



# Job satisfaction and labour market mobility

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This report has not been subjected to the standard Foundation editorial procedures.

## Country codes

|    |                |
|----|----------------|
| AT | Austria        |
| BE | Belgium        |
| CZ | Czech Republic |
| CY | Cyprus         |
| DK | Denmark        |
| EE | Estonia        |
| FI | Finland        |
| FR | France         |
| DE | Germany        |
| EL | Greece         |
| HU | Hungary        |
| IE | Ireland        |
| IT | Italy          |
| LV | Latvia         |
| LT | Lithuania      |
| LU | Luxembourg     |
| MT | Malta          |
| NL | Netherlands    |
| PL | Poland         |
| PT | Portugal       |
| SK | Slovakia       |
| SI | Slovenia       |
| ES | Spain          |
| SE | Sweden         |
| UK | United Kingdom |

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# Introduction

With the accession of 10 new Member States to the European Union in May 2004, the issue of geographical and labour market mobility within Europe has risen to the top of the EU policy agenda. The European Commission designated the year 2006 as 'European Year of Workers' Mobility'. The initiative aimed to inform EU citizens about the following issues: the benefits and the costs of both geographical mobility and job or labour market mobility; the realities of working in another country or changing job or career; and the rights and entitlements of migrant workers. The initiative also aimed to promote the exchange of good practice between public authorities and institutions, the social partners and the private sector, and to promote further examination of the scale and nature of geographical and job mobility within the Union.

In order to get a better view on the complex phenomenon of mobility in Europe, the European Commission carried out a Eurobarometer survey on geographical and labour market mobility in September 2005 (EB 64.1). The European Foundation for the Improvement of Living and Working Conditions analysed the findings of the survey and published different aspects in a series of six publications. The first is an overview report by Vandenbrande et al (2006), which presents a descriptive analysis of the data collected and examines four key areas of research: EU policy, geographical mobility, job mobility and restricted mobility. Five in-depth reports deal with a specific aspect of mobility. The present report focuses on the effects of job mobility on job satisfaction. Other reports deal with occupational mobility, the economic benefits of mobility, international and regional migration intentions and European workers' expectations of mobility and voluntary and forced job mobility. All the reports are available on the Foundation website at <http://www.eurofound.europa.eu/areas/populationandsociety/migration.htm>

Job satisfaction has long been used as a way to gauge occupational well-being. Higher levels of job satisfaction have been found to positively influence organisational commitment (and therefore employment and training), motivation, and significantly reduce absenteeism. Given that more satisfied workers also tend to be more productive and flexible, the notion of the satisfied worker comes to the fore as a key element in enabling the establishment of a flexible and highly qualified workforce, an important element of the new European Employment Strategy. At the same time, geographical and labour market mobility within the European Union is promoted to enhance productivity and growth. However, it is uncertain how mobility and job satisfaction relate to each other. The question is whether and how labour market mobility really leads to increased job satisfaction? And under what conditions can it lead to lower or higher job satisfaction?

The fact that job satisfaction is a measure of an emotional state has contributed to the concept's elusiveness, and a large number of definitions have been put forward by different studies. Given that the construct of 'work and the workplace' is much too broad to be considered as a whole, job satisfaction necessarily entails several dimensions. First and foremost, according to basic economic theory, job satisfaction (defined also as utility from working) will rise with income (or comparison incomes, as suggested by Clark and Oswald, 1996) and decline with number of hours worked. Non-monetary benefits, which have been found to play a significant role in determining job satisfaction, perhaps even more so than financial rewards (Ward and Sloane 2000), can be categorised into three major groups.<sup>1</sup>

1. Firstly, **fringe benefits** can be defined as miscellaneous goods or services received by employees beyond their remuneration. These are usually defined in employment contracts, and include items such as pension plans, medical insurance, stock options dependent on performance, subsidised purchases (e.g. employee discounts in major retailer chains).

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<sup>1</sup> For this excellent description of the dimensions of job satisfaction, the authors are indebted to Mora, Vila, and Garcia-Aracil (2005)

2. **Working conditions** form a second group in themselves, the major distinction being that they are non-monetary in nature. These comprise more easily quantifiable items such as noise reduction systems in factories, and others that are not so simple to measure such as increased job autonomy, higher degree of responsibility, flexible working hours, etc).
3. Thirdly, **consumption benefits** can be defined as the inflow of utility that the employee receives as a result of the conditions at his/her workplace. The satisfaction that one derives from the working conditions can stem from satisfaction with the work itself (content and mode of execution of tasks) and the general atmosphere at the workplace, in particular social relationships with co-workers.

# Labour market mobility as a factor in job satisfaction 1

Job satisfaction includes several dimensions (see Annex 2). Enhancing satisfaction for one of the dimensions does not necessarily increase satisfaction with other dimensions: for instance, increased earnings in combination with a higher amount of working hours could lead to different satisfaction outcomes in respect to salary and work–life balance of the individual. The possible distinction between ten different dimensions of job satisfaction forms an important part of the Eurobarometer dataset (64.1) on geographic and labour market mobility that will be analysed in this report.

## General theoretical framework

Satisfaction is based on two core factors: aspirations (a subjective expectation) and opportunities (representing the objective opportunity set). For instance, studies suggest that though women in many countries have fewer opportunities in the labour market, they ‘adapt’ to them and are not less satisfied.

In essence, satisfaction is highly conditional on the availability of information regarding the current job and available outside opportunities. Some authors have noted that aspirations and the subjective judgment of job quality are dependent also on previous experience with the job and career, with utility-maximising workers evaluating the expected utility associated with the current job against the expected utility associated with outside opportunities. In essence, a large component of satisfaction is generated by comparisons (Clark and Oswald, 1996). There is no clear information on actual job characteristics, such as wages or the extent of pecuniary/non-pecuniary benefits associated with it in the Eurobarometer dataset. This limits the possible analyses of a comparison of incomes. The individual’s perceptions of outside opportunities can be approximately judged by job satisfaction scores themselves.

In summary, the basic rationale would be that when the actual state differs sufficiently from the desired state, this generates job dissatisfaction, which when coupled with available opportunities would in turn trigger a job change. However, there is no data on aspirations and the quality of external opportunities cannot be directly judged. The introduction of macro-level variables into the models i.e. the mean national employment rate and mean national unemployment rate over the period 2000 to 2005, hints at possible outside options. To get more than a snapshot it is important to include a broader time frame when integrating these macro-level variables as predictors for job satisfaction in the year 2005.

Few studies in the field of labour economics deal with the relationship of job satisfaction and job mobility. Studies on the issue of job mobility mostly focus on the wage characteristics and pecuniary returns of a job, with the basic rationale being that job mobility would occur when the present value of discounted earnings associated with an outside option is greater than that of the current job position, net of mobility costs. The difference between the two values determines the employee’s propensity to stay, and he leaves when it turns negative (Clark 2001, Levy-Garboua, Montmarquette, and Simonnet 2004). In this framework, which is based on the neoclassical assumption of utility maximising rational actors, in markets with perfect information structure, all workers would be optimally satisfied with their present job. However, models of two-sided research have raised the issue of suboptimal firm/employee matches (Mortensen 1988).

However, it is broadly accepted that the assumptions of rationality and perfect information structures within markets serve as a useful basic model, but are not met in real markets. The same is true for the strict neoclassical rationality assumption. Behavioural theory based on ‘bounded rationality’ (Simon, 1982) assumes that the ability to make fully rational decisions is limited by two major factors: uncertainty about the future, and the costliness of the acquisition of information in the present, e.g. costs of the time needed to gather information. Consequently, individuals are incapable of maximising their utility in a strictly rational sense. Therefore they follow a strategy of ‘satisficing’, which means setting an aspiration level that is regarded as satisfactory. If this level is reached, a person is satisfied. If it is not achieved,

a decision or strategy has to be altered or the aspiration level has to be changed. In this basic theoretical approach the assumption is that this rational of 'satisficing' guides people's evaluation of their own job satisfaction in combination with objective opportunities.

The capacity of job satisfaction to serve as an indicator for a poor match situation between an employer and an employee is confirmed by the relatively few studies in the field of economics. Research has demonstrated that a high degree of job satisfaction is negatively correlated with job departures, even after controlling for wages and hours of work in cross-sectional designs (Flanagan, Strauss and Ulman, 1974; Freeman, 1978; Akerlof et al, 1988; Ward and Sloane 2000; Kristensen and Westergaard-Nielsen, 2004). Research of longitudinal design, which allows for controlling for unobserved individual heterogeneity, also confirms these findings (Levy-Garboua, Montmarquette and Simonnet, 2001; Clark et al 1998). It has also been found that work-related intentions to leave a job and low job satisfaction are highly correlated (Shields and Price, 2002; Appelbaum et al, 2003).

However, some authors have argued that in essence the relationship between job satisfaction and leaving a job is spurious, due to a common factor, which is the individual's propensity to leave (Levy-Garboua, Montmarquette, and Simonnet, 2004). However, it is clear that there is a strong relationship between low job satisfaction and leaving a job. A number of studies have also demonstrated that job satisfaction recovers significantly after a job change (Akerlof et al, 1988; van der Velde and Feij, 1995; Swaen et al, 2002). This is in line with the so-called 'gravitational hypothesis' put forward by McCormick, DeNisi, and Staw (1979), which states that individuals will tend to gravitate around occupations and jobs which ensure the best match between a worker's ability and job requirements, as well as with personal requirements and occupation-specific reward structures. The authors suggest that job mobility is the instrument to achieve such a better match.

In this context it is therefore important to differentiate between voluntary and involuntary job mobility. With regards to voluntarily mobility, people would tend to exhibit increased satisfaction with their next job as compared to those who were forced to move (Bartel and Borjas, 1981; Gottschalk and Maloney 1985). Following this theoretical assumption, the distinction between a voluntary and forced last job change is introduced into this model.<sup>2</sup> The category 'forced job change' includes the respondents who left their previous employer because they were 'made redundant' or their 'contract expired'. Thus a forced change rather refers to a necessity to end a contract at the behest of the employer than for personal reasons. People who stated they 'did not like their previous job', 'found a better job' or 'wanted to create own business' are grouped into the category 'last voluntary job change'. In contrast the categories 'not forced' and 'not voluntary' include all the other reasons given for the last job change. The two categories, voluntary and forced, comprise respondents who reported one or more reasons belonging to that category. As multiple answers to the question were possible, one respondent can be counted in different categories, if he/she has given multiple answers belonging to different categories.

In conclusion, for people who move between jobs, satisfaction with the current job would tend to be higher than satisfaction with the previous job, and especially so in the case of voluntary mobility. Therefore, workers who have recently experienced a voluntary job change are likely to report increased job satisfaction. Following this line of thought, it is likely that workers who change jobs many times would tend to belong to a group which has not found an optimal match between skills and job requirements. Therefore, it is plausible to conclude that the number of job changes would be negatively correlated with current job satisfaction. This only applies to cases, however, when the worker has not found

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<sup>2</sup> See Coppin and Vandenbrande (2006) for an analysis of job satisfaction as a predictor for future mobility intentions.

their match. It should be also noted that high job mobility usually impacts also earnings, above and beyond individual characteristics (that is, accounting for the mover-stayer model, as described by Blumen et al (1955) and Ghiselli (1974) (Light and McGarry, 1998; Judge and Watanabe, 1995). While results are inconclusive, most studies describe the association between frequency of job mobility and wages to be a negative one. In addition, from the perspective of human capital accumulation, frequent movers would have limited earnings prospects due to the low accumulation of firm-specific skills. However, it is possible that having been labour market mobile also serves as a positive signal to employers. Labour market mobility could then be a criteria for increasing 'negative selection' (Solga, 2002): the mobile individuals may belong to a group characterised by an advantageous skill set, in essence self-selecting into better jobs, which also would imply a higher degree of job satisfaction.

In the empirical analyses a distinction is made between the impact of past labour market mobility and the characteristics of the current job. Concerning past occupational mobility, besides the motivation (voluntary or forced) of the last job change, and number of employer changes, it is assumed that job tenure is an important determinant of job satisfaction. It could be expected that lower job tenure goes along with higher satisfaction in all dimensions of job satisfaction. However, additional job tenure would decrease dissatisfaction with the job through aligning aspirations with the actual conditions of the job – a strategy of 'satisficing'. This also holds for occupational tenure, since it has been demonstrated that workers are 'socialised into' the specific occupation and its reward structures (Mortimer and Lorence, 1979). In essence, the opposite effects accumulating for job tenure may 'cancel out' and render it insignificant in analyses.

The most essential characteristics of the current job are considered to be working hours, type of contract, sector and occupation. To account for skill intensity of the current job information is included on whether the current job requires more, less or different skills than the previous job. High skill intensity of a job is usually related to higher pecuniary remuneration, better working conditions and better fringe benefits. Therefore it can be assumed that an increase in required skills in the current job compared to the previous job indicates upward labour market mobility, whereas less skill in the current job indicates downward mobility.

In addition to this general two-step approach to the relationship between labour market mobility and job satisfaction by distinguishing between past job mobility and characteristics of the current job, a number of control variables are included. Despite the fact that there is little directly observable information on aspirations and opportunity structures, several variables can be regarded as shaping these important determinants, and also perhaps having an effect above and beyond the indirect effects on job satisfaction through aspirations and opportunities.

## Mediating factors

### Age and job satisfaction

Studies have consistently confirmed a significant positive relationship between job satisfaction and age (cf. Doering, Rhodes and Schusster, 1983; Glenn, Taylor and Weaver, 1977; Warr, 1992, among others). However, in terms of the nature of this relationship (linear or curvilinear), research is in a sense undergoing a 'back to basics,' with more recent papers demonstrating a significant U-shape in the function of job satisfaction and age (Clark, Oswald and Warr 1996), something which has been previously suggested (see Super, 1939; Herzberg et al, 1957). In fact, a third-order polynomial has also been proposed as best describing the form of the function (Kalleberg and Loscocco, 1983). Several explanations have been put forward to justify a positive relationship between age and job satisfaction, which are briefly elaborated below.

#### *The grinding down/developmental aging hypotheses*

The grinding down hypothesis is one of the chief explanations for the increase in job satisfaction with age. It states that young workers enter the labour market with high hopes, ideals, and expectations (aspirations); these are 'ground down'

with years of experience, in an attempt to minimise the disutility caused by the discrepancy between the desired and the achieved state (Kohn and Schooler, 1973). In essence, this means that higher job satisfaction in the later years of life is mainly caused by lower expectations and aspirations rather than an objective improvement in working conditions (Campbell, Converse and Rodgers, 1976; Wright and Hamilton, 1978). With lower demands and expectations, the perceived difference between the current job and the best possible job is diminished, as is the discrepancy between the current job and the perceived availability of outside options. A U-shaped relationship could potentially result from younger workers feeling positive about their new experiences in the transition to adulthood, something which diminishes as routine tasks set in (Herzberg et al, 1957). Empirical support for this assumption is provided by Warr (1992).

Another perspective (developmental aging), more suited to explaining a possible U-shape of the age/job satisfaction relationship builds on the assumption that the lives of adults take a basic established form (Erikson, 1979; Levinson, 1978), in which stable and transitional phases alternate. Transition phases often involve a process of questioning and adjustment of life views, with the middle-age period being often cited as a period in which transitions tend to be problematic (Brim, 1976). At a time in which values are re-evaluated, satisfaction with the job may decline especially among those for whom it holds a central position as a way for achieving life goals. Older workers, being more mature and experienced in personality development, are presumed therefore to be better able to adjust their aspirations and values in order to make the most of the job they are currently in.

### *The job-change hypothesis*

While the previous two theories emphasised psychological factors rather than objective job quality, the job-change hypothesis simply states that older workers are more satisfied because their jobs are actually better. With age, job tenure, experience and skills are accumulated that facilitate job mobility and the attainment of better placements. Therefore, an older worker can have a better opportunity to move between jobs if the present one is not deemed satisfying. However, this theory suggests that empirical results may be biased since the better educated (those who are likely to attain better jobs) enter into the labour force relatively late. Indeed, lowest satisfaction is often found among the youngest age group, under 20 years old (Weaver 1980, O'Brien and Dowling, 1981; Kalleberg and Loscocco, 1983; Doering, Rhodes and Schusster, 1983). Nonetheless, while this theory is useful in explaining some of the variance in job satisfaction with age, it cannot account for all of it; a significant job satisfaction component is typically retained after controlling for job characteristics.

Although in part this theory depends heavily upon the 'traditional' industrial-model firm structure, in which one necessarily 'starts at the bottom,' it does point to a potential investment rationale in considering the lower job satisfaction of youth. Given that at the beginning of their career young people need work experience in order to qualify for better jobs as well as a chance to improve their skill base, early jobs may be regarded as stepping-stones, which are acceptable if not fully satisfying (Quinn et al, 1974; Kalleberg and Loscocco, 1983). In addition, the lower practical experience of youth will tend to prevent them from improving their job position for some time, leading to a certain amount of frustration. However, the opposite effect of job dissatisfaction among young people can also appear, given that youth unemployment is almost twice the average unemployment today in most European countries. Therefore, people may be very much satisfied with their first job (employing an 'any job will do' attitude) since they perceive outside alternatives to be limited or nonexistent.

### *The life-cycle approach*

The life-cycle approach is introduced to reflect the changes in job requirements. In the beginning of one's career, a job that is enough for maintenance of one's physical needs and provides some degree of opportunity for advancement or skill improvement may be deemed appropriate although less than satisfying. In contrast, with growing maturity, new needs and responsibilities arise because of the family unit, such as home purchase, care for dependent children (including subsequent educational investments), etc. An important variable in the analysis is therefore the stage of the family life



cycle in which a person is situated; research has shown that it can be measured by marital status, and number and age of dependent children. What stage you are in the family life cycle has been shown to be an important determinant of work values over the life course (Wilensky, 1981; Campbell et al., 1976). Finally, after the children leave the home, financial pressures diminish and demand for income is lowered; however, additional requirements are placed on the job regarding security and fringe benefits (Kalleberg and Loscocco, 1983). This approach therefore favours the differential approach to the different dimensions of job satisfaction in examining its relationship with age.

Naturally, when considering the availability of better jobs for older workers and their different values, it is important to control for the effects of the structural position of the employee within the labour market. In general, this can be defined taking account of four factors – class, occupation, organisational size, and sector (Kalleberg and Loscocco, 1983).

### *Group membership*

Members of different age groups have been differently socialised and may thus attach a different degree of job satisfaction to the same level of rewards. It is assumed that age influences the four different dimensions of job satisfaction (see chapter on ‘Levels and distributions of job satisfaction in the EU’); the age variable is therefore introduced as an independent variable into this model. As there is contradictory evidence concerning its influence on job satisfaction, one cannot assume a linear relationship. To get a more detailed picture, age categories are applied in the multivariate models. Education, occupation and sector are included as independent variables to control for the structural position of employees within the labour market.

## **Gender and job satisfaction**

### *The expectation hypothesis*

Numerous studies, mainly targeted at the US and the UK, have confirmed the so-called ‘gender paradox’ of job satisfaction, with women exhibiting higher levels of job satisfaction than men, despite their disadvantaged position on the labour market (Clark, 1996 and 1997; Sloane and Williams 2000). This disadvantaged position entails the persistent male/female wage gap and the lower opportunity for promotion for women (European Commission, 2002). The foremost explanation put forward by researchers is consistent with the ‘grinding-down hypothesis’ presented above, and termed the expectation hypothesis – namely, women are forced by experience to lower their aspirations, which produces a job satisfaction premium as a result of low requirements (Clark, 1997).

### *The structural approach*

Since this relationship is dependent on the general employment and labour market framework, it will possibly disappear with the equalisation of opportunities for men and women (Clark, 1997; Souza-Poza and Souza-Poza, 2003). In addition, some researchers have gone so far as to suggest that, in fact, the presence or absence of a gender effect on job satisfaction is indicative of the ‘modernisation’ of the labour market (with Denmark, Sweden and the Netherlands at the fore). In the line of this argument, a structuralist perspective is warranted, observing workplace conditions as embedded in wider institutional and social contexts. To distinguish between these, countries are categorised by welfare state regimes, since the features of the approach toward the integration of women into the labour market will follow at least approximately the same lines of division (ibid). For example, liberal states are market-led, which institutionalises gender discrimination, while socio-democratic regimes will actively pursue female integration. Thus, the welfare state type has been introduced as an independent variable in the models used here, since among other influences it would shape the gender differences in opportunity structures, as well as differences in aspirations.

### *The role conflict theory*

A further perspective on gender differences in job satisfaction is provided by role conflict theory (Grandey, Cordeiro and Crouter, 2005). To the extent that a given role encroaches on other self-relevant roles, it will receive a negative

judgement (Carlson and Kacmar, 2000; Greenhaus and Beutell, 1985). Naturally, this effect will depend on the relative importance of the two roles, in particular work and family life, to the person. Following gender role research, women are more likely to view the family as a central role than men are (Bem, 1993; Gutek, Searle, and Klepa, 1991). In addition, the expanded role of women in the workforce has not so far entailed a reduction in requirements towards women in the family (Hochschild, 1999), which has served to significantly increase the stress that women face at work. The combination of work and family life is found to be particularly problematic for employed mothers (Warren and Johnson, 1994). In the context of the structural approach, the state-subsidised provision of child-care infrastructure found in Nordic countries serves to minimise the conflict between social roles for women. Significant differences with welfare state regimes are therefore to be expected.

The expectation hypothesis assumes equal job satisfaction for men and women or even higher job satisfaction for women based on a strategy of 'satisficing' through lowering aspiration levels. Both the structural approach and role conflict theory predict a moderating effect of welfare states on the relationship between gender and job satisfaction.

### Education and job satisfaction

A higher education in general has been demonstrated to lead to lower job satisfaction. The better educated tend to have higher aspirations and would thus tend to undervalue job rewards (Clark and Oswald, 1996; Oswald and Gardner, 2002). In fact, the highly educated tend to report a lower level of life satisfaction in general than those with an intermediate skill level (Hartog and Oosterbeek, 1998).

However, a higher level of education is also usually associated with a better employability and a better degree of occupational mobility, a lower risk of unemployment and better promotional chances. In addition, the more educated should be better able to orient themselves within the labour market and attain a better job match (Borjas, 1979). Hence, education can also have a positive impact on job satisfaction.<sup>3</sup>

While there is no clearcut line regarding the total effect of higher education, discrepancies between the educational level attained and the one required at the job is found to unambiguously diminish overall job satisfaction (Spector, 1997; Allen and van der Welden 2001). Workers will tend to get frustrated when they do not have the sufficient scope to utilise their valuable skills (Kalleberg and Sorenson, 1973).

There are observable differences between the highly educated and the mid/low-skilled in terms of valued job characteristics. The high skilled may tend to value training and promotion opportunities above pay or workload (Ward, 2001).

As higher education increases the probability of a better job match and is generally related to better objective working conditions, we expect a positive significant influence of education on aspects of job satisfaction that are only job-related such as salary and career prospects. For aspects of job satisfaction that relate more to overall life satisfaction, such as work-life balance we expect a negative relationship with higher education.

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<sup>3</sup> A short methodological note is warranted here given that historically, younger groupings have tended to acquire more education than their older counterparts, which may lead to interference between the effects of age and education (Warr, 1992).

## Employment status and job satisfaction

### *The unemployed vs. the employed*

Job satisfaction has been found to vary with occupational status, which may make sense, particularly when considering the cases of the employed and unemployed. In general, the termination of employment has been found to be associated with a drop in overall well being (Darity and Goldsmith, 1996). This is caused by the fact that employment is not simply a source of income; it is rather a socialisation context, a source of social relationships and identity, and a promoter of individual self-esteem (Winkelmann and Winkelmann, 1998). The unemployed will therefore have a lower average job satisfaction than the employed. However, this analysis will only look at employed people. Information on the rate of satisfaction with the last job for a person who was unemployed at the time of the survey is available in Eurobarometer (64.1), given the person was employed. It is assumed, that due to retrospectivity biases, integrating reported job satisfaction about a current and a previous job distorts the estimates rather than improving the model. Additionally, a number of unemployment spells are included as the only possible approximation of the overall past labour market mobility between forms of employment and non-employment of the individual. It is assumed that a higher number of unemployment spells increases the job satisfaction of employed people as those individuals may have lower aspirations concerning their job. However, due to the scarring effects of unemployment demonstrated in studies (Gangl, 2005), unemployment spells significantly reduce income for an extended period of time. Thus, although the drop of aspirations would account for higher job satisfaction, the lower objective conditions of the job would possibly generate a drop of job satisfaction with the number of unemployment spells.

Furthermore, the length of the unemployment spell is an important variable, although no single conclusion has been reached regarding its impact. Harrison (1976) stresses that individuals may lose the drive to actively look for ways to leave unemployment and states that in essence, the longer the unemployment, the worse the attitudes towards jobs, in general, and the prospect of finding a new job. Easterlin (1973) emphasises adaptability in the long term, reasoning that the shock from unemployment will tend to be most pronounced in the short-to-medium term.

Age is also a mediator of the impact of unemployment on life satisfaction (Clark and Oswald, 1994). The impact of the transition into unemployment is greatest at the middle stage of the life cycle, with pressing income needs and high expectations about labour market status. In contrast, the young may not be so concerned with unemployment due to the high unemployment rate of their group (there is little discrepancy between the self and close reference points<sup>4</sup>), or may regard it as a 'natural part' of the career development process. Unfortunately the data used in this report does not include information on the duration of unemployment spells or the transitions between life periods.

### *The self-employed*

The self employed have been found to be considerably more satisfied than people engaged in a standard employment relationship (Blanchflower and Oswald, 1998; Blanchflower, 2000; Blanchflower, Oswald and Stutzer, 2001; Hundley, 2001; Frey and Benz, 2002). Standard economic theory would suggest that the self-employed are more satisfied by virtue of higher income, or lower working hours. In fact, the self-employed often accept lower wages (Hamilton 2000).

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<sup>4</sup> Research has demonstrated that comparisons of this sort are mostly done between the self and individuals of similar characteristics

Hamilton (2000) explains this finding by reasoning that self-employment offers significant non-financial benefits (such as greater autonomy), which are termed by Benz and Frey (2003, 2004; Frey and Benz, 2002) as 'procedural utility;' that is, the utility generated by the way the work is done, rather than its outcomes. The greater independence, responsibility (which is also a major factor determining the higher satisfaction of managers), the higher task variety (Stone, 1986; O'Brien, 1986) and the lack of hierarchical structure contribute significantly to the increased job satisfaction of the self-employed. The greater flexibility characterising self-employment may contribute to resolving work- life balance clashes (Loscocco and Roschelle, 1991), and the lower degree of skill underutilisation serves to further increase job satisfaction (Hundley, 2001). However, one has to keep in mind that none of these findings are uniform. For example, Abbott (1988) argues that task variety and task autonomy for employed professionals may actually be also quite high, since they have the option of delegating routine tasks to lower-level workers.

According to the findings in the stated research it is assumed that being self employed increases satisfaction with work-life balance and contract. However, the real income of self employed may be lower when compared to other occupational status. But because satisfaction with different dimensions of the job seems to be particularly influenced by the perception of job-related circumstances (e.g. non-financial benefits) it is also assumed that self employed are more satisfied with their salary due to overall higher satisfaction. Especially in relation to salary, this effect is hypothesised to persist despite the wage reduction which the self-employed accept in return for procedural utility. In fact, it seems that since the choice regarding wage level is internalised and seen as an acceptable trade-off, no dissatisfaction with the actual salary level, even though lower, will be reported.

### Occupation and job satisfaction

While the effects of occupation on job satisfaction are complex, accounting for the effects of self-selection, different training and promotion opportunities, and the value of the symbolic capital associated with each, some basic conclusions can still be drawn. Managers will, on average, be more satisfied than other workers, including in some cases the self-employed. Managerial work can involve a great deal of task complexity, task variety, autonomy and responsibility, which have all been shown to increase job satisfaction. It has been pointed out that managers in companies have a larger amount of resources at their disposal and can afford to delegate less pleasant tasks to lower level workers, something that some self-employed managers cannot afford. Even though these arguments apply mainly to higher level management, some still hold for operational (low level) managers, such as the autonomy argument (Mintzberg, 1973). In addition, employed managers can enjoy the benefit of a performance-based pay package without being subject to the stress resulting from the greater risk exposure of the self-employed (Hundley, 2001).

On the other hand, blue-collar manual workers also tend to report higher job satisfaction than the middle group, a finding valid across a wide variety of industries and sectors (Bussing, 1992; Weaver, 1980). This has been attributed to lower aspiration levels in part due to socialisation, and in part to lower education. An alternative explanation may be that these workers do not place such a high degree of emphasis on the job as a major factor in achieving life goals.

The occupation of current employment is included in these models on different dimensions of job satisfaction. The underlying assumption, which is in line with research findings, is that people in the 'middle category' are less satisfied within the different dimensions as compared to people in blue-collar jobs or in management. It seems that job changes are more feasible in low-skill segments of the labour market because of better transferability of less specific skills and a shorter time needed for occupational adjustment. People with a lower education who also change jobs often may have lower aspirations regarding their job yet do not necessarily have to be less satisfied. In the high skill segment as well, multiple job changes could be an indicator for a specific market segment characterised by high worker mobility, e.g. highly specialised experts. However, in different sectors this high mobility would have to be interpreted rather differently, especially according to the nature of the move (i.e. voluntary vs. involuntary).

Finally, one unambiguous finding from studies of literature on job satisfaction reveals that most people tend to report a relatively high level of satisfaction with their work (Kahn, 1972).

The nature of job satisfaction ratings as an effective judgement necessitates controlling for the mood of respondents, given that people will tend to more easily recall negative experiences when in a bad mood, and positive experiences when in a good mood. Also, the degree of respondent cooperation during the interview influences the way people report their job satisfaction. Therefore this variable is controlled for in the multivariate models.

The following indicators of labour market mobility and job satisfaction can already partly respond to the question of what role job mobility plays in job satisfaction. Several mediating factors like basic demographic features of individuals need to be observed in addition to several indicators of labour market mobility.

# 2

## Extent of job satisfaction in the EU

Within the Eurobarometer dataset there are ten variables, which relate to job satisfaction. They are combined into three groups:

1. Objective work arrangements – including salary, contract and working hours
2. Quality of position, – including content of job, career prospects and training opportunities.
3. Combining work and private life, which includes satisfaction with commuting time, colleagues, work–life balance. An exploratory factor analysis confirmed this classification (see Annex 2).

Four variables were chosen for analysis: satisfaction with salary, contract, career prospects and work–life balance. Because of the debate on the increase of fixed-term contracts we also analysed satisfaction with these contracts.

The subsequent descriptive statistics and regression models include only those people that were currently employed at the time of the survey. Case numbers of the total population compared to the employed population by country are presented in Annex 1. The Eurobarometer dataset on geographic and labour market mobility 2005 (EB 64.1) phrases the question on job satisfaction as follows: ‘Generally speaking, when you think about your professional life, could you tell me whether you are very satisfied, fairly satisfied, fairly dissatisfied or not at all satisfied with each of the following’ (variable qa48a, see Annex 1). The formulation of the question is slightly vague as it could refer to the entire professional career or the current employment of the individual. However, in this report it is assumed that people when asked to judge their professional lives are strongly influenced by their current employment and the results are interpreted accordingly.

The categories ‘very satisfied’ and ‘fairly satisfied’ were combined based on the assumption that the respondents tend to state the middle category if they are indecisive. Therefore the category ‘fairly satisfied’ would already imply a positive answer. The categories ‘fairly dissatisfied’ and ‘not satisfied at all’ construct the category ‘dissatisfied’.

### **Labour market mobility and job-satisfaction**

Table 1 shows job satisfaction in relation to employment changes for each of the four variables of job satisfaction, which have been identified in the exploratory factor analysis in Chapter 3. Moreover, satisfaction with a work contract is included. The categories have been combined for better illustration.

Table 1: *Job satisfaction in relation to number of employment changes (%)*

| Number of job changes                      | Satisfied | Dissatisfied | Total       |
|--|-----------|--------------|-------------|
| <b>Satisfaction with salary</b>            |           |              |             |
| 0  | 71        | 29           | 100 (2840)  |
| 1-5  | 70        | 30           | 100 (6921)  |
| 6-10                                       | 65        | 35           | 100 (1276)  |
| 11-15                                      | 68        | 32           | 100 (150)   |
| 16-20                                      | 83        | 17           | 100 (41)    |
| 21+  | 61        | 39           | 100 (37)    |
| Total                                      | 70        | 31           | 100 (11265) |
| <b>Satisfaction with work contract</b>     |           |              |             |
| 0  | 81        | 19           | 100 (2840)  |
| 1-5  | 79        | 21           | 100 (6921)  |
| 6-10                                       | 77        | 23           | 100 (1276)  |
| 11-15                                      | 81        | 19           | 100 (150)   |
| 16-20                                      | 86        | 14           | 100 (41)    |
| 21+  | 61        | 39           | 100 (37)    |
| Total                                      | 79        | 21           | 100 (11265) |
| <b>Satisfaction with career prospects</b>  |           |              |             |
| 0  | 67        | 33           | 100 (2840)  |
| 1-5  | 64        | 36           | 100 (6921)  |
| 6-10                                       | 58        | 42           | 100 (1276)  |
| 11-15                                      | 63        | 37           | 100 (150)   |
| 16-20                                      | 75        | 25           | 100 (41)    |
| 21+  | 80        | 20           | 100 (37)    |
| Total                                      | 64        | 36           | 100 (11265) |
| <b>Satisfaction with work–life balance</b> |           |              |             |
| 0  | 85        | 15           | 100 (2840)  |
| 1-5  | 81        | 19           | 100 (6921)  |
| 6-10                                       | 75        | 25           | 100 (1276)  |
| 11-15                                      | 85        | 15           | 100 (150)   |
| 16-20                                      | 96        | 4            | 100 (41)    |
| 21+  | 84        | 16           | 100 (37)    |
| Total                                      | 82        | 18           | 100 (11265) |

Source: *EB 64.1, W14*<sup>5</sup>

There is no straightforward relationship between the number of job changes and job satisfaction for the different variables. It seems that initially, satisfaction in all variables decreases slightly with the initial number of employment changes and then increases after about ten job changes. However, the number of people who change their jobs more than ten times is very low, compared to the previous categories. The amount of people who are satisfied with their salary, contract, career prospects and work–life balance decreases between 1–5 and 6–10 employer changes as compared to the preceding category. However, the strongest decreases can be found between 1-5 and 6-10 employment changes and job satisfaction, in particular, decreases in relation to work–life balance. This may reflect a period of vocational adjustment with longer working hours or a new organisation of family life, which new journeys to work can entail. As employer

<sup>5</sup> The population weight W14 corrects for population distribution in the EU 25

changes can be voluntary or forced, upwards or downwards, it is also likely that they do not influence job satisfaction in a linear way. These findings indicate that other variables in connection with the number of job changes seem to have an influence. Therefore strong deviations for the four different variables are not likely.

In general, Table 1 shows that respondents report a high level of satisfaction with all dimensions of their job. Satisfaction with their contracts and work–life balance is particularly high, whereas the contrary is true for career prospects.

Table 2: Job satisfaction in relation to periods of unemployment (%)

| Number of job changes                      | Satisfied | Dissatisfied | Total       |
|--|-----------|--------------|-------------|
| <b>Satisfaction with salary</b>            |           |              |             |
| 0  | 73        | 27           | 100 (7254)  |
| 1  | 64        | 36           | 100 (1958)  |
| 2  | 66        | 34           | 100 (785)   |
| 3  | 54        | 46           | 100 (312)   |
| 4  | 57        | 43           | 100 (128)   |
| 5-10                                       | 43        | 57           | 100 (164)   |
| 11+  | 69        | 31           | 100 (27)    |
| Total                                      | 70        | 30           | 100 (10630) |
| <b>Satisfaction with work contract</b>     |           |              |             |
| 0  | 83        | 17           | 100 (7254)  |
| 1  | 78        | 22           | 100 (1958)  |
| 2  | 72        | 28           | 100 (785)   |
| 3  | 67        | 33           | 100 (312)   |
| 4  | 76        | 24           | 100 (128)   |
| 5-10                                       | 57        | 43           | 100 (164)   |
| 11+  | 73        | 27           | 100 (27)    |
| Total                                      | 80        | 20           | 100 (10630) |
| <b>Satisfaction with career prospects</b>  |           |              |             |
| 0  | 67        | 33           | 100 (7254)  |
| 1  | 60        | 40           | 100 (1958)  |
| 2  | 58        | 42           | 100 (785)   |
| 3  | 47        | 53           | 100 (312)   |
| 4  | 50        | 50           | 100 (128)   |
| 5-10                                       | 45        | 55           | 100 (164)   |
| 11+  | 61        | 39           | 100 (27)    |
| Total                                      | 64        | 36           | 100 (10630) |
| <b>Satisfaction with work–life balance</b> |           |              |             |
| 0  | 84        | 16           | 100 (7254)  |
| 1  | 79        | 21           | 100 (1958)  |
| 2  | 79        | 21           | 100 (785)   |
| 3  | 70        | 30           | 100 (312)   |
| 4  | 69        | 1            | 100 (128)   |
| 5-10                                       | 66        | 34           | 100 (164)   |
| 11+  | 98        | 2            | 100 (27)    |
| Total                                      | 82        | 18           | 100 (10630) |

Source: *EB 64.1, W14*

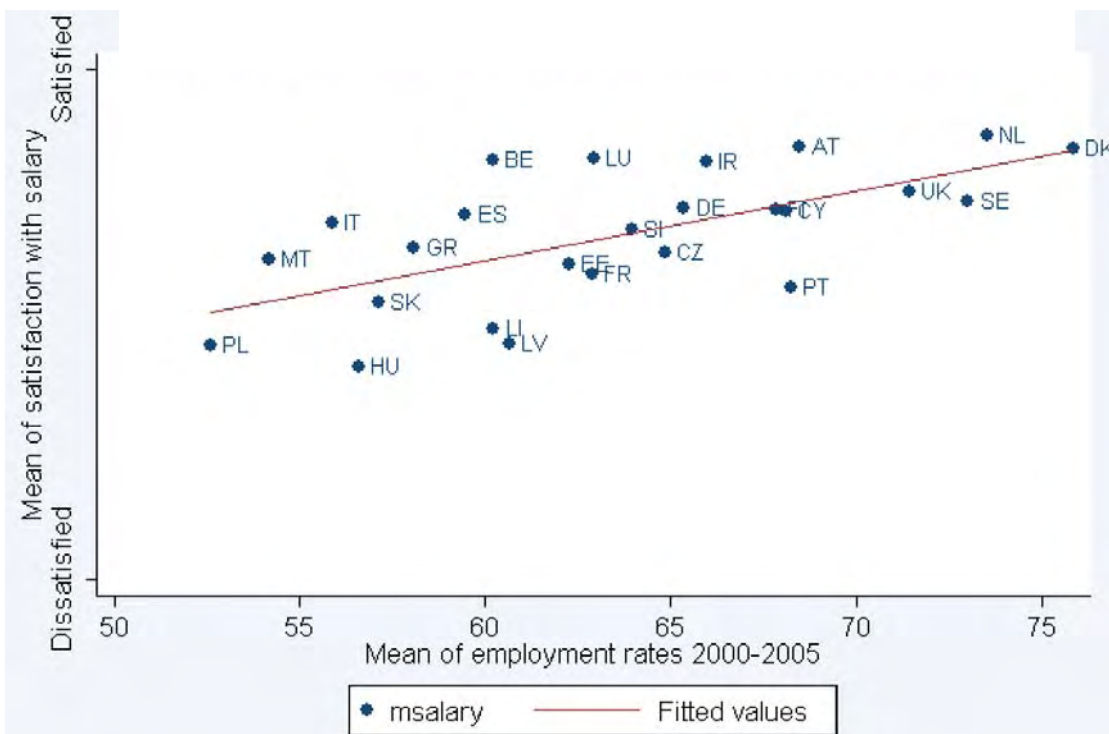


Table 2 illustrates satisfaction with salary, contract, career prospects and work–life balance in relation to periods of unemployment. Overall satisfaction tends to decrease with an increasing number of unemployment periods. On the one hand, the number of periods of unemployment reflects changes of employment, if these were accompanied by intermediary unemployment spells. On the other hand, it could show the impact of number of employer changes on satisfaction with worse or same job conditions, as a high number of unemployment spells is probably not a sign for upward mobility. Most likely, the people who had a high number of unemployment spells also did not find the best match.

### Macro-indicators and job satisfaction

Figure 1 shows the mean employment rates of the EU25 between 2000 and 2005 in relation to mean satisfaction with their salary. Firstly, it shows that in most countries the majority are satisfied with their salary. Only in Hungary, Poland, Latvia and Lithuania showed that on average, people were dissatisfied with their salary. A low wage level might contribute to low satisfaction with salary in those countries. Moreover, the figure depicts a positive correlation between employment rate and satisfaction with salary. This is particularly evident in countries from different welfare state regimes, which are known for their high levels of employment i.e. the Netherlands, Denmark, the United Kingdom and Sweden.

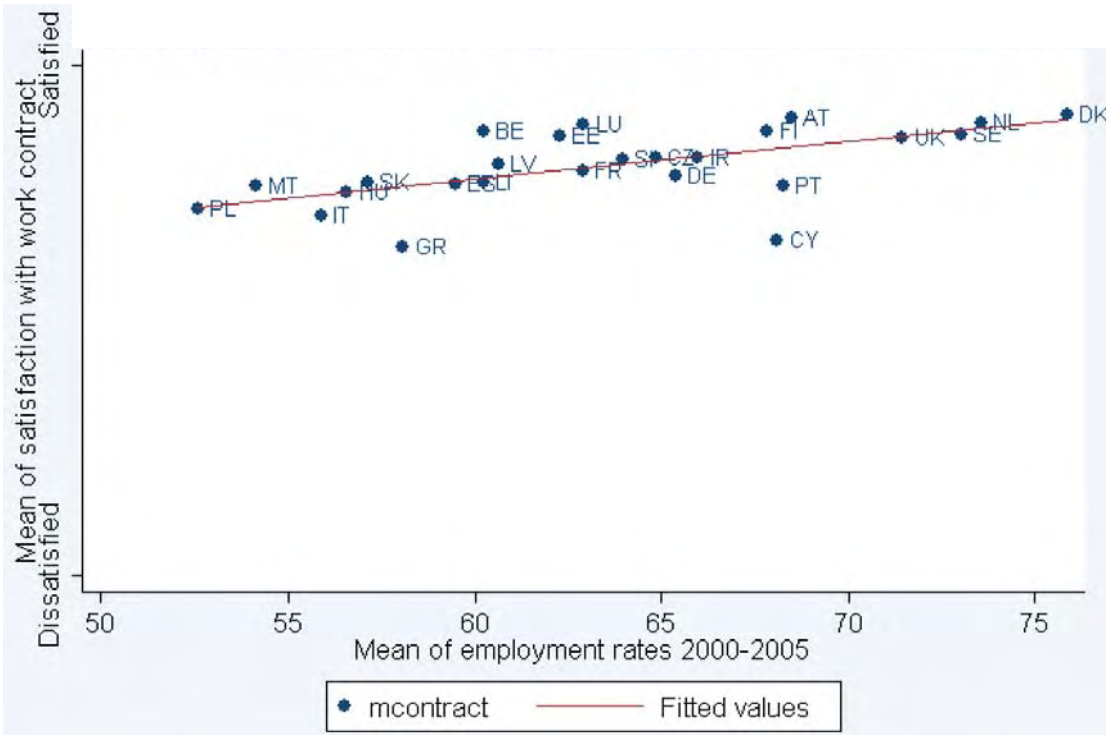
Figure 1: Mean employment rate (2000–2005) in relation to satisfaction with salary



Source: EB 64.1, W14

Figure 2 shows the mean employment rate in relation to the mean satisfaction with work contract. In contrast to the satisfaction levels with salary the broad majority of employed and self-employed people in all countries are satisfied with their work contracts. With the exception of Spain and Malta satisfaction seems to be lower in the southern European countries Greece, Portugal, Italy and Cyprus.

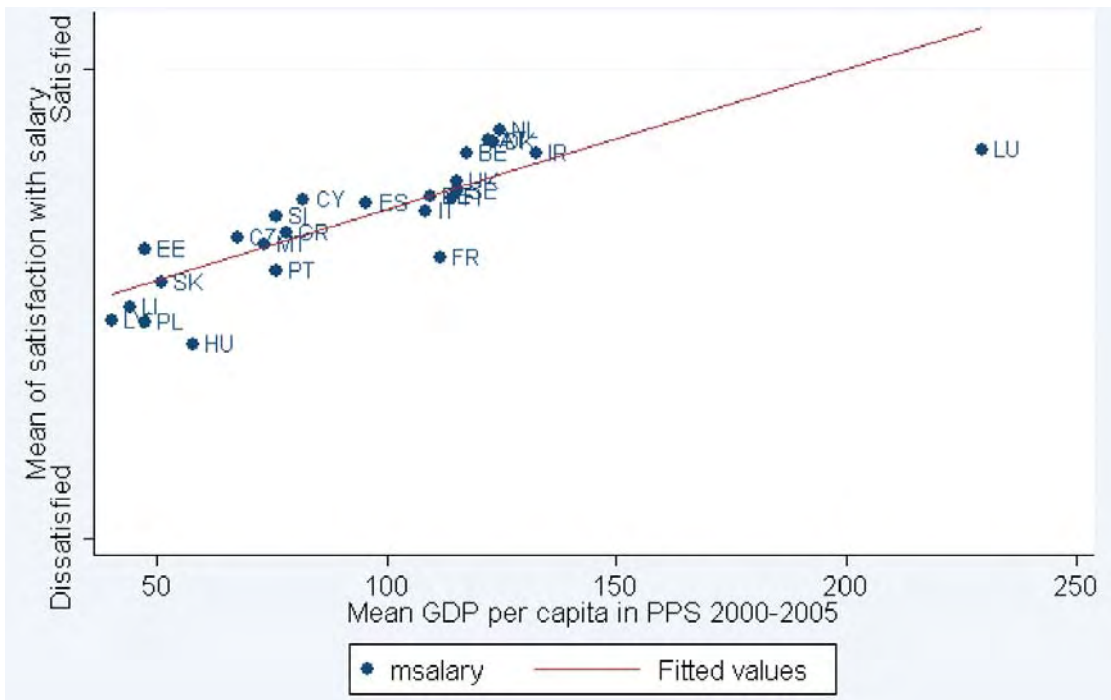
Figure 2: Mean employment rate (2000–2005) by mean satisfaction with work contract



Source: EB 64.1, W14

Figure 3 shows the mean gross domestic product (GDP) per capita in purchasing power standards (PPS) in relation to satisfaction with salary (EU 25 average = 100). Again, there is a positive correlation between the mean GDP and the mean satisfaction with salary in all 25 countries. Especially in Luxemburg where GDP can be seen as an indicator of economic achievement and may translate into better job characteristics – at least in Europe.

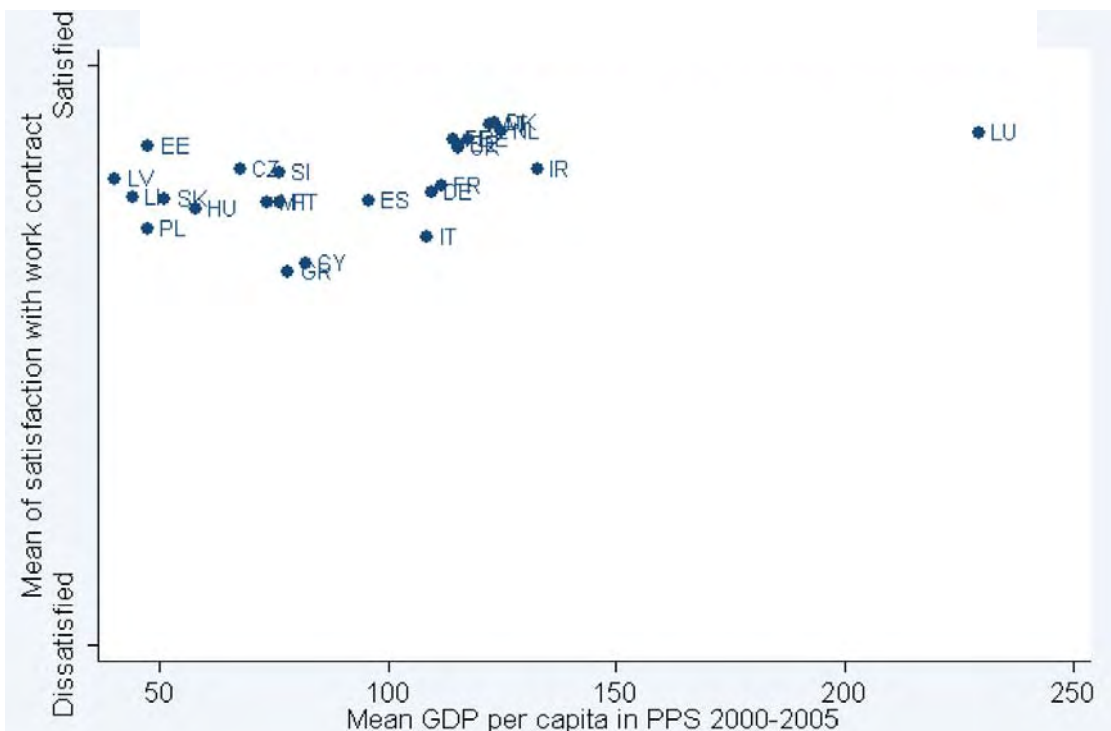
Figure 3: Mean GDP per capita in PPS 2000–2005 and mean satisfaction with salary



Source: EB 64.1, W14

In contrast, the mean satisfaction with a particular type of work contract (Figure 4) does not seem to be strongly related to the GDP of a country. Figure 4 does not include a regression line because the relation between the variables is unclear – it can be either linear or non-linear.

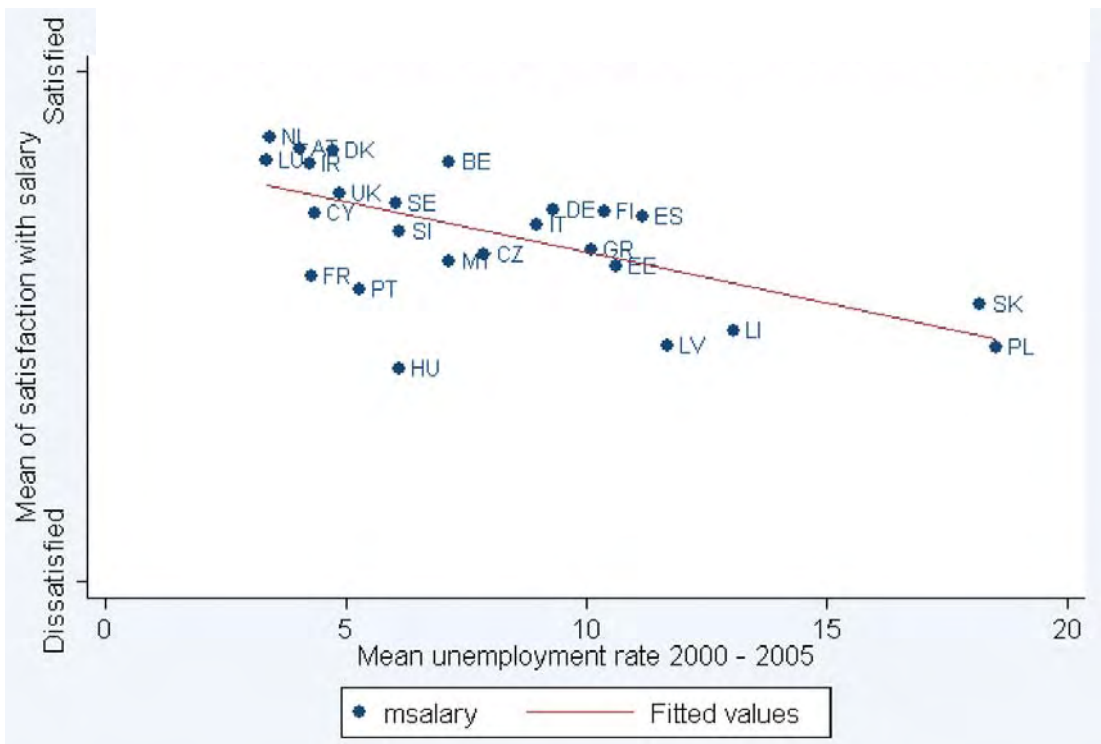
Figure 4: Mean GDP per capita in PPS 2000–2005 and mean satisfaction with work contract



Source: EB 64.1, W14

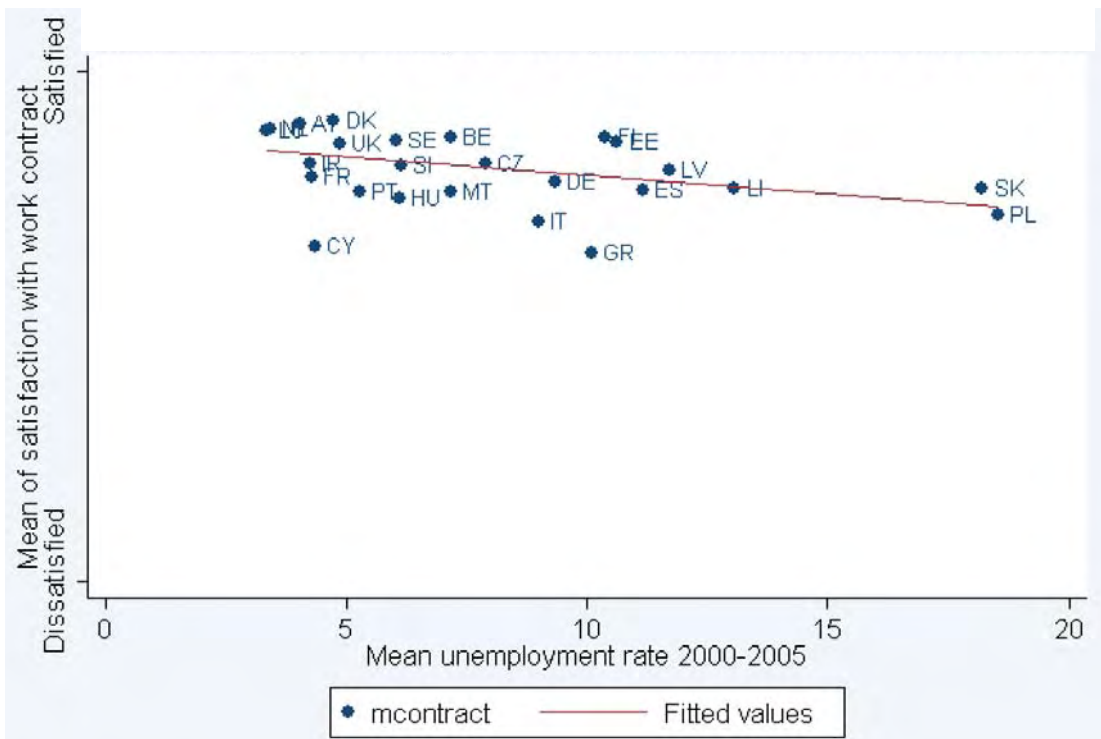
Figures 5 and 6 depict the mean unemployment rate in all Member States in relation to the mean satisfaction with salary and type of contract. There is no clear negative correlation between the mean satisfaction with contract and the mean unemployment rate. The negative correlation between mean satisfaction with salary and mean unemployment rate is only slightly stronger. It seems that the impact of the employment rate on mean satisfaction with salary is larger than the impact of the unemployment rate. These findings could be influenced by the fact that this sample contains only employed people. Although the mean unemployment rate of Hungary is about the European average the mean satisfaction with salary is comparably low.

Figure 5: Mean unemployment rate (2000–2005) and satisfaction with salary



Source: EB 64.1, W14

Figure 6: Mean unemployment rate (2000–2005) and satisfaction with work contract



Source: EB 64.1, W14

In general, the three mean macro indicators: employment rate, GDP per capita in PPS and unemployment rate seem to influence the two dimensions of job satisfaction depicted in Figures 1-6.

The analysis so far reveals that it can be expected that individual-level factors as well as institutional or macro-economic factors influence job satisfaction in the European Union. The multivariate analysis on the four elements of job satisfaction (satisfaction with salary, contract, career prospects and work–life balance) will shed some more light on this co-determination of job satisfaction.

# 3

## Drivers of job satisfaction

This chapter presents and discusses the results of the logistic regression models<sup>6</sup> on two core elements of objective work arrangements: satisfaction with salary and contract. It also looks at satisfaction with career prospects as a measure of the quality of employment and the determinants of combining work and private life (satisfaction with work–life balance).

The dependent variable is coded 1 for either ‘very satisfied’ or ‘fairly satisfied’ and 0 otherwise for each dimension of job satisfaction. The category 0 covers the response categories ‘fairly dissatisfied’, ‘not at all satisfied,’ and ‘don’t know’.<sup>7</sup>

All the models proceed in five steps for each dependent variable. Step 1 is limited to basic socio-demographics. Step 2 includes information about the current job, while Step 3 adds measures of past labour market mobility; particularly the most recent job change. The application of skills after a new job change – included in Step 2 – is relevant for the impact of labour market mobility on job satisfaction. Steps 4 and 5 include macro-level impacts. First, Step 4 integrates welfare regimes, and Step 5 specifies the macro-level influences and includes macro-economic indicators in place of the welfare state regimes. This analysis is based on the welfare state classification proposed by Bukodi and Róbert (2006). It is developed from the standard classification by Esping-Andersen (1990), but integrates the Central and Eastern European new Member States and tackles some of the criticisms on the Esping-Andersen classification. It is assumed that it is the differences in labour market flexibility and security embodied in the welfare state regimes that influence individual job satisfaction, rather than individual country policy differences. In order to grasp macroeconomic influences, the mean level of unemployment, employment and GDP between 2000 and 2005 are included, since it is assumed that more than a snapshot of current macroeconomic situation is necessary to explain its effect on job satisfaction. Level effects are reflected in means, and different effects measured as the difference between 2000 and 2005.

As the results give new insights into the composition of overall job satisfaction and the determinants are interrelated, the discussion will consider the influence of all independent variables on the four dependent variables stepwise. However, special emphasis is placed on the impact of mobility indicators on satisfaction with salary, contract, career prospects and work–life balance (Step 3).

### Satisfaction with salary

Table 3 shows the results of a logistic regression model on satisfaction with salary. Being in the youngest age group (15–24) increases satisfaction with salary as soon as job-related variables are included, compared to the reference age group 35–44 (Step 1). This is in line with the assumptions that the aspirations concerning a satisfactory salary are lower in the youngest age group and thus more easily met (Wilensky, 1981; Campbell et al, 1976). Men are consistently more satisfied with their salaries than women in each step of the model. Since gender wage gaps are persistent throughout the European Union this finding is rather intuitive and emphasises that women are indeed aware of this gender wage gap (and also harbour higher aspirations) and are thus less satisfied with their salaries. Higher education has a significant positive effect on the probability of being satisfied with ones salary compared to average or low education, due to the fact that higher human capital is associated with higher wages. The same is true for people who live with a partner. The

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<sup>6</sup> The logistic regression is a statistical technique that predicts the probability of a dichotomous dependent variable (i.e. being satisfied or not) using a combination of continuous and categorical independent variables. The beta-coefficients (logged odds) calculated with the statistical software Stata are shown in Tables 4-8. They can formally be interpreted in the following way: a one-unit increase in the independent variable is associated with a change in the dependent variable (cf. Backhaus, 2003; Menard, 1995; Kohler and Kreuter, 2001)

<sup>7</sup> Category 1 is based on two positive categories because it is assumed that indecisive respondents choose the category ‘don’t know’. Only people that were currently employed at the time of the survey are included in the analyses.

variable living with a partner covers both dual earner couples and couples in which only one spouse is in gainful employment.<sup>8</sup> Possibly, the strong positive impact of dual earner couples covers the negative tendency of single earner couples. Respondents' cooperation during the interview increases the level of reported satisfaction, but turns insignificant when past labour market mobility is included.

There are highly stable effects for characteristics of the current job (Step 2). Longer working hours decrease satisfaction with salary (as predicted by economic theory), while a permanent contract has a positive impact. In line with the assumption of a trade-off between job security and monetary remuneration, in other words between non-financial and financial remuneration, having a permanent contract may reduce salary requirements and thus increase satisfaction. This reflects the notion of an implicit contract between the employer and the employee: the employer does not have to compensate the employee for carrying a high risk of future job loss if the employee has high job security through a permanent contract. The employee will be satisfied with a lower wage with a permanent contract up to the value of the insurance premium that the coverage of sudden future job loss is worth to the employee.

In line with initial expectations, the self-employed and employed managers are significantly more satisfied with their salaries compared to those people in other white-collar employment. Manual workers are less satisfied with their salary compared to the reference group. There is no consistent effect for sector, but the results indicate a tendency for people who are employed in the public sector to be less satisfied with their salary than people in the production sector, while people employed in the service sector are more satisfied. If the current job requires fewer or different skills than the previous job then satisfaction with salary is significantly lower, reflecting the issue of job match on overall satisfaction (Spector, 1997; Allen and van der Welden, 2001). In addition, switching to jobs requiring different skills may entail a significant wage cut (to compensate for lack of experience or human capital).

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<sup>8</sup> There is no information about the employment status of the spouse or partner, thus we cannot distinguish between dual and single earner couples.

Table 3: *Determinants of satisfaction with salary*

| Satisfaction with salary                            | Step_1          | Step_2           | Step_3           | Step_4           | Step_5           |
|---|-----------------|------------------|------------------|------------------|------------------|
| 15–24 (ref 35–44)                                   | 0.035           | <b>0.305*</b>    | <b>0.388**</b>   | <b>0.309*</b>    | <b>0.338*</b>    |
| 25–34   | -0.004          | 0.080            | 0.078            | 0.118            | 0.135            |
| 45–54   | <b>-0.150*</b>  | -0.094           | -0.063           | -0.034           | -0.042           |
| 55–64   | -0.072          | -0.065           | -0.087           | -0.030           | -0.064           |
| 65+   | -0.240          | 0.155            | 0.034            | 0.304            | 0.267            |
| Gender: male (ref. female)                          | <b>0.375***</b> | <b>0.498***</b>  | <b>0.445***</b>  | <b>0.336***</b>  | <b>0.342***</b>  |
| Low education (ref. average)                        | -0.026          | 0.112            | 0.060            | -0.079           | -0.069           |
| High education                                      | <b>0.444***</b> | <b>0.411***</b>  | <b>0.395***</b>  | <b>0.276***</b>  | <b>0.225***</b>  |
| With partner (ref. without partner)                 | <b>0.291***</b> | <b>0.338***</b>  | <b>0.289***</b>  | <b>0.297***</b>  | <b>0.301***</b>  |
| No. of children age <10                             | 0.028           | 0.036            | 0.049            | 0.004            | 0.002            |
| No. of children age 10-14                           | -0.027          | -0.003           | 0.017            | 0.016            | 0.017            |
| Good respondents cooperation (ref. bad)             | <b>0.291**</b>  | <b>0.244*</b>    | 0.209            | 0.097            | 0.096            |
| Working h/week                                      |                 | <b>-0.016***</b> | <b>-0.019***</b> | <b>-0.009**</b>  | <b>-0.009**</b>  |
| Permanent contract (ref. other)                     |                 | <b>0.294***</b>  | <b>0.183**</b>   | <b>0.211**</b>   | <b>0.179*</b>    |
| Self-employed (ref. other white collar)             |                 | <b>0.315**</b>   | <b>0.245*</b>    | <b>0.220*</b>    | <b>0.228*</b>    |
| Manager (ref. other white collar)                   |                 | <b>0.235**</b>   | <b>0.192*</b>    | <b>0.211*</b>    | <b>0.220*</b>    |
| Manual worker (ref. other white collar)             |                 | <b>-0.227***</b> | <b>-0.188**</b>  | <b>-0.218**</b>  | <b>-0.198**</b>  |
| Sector of activity of current employment: services  |                 | <b>0.153*</b>    | 0.111            | 0.021            | 0.024            |
| Public (ref. production)                            |                 | -0.003           | -0.073           | <b>-0.174*</b>   | <b>-0.168*</b>   |
| Fewer skills cp. to previous job (ref. same skills) |                 | <b>-0.751***</b> | <b>-0.667***</b> | <b>-0.728***</b> | <b>-0.757***</b> |
| Different skills cp. to previous job                |                 | <b>-0.175*</b>   | <b>-0.134</b>    | <b>-0.230**</b>  | <b>-0.242**</b>  |
| More skills cp. to previous job                     |                 | -0.018           | -0.072           | -0.136           | -0.141           |
| No. of employer changes                             |                 |                  | 0.008            | -0.015           | -0.017           |
| No. of unemployment spells                          |                 |                  | <b>-0.110***</b> | <b>-0.107***</b> | <b>-0.107***</b> |
| Job tenure  |                 |                  | 0.009            | 0.002            | 0.005            |
| Job tenure <sup>2</sup> /1000                       |                 |                  | -0.016           | 0.002            | -0.045           |
| Last job change: sectoral mobility (ref no)         |                 |                  | -0.044           | 0.032            | 0.050            |
| Last job change: occupational mobility (ref no)     |                 |                  | -0.095           | -0.027           | -0.039           |
| Last job change: voluntary (ref. no)                |                 |                  | <b>0.381***</b>  | <b>0.364***</b>  | <b>0.354***</b>  |
| Last job change: forced (ref. no)                   |                 |                  | -0.097           | -0.131           | -0.118           |
| Last job change: interregional (ref. regional)      |                 |                  | <b>0.195*</b>    | 0.067            | 0.037            |
| Welfare state: liberal (ref. social-democratic)     |                 |                  |                  | <b>0.307*</b>    |                  |
| Insider protection conservative                     |                 |                  |                  | 0.046            |                  |
| Insider protection family oriented                  |                 |                  |                  | <b>-0.454***</b> |                  |
| Post-socialist                                      |                 |                  |                  | <b>-0.880***</b> |                  |
| Post-socialist liberal                              |                 |                  |                  | <b>-0.992***</b> |                  |
| Mean unemployment 2000–2005                         |                 |                  |                  |                  | <b>0.029*</b>    |
| Difference unemployment 2005–2000                   |                 |                  |                  |                  | 0.003            |
| Mean employment rate 2000–2005                      |                 |                  |                  |                  | <b>0.038***</b>  |
| Difference employment 2005–2000                     |                 |                  |                  |                  | 0.043            |
| Mean GDP in PPS 2000–2005                           |                 |                  |                  |                  | <b>0.014***</b>  |
| Difference GDP in PPS 2005–2000                     |                 |                  |                  |                  | 0.003            |
| McFaddens Pseudo-r <sup>2</sup>                     | <b>0.019</b>    | <b>0.041</b>     | <b>0.056</b>     | <b>0.084</b>     | <b>0.091</b>     |
| Chi2  | 259.554         | 365.121          | 456.197          | 687.120          | 738.470          |
| No. of Cases  | 11.066          | 7.139            | 6.517            | 6.517            | 6.517            |

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

 Source: *EB 64.1*



Contrary to theoretical expectations, controlling for other factors like the number of previous employment changes has no statistically significant impact on reported satisfaction with salary (Step 3).<sup>9</sup> Thus, it is not the number of job changes but more likely the quality, in terms of changes in salary that influences satisfaction with salary. In contrast, the number of unemployment periods has the expected consistently negative effect for employer changes. It is important to note here that only the number of unemployment spells was included and not the duration of unemployment. People who have frequent unemployment spells also have frequent spells of employment, and thus many job changes. The number of job changes and unemployment spells are therefore highly correlated. Assuming that downward mobility is more frequently accompanied by unemployment spells between employer changes, then the number of unemployment spells might reflect downward mobility. In addition, the number of employment changes includes no information on the direction of mobility or the reasons for leaving a job. This emphasises the necessity of including a measure for the motivation behind a job change. This information is available for the most recent job change. In fact, considering the characteristics of the last job change, the only factor that matters is whether it was voluntary or not. A voluntary departure from the previous job leads to higher satisfaction with the salary in the new job (in line with Bartel and Borjas, 1981; Gottschalk and Maloney, 1985). If the previous job was in a different region or a different country, this also increases satisfaction with the salary (in Step 3 of the model), but the effect becomes insignificant when macro-level influences are included. As a long distance change of employment is usually accompanied by high costs a person might want to compensate those costs with a higher salary. The macroeconomic condition of a country might reflect different wage levels, which make the effect insignificant.

Compared to the social democratic welfare regime, the reported satisfaction with salary is higher in countries that belong to a liberal welfare regime, for example the United Kingdom and Ireland (Step 4). In contrast, peoples living in the so-called insider protection family-oriented regime (e.g. many southern European countries) or the post-socialist and post-socialist liberal regimes are significantly less satisfied with their salaries. This indicates that as European integration proceeds, people increasingly judge their own satisfaction with reference to wage levels in other European countries rather than doing so exclusively within a national context (Delhey and Newton, 2005). Since wage levels are still far lower in the post-socialist countries compared to the old Member States of the European Union, this would explain the lower level of reported satisfaction. This would also apply for the southern European insider protection family-oriented regimes.

The explained variance reflected by McFaddens Pseudo  $r^2$  increases when including more specific macroeconomic indicators instead of the welfare state regimes (Step 5). In line with the thesis of international reference points as a basis of the evaluation of individual satisfaction, level effects rather than differences over time determine satisfaction with salary. Mean unemployment rate, employment rate and GDP all have a significant positive impact on satisfaction with salary. In countries with high unemployment, people possibly have a higher appreciation of a job and therefore also report being more satisfied with their salary, since their options are limited.

The significant impact of mobility indicators on satisfaction with salary is clear: whereas a voluntary job change has a clear positive impact, an increasing number of unemployment spells has a negative effect. It seems that a good quality job match following labour market mobility (i.e. the application of same skills) increases satisfaction with salary whilst the contrary holds true for downward mobility.

<sup>9</sup> The descriptive statistics (Table 4) showed that there is no linear relationship between satisfaction with salary and the number of employer changes. Thus, in former versions of the model the square number of employer changes was introduced into the model but turned out to be insignificant.

## Satisfaction with work contract

In the model on satisfaction with working contracts the self-employed were excluded, since they do not have a working contract in a strict sense, and cross-country differences in the legal framework of self-employment additionally complicate a clear-cut analysis.

Socio-demographic characteristics show that living with a partner has the most consistent impact on satisfaction with a work contract (Table 4). In the first step of the model, either being in the very young age group (15–24) or in the oldest age group (65+) decreases satisfaction with a work contract. Dissatisfaction in the younger age group probably reflects insecure contracts and generally precarious employment situations for labour market entrants. Higher education has a positive impact on satisfaction with a work contract in the first two steps of the model compared to average education. When including macro-level information, low education has a significant positive impact, which is probably based on the lower aspirations of lower educated people, above and beyond occupational-level or national-level effects. The lack of effect of higher education may be attributed to their better capacity to orientate themselves within the labour market, and thus adjust their aspirations accordingly (c.f. Borjas, 1979, also in line with the notion of ‘satisficing’). Good respondent cooperation only effects the reporting of work contract satisfaction in the first step of the model.

Table 4: *Determinants of satisfaction with work contract*

| Satisfaction with contract                          | Step_1           | Step_2           | Step_3           | Step_4          | Step_5           |
|---|------------------|------------------|------------------|-----------------|------------------|
| 15–24 (ref 35–44)                                   | <b>-0.457***</b> | 0.064            | 0.134            | 0.077           | 0.127            |
| 25–34   | <b>-0.188*</b>   | -0.030           | 0.023            | 0.055           | 0.059            |
| 45–54   | -0.034           | -0.053           | -0.012           | -0.052          | -0.044           |
| 55–64   | -0.074           | -0.074           | -0.077           | -0.178          | -0.141           |
| 65+   | <b>-0.941***</b> | 0.576            | 0.616            | 0.531           | 0.567            |
| Gender: male (ref. female)                          | 0.074            | 0.134            | 0.171            | 0.143           | 0.134            |
| Low education (ref. average)                        | -0.143           | 0.216            | 0.228            | <b>0.326*</b>   | <b>0.276*</b>    |
| High education                                      | <b>0.325***</b>  | <b>0.190*</b>    | 0.175            | 0.105           | 0.106            |
| With partner (ref. without partner)                 | <b>0.248***</b>  | <b>0.230**</b>   | <b>0.209*</b>    | <b>0.194*</b>   | <b>0.207*</b>    |
| No. of children age <10                             | 0.050            | 0.034            | 0.086            | 0.060           | 0.067            |
| No. of children age 10-14                           | -0.093           | -0.085           | -0.061           | -0.085          | -0.073           |
| Good respondents cooperation (ref. bad)             | <b>0.477***</b>  | 0.242            | 0.150            | 0.093           | 0.077            |
| Working h/week                                      |                  | <b>-0.018***</b> | <b>-0.019***</b> | <b>-0.014**</b> | <b>-0.014***</b> |
| Permanent contract (ref. other)                     |                  | <b>1.801***</b>  | <b>1.716***</b>  | <b>1.675***</b> | <b>1.703***</b>  |
| Manager (ref. other white collar)                   |                  | <b>0.344**</b>   | <b>0.354**</b>   | <b>0.274*</b>   | <b>0.318*</b>    |
| Manual worker (ref. other white collar)             |                  | -0.176           | -0.114           | -0.186          | -0.127           |
| Sector of activity of current employment: services  |                  | 0.014            | 0.011            | 0.005           | 0.002            |
| Public (ref. production)                            |                  | <b>0.206*</b>    | 0.184            | 0.168           | 0.181            |
| Fewer skills cp. to previous job (ref. same skills) |                  | <b>-0.559***</b> | <b>-0.470**</b>  | <b>-0.520**</b> | <b>-0.532**</b>  |
| Different skills cp. to previous job                |                  | -0.087           | -0.061           | -0.134          | -0.109           |
| More skills cp. to previous job                     |                  | 0.085            | -0.000           | -0.056          | -0.030           |
| No. of employer changes                             |                  |                  | -0.015           | <b>-0.030*</b>  | -0.024           |
| No. of unemployment spells                          |                  |                  | <b>-0.078**</b>  | <b>-0.075**</b> | <b>-0.074**</b>  |
| Job tenure  |                  |                  | 0.023            | 0.026           | 0.025            |
| Job tenure <sup>2</sup> /1000                       |                  |                  | -0.304           | -0.412          | -0.383           |
| Last job change: sectoral mobility (ref no)         |                  |                  | -0.017           | 0.010           | 0.016            |
| Last job change: occupational mobility (ref no)     |                  |                  | -0.027           | 0.001           | -0.005           |
| Last job change: voluntary (ref. no)                |                  |                  | <b>0.295**</b>   | <b>0.299**</b>  | <b>0.281**</b>   |
| Last job change: forced (ref. no)                   |                  |                  | 0.017            | 0.013           | 0.019            |
| Last job change: interregional (ref. regional)      |                  |                  | 0.123            | 0.045           | 0.054            |

Table 4: *Determinants of satisfaction with work contract(cont'd)*

| Satisfaction with contract                      | Step_1       | Step_2       | Step_3       | Step_4           | Step_5          |
|---|--------------|--------------|--------------|------------------|-----------------|
| Welfare state: liberal (ref. social-democratic) |              |              |              | 0.133            |                 |
| Insider protection conservative                 |              |              |              | <b>-0.361*</b>   |                 |
| Insider protection family oriented              |              |              |              | <b>-0.850***</b> |                 |
| Post-socialist                                  |              |              |              | <b>-0.597***</b> |                 |
| Post-socialist liberal                          |              |              |              | <b>-0.520**</b>  |                 |
| Mean unemployment 2000–2005                     |              |              |              |                  | <b>0.040*</b>   |
| Difference unemployment 2005–2000               |              |              |              |                  | 0.010           |
| Mean employment rate 2000–2005                  |              |              |              |                  | <b>0.039***</b> |
| Difference employment 2005–2000                 |              |              |              |                  | -0.008          |
| Mean GDP in PPS 2000–2005                       |              |              |              |                  | <b>0.006**</b>  |
| Difference GDP in PPS 2005–2000                 |              |              |              |                  | <b>0.025***</b> |
| McFaddens Pseudo-r2                             | <b>0.016</b> | <b>0.123</b> | <b>0.136</b> | <b>0.145</b>     | <b>0.145</b>    |
| Chi2  | 129.331      | 664.743      | 656.076      | 703.467          | 702.901         |
| No. of Cases                                    | 9.401        | 6.217        | 5.684        | 5.684            | 5.684           |

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

Note: Excluding self-employed

Source: *EB 64.1*

The characteristics of the current job (Step 2) account for the largest share of explained variance in the model.<sup>10</sup> Working hours per week decrease satisfaction, whereas working in a management position has a positive influence. In line with the higher benefits and job security that are usually provided in the public sector, people who work in the public sector are more satisfied with their work contract than people working in other sectors of employment. There is no positive effect if the current job requires more skills than the previous one, but lower skill requirements have a consistently negative impact on satisfaction with work contract. This might reflect the consequences of downward job mobility, which is usually associated with lower skill requirements, lower job security and lower job satisfaction. One might conclude that in relation to satisfaction with contract objective job characteristics determine satisfaction rather than aspirations that are influenced by socio-demographic variables.

Concerning past labour market mobility (Step 3), the number of unemployment spells and voluntary job mobility show a significant influence. Whereas the number of unemployment spells has a negative influence on satisfaction with work contract, analogous to satisfaction with salary, there is a positive impact if the last job change was voluntary. The latter once again emphasises the relationship between the reason behind leaving a previous job and satisfaction in a new job. A period of unemployment usually leads to a new contract. Moreover, a new employer has difficulties in estimating the productivity of an employee and a high number of unemployment spells usually signals low productivity. Therefore the employees with a high number of unemployment spells may simply get worse employment contracts. This interpretation is supported by the significant negative effect an increasing number of employment changes has, even after controlling for welfare state regimes (Step 4). Tenure does not show a significant positive influence on satisfaction with a work contract.<sup>11</sup> This may show that people adjust their aspirations concerning their contract according to tenure, as they know what is legally allowed.

<sup>10</sup> Pseudo-r2 increases by more than .1 when including characteristics of the current job, which is probably due to strong positive impact of the objective measure of having a permanent contract or not. However, note that the coefficients of 'permanent contract' are extremely high and thus should be regarded with caution

<sup>11</sup> This may be caused by a time effect or an initial selection effect. But it is also possible that people with long tenure possibly entered their jobs under favourable permanent contract conditions in the first place, and therefore remained with the same employer for a longer time (a selection effect). To disentangle these effects, longitudinal data is necessary.

Compared to the social democratic welfare regime, people report significantly lower levels of satisfaction with work contracts in all other welfare regimes with the exception of the liberal regime (Step 4). This is not surprising; since the liberal welfare regime is characterised by a labour market with comparatively little job security and individuals would probably compare their situation with the situation in other welfare regimes ('Europeanisation' impact). This finding indicates that the difference might lie in the expectations and aspirations people have concerning their work contracts rather than the objective contractual arrangements in different countries. In the UK and Ireland, people might have lower expectations concerning their work contract, regard the quality of contracts differently, or are accustomed to working in a flexible system. In both insider protection regimes and post-socialist regimes, individuals have high expectations concerning the protection of various social risks such as unemployment or disability. Governments or employers are made more responsible for the coverage of these risks, thus aspirations are higher and less easily met. However, when introducing the welfare state regimes into the model, an increasing number of employment changes show a significant negative effect on satisfaction with work contracts. This could indicate that the protection for changes in the work contract after an employment change is not considered as sufficient in any of the welfare states.

Mean unemployment and mean employment between 2000 and 2005 both have a positive impact on reported satisfaction with work contract (Step 5). Whereas for unemployment and employment a level effect dominates, for GDP both a level and a difference effect can be found. An increase in GDP from 2000 to 2005 has an additional positive impact on satisfaction with a contract above the positive impact of a higher mean level of GDP throughout this time frame.

As both dependent variables are determinants of objective work arrangements, the impact of mobility indicators on satisfaction with a contract is very similar to the results on satisfaction with salary. The reason behind leaving the previous job and the number of unemployment spells as a signal for productivity are important. However, it is not important for satisfaction with a contract if different skills are applied in the new job; only the application of fewer skills has a negative impact.

### Satisfaction with career prospects

Satisfaction with career prospects is one factor of the quality of employment. It includes the avoidance of downward mobility as well as the possibility of upward mobility. For satisfaction with career prospects a clear relationship with age (Table 5) cannot be established. People who are still employed after the age of 65+ are less satisfied with their career prospects, possibly attributable to the fact that they are approaching the end of their career, but the effect turns insignificant when including job-related characteristics. Again, a consistent highly significant positive impact for male gender is found, which reflects both the actual opportunity structures in markets characterised by gender wage gaps and discrimination, and the fact that gender discrimination in the labour market is perceived as salient by female participants, who no longer seem to be lowering their aspirations to fit the structure of labour markets. Low education compared to average education has no impact on reported satisfaction with career prospects. In contrast, in line with human capital theory, high education has a strong positive effect on satisfaction with career prospects. Living with a partner also positively influences satisfaction with career prospects. Possibly, an efficient division of labour within the household enables higher investments in future upward career mobility (c.f. Becker, 1973).

Good respondent cooperation during the interview has a positive effect on reported satisfaction with career prospects. If people feel better in the interview situation they are more optimistic concerning their future career prospects and thus report being more satisfied. However, the effect becomes insignificant when macro-level effects are included.

Working hours per week are a less decisive negative determinant of satisfaction with career prospects compared to satisfaction with salary and work contract (Step 2). Better career prospects might require an investment in the form of longer working hours. A permanent contract implies higher job security and increases the satisfaction with career

prospects. The self-employed and managers are also more satisfied with their career prospects compared to people in other white-collar employment. The opposite, however, cannot be found for manual workers; they are not less satisfied with their career prospects. This does not imply that manual workers have better career prospects, but probably reflects the fact that career is not regarded as central to the achievement of one's life goals, thereby lowering career-related aspirations (Bussing, 1992; Weaver, 1980).<sup>12</sup>

People employed in the public sector are consistently more satisfied with their career prospects, compared to workers in the production sector. The public sector traditionally offers high job security for insiders, as well as comparatively favourable working conditions. Also, these structures more often still adhere to the model of internal labour markets characterised by seniority wage structures and high insider protection. Therefore, career prospects are more secure, and standardised according to seniority, which makes future career changes less uncertain and risky, which in turn might account for the increase in satisfaction with career prospects.

The level of skill required in a current job compared to the previous one also plays an important role in determining satisfaction with career prospects. If a current job requires more skills, a person already has experienced a career move towards a more skill-intensive activity, which will typically be associated with better working conditions and a higher wage. Therefore, it is reasonable that people who apply more skills in their current job than in the previous one are more optimistic about their future career prospects based on past experiences.

Table 5: *Determinants of satisfaction with career prospects*

| Satisfaction with career prospects                  | Step_1          | Step_2           | Step_3           | Step_4           | Step_5           |
|---|-----------------|------------------|------------------|------------------|------------------|
| 15–24 (ref 35–44)                                   | -0.049          | 0.069            | 0.112            | 0.039            | 0.083            |
| 25–34   | 0.071           | 0.127            | 0.141            | <b>0.163*</b>    | <b>0.176*</b>    |
| 45–54   | -0.042          | -0.058           | 0.001            | 0.001            | 0.008            |
| 55–64   | 0.067           | 0.122            | 0.135            | 0.121            | 0.130            |
| 65+   | <b>-0.392*</b>  | -0.057           | -0.189           | -0.142           | -0.117           |
| Gender: male (ref. female)                          | <b>0.242***</b> | <b>0.293***</b>  | <b>0.266***</b>  | <b>0.208***</b>  | <b>0.217***</b>  |
| Low education (ref. average)                        | -0.083          | 0.125            | 0.109            | 0.092            | 0.102            |
| High education                                      | <b>0.444***</b> | <b>0.287***</b>  | <b>0.254***</b>  | <b>0.181**</b>   | <b>0.147*</b>    |
| With partner (ref. without partner)                 | <b>0.193***</b> | <b>0.196***</b>  | <b>0.186**</b>   | <b>0.184**</b>   | <b>0.185**</b>   |
| No. of children age <10                             | -0.053          | -0.062           | -0.040           | -0.075           | -0.072           |
| No. of children age 10-14                           | 0.020           | 0.061            | 0.063            | 0.050            | 0.059            |
| Good respondents cooperation (ref. bad)             | <b>0.339***</b> | <b>0.253*</b>    | <b>0.319*</b>    | 0.242            | 0.236            |
| Working h/week                                      |                 | <b>-0.007**</b>  | <b>-0.008**</b>  | -0.002           | -0.002           |
| Permanent contract (ref. other)                     |                 | <b>0.372***</b>  | <b>0.310***</b>  | <b>0.314***</b>  | <b>0.284***</b>  |
| Self-employed (ref. other white collar)             |                 | <b>0.762***</b>  | <b>0.705***</b>  | <b>0.682***</b>  | <b>0.681***</b>  |
| Manager (ref. other white collar)                   |                 | <b>0.399***</b>  | <b>0.350***</b>  | <b>0.325***</b>  | <b>0.350***</b>  |
| Manual worker (ref. other white collar)             |                 | -0.035           | -0.022           | -0.059           | -0.039           |
| Sector of activity of current employment: services  |                 | <b>0.145*</b>    | 0.127            | 0.085            | 0.086            |
| Public (ref. production)                            |                 | <b>0.270***</b>  | <b>0.226**</b>   | <b>0.182*</b>    | <b>0.192**</b>   |
| Fewer skills cp. to previous job (ref. same skills) |                 | <b>-1.083***</b> | <b>-0.995***</b> | <b>-1.047***</b> | <b>-1.072***</b> |
| Different skills cp. to previous job                |                 | <b>-0.179**</b>  | -0.134           | <b>-0.197*</b>   | <b>-0.201*</b>   |
| More skills cp. to previous job                     |                 | <b>0.284***</b>  | <b>0.255***</b>  | <b>0.212**</b>   | <b>0.206**</b>   |

<sup>12</sup> Additionally, a hierarchy of needs effect may be emerging here; considering more immediately pressing issues such as the higher probability of more precarious working conditions, and lower wages in this occupational group, career prospects might be perceived as less of a priority compared to other job characteristics. In addition, a lack of career prospects will change aspirations accordingly, if they are an unachievable goal (following the 'satisficing' argument).

Table 5: *Determinants of satisfaction with career prospects*

| Satisfaction with career prospects              | Step_1       | Step_2       | Step_3           | Step_4           | Step_5           |
|---|--------------|--------------|------------------|------------------|------------------|
| No. of employer changes                         |              |              | 0.006            | -0.012           | -0.011           |
| No. of unemployment spells                      |              |              | <b>-0.100***</b> | <b>-0.094***</b> | <b>-0.096***</b> |
| Job tenure                                      |              |              | -0.005           | -0.008           | -0.007           |
| Job tenure <sup>2</sup> /1000                   |              |              | 0.312            | 0.295            | 0.273            |
| Last job change: sectoral mobility (ref no)     |              |              | -0.091           | -0.051           | -0.043           |
| Last job change: occupational mobility (ref no) |              |              | -0.018           | 0.027            | 0.010            |
| Last job change: voluntary (ref. no)            |              |              | <b>0.232***</b>  | <b>0.224***</b>  | <b>0.214***</b>  |
| Last job change: forced (ref. no)               |              |              | -0.061           | -0.066           | -0.062           |
| Last job change: interregional (ref. regional)  |              |              | 0,038            | -0,047           | -0,058           |
| Welfare state: liberal (ref. social-democratic) |              |              |                  | <b>0.366**</b>   |                  |
| Insider protection conservative                 |              |              |                  | <b>-0.198*</b>   |                  |
| Insider protection family oriented              |              |              |                  | <b>-0.525***</b> |                  |
| Post-socialist                                  |              |              |                  | <b>-0.625***</b> |                  |
| Post-socialist liberal                          |              |              |                  | <b>-0.674***</b> |                  |
| Mean unemployment 2000–2005                     |              |              |                  |                  | 0.006            |
| Difference unemployment 2005–2000               |              |              |                  |                  | <b>-0.088***</b> |
| Mean employment rate 2000–2005                  |              |              |                  |                  | <b>0.021**</b>   |
| Difference employment 2005–2000                 |              |              |                  |                  | <b>-0.063**</b>  |
| Mean GDP in PPS 2000–2005                       |              |              |                  |                  | <b>0.010***</b>  |
| Difference GDP in PPS 2005–2000                 |              |              |                  |                  | 0.003            |
| McFaddens Pseudo-r <sup>2</sup>                 | <b>0.015</b> | <b>0.046</b> | <b>0.053</b>     | <b>0.067</b>     | <b>0.069</b>     |
| Chi <sup>2</sup>                                | 212.946      | 440.185      | 454.842          | 573.834          | 590.731          |
| No. of Cases                                    | 11.066       | 7.139        | 6.517            | 6.517            | 6.517            |

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

Source: *EB 64.1*

The model shows that an increased skill level in a current job significantly increases satisfaction with career prospects. The opposite is true for lower skills. People who use fewer skills in their current job are significantly less satisfied with their career prospects. Here the same argument of skill intensity as an indicator for an upward or downward move applies. Moreover, the change to using more skills seems to be perceived as a better match on the labour market by the individual which influences career prospects positively. We find the same effect for different skill requirements in the current job. While different skills could be understood as the application of additional skills, it is safe to assume that respondents tend to choose the response category different skills rather than fewer skills for reasons of social desirability. This could explain the significant negative impact of different skill requirements on satisfaction with career prospects.

The information on past mobility (Step 3) shows similar effects like in the proceeding models: again, a consistent negative impact of number of unemployment spells and a consistent positive effect of the voluntary nature of the last job change can be noted. A voluntary job change often occurs if a person finds a better job, i.e. if the quality of employment improves. Apparently, better career prospects matter in this context. However, if a person has a high number of unemployment spells this could indicate de-skilling or a lack of specific human capital which is detrimental to career advancement.

The effects of these measures of past labour market mobility have been very stable across the variables of job satisfaction in all models presented in this chapter so far. While other influencing factors vary, it seems that satisfaction with objective work arrangements (i.e. work contract and salary) and quality of employment (i.e. career prospects) is

influenced in a similar way by labour market mobility indicators. For the relationship between labour market mobility and job satisfaction this could imply that certain mobility-related living conditions increase satisfaction with objective work arrangements and quality of position, whereas others decrease it in equal measure.

Welfare state regimes and macroeconomic indicators are important determinants of satisfaction with career prospects (Steps 4 and 5). Compared to the social democratic welfare regime, only the liberal welfare regime has a significant positive impact, while all other welfare regimes show significant negative effects. This means that satisfaction is highest in the liberal welfare regime, followed by the social democratic welfare regime. Since the social democratic regime is characterised by high employment security, satisfaction with career prospects should be comparatively high in these countries. High employment security gives you the opportunity to leave an ill-matching job in the hope of finding something more suitable and thus will increase satisfaction with career prospects. In contrast, the liberal welfare regime provides high labour market flexibility, very little security, and places labour market-related social risks mostly on the shoulders of the individual. The positive effect we find for the liberal regime is probably based on a combination of lower aspirations and high job mobility, including higher permeability for upward mobility. By the lower aspirations argument we mean that people do not expect secure and certain career prospects, but are accustomed to a high degree of uncertainty and do not perceive it as unsatisfactory. The argument of highly anticipated future labour market mobility implies that due to low job security, and high labour market flexibility, people expect to be mobile in the labour market in future. Due to frequent job changes they might generally perceive it as easier to find a new job, if they were looking for one. The negative impact of insider protection regimes and post-socialist countries probably are based on different rationales. In insider protection regimes, labour market rigidities may account for lower satisfaction with career prospects. On the other hand, the depreciation of skills during the transformations process of post-socialist countries, as well as higher uncertainty about future labour market developments in these countries, may account for the negative impact of the post-socialist welfare regimes on satisfaction with career prospects.

For macroeconomic influences, a combination of level and different effects (Step 5) can be noted. While the unemployment level, included as the mean unemployment between 2000 and 2005 rate, has no impact on reported satisfaction, the difference between the unemployment rate 2005 and 2000 has the expected significant negative effect. If the unemployment rate increased during the past five years, satisfaction with career prospects was lower in 2005. Since people base their assessment of future career prospects to a certain extent on past developments (Levy-Garboua, Montmarquette, and Simonnet, 2004), it is reasonable that unemployment trends have a greater impact on future career prospects than unemployment levels at one point in time. For the employment rate, there is a positive effect of the mean level between 2000 and 2005, and a negative impact of the difference between 2005 and 2000. For GDP the expected positive impact of mean GDP 2000-2005 can be established, but no effect for GDP change.

The results for satisfaction with career prospects underline that skill intensity is an indicator for an upward or downward move. Therefore, applying fewer skills after a job change has a negative impact whilst applying more skills has a positive impact. Again the same positive effect of a voluntary job change and the negative effect of unemployment spells are shown.

## **Satisfaction with work–life balance**

Satisfaction with work–life balance determines the satisfaction of being able to combine work and private life (see Annex 2). Analogous to the models presented above, a straightforward effect of age upon satisfaction with work–life balance (Table 6) cannot be detected. Again, there is a positive impact of male gender. It is reasonable to assume that in the context of the male breadwinner model, which is still the dominant mode of division of work within the family in most European countries, it is easier for men to combine work and family life, since they do not engage in large amounts of household-related work. In contrast, women hold a central role in the family (Bem, 1993; Gutek, Searle, and Klepa,

1991). Note that this sample is based on employed people only; therefore individuals (mostly females) whose main activity is housekeeping or childcare do not appear in the sample.

The impact of educational level on satisfaction with work–life balance corresponds to other research findings (Bussing, 1992; Weaver, 1980). Low education increases satisfaction with work–life balance, while higher education has no impact. The common explanation for this effect is that the lower educated have lower aspirations, which are more easily met. In addition, the jobs in which highly educated people work are usually more demanding in terms of working long hours, geographic mobility and flexibility. These are all factors that make the combination of work and private life more difficult. However, it should also be noted that this is by no means a straightforward interpretation that applies to all social groups. In fact, the higher educated (and better paid) can more easily afford private childcare and other services facilitating the combination between work and private life.

Analogous to the three models presented above, a positive impact for living with a partner can be found. This consistent positive effect of living with a partner on different variables of job satisfaction indicates that people who are with a partner are generally more satisfied with their life situation and thus report higher satisfaction levels. The increase in satisfaction with work–life balance may be highest for those people whose partner takes the responsibility for household related work, typically women. This would imply that men who are living with a partner are more satisfied with their work–life balance. However, there is not sufficient information on the employment status of the spouse and the inclusion of an interaction term between male gender and living with a partner did not support this assumption.<sup>13</sup>

In contrast to the models that are based exclusively on job characteristics of job satisfaction (salary, contract, career prospects), the number of children aged ten years and under has a significant negative impact on the work–life balance of employed people in the European Union. The findings suggest that the age of children strongly determines the degree of care intensity they require: having children aged 10–14 does not negatively effect the satisfaction with work–life balance anymore.

In line with theoretical expectations, the results show that the amount of working hours per week significantly decrease satisfaction with work–life balance (Step 2). Other characteristics of the current job, however, do not show any effect: whether a person has a permanent contract, is self-employed or in a management position, or which sector she works in does not make a difference concerning satisfaction with work–life balance. A negative effect shows up if fewer or different skills are required in the current job than in the previous job. Based on the assumption that a move towards lower skill intensity indicates downward mobility, these job changes might imply more precarious working conditions in the current job. This in turn could lead to more difficulties in combining work and private life, e.g. through irregular working times.

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<sup>13</sup> The interaction term was significantly negative in the first step of the model but turned insignificant in subsequent steps of the model (not presented here, but in earlier versions of the model). Moreover, the variables introduced in Step 2–5 could have outweighed the influence of shared house or reproduction work within a relationship on men's perception of their work-life balance.



Table 6: *Determinants of the satisfaction with work–life balance*

| Satisfaction with work–life balance                 | Step_1          | Step_2           | Step_3           | Step_4           | Step_5           |
|---|-----------------|------------------|------------------|------------------|------------------|
| 15–24 (ref 35–44)                                   | 0.119           | -0.030           | 0.120            | 0.102            | 0.106            |
| 25–34   | -0.076          | -0.098           | -0.016           | 0.002            | 0.011            |
| 45–54   | 0.033           | 0.048            | 0.061            | 0.073            | 0.063            |
| 55–64   | <b>0.224*</b>   | <b>0.226*</b>    | 0.179            | 0.180            | 0.158            |
| 65+   | -0.206          | 0.699            | 0.785            | <b>0.856*</b>    | 0.818            |
| Gender: male (ref. female)                          | <b>-0.049</b>   | <b>0.208**</b>   | <b>0.203**</b>   | <b>0.179*</b>    | <b>0.177*</b>    |
| Low education (ref. average)                        | 0.116           | <b>0.278*</b>    | <b>0.343**</b>   | <b>0.290*</b>    | <b>0.346**</b>   |
| High education                                      | <b>0.043</b>    | 0.035            | 0.038            | -0.051           | -0.031           |
| With partner (ref. without partner)                 | <b>0.254***</b> | <b>0.288***</b>  | <b>0.306***</b>  | <b>0.304***</b>  | <b>0.298***</b>  |
| No. of children age <10                             | <b>-0.100**</b> | <b>-0.114*</b>   | <b>-0.084</b>    | <b>-0.097*</b>   | <b>-0.099*</b>   |
| No. of children age 10-14                           | -0.026          | -0.035           | -0.016           | -0.022           | -0.023           |
| Good respondents, cooperation (ref. bad)            | <b>0.054</b>    | <b>0.061</b>     | -0.010           | -0.031           | -0.033           |
| Working h/week                                      |                 | <b>-0.050***</b> | <b>-0.051***</b> | <b>-0.049***</b> | <b>-0.048***</b> |
| Permanent contract (ref. other)                     |                 | 0.136            | 0.077            | 0.079            | 0.063            |
| Self-employed (ref. other white collar)             |                 | 0.203            | 0.138            | 0.133            | 0.124            |
| Manager (ref. other white collar)                   |                 | -0.124           | -0.150           | -0.139           | -0.162           |
| Manual worker (ref. other white collar)             |                 | -0.095           | -0.065           | -0.078           | -0.076           |
| Sector of activity of current employment: services  |                 | -0.093           | -0.121           | -0.140           | -0.127           |
| Public (ref. production)                            |                 | -0.051           | -0.111           | -0.134           | -0.119           |
| Fewer skills cp. to previous job (ref. same skills) |                 | <b>-0.679***</b> | <b>-0.616***</b> | <b>-0.614***</b> | <b>-0.629***</b> |
| Different skills cp. to previous job                |                 | <b>-0.307***</b> | <b>-0.335***</b> | <b>-0.361***</b> | <b>-0.358***</b> |
| More skills cp. to previous job                     |                 | -0.041           | -0.100           | -0.106           | -0.130           |
| No. of employer changes                             |                 |                  | 0.005            | -0.003           | -0.004           |
| No. of unemployment spells                          |                 |                  | <b>-0.057*</b>   | <b>-0.055*</b>   | <b>-0.052*</b>   |
| Job tenure  |                 |                  | <b>0.033**</b>   | <b>0.032*</b>    | <b>0.033**</b>   |
| Job tenure <sup>2</sup> /1000                       |                 |                  | -0.666           | -0.701           | -0.711           |
| Last job change: sectoral mobility (ref no)         |                 |                  | 0.067            | 0.091            | 0.091            |
| Last job change: occupational mobility (ref no)     |                 |                  | 0.025            | 0.021            | 0.039            |
| Last job change: voluntary (ref. no)                |                 |                  | 0.079            | 0.068            | 0.073            |
| Last job change: forced (ref. no)                   |                 |                  | 0.133            | 0.121            | 0.121            |
| Last job change: interregional (ref. regional)      |                 |                  | -0.051           | -0.089           | -0.082           |
| Welfare state: liberal (ref. social-democratic)     |                 |                  |                  | <b>-0.340*</b>   |                  |
| Insider protection conservative                     |                 |                  |                  | -0.210           |                  |
| Insider protection family oriented                  |                 |                  |                  | -0.222           |                  |
| Post-socialist                                      |                 |                  |                  | <b>-0.469***</b> |                  |
| Post-socialist liberal                              |                 |                  |                  | <b>-0.391**</b>  |                  |
| Mean unemployment 2000–2005                         |                 |                  |                  |                  | 0.014            |
| Difference unemployment 2005–2000                   |                 |                  |                  |                  | -0.027           |
| Mean employment rate 2000–2005                      |                 |                  |                  |                  | <b>0.024**</b>   |
| Difference employment 2005–2000                     |                 |                  |                  |                  | -0.026           |
| Mean GDP in PPS 2000–2005                           |                 |                  |                  |                  | 0.002            |
| Difference GDP in PPS 2005–2000                     |                 |                  |                  |                  | -0.008           |
| McFaddens Pseudo-r <sup>2</sup>                     | <b>0.005</b>    | <b>0.054</b>     | <b>0.059</b>     | <b>0.062</b>     | <b>0.062</b>     |
| Chi <sup>2</sup>                                    | 48.115          | 365.052          | 358.979          | 376.430          | 381.039          |
| No. of Cases  | 11.066          | 7.139            | 6.517            | 6.517            | 6.517            |

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ Source: *EB 64.1*

Past employment trajectories also influence satisfaction with work–life balance in several ways (Step 3). The negative impact of frequent periods of unemployment also applies to this dimension of satisfaction. This is not surprising as unemployment can go along with increased job search costs. Job tenure, on the other hand, has a consistently positive impact. Again, it is not possible to distinguish between the initial selection effect, i.e. that people stayed in their job for a longer time, because they are satisfied with the way their job enables them to combine work and private life; or an increase in satisfaction with tenure over time due to satisficing effects, or adapting aspirations to fit job needs. In contrast to the models presented before, none of the information about the last job change has an impact on satisfaction with work–life balance. This might indicate that mid- and long-term measures of labour market mobility are more decisive for satisfaction with work–life balance than recent changes.

Step 4 of the model shows that people who live in a liberal welfare regime or in a post-socialist regime are significantly less satisfied with their work–life balance than people who live in the social-democratic welfare regime. Social democratic countries exhibit on average lower gender differences in working time, and a low incidence of long working hours or precarious part-time employment, due to high average and marginal taxation and low gender wage differentials (which encourage dual earner structures and at the same time discourage long working hours). In contrast, high income, inequality, high returns to education, and low taxation foster long working hours in liberal welfare states (Anxo and Erhel, 2005). There is no effect for the insider protection regimes. Both the social democratic welfare regime and the insider protection regimes are characterised by a comparatively high standard of employment protection. High employment protection in terms of working hours and working conditions additionally strongly influences options to combine work and private life to a satisfactory level.

Including more detailed measures of macroeconomic indicators (Step 5) reveals that only the mean employment rate during 2000 and 2005 has a significant positive impact on satisfaction with work–life balance. The way in which the independent variables influence satisfaction with work–life balance most strongly diverges from the other models. This emphasises how complex job satisfaction is and once again calls for a detailed analysis of the different variables of job satisfaction as enabled by the Eurobarometer (64.1) data rather than using crude overall measures.

The effects of mobility indicators with regards to satisfaction with work–life balance are somewhat different than satisfaction in the three former models (Tables 3 to 5). If fewer and different skills have to be applied after a job change this negatively affects satisfaction – as with other models. But a number of unemployment spells or the reason for the last job change are irrelevant determinants. With job tenure as the only significant and positive effect, mid- and long-term measures of labour market mobility seem decisive for satisfaction with work–life balance.

The European Year of Mobility 2006 recognises that geographic and job mobility raises flexibility in the labour market and may contribute to job growth in the European Union. It is frequently claimed that the European Employment Strategy focuses mainly on creating more jobs and less effort is devoted to creating better jobs. A useful measure for the quality of jobs is job satisfaction – one of the major focuses of this research report. In particular, the relationship between job satisfaction and different indicators of labour market mobility are analysed, as both constitute important elements of the European employment strategy.

As job satisfaction is a multi-dimensional construct, use was made of the detailed distinction between different variables of job satisfaction provided by Eurobarometer (64.1). The components of job satisfaction can be divided into roughly three dimensions (see Annex 2). These dimensions can be termed ‘satisfaction with objective work arrangements’ (comprising satisfaction with salary, contract and hours worked), ‘satisfaction with the quality of position’ (comprising satisfaction with training opportunities, career prospects and job content), and ‘satisfaction with combining work and private life’ (including satisfaction with commuting time, colleagues, and work–life balance).

The analysis of the four variables taken from the three job satisfaction factor constructs (satisfaction with salary, contract, career prospects and work–life balance) and its link to labour market mobility is set in the general theoretical framework of subjective aspirations as opposed to objective opportunity sets. To include labour market characteristics, a two-step process was introduced by distinguishing between past labour market mobility and characteristics of the current job.

With regards to the relationship between labour market mobility and job satisfaction two main results stand out: periods of unemployment negatively influence satisfaction with objective work arrangements, quality of position and combining work and private life (satisfaction with salary, work contract, career prospects and work–life balance), whereas a previous voluntary job change increases satisfaction with objective work arrangements and quality of position rather than with work–life balance.

Labour market mobility can lead to increased satisfaction in two dimensions of job satisfaction if it relates to particular reasons. Individuals prefer voluntary reasons for changing their job, i.e. ‘did not like his previous job’, ‘found a better job’ or ‘wanted to create own business’. Additionally, mobility leads to higher satisfaction if it is connected to a low number of unemployment spells and the application of same or more skills in the current job. Job tenure only has a positive significant impact on job satisfaction in relation to work–life balance. Rather than reflecting an adjustment of aspirations this may show that people who have the possibility of combining work and private life tend to stay in their job.

The probability of being satisfied with one’s salary increased if the last job change was between European regions, but only if macroeconomic factors were not included. In contrast, the increasing number of employment changes has a negative impact on satisfaction with a work contract even if welfare state regimes are included in the multivariate analysis. In liberal welfare states job turnover is a frequent phenomenon but is not necessarily synonymous with increased job insecurity. Nevertheless, it seems that a job change decreases the perception of the quality of a contract regardless of the welfare state type. This underlines the demand for security in the sense that work contract details do not worsen after a job change.

In summary, the empirical analysis of the four components (satisfaction with salary, work contract, career prospects and work–life balance) showed a number of new insights:

- In contrast to existing evidence, age does not show a straightforward effect in any of the four models. This shows that satisfaction in one of the variables is influenced by factors other than age.

- A consistently positive impact of the male gender in three out of the four models can be found, indicating that women are aware of existing inequalities and do not adjust their aspirations accordingly.
- Higher education has a positive impact on job-related satisfaction levels (in the first three dimensions), but lower education increases satisfaction with work–life balance. This is in line with human capital theory, where a higher human capital is associated with higher wages or better career prospects. Additionally it may be the same for a more demanding job.
- Living with a partner has a positive impact in all four models as salaries and household responsibilities may be shared.
- Having young children has no effect in the first three models, but has a negative impact on satisfaction with work–life balance.
- Respondents' cooperation during the interview shows a positive tendency, but turns insignificant at later steps in all models. Thus, satisfaction with professional life rather depends on stable opinions rather than a momentary mood.
- In line with economic theory, the extent of working longer hours per week decreases satisfaction in all models, but impacts least on career prospects.
- Having a permanent contract has a significant positive impact on all job-related satisfaction dimensions (salary, contract, career prospects), but no impact on satisfaction with work–life balance. This underlines that objective work arrangements that provide security can have a positive influence on job satisfaction.
- Being self-employed has a positive impact on satisfaction with salary and career prospects, but not on contract and work–life balance.
- Working in management has a positive impact in all models, but satisfaction with work–life balance as a manager includes demanding working conditions like longer working hours.
- Fewer or different skills required in the current job decrease satisfaction in all models; more skills only increases satisfaction in the first three job-related models, but does not include satisfaction with work–life balance. In line with research, a poor job match has the expected negative effect, which however does not always materialise, since more skills required may be serving as a proxy for upward mobility.
- Increasing numbers of unemployment periods have a significant negative impact in all models.
- People in the liberal and social-democratic welfare state regimes are generally more satisfied with the different dimensions of job satisfaction than people from the post-socialist and insider protection regimes.
- Generally, the level effects of macro-economic indicators are better predictors of job satisfaction, with the exception of the case of career prospects, where people are more influenced by developments, as measured by the difference between 2005 and 2000.

Thus, several factors that influence job satisfaction of European Union citizens can be identified in the Eurobarometer (64.1) data and some of them do confirm the effects found in the previous research on this issue. This analysis of a general model of job satisfaction dimensions for all employees finds that job satisfaction is higher for people with a higher education, except for satisfaction with work–life balance. In the same general overall model women are less satisfied with their salary, career prospects and work–life balance. Apparently women are aware of existing inequalities and it affects their job satisfaction. Gender, however, does not play a role in relation to type of work contract. Age groups in most steps of the model do not influence the dimensions of job satisfaction significantly. Similarly, only some specific elements of labour market mobility influence job satisfaction.

These analyses show, that job satisfaction is not a one-dimensional feature of a job and the job holder's characteristics, and that a broad range of specific elements of job satisfaction need to be taken into account when addressing job satisfaction. The findings largely correspond to results from research on job satisfaction, although few studies have attempted to discern the underlying structure or processes that produce job satisfaction. The findings are also interesting from the point of view that previous analyses have shown that the four components of job satisfaction shift in relative importance throughout life (Campbell et al, 1976). The identification of this structure helped define the variables to be included in the statistical models, since the components of job satisfaction respond differently to variation in the independent variables. Four major components of job satisfaction were selected for analysis: satisfaction with salary, work contract, career prospects, and work–life balance. The initial expectation based on the literature was confirmed by the analysis, with satisfaction with work–life balance exhibiting a different pattern than the other, more job-related elements of job satisfaction.

The overall conclusion of this paper is that voluntary mobility is an important determinant of job satisfaction. This is in line with the overarching debate on the need to empower people to actively manage both their personal lives and professional careers according to their preferences. In this context, enabling smoother transitions between different job statuses, including new combinations of such, would also serve to not only increase the flexibility of the workforce and meet the needs of firms, but would also indeed increase the satisfaction of workers. In the framework of transitional labour markets, the country-based results follow the general debate on flexicurity.

Social democratic welfare states exhibit on average higher job satisfaction, followed by the liberal welfare state. The insider protection conservative, insider protection family-oriented, post-socialist and the post-socialist liberal welfare state regimes seem to produce less satisfaction than the social democratic welfare states along most dimensions of job satisfaction. Satisfaction scores seem to reflect the existing labour market arrangements in each type. For example, satisfaction with salary is higher in the liberal welfare states, and satisfaction with work–life balance is higher for social democratic states. Other welfare state types consistently underperform regarding job satisfaction of the dependently employed. An important conclusion that emerges here is that the countries that perform worst in terms of job satisfaction are also those who are worst off with regard to the flexibility-security nexus.

Naturally, even within welfare state types, there is significant internal variation, which is why measures that go closer to the country classification are more effective in explaining the variance in job satisfaction. Interestingly enough, this change is very small, hinting at the fact that some overarching models of organising welfare can be relatively more successful than others in generating higher levels of job satisfaction for the workforce, and while country-based solutions are necessary they do not preclude the usefulness of an overarching strategy.

An interesting conclusion emerges in the case of reported satisfaction with a working contract, where liberal and social democratic states do not differ significantly, despite the very different nature of employment protection and fixed-term contracts in these states. However, it has been demonstrated that liberal and social democratic states manage equally well to combine flexibility and employment security (de Gier and van den Berg, 2005), and therefore if the type of working contract is taken as a partial proxy for employment security the difference between these regimes vanishes. Policy insights from this analysis could therefore indicate that transitional labour market arrangements that bridge geographic mobility and other labour market transitions could enhance overall job satisfaction in the European Union. Equally, the perceived balance between job security and labour market flexibility is an important component for employees in their job satisfaction.

The consistently negative effect of a number of unemployment spells on job satisfaction persists in all models and confirms the damaging effect of unemployment on the individual labour market history and trajectory (Gangl, 2005). The fact that this factor remains highly significant even after controlling for a range of individual, job-related and

occupational characteristics, as well as the welfare state type, serves to confirm the severity of the effect at European level. As previous studies have focused mostly on the effect of unemployment on wages, it remains the goal of subsequent research to identify whether the effect persists above and beyond the wage effect. The result that a higher number of unemployment spells leads to lower satisfaction with the four aspects of professional life also supports the 'flexicurity' theory (see also Coppin and Vandenbrande, 2006) in the sense that individuals need an insurance against certain risks on the labour market to be able to be flexible and mobile on the labour market and geographically.

The establishment of a policy and institutional framework accounting for these risks and enabling individual flexibility and mobility may therefore also have a positive effect on job satisfaction. One such instrument is the transitional labour market framework (Schmid and Schömann, 2004) later translated into the so-called European Employment Insurance Strategy, as described by de Gier and van den Berg (2005). The prevention of unemployment through extending social security services to the low-wage and high-risk employed, encouraging easier transitions out of unemployment, and taking steps to eliminate concomitant discrimination and psychological effects (possibly through guidance and counselling services) therefore remains a key challenge for European states.

As there is a high probability and a significant amount of evidence that satisfied workers tend to be more productive and look more favourably on to flexibility, the notion of the 'satisfied worker' is a key element in obtaining a flexible and highly qualified workforce. Geographical and labour market mobility within the European Union can – under specific conditions – promote job satisfaction and thereby is likely to enhance sustainable growth. This report has shown that intended or voluntary job changes, few unemployment spells and less downward mobility form a relevant part of those conditions which increase different elements of job satisfaction. In this respect mobility emerges as an important additional element of the European Employment Strategy to create more and better jobs.

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# Annexes

## Annex 1: data and question phrasing

The Eurobarometer 64.1 data was collected via personal interviews in the EU 25 countries in September 2005. A detailed description of the dataset and first descriptive results can be found in the report that has been published by the European Foundation for the Improvement of Living and Working Conditions in 2006 (Coppin et al, 2006).

Table 7 gives an overview of the case numbers by country for the total population and on which the sample analyses presented throughout this paper are based on – the population currently employed at the time of the survey. At the time of the survey, 45.83% of the surveyed population was employed (Table 8).

Table 7: *Case numbers by country: employed vs. total population (without weighting)*

|              | Total population |               | Employed (including self employed) |               |
|--------------|------------------|---------------|------------------------------------|---------------|
|              | Frequency        | Percent       | Frequency                          | Percent       |
| BE           | 1,047            | 4.25          | 505                                | 4.47          |
| DK           | 1,011            | 4.10          | 526                                | 4.66          |
| DE           | 1,528            | 6.20          | 700                                | 6.20          |
| GR           | 1,000            | 4.06          | 415                                | 3.67          |
| ES           | 1,016            | 4.12          | 384                                | 3.40          |
| FI           | 1,004            | 4.07          | 444                                | 3.93          |
| FR           | 1,014            | 4.11          | 489                                | 4.33          |
| IE           | 1,000            | 4.06          | 476                                | 4.21          |
| IT           | 1,000            | 4.06          | 498                                | 4.41          |
| LU           | 500              | 2.03          | 207                                | 1.83          |
| NL           | 1,000            | 4.06          | 590                                | 5.22          |
| AT           | 1,012            | 4.11          | 540                                | 4.78          |
| PT           | 1,000            | 4.06          | 377                                | 3.34          |
| SE           | 1,000            | 4.06          | 596                                | 5.28          |
| UK           | 1,334            | 5.41          | 595                                | 5.27          |
| CY           | 502              | 2.04          | 242                                | 2.14          |
| CZ           | 1,011            | 4.10          | 543                                | 4.81          |
| EE           | 1,009            | 4.09          | 452                                | 4.00          |
| HU           | 1,012            | 4.11          | 362                                | 3.21          |
| LV           | 1,049            | 4.26          | 515                                | 4.56          |
| LT           | 1,002            | 4.07          | 392                                | 3.47          |
| MT           | 500              | 2.03          | 147                                | 1.30          |
| PL           | 999              | 4.05          | 316                                | 2.80          |
| SK           | 1,056            | 4.29          | 543                                | 4.81          |
| SI           | 1,037            | 4.21          | 440                                | 3.90          |
| <b>Total</b> | <b>24,643</b>    | <b>100.00</b> | <b>11,294</b>                      | <b>100.00</b> |

Source: *EB 64.1*

Table 8: *Current occupation of total population, EB 64.1*

| Current occupation         | Frequency     | Percent       | Cum. Percent |
|----------------------------|---------------|---------------|--------------|
| Self-employed              | 1,688         | 6.85          | 6.85         |
| Managers                   | 2,435         | 9.88          | 16.73        |
| Other white collar workers | 2,623         | 10.64         | 27.37        |
| Manual workers             | 4,548         | 18.46         | 45.83        |
| House person               | 2,489         | 10.10         | 55.93        |
| Unemployed                 | 1,555         | 6.31          | 62.24        |
| Retired                    | 7,004         | 28.42         | 90.66        |
| Student                    | 2,301         | 9.34          | 100.00       |
| <b>Total</b>               | <b>24,643</b> | <b>100.00</b> |              |

**Dependent variables: question phrasing**

The exact phrasing and the order in which satisfaction with different dimensions of job satisfaction are presented in the survey may influence respondent behaviour.

QA48a: Generally speaking, when you think about your professional life, could you tell me whether you are very satisfied, fairly satisfied, fairly dissatisfied or not at all satisfied with each of the following?

|    |   | Very satisfied | Fairly satisfied | Fairly dissatisfied | Not at all satisfied | DK |
|----|---|----------------|------------------|---------------------|----------------------|----|
| 1  | Your salary   | 1              | 2                | 3                   | 4                    | 5  |
| 2  | Your work contract  | 1              | 2                | 3                   | 4                    | 5  |
| 3  | The number of hours you work                                | 1              | 2                | 3                   | 4                    | 5  |
| 4  | Your commuting time   | 1              | 2                | 3                   | 4                    | 5  |
| 5  | Your career prospects                                       | 1              | 2                | 3                   | 4                    | 5  |
| 6  | The content of your job                                     | 1              | 2                | 3                   | 4                    | 5  |
| 7  | Your colleagues   | 1              | 2                | 3                   | 4                    | 5  |
| 8  | Your training opportunities                                 | 1              | 2                | 3                   | 4                    | 5  |
| 9  | The balance between your private life and your working life | 1              | 2                | 3                   | 4                    | 5  |
| 10 | The health and safety conditions in your company            | 1              | 2                | 3                   | 4                    | 5  |

The EB 64.1 question on job satisfaction distinguishes between ten dimensions of job satisfaction. The phrasing ‘about your professional life’ makes the question somewhat blurred, but it is assumed that people predominantly referred to their current job rather than their past employment history when answering the question. The ordering of the ten dimensions of job satisfaction starts out with the evaluation of rather objective and easily quantifiable aspects: salary, work contract, number of hours worked and commuting time. It continues with aspects related to the qualitative content of a job: career prospects, content of job, colleagues, and training opportunities, and finally ends with broader aspects relating to different domains of life: family and health. It should be noted that the evaluation of the first items may influence the evaluation of subsequent items.

## Annex 2: dimensions of job satisfaction – factor analysis

In order to discern whether the job satisfaction construct in Europe falls within a general categorisation, an exploratory factor analysis was undertaken, a technique specifically designed to uncover the latent structure underlying a set of variables.

For the factor estimation, the principle axis factoring procedure was selected, which seeks to derive the least possible number of factors to account for the common (shared) variance within a number of variables, as opposed to principle component analysis which attempts to derive a structured accounting for the maximum of the shared and unique variance among the variables. Since the common portion of the variance (the one that measurements of job satisfaction share in an underlying structure inherent to job satisfaction alone) is of interest in the current analysis, the use of principle factors is justified. However, as has been remarked by Wilkinson, Blank and Gruber (1996) in most cases principle component analysis and principle factor analysis will lead to similar or identical conclusions.

As a first step, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was estimated to confirm the viability of searching for an underlying factor structure. As expected in this case, the KMO values were very high since all variables are used to measure the same underlying construct, with the overall measure standing at 0.9043.

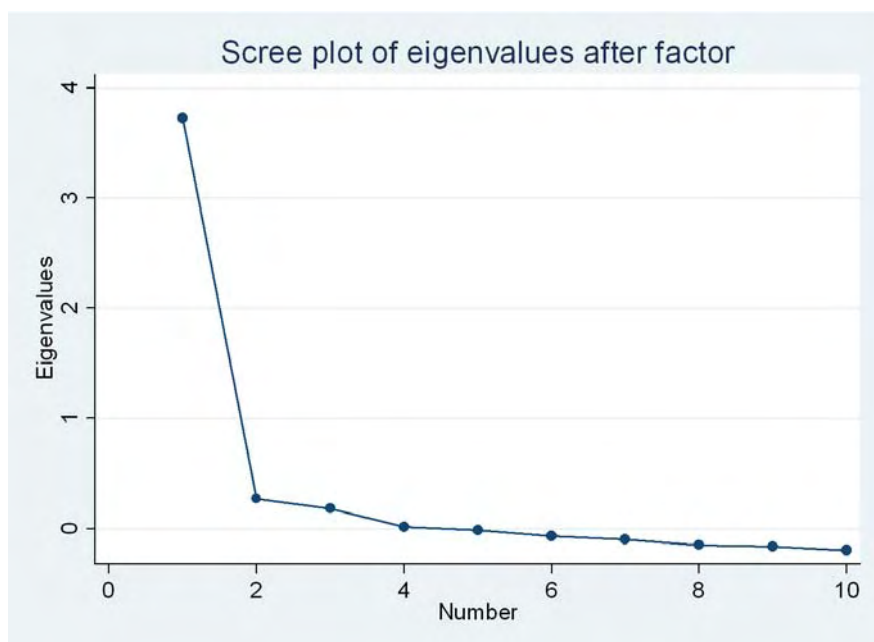
Table 9: *Factor analysis*

| <b>Factor analysis/correlation</b> |                   |                   |                   | Number of obs = 19405 |
|------------------------------------|-------------------|-------------------|-------------------|-----------------------|
| Method: principal factors          |                   |                   |                   | Retained factors = 3  |
| Rotation: (unrotated)              |                   |                   |                   | Number of params = 27 |
| <b>Factor</b>                      | <b>Eigenvalue</b> | <b>Difference</b> | <b>Proportion</b> | <b>Cumulative</b>     |
| Factor 1                           | 3.72663           | 3.45200           | 1.0553            | 1.0553                |
| Factor 2                           | 0.27462           | 0.08916           | 0.0778            | 1.1330                |
| Factor 3                           | 0.18546           | 0.16700           | 0.0525            | 1.1856                |
| Factor 4                           | 0.01846           | 0.02842           | 0.0052            | 1.1908                |
| Factor 5                           | -0.00996          | 0.05687           | -0.0028           | 1.1880                |
| Factor 6                           | -0.06682          | 0.02628           | -0.0189           | 1.1690                |
| Factor 7                           | -0.09311          | 0.05481           | -0.0264           | 1.1427                |
| Factor 8                           | -0.14792          | 0.01252           | -0.0419           | 1.1008                |
| Factor 9                           | -0.16043          | 0.03509           | -0.0454           | 1.0554                |
| Factor 10                          | -0.19552          |                   | -0.0554           | 1.0000                |

The variables representing satisfaction with each of the ten aspects of work–life were recoded for higher values to represent higher satisfaction in order to aid the analysis. The output for the factor analysis is in Table 9.

The choice of the number of factors retained is somewhat ambiguous, with studies recognising a number of different and valid approaches. The Kaiser criterion would suggest keeping only one factor, although literature has found it to be unreliable as a single indicator (Lance, Butts, and Michels, 2006). In addition, it would tend to underestimate the true number of factors when the number of variables is less than 20 (Cattell, 1966). The Cattell scree plot test has been often criticised as being a matter of the subjective evaluation of the researcher for where the ‘scree’ starts, with researchers being tempted to choose the number of factors they would like to have. The number of factors seems to be a maximum of three by this criterion, with level-off starting decisively at the fourth (Figure 7).

Figure 7: Scree plot of eigenvalues



A newer method of selection of a number of factors for retention, sometimes characterised as superior in literature, is the Parallel Analysis Method (Velicer, Eaton, and Fava, 2000: 67; Lance, Butts, and Michels, 2006).

Table 10: Parallel Analysis for Eigen values

|            | Eigen   | Random  | Dif     |
|------------|---------|---------|---------|
| <b>c1</b>  | 3.7266  | 0.0372  | 3.6894  |
| <b>c2</b>  | 0.2746  | 0.0320  | 0.2426  |
| <b>c3</b>  | 0.1855  | 0.0154  | 0.1701  |
| <b>c4</b>  | 0.0185  | 0.0082  | 0.0102  |
| <b>c5</b>  | -0.0100 | -0.0019 | -0.0081 |
| <b>c6</b>  | -0.0668 | -0.0026 | -0.0643 |
| <b>c7</b>  | -0.0931 | -0.0117 | -0.0814 |
| <b>c8</b>  | -0.1479 | -0.0173 | -0.1306 |
| <b>c9</b>  | -0.1604 | -0.0200 | -0.1405 |
| <b>c10</b> | -0.1955 | -0.0346 | -0.1609 |

It compares the difference in eigenvalue for the factor with eigenvalues for a randomly generated variable to help determine the true number of factors. This method suggests keeping only those factors for which the difference between eigenvalues is positive.

According to this criterion, the appropriate number of factors to be retained in the case of this data is four (Table 10). However, following calculations that for the sake of brevity will not be repeated here, the fourth factor is uninterpretable



(characterised by very low loadings of .1 even after rotation) and therefore the comprehensibility criterion takes precedence here, and only three factors are extracted.

Since the estimation procedure used in this case is principal factoring, the eigenvalues and eigenvectors of the sample covariance (S) are computed after first estimating values for Psi (as opposed to principle component factoring, where the eigenvalues and eigenvectors of S are calculated before the elements of Psi), S-Psi is not necessarily positive semidefinite (Rencher, 1995). When not, negative eigenvalues can be generated, which generates cumulative proportions above 1. Indeed, this is the case in our analysis, which makes it rather difficult to tell the exact proportion of the common variance explained by the factor structure. However, a principal component factoring procedure with a similar factor structure (the same factors in number and nature of loadings), puts the overall variance explained (shared and unique) by the factor structure at 61.03%.

The results of the analysis were further rotated using varimax rotation which keeps the orthogonality of factors, thus aiding the subsequent interpretation of the factors. The results are presented in Table 11.

Table 11: *Factor analysis: rotated solution*

| <b>Factor analysis/correlation</b>       |          | Number of obs = 19405 |          |
|--|----------|-----------------------|----------|
| Method: principal factors                |          | Retained factors = 3  |          |
| Rotation: orthogonal varimax (Horst off) |          | Number of params = 27 |          |
| Variable (Satisfaction with...)          | Factor 1 | Factor 2              | Factor 3 |
| Salary                                   |          | 0.5286                |          |
| Contract                                 |          | 0.5245                |          |
| Hours                                    |          | 0.5043                | 0.4075   |
| Career prospects                         | 0.6406   |                       |          |
| Commuting time                           |          |                       | 0.3652*  |
| Job content                              | 0.4634   |                       | 0.4018   |
| Colleagues                               |          |                       | 0.4287   |
| Training opportunities                   | 0.6152   |                       |          |
| Work–life balance                        |          |                       | 0.5211   |
| Health and safety                        | 0.3489*  | 0.3094*               | 0.4219   |

(blanks represent abs(loading)<.4) \* presented for clarity

Source: *EB 64.1*

Satisfaction with salary, contract, and working hours all seem to load very highly on a single factor, which we will term satisfaction with objective work arrangements. This finding of a single interpretable factor in this category demonstrates that satisfaction with salary is not a single indicator of satisfaction with the formal aspect of work.

Satisfaction with working hours also loads relatively highly on factor 3, which includes prominently satisfaction with work–life balance, satisfaction with colleagues, satisfaction with commuting time and satisfaction with job content. This factor is **satisfaction with combining private and working life**. This definition was selected on the basis of the high loadings of social relationships at work (colleagues), commuting time<sup>14</sup> (which would limit time for other social activities) and satisfaction with work–life balance. The high loading of job content on this factor is interpreted as

<sup>14</sup> Relatively low loading, but significantly higher than the loadings on the other two factors

satisfaction with the mode and orientation of work – perhaps the satisfaction derived from the degree of team work involved in a job will tend to be covered by this category. A component of satisfaction with working hours is also applicable to this construct, given that unfavourable working hours will tend to have an effect on combining the work and private spheres.

The final factor (factor 1 in the table) seems to measure what is termed here **satisfaction with quality of position**, comprising satisfaction with training opportunities, career prospects and job content. The loading of job content here is taken to represent the ‘objective’ content of the job, comprising tasks, duties and responsibilities (rather than the *mode* of working already accounted for above).

In summary, the items as we categorise them, are:

1. Satisfaction with objective work arrangements
  - Satisfaction with salary
  - Satisfaction with contract
  - Satisfaction with hours worked.
2. Satisfaction with quality of position
  - Satisfaction with training opportunities
  - Satisfaction with career prospects
  - Satisfaction with job content.
3. Satisfaction with combining work and private life
  - Satisfaction with commuting time
  - Satisfaction with colleagues
  - Satisfaction with work–life balance.

Satisfaction with health and safety conditions is roughly equally correlated with all three categories and seems to be unaccounted for by this factor structure. The conclusions reached in this section will contribute to the subsequent structuring of the paper, with each aspect being described separately. In addition, they will be used in the modelling section of this paper in order to construct a viable model of job satisfaction in Europe.

The subsequent structure of the paper will follow this basic distinction, analysing the primary variables contributing to each factor construct. Models will be constructed for satisfaction with salary and contract (loading highly on the factor we have termed satisfaction with objective work arrangements). Satisfaction with career prospects is the variable most correlated with the factor quality of position, and will thus also be the subject of a separate model. Finally, satisfaction with work–life balance will be taken as representative of factor 3, combining work and private life. These variables were selected on the basis of having the highest loadings on their respective factor, as well as loading only on a single factor. Despite the relatively good internal reliability measures for scales constructed out of the items on each factor (e.g. alpha of .74 for factor 1), the models will apply to one variable only, making results easier to interpret, but also hinting to the underlying dynamics of their respective group.

This section confirms the assumption that job satisfaction is a multi-dimensional construct, which may be determined by very different underlying processes.

## Annex 3: descriptives

### 1. Job satisfaction and age

Table 12: *Job satisfaction by age groups*

|  | Satisfied | Dissatisfied | Total       |
|--|-----------|--------------|-------------|
| <b>Satisfaction with salary</b>            |           |              |             |
| 15-25                                      | 63        | 37           | 100 (954)   |
| 25-35                                      | 69        | 31           | 100 (2779)  |
| 35-45                                      | 72        | 28           | 100 (3766)  |
| 45-55                                      | 67        | 33           | 100 (2811)  |
| 55-65                                      | 73        | 27           | 100 (1169)  |
| 65+  | 72        | 28           | 100 (143)   |
| Total                                      | 69        | 31           | 100 (11622) |
| <b>Satisfaction with work contract</b>     |           |              |             |
| 15-25                                      | 74        | 26           | 100 (954)   |
| 25-35                                      | 78        | 22           | 100 (2779)  |
| 35-45                                      | 82        | 18           | 100 (3766)  |
| 45-55                                      | 79        | 21           | 100 (2811)  |
| 55-65                                      | 81        | 19           | 100 (1169)  |
| 65+  | 63        | 37           | 100 (143)   |
| Total                                      | 79        | 21           | 100 (11622) |
| <b>Satisfaction with career prospects</b>  |           |              |             |
| 15-25                                      | 60        | 40           | 100 (954)   |
| 25-35                                      | 65        | 35           | 100 (2779)  |
| 35-45                                      | 63        | 37           | 100 (3766)  |
| 45-55                                      | 63        | 37           | 100 (2811)  |
| 55-65                                      | 66        | 34           | 100 (1169)  |
| 65+  | 64        | 36           | 100 (143)   |
| Total                                      | 64        | 36           | 100 (11622) |
| <b>Satisfaction with work–life balance</b> |           |              |             |
| 15-25                                      | 80        | 20           | 100 (954)   |
| 25-35                                      | 78        | 22           | 100 (2779)  |
| 35-45                                      | 81        | 19           | 100 (3766)  |
| 45-55                                      | 83        | 17           | 100 (2811)  |
| 55-65                                      | 88        | 12           | 100 (1169)  |
| 65+  | 77        | 23           | 100 (143)   |
| Total                                      | 81        | 19           | 100 (11622) |

Source: *EB 64.1, WI4*

## 2. Job satisfaction and gender

Table 13: *Job satisfaction by gender*

|  | Satisfied | Dissatisfied | Total       |
|--|-----------|--------------|-------------|
| <b>Satisfaction with salary</b>            |           |              |             |
| Female                                     | 67        | 33           | 100 (5040)  |
| Male                                       | 71        | 29           | 100 (6582)  |
| Total                                      | 69        | 31           | 100 (11622) |
| <b>Satisfaction with work contract</b>     |           |              |             |
| Female                                     | 79        | 21           | 100 (5040)  |
| Male                                       | 80        | 20           | 100 (6582)  |
| Total                                      | 79        | 21           | 100 (11622) |
| <b>Satisfaction with career prospects</b>  |           |              |             |
| Female                                     | 60        | 40           | 100 (5040)  |
| Male                                       | 66        | 34           | 100 (6582)  |
| Total                                      | 64        | 36           | 100 (11622) |
| <b>Satisfaction with work–life balance</b> |           |              |             |
| Female                                     | 82        | 18           | 100 (5040)  |
| Male                                       | 81        | 19           | 100 (6582)  |
| Total                                      | 81        | 19           | 100 (11622) |

Source: *EB 64.1, W14*

## 3. Job satisfaction and education

Table 14: *Job satisfaction by education (d8: `Age when stopped full-time education)*

|  | Satisfied | Dissatisfied | Total       |
|--|-----------|--------------|-------------|
| <b>Satisfaction with salary</b>            |           |              |             |
| 15-  | 67        | 33           | 100 (1649)  |
| 16-20                                      | 67        | 33           | 100 (5757)  |
| 20+  | 74        | 26           | 100 (4013)  |
| Total                                      | 69        | 31           | 100 (11419) |
| <b>Satisfaction with work contract</b>     |           |              |             |
| 15-  | 23        | 77           | 100 (1649)  |
| 16-20                                      | 21        | 79           | 100 (5757)  |
| 20+  | 19        | 81           | 100 (4013)  |
| Total                                      | 21        | 79           | 100 (11419) |
| <b>Satisfaction with career prospects</b>  |           |              |             |
| 15-  | 59        | 41           | 100 (1649)  |
| 16-20                                      | 62        | 38           | 100 (5757)  |
| 20+  | 68        | 32           | 100 (4013)  |
| Total                                      | 64        | 36           | 100 (11419) |
| <b>Satisfaction with work–life balance</b> |           |              |             |
| 15-  | 84        | 16           | 100 (1649)  |
| 16-20                                      | 81        | 19           | 100 (5757)  |
| 20+  | 82        | 18           | 100 (4013)  |
| Total                                      | 81        | 19           | 100 (11419) |

Source: *EB 64.1, W14*

#### 4. Job satisfaction and working hours

Table 15: *Job satisfaction by working hours (qa40: 'How many hours per week do you usually work?')*

|  | Satisfied | Dissatisfied | Total       |
|--|-----------|--------------|-------------|
| <b>Satisfaction with salary</b>            |           |              |             |
| 21 hours a week or less                    | 74        | 26           | 100 (1069)  |
| 22 to 30 hours a week                      | 70        | 30           | 100 (1008)  |
| 32 to 40 hours a week                      | 68        | 32           | 100 (5903)  |
| more than 40 hours a week                  | 70        | 30           | 100 (3241)  |
| Total                                      | 69        | 31           | 100 (11222) |
| <b>Satisfaction with work contract</b>     |           |              |             |
| 21 hours a week or less                    | 80        | 20           | 100 (1069)  |
| 22 to 30 hours a week                      | 81        | 19           | 100 (1008)  |
| 32 to 40 hours a week                      | 83        | 17           | 100 (5903)  |
| more than 40 hours a week                  | 75        | 25           | 100 (3241)  |
| Total                                      | 80        | 20           | 100 (11222) |
| <b>Satisfaction with career prospects</b>  |           |              |             |
| 21 hours a week or less                    | 60        | 40           | 100 (1069)  |
| 22 to 30 hours a week                      | 64        | 36           | 100 (1008)  |
| 32 to 40 hours a week                      | 64        | 36           | 100 (5903)  |
| more than 40 hours a week                  | 66        | 34           | 100 (3241)  |
| Total                                      | 64        | 36           | 100 (11222) |
| <b>Satisfaction with work–life balance</b> |           |              |             |
| 21 hours a week or less                    | 89        | 11           | 100 (1069)  |
| 22 to 30 hours a week                      | 87        | 13           | 100 (1008)  |
| 32 to 40 hours a week                      | 85        | 15           | 100 (5903)  |
| more than 40 hours a week                  | 71        | 29           | 100 (3241)  |
| Total                                      | 82        | 18           | 100 (11222) |

Source: *EB 64.1, W14*