage.

The main purpose of the survey was to get insight into the job satisfaction of public personnel. Hence, the survey included questions on job satisfaction and on job search. We exclude 2,849 workers who reported a change in position within their employers' organisation in 2002 from the analysis, as these workers may have based their answers to the questions on search behaviour on the situation before rather than after their internal job change. Note that this implies that all respondents in the analysis held one position continuously throughout 2002. Furthermore, we remove 3,555 respondents for failure to comment upon their job search behaviour or job satisfaction, and another 1,897 respondents for non-response to

questions on personal or job characteristics except for earnings and size of the organisation.[6] This leaves us with a sample size of 20,011 respondents.

To assess workers' job satisfaction, respondents had to indicate, on a 5-point scale ranging from *'very dissatisfied'* to *'very satisfied'*, their satisfaction with 15 different job domains, as well as with their job in general. The part of the survey on job search started with the question *'Have you searched for another job or position in 2002?',* with possible answers *'No, not at all', 'Yes, I have been looking around',* and *'Yes, I have intensively searched for another job/position'.* Table 1 reports summary statistics for job satisfaction and job search intensity, as well as for the available worker and job characteristics.[7] Most respondents are satisfied with their job, as 55 percent claim to be somewhat satisfied with their job, and another 19 percent are very satisfied. Only 13 percent of the respondents express dissatisfaction. About 30 percent of the respondents indicate to have searched for another job or position. Of these, one out of six has searched intensively. Figure 1 shows the relation between job satisfaction and job search. Clearly, for workers who do not search for another job, the distribution of job satisfaction scores is much more skewed towards satisfaction than for workers who do search for another job. Hence, the probability that a worker tries to find another job decreases with his job satisfaction.

The relation between job search and job satisfaction also emerges from mean satisfaction scores. Table 2 relates the mean satisfaction scores for all job domains and for the job overall to job search intensity.[8] The mean satisfaction score for the job overall is 3.77 on a 5-point scale. This is

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[6]Excluding the 1,724 respondents who did not provide answers on either earnings or the size of their organisation has no effect on the results.

[7]'Married / cohabitating' and 'children' are dummy variables representing whether or not the worker has a partner and children, respectively. The education dummies depend on the highest attained level of schooling. 'Low education' consists of respondents with primary school and lower vocational education, and 'medium education' comprises respondents who completed high school or medium vocational education. Tenure is computed as the number of months from the starting date of the employment spell at the current employer up to December 2002. For the 203 respondents who gave only the starting year but not the starting month of this employment spell, we have set the starting month at July. For data reasons, respondents' age, monthly wage, and organisational size are given in categories.

[8]This is the only instance in this paper where we, for expositional reasons, treat the satisfaction scores as cardinal.

Figure 1: Job satisfaction and job search
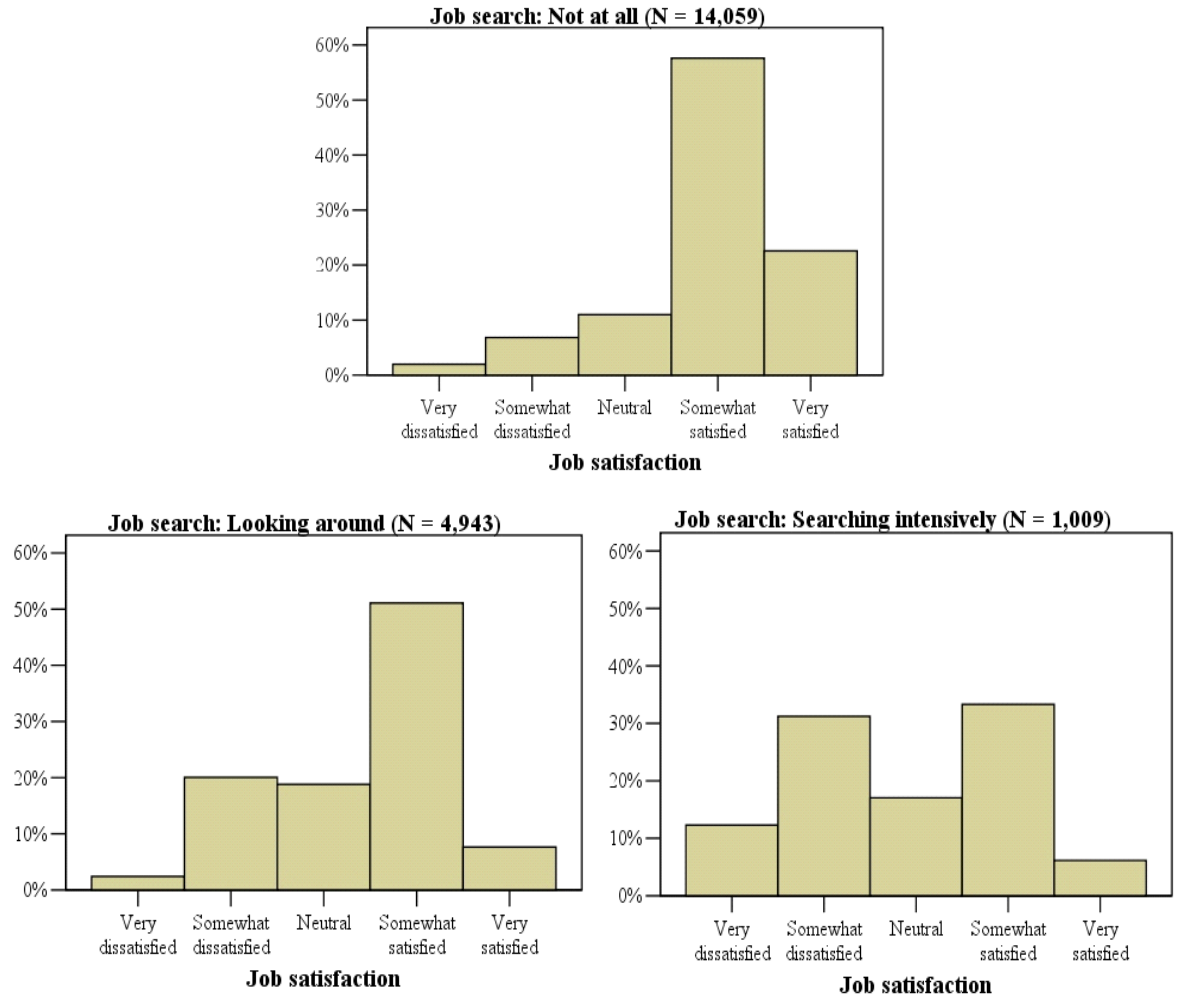
Data source: BZK, personeelsonderzoek 2003.

remarkably similar to mean satisfaction scores of 4.54 on a 6-point scale for French public sector workers and 5.42 on a 7-point scale for British public sector workers, as reported by Clark and Senik (2005) using data from the ECHP 1994-2001 and the BHPS 1991-2001, respectively. The Dutch public sector workers appear especially positive about their contract duration, commuting time, and job duties, but fairly negative about their financial prospects and work pressure. Job search intensity is negatively related to satisfaction with all job domains as well as to satisfaction with the job overall. The difference in mean satisfaction scores between workers

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who do not search at all and workers who search intensively is largest for the job overall, followed by atmosphere, (future) job duties, management, and autonomy.

Workers who indicated that they had searched for another job were subsequently asked why they started searching for another job. More precisely, job seekers had to indicate the importance of 19 different job aspects in their decision to start searching, on a 5-point scale ranging from *'very important'* to *'not important at all'*.[9] Moreover, the job seekers had to rank the three most important reasons to start searching. We use this information to construct 'reason-to-search' variables in the following way, as proposed by Mathios (1989). A reason-to-search variable is assigned the value 0 if the respondent did not consider this reason to search as important (3-5 on the 5-point scale), the value 1 if the respondent considered the reason to search important (1-2 on the 5-point scale), but did not indicate it as one of the three most important reasons to search, the value 2 if this reason to search was the third most important reason, the value 3 if this reason was the second most important reason, and the value 4 if it was the most important reason to search for a new job.[10]

Furthermore, job seekers were asked where they searched for another job: within their current organisation, within their current industry, and/or in other industries.[11] Table 3 lists the means of the reason-to-search variables for all job seekers together, as well as separated by the direction of

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[9]The four job domains added to the 15 job domains listed in Table 2 are 'threat of restructuring', 'threat of losing job', 'contractual hours', and 'combination of work and private life', see Table 3.

[10]As acknowledged by Mathios (1989), it is obvious that this specification imposes arbitrary weights on the answers regarding the importance of job domains. The robustness of our results is checked by using three different specifications. The first two specifications use only the most important reason for searching and the three most important reasons for searching (equally weighted), respectively. These specifications yield qualitatively similar results, but perform worse than the 0-1-2-3-4 specification in terms of explanatory power. Furthermore, we used a specification which imposes no structure of weights, by inserting a dummy variable for each level of importance of all job domains. Again, qualitatively similar results emerge.

[11]The survey distinguished between the following 14 public sector industries: the central government, three forms of local government (municipality, province, and water-government), the police, defense, the judicial system, academic hospitals, and six forms of education and research (primary, secondary, vocational, and higher vocational education, universities, and research institutes).

their search efforts.[12] The main reasons for searching appear to be pay, job duties, and management. Furthermore, Table 3 hints at the main message of this paper. The differences in the importance of the reason-to-search variables between the second, third, and fourth column point to a relation between workers' reasons for searching and the direction of their search efforts. For instance, workers who search within their organisation attach relatively much importance to autonomy and future job duties, and relatively little importance to work pressure and commuting time. Likewise, work pressure is more important in the decision to search for those who search for a new job outside their industry than for those who search within their industry. Sections 4.3 and 4.4 analyse these differences in greater detail.

4 Results

4.1 The determinants of job satisfaction

In this section, we analyse the socio-economic determinants of job satisfaction. We find that many of the findings in the literature, as discussed in Section 2, carry over to our sample of public sector workers in the Netherlands. Table 4 presents the results of an ordered logit estimation, where the dependent variable is workers' satisfaction with their job in general. The gender gap is present in the data: females are more positive about their job than males. The negative effect of education is also present, as well as the U-shaped relation between age and job satisfaction, which has its minimum in the early thirties. We further find that having a partner is positively related to job satisfaction, and that ethnic minorities express significantly lower job satisfaction.

The effect of earnings on job satisfaction is positive, but not particularly strong. It takes a monthly wage change of about 1500 euro to mimic the magnitude of the marginal effect of a change in gender on the proba-

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[12]As 1,060 out of the 5,952 job seekers in the sample did not answer all questions on their reasons for searching, and 98 job seekers did not indicate where they searched for another job, Table 3 is based on 4,794 observations. Note also that respondents were allowed to indicate more than one direction of their search efforts. Hence, respondents may appear in more than one column of Table 3.

bility that a worker expresses high job satisfaction.[13] In contrast to most earlier findings (and to economic intuition), the number of contractual hours appears to have hardly any effect on job satisfaction. The relation between job satisfaction and the size of the organisation is U-shaped, with employees in medium-sized organisations less satisfied than employees in small and large organisations. Tenure also has a U-shaped effect on job satisfaction, whereas labour market experience appears to have a negligible effect. Lastly, having a temporary contract has a negative, but statistically insignificant effect on job satisfaction.

To summarise, apart from the insignificant effect of working hours on job satisfaction, our findings on the relations between socio-economic characteristics of public sector workers in the Netherlands and their job satisfaction are well in line with findings of previous studies.

4.2   Job satisfaction and job search

Figure 1 and Table 2 showed that dissatisfied workers on average have higher search intensity than satisfied workers. In this section, we show that this result carries over to a multivariate analysis. Table 5 gives the results of an ordered logit estimation, where the dependent variable is workers' search intensity. In the first column, the estimation controls for the available worker and job characteristics. Most effects correspond to findings of earlier studies on the determinants of the incidence of on-the-job search without subjective variables (Pissarides and Wadsworth, 1994, Manning, 2003). We find that job search increases with educational attainment and decreases with age. The effect of experience and working hours is hump-shaped, the latter effect peaking at 31 hours. Females and employees in small organisations exert less search effort, singles exert more search effort, and minorities are not more likely to search for another job.

Our findings differ from Pissarides and Wadsworth (1994) and Manning (2003) only in that job search does not decrease with job tenure and with earnings. In our data, tenure has a hump-shaped effect on the probability that a worker is searching for another job, peaking at about 13 years. This also contrasts with economic theories in which long tenure is

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[13]These effects are evaluated at the sample means of the other explanatory variables.

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a sign of a good match (Jovanovic, 1979a) or related to the accumulation of job-specific capital (Jovanovic, 1979b). Two features of our data may account for this discrepancy. First, we have information about organisational tenure rather than job tenure, as workers were asked when they started working for their current employer. Second, to qualify for the survey, respondents should have worked continuously for one employer during the whole of 2002. Hence, there are no workers with less than 12 months of tenure in the sample. Our finding that a worker's wage has little effect on job search intensity may be due to the crudeness of the wage data. The expected negative effect of salary on job search is probably picked up by the more detailed data on tenure and experience.

The second column of Table 5 adds a dummy representing dissatisfaction with the job in general. This dummy takes the value 1 when the respondent reported to be either somewhat dissatisfied or very dissatisfied with the job in general (1-2 on the 5-point scale). Clearly, dissatisfied workers search more intensively than satisfied workers, corresponding to findings by Shields and Price (2002), Sousa-Poza and Henneberger (2004), and Böckerman and Ilmakunnas (2004). A change in this dummy variable from satisfied to dissatisfied decreases the probability that a worker does not search at all by more than 30 percentage points.

In the third column, the dummy for overall job dissatisfaction is replaced by similar dummies for domain job dissatisfaction. For most job aspects, dissatisfaction raises search intensity significantly. The main instigators of job search appear to be dissatisfaction with (future) job duties, followed by dissatisfaction with the atmosphere at work, commuting time, and autonomy. The main exception is dissatisfaction with facilities at work, which has a negative effect on search intensity. Clark (2001) and Kristensen and Westergard-Nielsen (2004) relate satisfaction with 7 job domains to quit behaviour of British and Danish workers, respectively. For British workers, dissatisfaction with job security correlates most with the probability that a worker quits, followed by pay, the use of initiative, and the work itself. For Danish workers, type of work appears most important, followed by earnings. Given the lack of a job domain reflecting job security in our data, our findings are well in line with these studies, apart from a somewhat smaller effect of financial rewards on job search

intensity.[14]

Overall, the findings concerning the socio-economic determinants of job satisfaction and job search and the relation between job search and job satisfaction in our sample of Dutch public sector workers appear well in line with previous research. This enhances our confidence that the more novel findings in the remainder of this paper are also applicable to the populations studied in earlier work.

4.3 Direction of search efforts: within or outside the current organisation

One of the leading models of labour mobility treats jobs as experience goods (Johnson, 1978, Jovanovic, 1979a). A worker is initially imperfectly informed about her valuation of a job. Over time, the worker learns about the quality of the match. If the match turns out to be sufficiently bad, the worker will seek another job.

Yet, the information workers obtain is not confined to their own job. Workers' on-the-job experience also generates information on jobs related to their own job. In particular, workers learn about other jobs in their organisation, be it through gossip or through observing the implementation of organisational policy. This bears on job search behaviour. Workers who become sufficiently dissatisfied with a disamenity present in every job in their current organisation will search for a job outside rather than within the organisation. For instance, for many organisations, the top management and an employee's commuting time vary little across jobs within the organisation. Other job aspects, however, may vary sufficiently to make an internal job change a viable option. For instance, a police officer who moves from a junior to a senior position within his department gets more responsibility, but may not improve his relation with the department chief.

Organisation-specific problems should thus drive workers out of their organisation, whereas more job-specific problems may be solved by internal job search. Unfortunately, not all job domains are easily classified as

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[14]The ranking of the strength of the effects of domain job satisfaction on job search is largely preserved when the effects are estimated by including the satisfaction variables one by one in the estimation, as in Clark (2001) and Kristensen and Westergard-Nielsen (2004), rather than simultaneously.

either job-specific or organisation-specific. Some employees may obtain a higher wage or nicer job duties by taking up another position within their current organisation, whereas other employees may be stuck in a given job category and, hence, need to leave the organisation in order to improve upon these job domains. Similarly, a restructuring may reduce the number of jobs within an organisation, but may also provide opportunities for promotion. For several job domains, however, the classification is clear. Although counterexamples are available, problems with commuting time and management are mostly organisation-specific. Problems with contract duration are also organisation-specific, as contract duration only hinders workers whose fixed-term contracts are not renewed and, hence, have little chance of obtaining another position within their organisation. Conversely, a lack of autonomy is primarily a job-specific problem.

To evaluate the effect of workers' reasons for searching on the direction of their job search efforts, we estimate a logit model where the dependent variable takes the value zero if the respondent directed his search efforts solely towards his current organisation (909 respondents), and the value 1 if the respondent searched only outside the organisation (2,989 respondents). To create a clear distinction between workers who search within and workers who search outside their organisation, we leave the 896 respondents who searched both within and outside their organisation out of the analysis. Table 6 reports the results of the estimation as well as marginal effects for all independent variables.[15]

Age has the expected negative effect, indicating that older workers are more inclined to stay in their organisation, although the effects are not statistically significant. Better educated employees are more likely to search for a job at other firms, which reflects that the knowledge and skills of better educated employees have wider applicability. For instance, job seekers with a university diploma are 16 percentage points more likely to search for a new employer than job seekers who did not finish high school. The obvious explanation for the finding that employees in large organisations are more likely to search within their organisation than employees in

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[15]Marginal effects are evaluated at the sample means of the independent variables. For dummy variables, it gives the effect of a change in the value of the dummy variable from zero to one on the predicted probability that the dependent variable equals one, with the other variables held at their sample means.

smaller organisations is that larger organisations offer more opportunities for internal job change.

The reason-to-search variables are included in the second column of Table 6. Jointly, the reason-to-search variables are highly significant, and several are individually significant as well. As hypothesised, we find that workers who search for a new job because of their contract duration, commuting time, or problems with management are less likely to search within their own organisation. Similarly, when work pressure is a reason to search for a new job, workers are also more likely to search outside their organisation. This can be explained by differences in organisational culture between firms, as well as by an industry-wide shortage of personnel with certain qualifications. Workers who seek higher rewards also search primarily outside their current organisation, as well as workers who face problems with facilities at work.

The magnitude of these effects is substantial. The column with marginal effects gives the effect of a one-point increase in the reason-to-search variables on the probability that a worker searches outside the current organisation. Given the 0-1-2-3-4 specification of the reason-to-search variables, the difference in this probability between workers for whom a reason to search is most important in the decision to start searching and workers for whom the reason to search is not important is about four times the marginal effect.[16] Evaluated at the sample means of the other variables, workers for whom rewards or personnel management is the most important reason to start searching are 11 percentage points more likely to search outside their organisation than workers who do not consider these reasons to search important. For commuting time, this difference is 16 percent.

Other reasons for searching relate to internal job search. An upcoming restructuring does not chase away employees, but rather induces them to search for a new position within their organisation. Workers who are not content with the number of contractual hours or with the opportunities for training also search relatively often within their current organisation.

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[16]The nonlinear nature of the logit model and the relatively high fraction of job seekers who search outside their current organisation imply that this difference is actually somewhat smaller (larger) than four times the marginal effect for reason-to-search variables which have a positive (negative) effect on the probability to search outside the organisation.

Böheim and Taylor (2004) show indeed that within-employer mobility facilitates the adjustment of work hours in the direction desired by employees. Yet, between-employer mobility improves this adjustment even more, see also Altonji and Paxson (1992). The result on training can be explained by observing that many firms cater an employee's training opportunities to the skills needed for his job, implying that training opportunities differ across jobs within the organisation. For instance, Oosterbeek (1996) shows that workers in low-level jobs have less opportunities for training than workers in higher-level jobs.

Several findings point to one important driving force behind internal job search: the benefits that accompany a promotion. Employees searching for better financial prospects, nicer job duties in the future, or more autonomy are more likely to search within their organisation. Each of these job aspects may be improved upon by internal promotion. The finding that rewards as a reason for job search has a positive effect on the probability that a workers searches elsewhere, whereas job duties has a negligible effect is not inconsistent with the promotion argument. Admittedly, current rewards are often improved by a promotion. Yet, workers who think that they earn too little in their current organisation may feel undervalued and, hence, conclude that they are more likely to obtain a better salary somewhere else. Furthermore, job duties are often attached to a specific job and may therefore be changed by an internal as well as an external job change.

Especially the effect of autonomy is strong. Workers for whom autonomy is the most important reason to search for another job are 18 percentage points more likely to search within the organisation than workers who do not consider autonomy important. For financial prospects and future job duties, this difference is about 7 percentage points.[17]

The broad pattern of these findings is in line with the argument that workers with organisation-specific reasons for searching are more likely

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[17]These effects can add up to large differences between workers. For instance, a worker who ranks autonomy as the most important reason to search for another job, followed by future job duties and financial prospects, is more than 50 percentage points more likely to search within the organisation than a worker for whom commuting time is the most important reason to search, personnel management second most important, and rewards third most important.

to try to leave the organisation than workers with job-specific reasons for searching. To recap, problems with commuting time, management, contract duration, work pressure, facilities, and rewards lead workers to seek for a new employer. An upcoming restructuring, inconvenient hours, and insufficient training opportunities lead workers to opt for other jobs within their organisation. A further reason behind internal job search is the desire to advance, as workers striving for better financial prospects, nicer job duties in the future, and more autonomy search more often within their current organisation.

4.4 Direction of search efforts: within or outside the current industry

Given that a worker decides to direct his search efforts outside his current organisation, does he focus on other organisations within the current industry of employment, or does he seek to leave the industry? The last part of the analysis is devoted to this question. Again, a worker's decision may be influenced by his experience in the current job. For, besides learning about jobs within the organisation, workers also learn about some features of jobs within the industry. The jobs within an industry open to a single worker often have some features in common. For example, the activities of most faculty personnel include a mix of teaching, research, and management. When dissatisfaction is caused by a job domain which has an industry-specific component, a change in industry may be necessary to alleviate the discomfort.

For many job domains, the strength of the influence of industry is hard to assess, and probably differs across industries. Yet, two job domains that are likely to be partially determined by industry are job duties and work pressure. Intuitively, a nurse who dislikes caring for patients has little to gain from moving to another hospital. Furthermore, given that wage bargaining takes place at industry-level in most public sector industries in the Netherlands, we would expect that workers who search for better rewards and financial prospects also seek employment outside their current industry.

From the 2,989 job seekers who did not search within their organisa-

tion, 1,335 respondents searched only within their current industry, and 1,106 respondents searched in other industries. For clarity, we leave out the remaining 548 respondents who searched both within and outside their current industry. We estimate a logit model where the dependent variable takes the value 0 if the respondent searched for another job within the current industry, and the value 1 if the respondent searched in other industries. The results are given in Table 7.

Earnings and size of the organisation have most explanatory power. Earnings are negatively related to the probability that workers seek jobs in other industries. Better-paid employees probably have relatively more to lose from a switch in industry, due to industry-specific skills.[18] Size of the organisation is positively related to the probability that employees search in other industries. Hence, together with the relation between internal job search and size described in the previous subsection, the pattern is as follows: job seekers in large organisations are more likely to search within their current organisation, but given that they intend to leave the organisation, they are more likely to intend to leave the industry altogether. This may be explained by observing that employees in large organisations have more opportunities to solve problems at work unrelated to industry by an internal job change than employees in small organisations. Hence, given that an internal job change is not sufficient, employees in large organisations may more often need to change industry in order to alleviate their dissatisfaction.

The reason-to-search variables are included in the second column of Table 7. Jointly, the reason-to-search variables are statistically significant, although their explanatory power is considerably smaller than in Table 6. Most reason-to-search variables appear to have a negligible effect on workers' decision to stay in or leave their industry. Still, we find that when work pressure or job duties triggered job search, employees are more likely to be aiming at leaving the industry. As argued above, these job aspects may have an industry-specific component. Dissatisfaction with financial prospects is also positively related to the probability that a worker seeks to leave the industry, but, in contrast to our expec-

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[18]Neal (1995) shows that displaced workers suffer smaller wage losses when they find re-employment in their predisplacement industry than if they move to another industry.

tations, the effects of dissatisfaction with rewards and future job duties are indeterminate. Conversely, when commuting time or autonomy are important in the decision to start searching, workers are more likely to search within their industry. Dissatisfaction with contractual hours works in the same direction, although the effect is not statistically significant. A possible explanation for the negative effect of autonomy on the probability that workers search outside their industry is that knowledge and skills needed to work independently or to supervise others may be less transferable between industries than within an industry.

The effect of job duties is strongest. Workers for whom job duties is the most important reason to search are 14 percentage points more likely to search outside their industry than workers who do not consider job duties important, evaluated at the sample means of the other variables. For work pressure and financial prospects, these figures are 9 and 12 percentage points, respectively, whereas workers for whom commuting time or autonomy is most important are 13 percent less likely to search outside their industry than workers who do not consider these reasons for searching important.

5 Concluding remarks

The economics literature on job satisfaction has shown that workers' satisfaction with their job influences their behaviour on the labour market, most notably their choice to stay in or leave their job. Besides confirming this finding in a large sample of employees in the Dutch public sector, this paper shows that workers' satisfaction with specific job domains yields information on the direction of their job search efforts. The emerging pattern is intuitive: dissatisfaction with job domains which are largely constant across jobs within an organisation leads workers to seek employment outside their current organisation. On the other hand, when job search is instigated by job domains that are job-specific, workers are more inclined to seek for another position within their current organisation. Furthermore, given that workers decide not to search within their current organisation, they are more likely to intend to leave their industry altogether when their job search is instigated by job domains which are likely

to have an industry-specific component.

These findings suggest that workers use information obtained through their on-the-job experience to update their expectations on both their own and other jobs. This information thus aides them in deciding whether and where to look for alternative employment. In this respect, our findings relate to Neal (1999). He distinguishes between job mobility and career mobility, the latter empirically defined as a change in both industry and occupation. Discussing evidence that workers first choose a suitable career and subsequently a suitable job, Neal argues that *"many workers are apparently using on-the-job experience as a means of gaining information about possible careers"* (p. 239).

A potential drawback of our data is that it consists of employees who did not change jobs in 2002. This implies that there may be a sorting effect, insofar as those who did change jobs in 2002 differed in their motives for job search from those who stayed in their job. In a closely related paper, Delfgaauw (2005) analyses the relation between job movers' reasons for quitting their initial job and their decision to stay in or leave the industry, using similar survey data of job-to-job movers who either started or ended an employment spell at a public sector organisation in the Netherlands in 2001. Hence, for industry change, we can compare the intentions of the job seekers in the present sample to the motives of the job movers in Delfgaauw (2005). Job movers were more likely to have left the industry when financial prospects, work pressure, and job duties were important in their decision to quit, resembling the intentions of job seekers in the present sample. Similarly, dissatisfaction with commuting time and contractual hours had a negative effect on the likelihood of a change in industry. In contrast to the present findings — but in line with the main argument — workers who quit for rewards and future job duties were more likely to have left the industry. Workers dissatisfied with management were also more likely to have left their industry, while a quit for training and the atmosphere at work was negatively related to the probability of a change in industry. Threats of restructuring and job loss and dissatisfaction with the combination of work and private life have statistically insignificant effects in both studies. Hence, although there are some differences, the lack of actual job movers in the present sample does not

appear to drive the main results.[19]

One critique on relating job satisfaction to job search is that job search may be nothing more than an alternative measure of job satisfaction (cf. Clark, 2001). A more tangible measure of job search behaviour is whether or not an employee has actually applied for another job or position. In our sample, almost 59 percent of the job seekers said to have applied for another job in 2002. There is a clear distinction by search intensity, as 52 percent of the respondents who were 'looking around' had applied for another job, against 89 percent of the respondents who 'searched intensively'. Replacing search intensity by the application decision as our measure of job search has no qualitative effect on our findings. Hence, we feel confident that domain job satisfaction not only affects workers' decision where to search for another job, but also bears on actual quit behaviour.

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[19]Besides sorting, two other factors may account for the differences between Delfgaauw (2005) and the present paper. First, the survey among job movers had more detailed information on respondents' wages, but no data on organisational size. Second, the survey on quit behaviour was conducted one year before the survey on search behaviour. In 2001, the labour market was tight after the boom at the turn of the century, while in 2002 the Dutch economy came to a virtual standstill. Consequences of the downturn may have been that public sector jobs became more attractive relative to private sector jobs, and that less vacancies were present.

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Table 1: Descriptive Statistics

Variables	Mean	SD
Female	0.449	
Minority	0.034	
Age:		
15 - 19	0.004	
20 - 24	0.042	
25 - 29	0.085	
30 - 34	0.116	
35 - 39	0.133	
40 - 44	0.175	
45 - 49	0.174	
50 - 54	0.165	
55 - 59	0.089	
60 - 69	0.018	
Married / cohabitating	0.806	
Children (dummy)	0.538	
Low education	0.139	
Medium education	0.245	
Higher vocational education	0.438	
University	0.179	
Tenure (in months)	151.085	121.717
Experience (in years)	20.163	10.536
Contractual hours	32.751	8.244
Temporary contract	0.083	
Monthly wage (euro):		
Less than 1250	0.096	
1251 - 1500	0.074	
1501 - 1750	0.085	
1751 - 2000	0.103	
2001 - 2500	0.183	
2501 - 3000	0.140	
3001 - 3500	0.118	
3501 - 4000	0.067	
4001 - 4500	0.040	
4501 - 5000	0.023	
More than 5000	0.031	
No response	0.040	
Size (number of employees):		
0 - 10	0.006	
11 - 20	0.024	
21 - 50	0.064	
51 - 100	0.075	
101 - 500	0.281	
501 - 1000	0.100	
1001 - 5000	0.225	
More than 5000	0.181	
No response	0.044	
Job satisfaction:		
Very dissatisfied	0.023	
Somewhat dissatisfied	0.110	
Neutral	0.130	
Somewhat satisfied	0.550	
Very satisfied	0.187	
Job search:		
Not at all	0.703	
Looking around	0.247	
Searching intensively	0.050	
Observations		20,011

Data source: BZK, Personeelsonderzoek 2003.

Table 2: Mean satisfaction scores

Satisfaction with	All	Job search intensity		
		Not at all	Looking around	Searching intensively
Job overall	3.77	3.95	3.46	2.99
Contract duration	4.20	4.25	4.15	3.91
Rewards	3.31	3.41	3.12	3.10
Financial prospects	2.61	2.71	2.40	2.34
Work pressure	2.82	2.87	2.71	2.74
Facilities at work	3.18	3.21	3.14	3.08
Physical working conditions	3.10	3.18	2.96	2.89
Job duties	4.02	4.19	3.71	3.45
Future job duties	3.48	3.68	3.11	2.89
Education / training opportunities	3.41	3.54	3.18	2.92
Atmosphere at work	3.94	4.13	3.62	3.30
Commuting time	4.08	4.18	3.88	3.78
Personnel management	2.98	3.15	2.67	2.44
Management of the organisation	2.88	3.04	2.58	2.43
Style of leadership	3.02	3.21	2.66	2.40
Autonomy / responsibility	3.97	4.12	3.69	3.41
Observations	20,011	14,059	4,943	1,009

Data source: BZK, Personeelsonderzoek 2003.

Table 3: Means of the reason-to-search variables

Reasons to search	All	Direction of search effort		
		In current organisation	In current industry	Outside current industry
Threat of restructuring	0.30	0.40	0.26	0.30
Threat of losing job	0.18	0.22	0.18	0.20
Contract duration	0.25	0.26	0.26	0.29
Rewards	0.79	0.66	0.83	0.82
Financial prospects	1.00	1.11	0.96	1.00
Work pressure	0.84	0.67	0.86	1.00
Facilities at work	0.31	0.26	0.33	0.36
Physical working conditions	0.36	0.35	0.35	0.41
Job duties	1.01	1.11	0.93	1.02
Future job duties	1.22	1.45	1.19	1.15
Education / training opportunities	0.47	0.60	0.43	0.43
Atmosphere at work	0.88	0.84	0.91	0.89
Contractual hours	0.25	0.25	0.25	0.26
Combination of work and private life	0.57	0.51	0.55	0.58
Commuting time	0.56	0.34	0.67	0.55
Personnel management	0.89	0.77	0.91	0.99
Management of the organisation	1.01	0.93	1.03	1.10
Style of leadership	1.08	1.02	1.13	1.13
Autonomy / responsibility	0.94	1.20	0.86	0.78
Observations	4,794	1,806	2,505	2,234

Data source: BZK, Personeelsonderzoek 2003

Table 4: The determinants of job satisfaction (ordered logit)

Variable	Coefficient	(SE)
Female	0.303	(0.035)***
Minority	-0.400	(0.074)***
Age:		
25 - 29	-0.132	(0.082)
30 - 34	-0.200	(0.088)**
35 - 39	-0.121	(0.098)
40 - 44	-0.041	(0.105)
45 - 49	-0.066	(0.112)
50 - 54	0.053	(0.117)
55 - 59	0.257	(0.126)**
60 - 69	0.639	(0.161)***
Married / cohabitating	0.174	(0.037)***
Children (dummy)	0.042	(0.032)
Medium education	-0.009	(0.047)
Higher vocational education	-0.247	(0.050)***
University	-0.330	(0.062)***
Tenure (in months/10)	-0.019	(0.005)***
Tenure^2/1000	0.004	(0.001)***
Experience (in years)	-0.009	(0.009)
Experience^2/10	-0.013	(0.018)
Contractual hours	-0.007	(0.009)
Contractual hours^2/10	0.005	(0.016)
Temporary contract	-0.087	(0.055)
Monthly wage (euro):		
1251 - 1500	0.139	(0.071)*
1501 - 1750	0.175	(0.072)**
1751 - 2000	0.036	(0.071)
2001 - 2500	0.100	(0.068)
2501 - 3000	0.185	(0.073)**
3001 - 3500	0.317	(0.078)***
3501 - 4000	0.492	(0.088)***
4001 - 4500	0.543	(0.101)***
4501 - 5000	0.524	(0.118)***
More than 5000	0.959	(0.113)***
No response	0.139	(0.089)
Size (number of employees):		
0 - 10	0.248	(0.178)
11 - 20	0.232	(0.102)**
21 - 50	-0.111	(0.073)
51 - 100	-0.172	(0.067)**
101 - 500	-0.049	(0.051)
501 - 1000	-0.076	(0.060)
1001 - 5000	-0.093	(0.047)**
No response	-0.193	(0.076)**
Industry dummies	YES	
Thresholds		
Very dissatisfied	-4.203	(0.170)***
Somewhat dissatisfied	-2.338	(0.165)***
Neutral	-1.480	(0.164)***
Somewhat satisfied	1.073	(0.164)***
Observations	20,011	
Nagelkerke's R^2	0.028	

Data source: BZK, Personeelsonderzoek 2003.

* significant at the 0.10 level. ** significant at the 0.05 level. *** significant at the 0.01 level.

Table 5: The determinants of job search (ordered logit)

Variable	Coefficient	(SE)	Coefficient	(SE)	Coefficient	(SE)
Female	-0.283	(0.040)***	-0.244	(0.041)**	-0.243	(0.042)***
Minority	0.009	(0.086)	-0.110	(0.088)	-0.155	(0.093)*
Age:						
25 - 29	-0.092	(0.093)	-0.117	(0.095)	-0.188	(0.099)*
30 - 34	-0.085	(0.101)	-0.151	(0.102)	-0.302	(0.106)***
35 - 39	-0.317	(0.114)***	-0.391	(0.115)***	-0.586	(0.120)***
40 - 44	-0.311	(0.123)**	-0.382	(0.125)***	-0.543	(0.130)***
45 - 49	-0.365	(0.131)***	-0.450	(0.133)***	-0.617	(0.138)***
50 - 54	-0.642	(0.138)***	-0.725	(0.140)***	-0.852	(0.145)***
55 - 59	-1.467	(0.159)***	-1.534	(0.161)***	-1.680	(0.168)***
60 - 69	-2.340	(0.303)***	-2.391	(0.306)***	-2.382	(0.314)***
Married / cohabitating	-0.086	(0.044)**	-0.045	(0.045)	-0.017	(0.046)
Children (dummy)	0.066	(0.038)*	0.091	(0.039)**	0.079	(0.040)*
Medium education	0.208	(0.056)***	0.248	(0.058)***	0.290	(0.060)***
Higher vocational education	0.446	(0.061)***	0.437	(0.063)***	0.417	(0.066)***
University	0.507	(0.074)***	0.470	(0.076)***	0.393	(0.079)***
Tenure (in months/10)	0.048	(0.006)***	0.048	(0.006)***	0.042	(0.006)***
Tenure^2/1000	-0.015	(0.002)***	-0.015	(0.002)***	-0.014	(0.002)***
Experience (in years)	0.039	(0.011)***	0.042	(0.011)***	0.051	(0.011)***
Experience^2/10	-0.080	(0.023)***	-0.094	(0.024)***	-0.118	(0.025)***
Contractual hours	0.031	(0.012)***	0.031	(0.012)**	0.025	(0.012)**
Contractual hours^2/10	-0.051	(0.020)**	-0.050	(0.021)**	-0.046	(0.021)**
Temporary contract	0.123	(0.063)*	0.062	(0.064)	0.075	(0.071)
Monthly wage (euro):						
1251 - 1500	0.030	(0.086)	0.044	(0.088)	0.061	(0.092)
1501 - 1750	0.007	(0.086)	0.047	(0.088)	0.096	(0.091)
1751 - 2000	0.122	(0.084)	0.115	(0.086)	0.157	(0.090)*
2001 - 2500	0.142	(0.081)*	0.159	(0.083)*	0.216	(0.086)**
2501 - 3000	0.175	(0.088)**	0.216	(0.089)**	0.313	(0.093)***
3001 - 3500	0.064	(0.093)	0.124	(0.095)	0.228	(0.100)**
3501 - 4000	0.037	(0.105)	0.128	(0.107)	0.304	(0.112)***
4001 - 4500	-0.005	(0.120)	0.063	(0.122)	0.252	(0.128)**
4501 - 5000	0.129	(0.138)	0.239	(0.140)*	0.527	(0.146)***
More than 5000	-0.014	(0.133)	0.103	(0.136)	0.369	(0.142)***
No response	0.112	(0.106)	0.173	(0.108)	0.161	(0.113)
Size (number of employees):						
0 - 10	-0.582	(0.252)**	-0.644	(0.257)**	-0.479	(0.263)*
11 - 20	-0.208	(0.127)	-0.204	(0.129)	-0.078	(0.135)
21 - 50	-0.062	(0.087)	-0.110	(0.089)	-0.025	(0.093)
51 - 100	-0.094	(0.079)	-0.131	(0.080)	-0.043	(0.083)
101 - 500	-0.018	(0.059)	-0.052	(0.060)	0.039	(0.062)
501 - 1000	0.083	(0.068)	0.066	(0.070)	0.096	(0.073)
1001 - 5000	0.124	(0.053)**	0.078	(0.054)	0.099	(0.056)*
No response	-0.063	(0.091)	-0.099	(0.093)	-0.047	(0.097)
Dissatisfaction with:						
Job overall			1.445	(0.043)***		
Contract duration					0.197	(0.079)**
Rewards					0.120	(0.042)***
Financial prospects					0.302	(0.039)***
Work pressure					-0.047	(0.037)
Facilities at work					-0.205	(0.041)***
Physical working conditions					0.023	(0.039)
Job duties					0.549	(0.062)***
Future job duties					1.053	(0.050)***
Education / training					0.154	(0.044)***
Atmosphere at work					0.803	(0.052)***
Commuting time					0.537	(0.051)***
Personnel management					0.145	(0.046)***
Management of the organisation					0.252	(0.045)***
Style of leadership					0.296	(0.042)***
Autonomy / responsibility					0.503	(0.059)***
Industry dummies	YES		YES		YES	
Thresholds						
No job search	1.519	(0.203)***	1.692	(0.207)***	2.245	(0.214)***
Looking around	3.668	(0.205)***	3.948	(0.210)***	4.740	(0.217)***
Observations	20,011		20,011		20,011	
Nagelkerke's R^2	0.087		0.150		0.262	

Data source: BZK, Personeelsonderzoek 2003.

* significant at the 0.10 level. ** significant at the 0.05 level. *** significant at the 0.01 level.

Table 6: The determinants of the decision to search within or outside the organisation (logit)

Dependent variable: 0 = searching within organisation, 1 = searching outside organisation

Variables	Coefficient	(SE)	Marginal effect	Coefficient	(SE)	Marginal effect
Female	-0.047	(0.106)	-0.007	-0.186	(0.115)	-0.026
Minority	-0.166	(0.222)	-0.027	-0.160	(0.242)	-0.023
Age:						
25 - 29	0.006	(0.241)	0.001	0.101	(0.265)	0.013
30 - 34	-0.199	(0.253)	-0.032	-0.170	(0.279)	-0.024
35 - 39	-0.170	(0.292)	-0.027	-0.015	(0.320)	-0.002
40 - 44	-0.434	(0.314)	-0.073	-0.283	(0.345)	-0.041
45 - 49	-0.561	(0.338)*	-0.097	-0.460	(0.370)	-0.069
50 - 54	-0.587	(0.357)	-0.103	-0.594	(0.391)	-0.093
55 - 69	-0.588	(0.419)	-0.107	-0.666	(0.454)	-0.110
Married / cohabitating	-0.057	(0.116)	-0.009	-0.040	(0.125)	-0.005
Children (dummy)	0.148	(0.101)	0.023	0.128	(0.110)	0.018
Medium education	0.505	(0.140)***	0.072	0.499	(0.151)***	0.062
Higher vocational education	0.850	(0.156)***	0.129	0.955	(0.169)***	0.126
University	1.340	(0.194)***	0.165	1.576	(0.212)***	0.161
Tenure (in months/10)	-0.002	(0.016)	0.000	-0.008	(0.017)	-0.001
Tenure^2/1000	-0.005	(0.004)	-0.001	-0.004	(0.005)	-0.001
Experience (in years)	0.001	(0.029)	0.000	-0.011	(0.031)	-0.001
Experience^2/10	0.040	(0.064)	0.006	0.075	(0.069)	0.010
Contractual hours	-0.026	(0.031)	-0.004	-0.020	(0.032)	-0.003
Contractual hours^2/10	0.047	(0.050)	0.007	0.032	(0.053)	0.004
Temporary contract	0.313	(0.178)*	0.045	0.290	(0.199)	0.036
Monthly wage (euro):						
1251 - 1500	-0.169	(0.237)	-0.027	-0.072	(0.256)	-0.010
1501 - 1750	-0.161	(0.236)	-0.026	-0.245	(0.253)	-0.036
1751 - 2000	-0.166	(0.229)	-0.027	-0.292	(0.245)	-0.043
2001 - 2500	0.100	(0.218)	0.015	0.087	(0.234)	0.012
2501 - 3000	-0.056	(0.236)	-0.009	-0.269	(0.254)	-0.039
3001 - 3500	0.246	(0.253)	0.036	0.160	(0.270)	0.021
3501 - 4000	0.512	(0.290)*	0.069	0.531	(0.311)*	0.062
4001 - 4500	0.420	(0.335)	0.058	0.389	(0.363)	0.047
4501 - 5000	0.299	(0.374)	0.043	0.381	(0.405)	0.046
More than 5000	0.608	(0.360)*	0.079	0.592	(0.387)	0.066
No response	0.042	(0.298)	0.007	-0.119	(0.321)	-0.017
Size (number of employees):						
0 - 20	1.466	(0.379)***	0.144	1.323	(0.401)***	0.116
21 - 50	1.775	(0.287)***	0.166	1.550	(0.300)***	0.132
51 - 100	1.964	(0.260)***	0.180	2.085	(0.274)***	0.159
101 - 500	0.969	(0.147)***	0.133	1.023	(0.160)***	0.121
501 - 1000	0.697	(0.171)***	0.091	0.657	(0.183)***	0.075
1001 - 5000	0.138	(0.128)	0.021	0.121	(0.138)	0.016
No response	0.446	(0.250)*	0.061	0.330	(0.262	0.040
Reason to search:						
Threat of restructuring				-0.132	(0.048)***	-0.018
Threat of losing job				0.038	(0.074)	0.005
Contract duration				0.134	(0.066)**	0.018
Rewards				0.245	(0.043)***	0.033
Financial prospects				-0.111	(0.039)***	-0.015
Work pressure				0.121	(0.041)***	0.016
Facilities at work				0.130	(0.076)*	0.018
Physical working conditions				-0.067	(0.062)	-0.009
Job duties				-0.010	(0.037)	-0.001
Future job duties				-0.117	(0.039)***	-0.016
Education / training				-0.129	(0.052)**	-0.018
Atmosphere at work				0.006	(0.040)	0.001
Contractual hours				-0.150	(0.067)**	-0.020
Work vs private life				0.015	(0.050)	0.002
Commuting time				0.440	(0.057)***	0.060
Personnel management				0.254	(0.048)***	0.035
Management of the organisation				0.100	(0.045)**	0.014
Style of leadership				0.099	(0.042)**	0.013
Autonomy / responsibility				-0.277	(0.036)***	-0.038
Constant	-0.068	(0.555)		-0.125	(0.613)	
Industry dummies	YES			YES		
Observations	3,898			3,898		
Nagelkerke's R^2	0.217			0.342		

Data source: BZK, Personeelsonderzoek 2003.

* significant at the 0.10 level. ** significant at the 0.05 level. *** significant at the 0.01 level.

Table 7: The determinants of the decision to search within or outside the industry (logit)

Dependent variable: 0 = searching within industry, 1 = searching outside industry

Variables	Coefficient	(SE)	Marginal effect	Coefficient	(SE)	Marginal effect
Female	0.147	(0.112)	0.036	0.149	(0.116)	0.037
Minority	0.406	(0.235)*	0.101	0.379	(0.241)	0.094
Age:						
25 - 29	-0.784	(0.246)***	-0.181	-0.929	(0.255)***	-0.209
30 - 34	0.136	(0.250)	0.034	-0.014	(0.261)	-0.003
35 - 39	-0.152	(0.290)	-0.037	-0.290	(0.301)	-0.071
40 - 44	0.003	(0.315)	0.001	-0.181	(0.327)	-0.044
45 - 49	-0.157	(0.343)	-0.038	-0.364	(0.357)	-0.088
50 - 54	-0.003	(0.363)	-0.001	-0.158	(0.378)	-0.039
55 - 69	-0.571	(0.440)	-0.134	-0.801	(0.456)*	-0.182
Married / cohabitating	-0.254	(0.123)**	-0.063	-0.201	(0.126)	-0.050
Children (dummy)	-0.150	(0.108)	-0.037	-0.109	(0.113)	-0.027
Medium education	0.407	(0.198)**	0.101	0.407	(0.203)**	0.101
Higher vocational education	0.154	(0.201)	0.038	0.107	(0.207)	0.026
University	0.342	(0.225)	0.085	0.313	(0.234)	0.078
Tenure (in months/10)	-0.006	(0.017)	-0.001	-0.009	(0.017)	-0.002
Tenure^2/1000	0.001	(0.005)	0.000	0.001	(0.005)	0.000
Experience (in years)	0.003	(0.030)	0.001	0.002	(0.030)	0.000
Experience^2/10	0.060	(0.066)	0.015	0.063	(0.068)	0.016
Contractual hours	0.033	(0.029)	0.008	0.026	(0.029)	0.006
Contractual hours^2/10	-0.070	(0.050)	-0.017	-0.060	(0.050)	-0.015
Temporary contract	-0.259	(0.185)	-0.063	-0.153	(0.204)	-0.038
Monthly wage (euro):						
1251 - 1500	-0.265	(0.246)	-0.064	-0.228	(0.253)	-0.056
1501 - 1750	-0.431	(0.242)*	-0.103	-0.347	(0.248)	-0.084
1751 - 2000	-0.607	(0.236)**	-0.143	-0.482	(0.242)**	-0.115
2001 - 2500	-0.456	(0.220)**	-0.110	-0.369	(0.224)	-0.089
2501 - 3000	-0.920	(0.241)***	-0.211	-0.737	(0.250)***	-0.172
3001 - 3500	-1.071	(0.256)***	-0.240	-0.951	(0.263)***	-0.216
3501 - 4000	-1.281	(0.284)***	-0.273	-1.131	(0.292)***	-0.247
4001 - 4500	-1.380	(0.326)***	-0.284	-1.258	(0.333)***	-0.264
4501 - 5000	-1.613	(0.392)***	-0.313	-1.382	(0.400)***	-0.281
More than 5000	-1.229	(0.386)***	-0.259	-1.087	(0.395)***	-0.234
No response	-0.976	(0.306)***	-0.216	-0.810	(0.313)**	-0.184
Size (number of employees):						
0 - 20	-0.759	(0.327)**	-0.174	-0.643	(0.335)*	-0.149
21 - 50	-0.891	(0.253)***	-0.201	-0.709	(0.259)***	-0.164
51 - 100	-0.224	(0.215)	-0.055	-0.203	(0.217)	-0.050
101 - 500	-0.351	(0.180)*	-0.086	-0.298	(0.182)	-0.073
501 - 1000	-0.358	(0.205)*	-0.087	-0.212	(0.210)	-0.052
1001 - 5000	-0.210	(0.171)	-0.052	-0.152	(0.172)	-0.037
No response	-0.407	(0.295)	-0.097	-0.331	(0.303)	-0.080
Reason to search:						
Threat of restructuring				0.007	(0.056)	0.002
Threat of losing job				-0.065	(0.079)	-0.016
Contract duration				0.000	(0.069)	0.000
Rewards				-0.027	(0.041)	-0.007
Financial prospects				0.090	(0.044)**	0.022
Work pressure				0.121	(0.038)***	0.030
Facilities at work				0.091	(0.072)	0.022
Physical working conditions				0.104	(0.064)	0.026
Job duties				0.143	(0.039)***	0.035
Future job duties				-0.046	(0.041)	-0.011
Education / training				-0.004	(0.065)	-0.001
Atmosphere at work				-0.004	(0.039)	-0.001
Contractual hours				-0.078	(0.072)	-0.019
Work vs private life				0.047	(0.050)	0.012
Commuting time				-0.138	(0.046)***	-0.034
Personnel management				0.027	(0.045)	0.007
Management of the organisation				0.015	(0.044)	0.004
Style of leadership				-0.033	(0.042)	-0.008
Autonomy / responsibility				-0.135	(0.044)***	-0.033
Constant	-0.639	(0.540)		0.660	(0.585)	
Industry dummies	YES			YES		
Observations	2,441			2,441		
Nagelkerke's R^2	0.191			0.223		

Data source: BZK, Personeelsonderzoek 2003.

* significant at the 0.10 level. ** significant at the 0.05 level. *** significant at the 0.01 level.