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How job changes affect people's lives: Evidence from subjective well-being data

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How Job Changes Affect People's Lives – Evidence from Subjective Well-being Data

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How Job Changes Affect People's Lives – Evidence from Subjective Well-being Data

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February 2015

Abstract

For representative German panel data, we document that voluntary job switching is associated with higher levels of life satisfaction, though only for some time, whereas forced job changes do not affect life satisfaction clearly. Using plant closures as an exogenous trigger of switching to a new employer, we find that job mobility turns out to be harmful for satisfaction with family life. By investigating people's lives beyond their workplaces, our study complements research on the well-being impact of labour mobility, suggesting some positive welfare effects of flexible labour markets, but also a previously undocumented potential for negative implications.

JEL Classification: I31; J28; J61; J63

Keywords: life satisfaction; satisfaction with family life; job changes; honeymoon-hangover effect; employment protection legislation

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1. Introduction

Working life determines subjective well-being on an essential level. This becomes most obvious by means of the extraordinary misery of the unemployed. Hardly any other life event worsens well-being as dramatically and there is no other negative life event to which people adapt more poorly (Clark et al. 2008). Specific circumstances of employment yield further differences in overall subjective well-being. Working time is inversely U-shaped in life satisfaction (Rätzel 2012), whereby workers suffer in particular from hours mismatch (Wooden et al. 2009, Wunder and Heineck 2013). Gender roles can explain why working part-time or fulltime affects men and women differently (Booth and van Ours 2008, 2009, 2013). Becoming self-employed can benefit life satisfaction more than becoming employed by a company (Binder and Coad 2013). Bearing in mind the severe impact of unemployment, it does not come as a surprise that job insecurity affects life satisfaction negatively as well (e.g. Lüchinger et al. 2010). In contrast to these studies on single circumstances of employment, much less is known about the life satisfaction consequences of changing jobs. Our first comprehensive investigation of this issue aims at filling this gap.

Theoretically, workers who switch employers voluntarily and firms displacing workers bring the labour market to its equilibrium. Indeed, labour markets are never in equilibrium and mobility always persists. Hence, the welfare implications of labour mobility are of special interest in economics and present various policy issues. For an individual, changes of employer become more likely the more flexible the labour market is (e.g. Bertola 1990, Hopenhayn and Rogerson 1993, Kugler and Pica 2008, Kan and Lin 2011). Besides many other factors, the welfare consequences of mobility need to be taken into account when weighting the costs and benefits of employment protection legislation. Studies that focus on the job satisfaction effects of job changes provide preliminary insights in this respect. Based on data about US managers, Boswell et al. (2005, 2009) characterise work-related well-being after having switched employers as a honeymoon-hangover pattern. Job satisfaction is substantially higher in the new job than before, but reduces substantially after some time. A similar pattern is observed in studies with different research focus (e.g. Georgellis and Tabvuma 2010, Johnston and Lee 2012, 2013, Gielen 2013, Chadi and Hetschko 2013). In a comprehensive analysis of people's job satisfaction, Chadi and Hetschko (2014) clarify that the positive impact of changing jobs depends crucially on the trigger of mobility. Only voluntary changes lead to the honeymoon-hangover pattern of initially outstanding levels of job satisfaction that decline as time goes by.

The different consequences of voluntary and involuntary job changes are very relevant for labour market policies. Flexible labour markets allow workers to switch voluntarily more often because higher turnover generates more vacancies. Furthermore, it sets the stage for involuntary mobility by facilitating dismissals. Our contribution in this context is that we apply life satisfaction as a global measure of individual welfare.¹ This allows us to gain further insights beyond those from the existing job satisfaction studies about the general consequences of voluntary and involuntary mobility for well-being, offering more relevant policy implications.

Obviously, a shortcoming of measuring the well-being effects from job mobility using only job satisfaction is underestimating effects on other areas of life. When workers work more hours after the employer change because they need to signal high productivity for the purposes of employment stability or promotion, less time remains available for leisure time activities and home production. This might come at the expense of utility derived from family life, housing or hobbies. We hence contribute to research on satisfaction with these aspects of life, being the first to study the potential effects of job changes.²

Our empirical analysis distinguishes between job switches following resignations (voluntary) and job switches triggered by plant closures (involuntary). It is obvious that voluntarily conducted job mobility constitutes a selection of positive cases, which means that the effects observed in the data do not necessarily reflect a causal effect of the event itself. Instead, the estimated effects of changes after resignations on life satisfaction can originate from both the reasons motivating the switch (e.g. the wish to do new and more interesting tasks) as well as the actual event of switching (e.g. simply because of the variation of tasks). Involuntarily triggered switching resulting from the exogenous happenstance of a plant closure, however, can only have the latter implication.³ It hence allows us to search for genuine well-being effects of changing employers, as we exclude a positive bias due to a

¹ See e.g. Dolan et al. (2008), Frey (2008) and Weimann et al. (2015) for surveys of the work in this field. The use of life satisfaction data as a proxy for people's overall utility levels is a standard approach in numerous economic contributions (e.g. Stutzer and Lalive 2004, Luttmer 2005, Schwarze and Winkelmann 2011).

² Apart from the large body of research using life satisfaction and job satisfaction data, some researchers examine various life domains (e.g. van Praag et al. 2003, Powdthavee 2011), whereas others specifically look at certain areas of life. See e.g. Winkelmann (2005) as well as Ford et al. (2007) for satisfaction with family life, Diaz-Serrano (2009) for housing satisfaction as well as Gimenez-Nadal and Sevilla-Sanz (2011) for free time satisfaction.

³ The coincidental event of a plant closure has been used in previous research, inter alia, to identify the causal effect of unemployment on individual life satisfaction (Kassenboehmer and Haisken-DeNew 2009), on individual health (Schmitz 2011), on the health of spouses (Marcus 2013) and on social participation (Kunze and Suppa 2014). Our most recent paper (Chadi and Hetschko 2014) is the first that exploits plant closures as an exogenous source of job mobility to analyse job satisfaction.

special motivation for a voluntary job change and other unobserved factors. An individual fixed-effects estimation approach as well as a robustness check based on matching techniques help us to interpret our empirical findings as causal evidence.

Based on representative German panel data, we find that the honeymoon-hangover pattern of voluntary job changes known from the job satisfaction studies mentioned above shows up in life satisfaction as well, although to a much smaller extent. Whereas switching jobs involuntarily changes life satisfaction neither for the worse nor for the better, it substantially reduces satisfaction with family life. The analyses of housing satisfaction and satisfaction with free time do not yield clear findings. We conclude that individuals manage to arrange their personal lives with their working lives quite well in the case of voluntary job changing, but, in case of enforced job mobility, we see a potential threat to subjective well-being in one particular area of life.

We proceed as follows. Section 2 outlines our theoretical expectations for the empirical analysis. Data and sampling are documented in Section 3. Two results sections follow. A mean analysis (Section 4) allows us to draw preliminary conclusions about life satisfaction as an outcome of changing employers. Moreover, we document increasing working time after job switching. Section 5 explains the methodology we use to identify the effects of switching and presents the corresponding estimation results for various satisfaction outcomes. Section 6 concludes and discusses our findings.

2. Theoretical expectations

2.1 Involuntarily triggered switching

In the following, we develop expectations about the empirical consequences of job changes for different dimensions of subjective well-being. At the beginning, we focus on involuntary switching (triggered exogenously). We assume that after having switched employers, workers want to establish themselves in order to achieve future employment stability and promotions.⁴ In consequence, they try to signal high productivity at the beginning of a new employment relationship, using working hours as one potential signalling device (e.g. Bell and Freeman 2001, Engellandt and Riphahn 2005).⁵ We use a very simple framework to describe this

⁴ Employment protection legislation may contribute to such behaviour as well. New workers need to survive probation whereas dismissal protection preserves enduring employment relationships. Ichino and Riphahn (2005) present evidence in support of this notion by showing that absenteeism is relatively low during probation.

⁵ The literature considers absence rates as another productivity signal (see e.g. Flabbi and Ichino 2001, Audas et al. 2004, Hesselius et al. 2009).

supposition and its possible consequences for the impact of exogenously triggered switching on different dimensions of well-being. The representative worker invests a fixed time budget T in working activities (h hours) and in non-working activities (n hours), such as in leisure activities and home production. The goal is to maximise total utility $U = u_1(h) + u_2(n)$, with $u_1', u_2' > 0$ and $u_1'', u_2'' < 0$. The worker chooses h with the result that the marginal utility of time spent in non-working activities equals the marginal utility of working time:

$$u_2'(n) = u_1'(h) \quad (1)$$

Following the argument that employment stability or promotions play an important role for utility, we extend the utility function by z , representing the contemporaneous utility derived from future employment prospects. In order to illustrate a relative difference in the nature of z between the old and the new job, we assume that z is exogenous from the worker's point of view. Promotions have taken place or not and employment stability depends only on the exogenous risk of firm failure: $U_{old} = u_1(h_{old}) + u_2(n_{old}) + z_{exo}$. When having switched to another job, workers can contribute to future employment prospects. To keep it simple, we assume that the new and the old job are completely equal in other respects (h affects u_1 and u_2 in the same way), which yields $U_{new} = u_1(h_{new}) + u_2(n_{new}) + z(h_{new})$, with $z' > 0$. While working time is chosen in the same way as illustrated in (1) before switching

$$u_2'(n_{old}) = u_1'(h_{old}) , \quad (2)$$

it fulfills

$$u_2'(n_{new}) = u_1'(h_{new}) + z'(h_{new}) \quad (3)$$

afterwards. Switching increases the marginal utility of hours spent in non-working activities, which means that n has decreased and h has risen.

Beyond changes in time use, these considerations yield the following suppositions for our empirical well-being study. The effect of involuntarily triggered switching $U_{new} - U_{old}$ is zero or negative. Otherwise, the job change would not take place *involuntarily*. It is also plausible that rational, but risk averse individuals do not switch jobs when U_{new} is uncertain and the *expected* U_{new} is higher than U_{old} . Regarding u_2 , our simple framework suggests a negative change caused by job mobility. We test this hypothesis using satisfaction with free time, satisfaction with family life and housing satisfaction as proxies of some part of the utility derived from non-working activities.

2.2 Voluntary mobility

Concerning voluntary job changes, we suppose that life satisfaction reflects the honeymoon-hangover pattern (Boswell et al. 2005) found in the literature for job satisfaction as well. From a theoretical point of view, rational workers will only change employers voluntarily if they can improve their individual welfare, which is measured using life satisfaction in this study. As job satisfaction does not completely translate into life satisfaction (e.g. van Praag et al. 2003), we suppose that the honeymoon-hangover pattern is less strong in life satisfaction than it has been found for representative job satisfaction data (Chadi and Hetschko 2014).

Regarding satisfaction with specific areas of life, we expect that the honeymoon experience of voluntarily chosen new jobs might appear to be beneficial as well. If workers become happier during the transition, they will also tend to report higher levels of each relevant life domain satisfaction. Moreover, workers could switch *in order to* become more satisfied with such a specific area of life, for instance, when they aim at reducing work-family conflict. However, we have argued above that involuntary job changes likely yield adverse effects on specific life domains, which might apply to voluntary changes as well. In sum, we start from the premise that the progression of satisfaction with family life or free time as well as housing satisfaction around voluntary job changes is a priori unclear.

3. Data

We make use of data of the German Socio-Economic Panel Study (SOEP; Wagner et al. 2007). The SOEP is especially well-suited for our research purpose. It includes a huge variety of information on subjective well-being and employment. Its panel structure enables us to follow the same workers from one job to another. We identify the triggers of job changes by a question on the reasons why the initial employment relationship terminated: *How was this job terminated?*. To distinguish between terminations that are either voluntary or involuntary from the employee's point of view, we analyse the two answering possibilities *my resignation* and *because place of work or office has closed* (in the following *plant closure*). Based on the SOEP waves from 1994 to 1998 and from 2001 to 2012, both pieces of information are combined with precisely generated data on recent employer changes since the preceding SOEP interview. When analysing respondents' subjective well-being before and after the transition from one job to another, our analyses also include information on the waves of 1992, 1993, 1999 and 2000. We only make use of data of employed individuals that are at least 18 years old and younger than 60 years of age and work at least 15 hours per week. Job

changes only consist of switches between companies and take place only after plant closures and resignations (switches because of other reasons are excluded).

Concerning subjective well-being, we investigate workers' overall life satisfaction as well as satisfactions with family life, free time, housing, and job. They are ascertained separately by single-item questions in the following way:

How satisfied are you with your life, all things considered / your family life / your free time / your place of dwelling / your job? Please answer by using the following scale: 0 means "completely dissatisfied", 10 means "completely satisfied".

In addition, we use data on workers' labour earnings and equalised incomes (using the new OECD scale, at 2006 prices). The SOEP provides us with a variety of personal background characteristics (gender, age, employment biography), household characteristics (housing space, home ownership, number of household members), many job characteristics (e.g. sectors) as well as with data on workers' family lives (marital status, relationship status, partners' employment status, number of children, people in need of care) and their objective health status (disability, overnight stays in hospital). We also consider the information on time use SOEP respondents have to provide in order to calculate working hours. The Appendix includes a detailed description of our data (Table A1), distinguishing between three groups of workers: those who did not change jobs recently, those who changed recently after resigning and those who changed recently because of a plant closure.

4. Well-being and time use around job changes

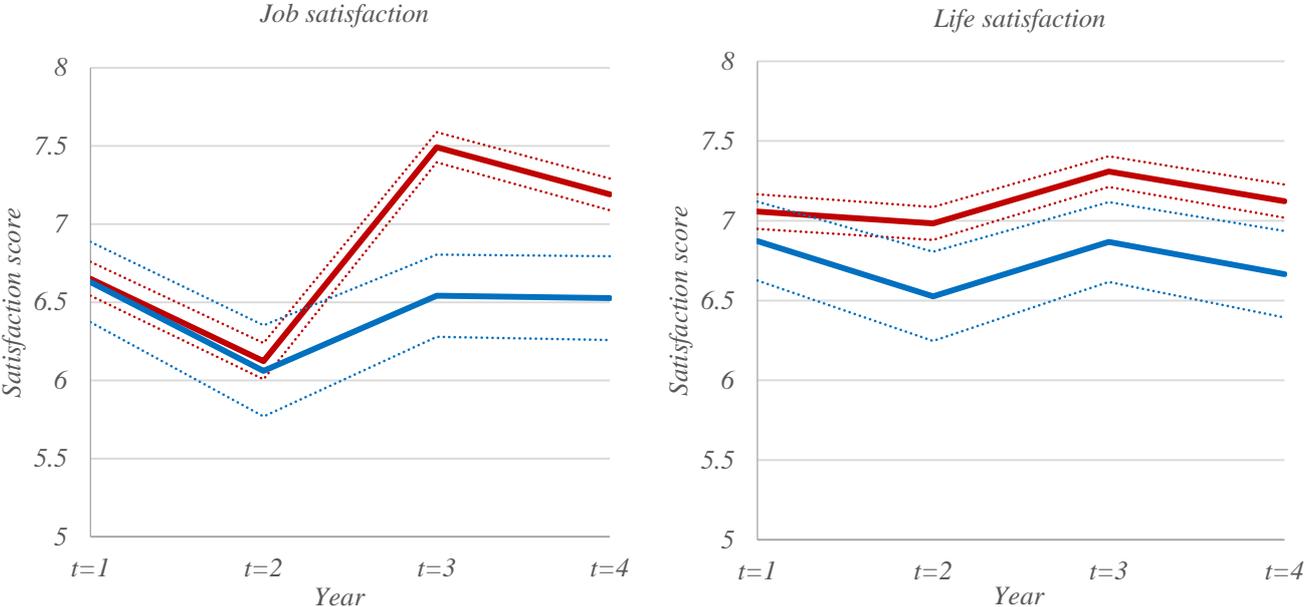
4.1 Life and job satisfaction

To provide first insights into well-being patterns around employer changes, we compare the mean satisfaction scores of switches after resignations and switches after plant closures in Figure 1. Satisfaction scores are drawn for four SOEP interviews around job changes, resulting in four points in time $t = 1, 2, 3, 4$. Employees change employers between $t = 2$ and $t = 3$. The period between two points in time is approximately one year. Comparing satisfaction scores between $t = 1$ and $t = 3$ is one way to gain insights into the potential impact of switching on well-being without having much interference by unobserved factors determining people's (working) lives at the end of their tenure.

The two diagrams indicate for voluntary job changes that the honeymoon-hangover pattern shows up in both job satisfaction and life satisfaction, although it is much less

pronounced for the latter outcome. In $t = 3$, both satisfaction scores of voluntary mobility exceed the level of $t = 1$ significantly. Only in the case of job satisfaction, however, is the score still higher in $t = 4$ than in $t = 1$. Both trajectories describing voluntary switching suggest a hangover between $t = 3$ and $t = 4$. When the employer change is triggered by plant closure, however, neither job satisfaction nor life satisfaction show the honeymoon-hangover pattern. Switching itself does not seem to have a direct impact on life satisfaction, which is in line with the conclusion of Chadi and Hetschko (2014) regarding job satisfaction. We scrutinise these findings further in Section 5.2.

Figure 1. Job satisfaction and life satisfaction around job changes



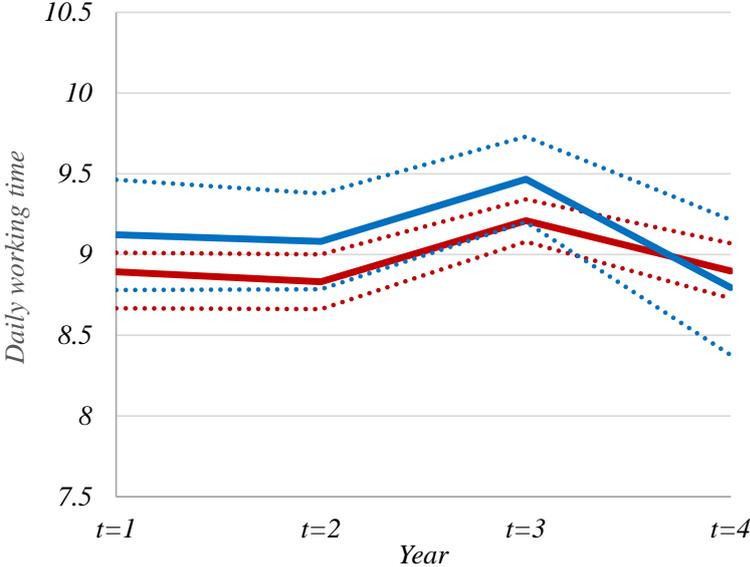
Note. Points in time ($t=1,2,3,4$) mark time lags of approximately one year. Job changes take place between $t=2$ and $t=3$. Red (blue) lines denote switching after resignation (plant closure). Dotted lines denote 95% confidence intervals.

4.2 Time Use

As hypothesised in Section 2, increasing working time is a potential pathway through which job mobility affects subjective well-being. In the following, we document the average working time changes around the two different types of job mobility resignation and plant closure. The investigation comes close to the well-being analysis presented in the previous subsection. We illustrate the working time patterns in Figure 2. Working time is measured by the SOEP’s time use data about “a typical working day”. We exclude those observations of workers who switch twice between $t = 2$ and $t = 3$. In both cases of job mobility, working time does not change significantly between the last two observations of the initial

employment relationship, but increases considerably with the employer change. The overall change between $t = 1$ and $t = 3$ is +0.34 hours per day ($p < 0.05$) for changes triggered by plant closure and +0.37 ($p < 0.01$) for changes triggered by resignations. We exploit biennially available SOEP data on weekly time use in order to test whether these findings change when time use during weekends is considered as well. It turns out that weekly working time rises by 0.41 hours per day ($p < 0.05$) when switched because of a plant closure and by 0.36 when resigned ($p < 0.01$). Afterwards, time spent working is greatly reduced (between $t = 3$ and $t = 4$).

Figure 2. Working time around job changes



Note. Points in time ($t=1,2,3,4$) mark time lags of approximately one year. Job changes take place between $t=2$ and $t=3$. Red (blue) lines denote switching after resignation (plant closure). Dotted lines denote 95% confidence intervals.

Increasing time spent working in the case of self-selected job changes can be explained in several ways, such as by possibly dominating transitions from part-time jobs to full-time jobs. In contrast, rising working time after exogenously triggered switches might reflect in particular the necessity to assert oneself at the beginning of a new employment relationship. When workers increase working time, it is plausible that less time is spent in free time activities and home production activities. The time use survey of the SOEP provides information about a selective set of activities that make it possible to cast some light on this supposition. We find weak evidence that workers who switch jobs after plant closures reduce time used for home production activities and hobbies. After resignations, less time is spent in home production activities and education (detailed results are available on request).

5. The impact of job changes on life satisfaction and specific areas of life

5.1 Methodology

In order to analyse the consequences of job mobility for life satisfaction and satisfaction with other areas of life, we apply an individual fixed-effects regression approach. It explains a specific satisfaction (variable *Satisfaction* in the model (4)) of worker *i* at time *t*. A binary variable (*Resign*) becomes one for observations of recent job changes (at time $t = 3$) after resignation and describes the empirical relation of voluntary job changes and the different satisfactions. We focus on recent switches that are exogenously triggered by plant closures (*Plant*) in order to identify direct effects of switching jobs on well-being. From a methodological perspective, this event offers the advantage that the ultimate trigger of changes in one's working life does not result from individual activities, such as job performance. Plant closures force job switching among both the willing and the unwilling, those with both high and low work motivation. The potential issue that workers' characteristics in plants that are being closed are generally different from workers' characteristics in surviving plants is tackled by estimating satisfaction effects based on within worker changes using individual fixed effects (σ). The regression approach allows us to take into account several, likely exogenous, circumstances of family life (*F*), personal characteristics (*P*) and household characteristics (*HH*) as controls. The underlying empirical model can be written as

$$Satisfaction_{it} = \beta Plant_{it} + \gamma Resign_{it} + \delta' F_{it} + \chi' P_{it} + \phi' HH_{it} + \sigma_i + \tau_t + \varepsilon_{it} \quad (4)$$

We also conduct several sensitivity analyses. Besides some tests addressing the composition of our samples using the same methodology, one robustness check applies an alternative approach to identify causal effects of switching on dimensions of well-being. We thereby tackle two potential sources of selection. One is that some workers may select out of the initial job before their plants close because they foresee the event; the other might be that workers who experience the event are not able to find a new job until the next SOEP interview. Such types of selection could influence the estimation described above if these two groups of workers would differ in the individual change of well-being caused by switching. Thus, we follow the literature on identifying causal effects of labour market events (or policies) that cannot be analysed by field experiments (e.g. Card et al. 2010, 2011), which obviously applies to our research purposes. Concretely, we exploit the panel structure of the

data by combining a difference-in-differences approach with a matching technique to construct a control group (workers who stay in the same job) that is as similar as possible to the treatment group (workers who switch jobs because of plant closures).

The matching technique is entropy balancing (Hainmueller 2012). This method calculates weights for each observation of the control group with the result that the weighted control group equals the treatment group with respect to the means (one moment) of a huge set of conditioning variables, as measured in $t = 1$. Thereby, we can make use of the rich SOEP dataset allowing us to take into account major explanations for the abilities to switch before plant closure and the ability to find a new job within approximately one year (e.g. education, health, gender, past employment spells and past unemployment spells, income, industry, and time of interview). Most importantly, we consider workers' expectations of job loss and job change until $t = 3$. The difference between treatment and control group in the change in satisfaction from $t = 1$ to $t = 3$ measures the effect of switching. A first-difference estimation of this effect allows us to control for time effects and can be extended to further controls.

5.2 Life satisfaction

A first specification of the model (4) with life satisfaction as the dependent variable groups the two change types (voluntary / involuntary) in one binary variable ("new job" at time $t = 3$). Individual fixed effects and the interview timing (year, week of the year) are controlled for. The results of the corresponding estimation (and further specifications) are summarised by Table 1 and displayed in detail in the Appendix (Table A2). It turns out that recent job mobility benefits overall well-being. According to the second specification that divides recent switching into the two types of mobility, this general "new job effect" is clearly driven by voluntary changes. Exogenously triggered switches neither increase nor decrease well-being significantly. Adding further and rather exogenous controls taking into account characteristics of workers' family lives (e.g. being widowed), households (e.g. home ownership) and personal background (e.g. age) does not change this result (Specification 3). A fourth specification considers also characteristics that might be endogenous, such as job characteristics that can change when workers switch jobs, but does not yield other qualitative findings than the preceding specifications.

Following Clark et al. (2008), we extend the model to lag and lead variables reflecting different points in time around job changes (Specification 5). This step reveals that the honeymoon-hangover pattern of job satisfaction around voluntary employer changes

translates into overall subjective well-being. Individual life satisfaction exceeds its mean level significantly in $t = 3$, but returns to its average by $t = 4$. Compared to the picture for job satisfaction (see Chadi and Hetschko 2014), the honeymoon-hangover pattern shows up to be much less pronounced in life satisfaction data.⁶ Moreover, life satisfaction may play a predicting role for resignations (strong negative effect in $t = 2$). This finding is known so far only from the research on job satisfaction (e.g. Clark 2001, Shields and Wheatley Price 2002, Delfgaauw 2007, Lévy-Garboua et al. 2007, Böckerman and Ilmakunnas 2009, Green 2010).

The lags and leads approach does yield one additional finding regarding unintended switches. In contrast to the expectation that one may have, there is no drop in subjective well-being at the end of workers' tenure when a plant closure is about to happen. This is evidence in support of our identification strategy and the idea to look at job changes following a specific event, which itself does not seem to imply detrimental effects on people's life situation.

Finally, we expand the model further by interactions of recent job switching and the change in working time, according to the time use data, from the initial job to the new job (Specification 6). This provides some evidence that the change in working time accompanying the job change drives apart the well-being effect of the new job. The estimated difference between the two interactions is substantial, though only weakly significant. In contrast, for workers who intend to change employers, we do not observe such phenomenon. These findings are no different from those that we obtain when working time changes are determined using an alternative measurement for working hours.

Concerning our control variables, Table A2 reveals correlations in line with the life satisfaction literature (e.g. Weimann et al. 2015). Income, objective indicators of health, and partnership are linked to higher subjective well-being, and so are several recent life events such as marriage, moving together with one's partner, moving houses in general and child birth. In contrast, recent death of spouse, recent separation and living with people in need of care in the same household reduce life satisfaction. Autonomy in carrying out tasks, which is positively related to job satisfaction (e.g. Benz and Frey 2008), supports overall well-being as well.

⁶ The results for job satisfaction based on the data set used in the present paper are available upon request.

Table 1. Life satisfaction and job changes (summary)

Specification	(1)	(2)	(3)	(4)	(5)	(6)
New job, t=3	0.215*** (0.058)					
Resignation, t=1					-0.129* (0.067)	-0.130* (0.067)
Resignation, t=2					-0.268*** (0.070)	-0.267*** (0.069)
Resignation, t=3		0.246*** (0.064)	0.246*** (0.064)	0.240*** (0.064)	0.171** (0.067)	
Resignation, t=3, working more						0.155 (0.097)
Resignation, t=3, working less						0.181** (0.086)
Resignation, t=4					-0.062 (0.062)	-0.062 (0.062)
Plant closure, t=1					0.040 (0.085)	0.043 (0.086)
Plant closure, t=2					0.076 (0.097)	0.079 (0.097)
Plant closure, t=3		0.045 (0.126)	0.049 (0.126)	0.067 (0.123)	0.072 (0.127)	
Plant closure, t=3, working more						-0.201 (0.196)
Plant closure, t=3, working less						0.246 (0.163)
Plant closure, t=4					-0.125 (0.121)	-0.124 (0.121)
Working time, typical working day						0.008 (0.008)
Individual fixed effects	yes	yes	yes	yes	yes	yes
Interview time	yes	yes	yes	yes	yes	yes
Personal controls			yes	yes	yes	yes
Family controls			yes	yes	yes	yes
Household controls			yes	yes	yes	yes
Additional controls				yes	yes	yes
Observations	51,969	51,969	51,969	51,969	51,969	51,969
R ²	0.014	0.015	0.022	0.035	0.036	0.036
Number of persons	10,131	10,131	10,131	10,131	10,131	10,131

Notes: * denotes significance at the 10% level, ** at the 5% level and *** at the 1% level. Robust standard errors are in parentheses. Observations correspond to the sample described in Table A1 except that the fixed-effects regressions exclude one-observation groups. The dependent variable is life satisfaction. Regressions consider individual fixed effects and sample weights. The results are presented in detail in Table A2 in the Appendix.

In additional analyses, we test whether our main life satisfaction findings (i.e. a honeymoon-hangover pattern for voluntary switches but no evidence for a causal impact of switching on life satisfaction) are sensitive towards alternative sample compositions. Among other aspects, we raise the minimum levels of household incomes and earnings, we set minimum and maximum levels of working hours, and we exclude public servants (who essentially cannot lose their jobs). To further check the role of subjectively perceived worries of job insecurity, we control for the reported level of job security. We also exclude those who experienced a period of unemployment between the initial and the new job. Finally, we add a set of control variables for potential survey-specific effects from interviewer presence (Conti and Pudney 2011) and panel experience (Chadi 2013). None of these analyses yields any other qualitative finding than those reported above.

Applying the alternative difference-in-differences approach confirms our qualitative results as well. Using entropy balancing with one moment, we match control group and treatment group based on a huge set of individual characteristics and individual expectations of mobility-related events in the next two years, as measured in $t = 1$. A smaller set of conditioning variables allows for entropy balancing with two moments. Both variants do not identify positive or negative life satisfaction effects of switching triggered by plant closure. Detailed results of all of the robustness checks are available on request.

5.3 Satisfaction with free time, housing satisfaction and satisfaction with family life

Our theoretical considerations (Section 2) suggest that family life, free time and the housing situation may suffer from involuntary job mobility. In all of the three cases, we apply the same methodology described in Subsection (5.1) and apply each domain satisfaction as the dependent variable of model (3). Summarised results of analysing satisfaction with family life when changing the job are documented in Table 2 (detailed results in Appendix Table A3).⁷ We find that a single binary variable indicating recent job mobility is not significantly related to satisfaction with family life (Specification 1). Estimating a second specification that distinguishes between the reasons of mobility makes clear that this result originates from the dominance of voluntary switching in the data. Recent switching because of plant closures severely reduces satisfaction with family life. Specification (3a) adds a vector of likely exogenous controls (e.g. number of children) that we expect to matter for satisfaction with family life in particular. This leaves the findings unchanged. Furthermore, the picture changes

⁷ Note that the SOEP data allows us to analyse the satisfaction with the family life based on the waves from 2006 to 2012.

neither when further likely exogenous controls used for the life satisfaction analysis (Specifications 3b) nor endogenous controls (e.g. moving) enter the model (Specifications 4). In line with our theoretical expectations, working time is negatively related to satisfaction with family life.

Table 2. Satisfaction with family life and job changes

<i>Specification</i>	(1)	(2)	(3a)	(3b)	(4)
New job	0.019 (0.085)				
Recent resignation		0.092 (0.087)	0.095 (0.087)	0.096 (0.087)	0.093 (0.086)
Recent plant closure		-0.555** (0.280)	-0.555** (0.279)	-0.546** (0.278)	-0.545** (0.268)
Individual fixed effect	yes	yes	yes	yes	yes
Interview time	yes	yes	yes	yes	yes
Personal controls				yes	yes
Family controls			yes	yes	yes
Household controls				yes	yes
Additional controls					yes
Observations	37,773	37,773	37,773	37,773	37,773
R-squared	0.002	0.003	0.006	0.011	0.039
Number of persons	8,274	8,274	8,274	8,274	8,274

*Notes: *denotes significance at the 10% level, **at the 5% level and ***at the 1% level. Robust standard errors are in parentheses. Fewer observations are used compared to the life satisfaction regressions because of missing data about satisfaction with family life before the 2006 SOEP wave. The dependent variable is satisfaction with family life. Regressions consider individual fixed effects and sample weights. Detailed results are presented in Appendix Table A3.*

The results of our family satisfaction analysis survive the same robustness checks that we described before in the life satisfaction analysis. Entropy balancing is limited to a slightly smaller set of conditioning variables compared to the life satisfaction analysis because of the smaller number of SOEP waves that include information about satisfaction with family life, but the most important ones can be used as well (here family background and expectations of future labour market events).

In case of satisfaction with free time and the place of dwelling, job changing seems to have no particular effect (see Appendix Tables A4 and A5). We proceed in the same way as in the case of the estimation of satisfaction with family life: starting with the new job effect, differentiating it for switches triggered by plant closures and resignations and proceeding with a domain-specific vector of exogenous controls (housing satisfaction: household controls, satisfaction with free time: personal controls). Finally, the full set of characteristics of the life

satisfaction analysis are controlled for. Voluntary switching seems to be unrelated with respect to both life domain satisfactions. The same applies for the relation of involuntarily triggered mobility and housing satisfaction. Free time satisfaction seems negatively related to switching after plant closure, though not at a significant level, which is why we do not further interpret this result. In line with our theoretical expectations, working time is negatively related to free time satisfaction. Applying the robustness analyses previously described to free time satisfaction and housing satisfaction does not lead to new insights. In sum, our analyses of different areas of life suggest that job changing, if involuntarily triggered by exogenous events, negatively affects family life while the other domains of housing and free time do not seem to be affected.

6. Conclusion and Discussion

What do we learn from applying life satisfaction as a global measure of individual welfare to the consequences of job changes? First of all, the honeymoon-hangover pattern shows up as it does in investigations of labour mobility and its role for the satisfaction with one's job (e.g. Boswell et al. 2005, Chadi and Hetschko 2014). Comparing the magnitudes reveals that life satisfaction reflects honeymoon and hangover to a much lesser extent than job satisfaction. In other words, the job change premium is not as large for people's lives as it is for their work lives. This is in line with findings from the application of the domain satisfaction approach and analyses of the job satisfaction-life satisfaction relationship (van Praag et al. 2003).

Policy implications are straightforward, although one needs to bear in mind that we investigate only some particular consequences of labour market flexibilisation. Our results suggest a positive welfare effect from easing employment protection, which originates from more opportunities to switch jobs voluntarily (more turnover, more vacancies). We also conclude that this implication appears to be overestimated when only looking at job satisfaction. Our results, moreover, imply that involuntary mobility does not affect life satisfaction on average. Switching itself neither increases nor decreases overall subjective well-being. In that sense, labour market flexibilisation is not promising and not harmful. However, we find that switching reduces satisfaction with family life. A possible explanation is that starting a new job makes it necessary to assert oneself in a new environment. Employees are willing to work long hours in order to improve future employment prospects. They need to survive probation and may compete with others for a good position in the new job. Working longer means investing less in non-work-related activities, which could explain

why satisfaction with family life decreases. As more SOEP waves including information about satisfaction with family life become available, future research will be better able to scrutinise this supposition further.

The remaining question coming from these results is why life satisfaction does not seem to reflect the reduction of satisfaction with family life after involuntary switches. We consider two complementary explanations, both suggesting effects compensating the utility loss from family life. First, switching itself might be beneficial as it yields a variation of tasks and routines. Second, spending more time working might be beneficial, referring to what we have denoted the utility u_1 in our simple theoretical description. Firms could pay for overtime and being engaged more in a productive process might increase the feeling of leading a purposeful and meaningful life. Having meaning in life or not is expectably as important for the people as it is difficult for empirical researchers to control for (Loewenstein 1999). In sum, positive and negative effects of changing employers involuntarily appear to balance out, with the result that, in general, switching jobs neither changes life for the better nor for the worse.

References

- Audas, Rick, Tim Barmby and John Treble (2004): “Luck, effort, and reward in an organizational hierarchy”, *Journal of Labor Economics*, 22, pp. 379 – 395.
- Bell, Linda A. and Richard B. Freeman (2001): “The incentive for working hard: explaining hours worked differences in the US and Germany”, *Labour Economics*, 8, pp. 181 – 202.
- Benz, Matthias and Bruno S. Frey (2008): “Being independent is a great thing: subjective evaluations of self-employment and hierarchy”, *Economica*, 75, 362-383.
- Bertola, Giuseppe (1990): “Job security, employment and wages”, *European Economic Review*, 34, pp. 851-879.
- Binder, Martin and Alex Coad (2013): “Life satisfaction and self-employment: a matching approach”, *Small Business Economics*, 40, pp. 1009–1033.
- Böckerman Petri, Ilmakunnas Pekka (2009): “Job disamenities, job satisfaction, quit intentions, and actual separations: Putting the pieces together”, *Industrial Relations*, 48, pp. 73 – 96.
- Booth, Alison L. and Jan van Ours (2008): “Job Satisfaction and Family Happiness: The Part-time Work Puzzle”, *Economic Journal*, 118, pp. F77 – F99.
- Booth, Alison L. and Jan van Ours (2009): “Hours of Work and Gender Identity: Does Part-time Work Make the Family Happier?”, *Economica*, 76, 176 – 196.
- Booth, Alison L. and Jan van Ours (2013): “Part-time Jobs: What Women Want?”, *Journal of Population Economics*, 26, pp. 263 – 283.
- Boswell, Wendy R., John W. Boudreau and Jan Tichy (2005): “The Relationship Between Job Change and Job Satisfaction: The Honeymoon-Hangover-Effect”, *Journal of Applied Psychology*, 90, pp. 882 – 892.
- Boswell, Wendy R., Abbie J. Shipp, Stephanie C. Payne and Satoris S. Culbertson (2009): “Changes in Newcomer Job Satisfaction over Time: Examining the Pattern of Honeymoons and Hangovers”, *Journal of Applied Psychology*, 94, pp. 844 – 858.
- Card David, Jochen Kluge and Andrea Weber (2010): “Active Labour Market Policy Evaluations: A Meta-Analysis”, *Economic Journal*, 120, pp. F452-F477.
- Card, David, Pablo Ibarraán und Juan M. Villa (2011): *Building in an Evaluation Component for Active Labor Market Programs: A Practitioner’s Guide*, IZA Discussion Paper No. 6085.
- Chadi, Adrian and Clemens Hetschko (2013): *Flexibilisation without hesitation? Temporary contracts and workers’ satisfaction*, Freie Universität Berlin, School of Business & Economics Discussion Paper 3/2013.
- Chadi, Adrian and Clemens Hetschko (2014): *The Magic of the New: How Job Changes Affect Job Satisfaction*, IAAEU Discussion Paper 5/2014.
- Clark, Andrew E. (2001): “What Really Matters in a Job? Hedonic Measurement Using Quit Data”, *Labour Economics*, 8, pp. 223-242.

- Clark, Andrew E., Yannis Georgellis and Peter Sanfey (1998): “Job Satisfaction, Wage Changes, and Quits: Evidence from Germany”, *Research in Labor Economics*, 17, pp. 95-21.
- Clark, Andrew E., Ed Diener, Yannis Georgellis and Richard E. Lucas (2008): “Lags and leads in Life Satisfaction: a Test of the Baseline Hypothesis”, *Economic Journal*, 118, pp. F222- F243.
- Delfgaauw, Josse (2007): “The effect of job satisfaction on job search: Not just whether, but also where”, *Labour Economics*, 14, pp. 299-317.
- Diaz-Serrano, Luis (2009): “Disentangling the Housing Satisfaction Puzzle: Does Homeownership Really Matter?”, *Journal of Economic Psychology*, 30, pp. 745-755.
- Dolan, Paul, Tessa Peasgood, and Matthew White (2008): “Do We Really Know What Makes Us Happy? A Review of the Economic Literature on the Factors Associated with Subjective Well-Being”, *Journal of Economic Psychology*, 29, 94-122.
- Engellandt, Axel and Regina T. Riphahn (2005): “Temporary Contracts and Employee Effort”, *Labour Economics*, 12, pp. 281 – 299.
- Flabbi, Luca and Andrea Ichino (2001): “Productivity, seniority and wages: New evidence from personnel data”, *Labour Economics*, 8, pp. 359 – 387.
- Ford, Michael T., Beth A. Heinen and Krista L. Langkamer (2007): “Work and Family Satisfaction and Conflict: a Meta-analysis of Cross-domain Relations”, *Journal of Applied Psychology*, 92, pp. 57 – 80.
- Frey, Bruno S. (2008): *Happiness: A Revolution in Economics*, Cambridge, Mass.: MIT Press.
- Georgellis, Yannis and Vurain Tabvuma (2010): “Does Public Service Motivation Adapt?”, *Kyklos*, 63, pp. 176 – 191.
- Gielen, Anne C. (2013): “Repeated Job Quits: Stepping Stones or Learning about Quality?”, *IZA Journal of European Labor Studies*, 2, pp. 1 – 22.
- Gimenez-Nadal, Jose I. and Almudena Sevilla-Sanz (2011): “The Time-Crunch Paradox”, *Social Indicators Research*, 102: pp. 181-196.
- Green, Francis (2010): “Well-being, Job Satisfaction and Labour Mobility”, *Labour Economics*, 17, pp. 897 – 903.
- Hainmueller, Jens (2012): “Entropy Balancing for Causal Effects: a Multivariate Reweighting Method to Produce Balanced Samples in Observational Studies”, *Political Analysis*, 20, pp. 25 – 46.
- Hesselius, Patrik, Per Johansson and J. Peter Nilsson (2009): “Sick of your colleagues’ absence?”, *Journal of the European Economic Association*, 7, pp. 583 – 594.
- Hopenhayn, Hugo and Richard Rogerson (1993): “Job Turnover and Policy Evaluation: a General Equilibrium Analysis”, *Journal of Political Economy*, 101, pp. 915-938.
- Ichino, Andrea and Regina T. Riphahn (2005): “The Effect of Employment Protection on Worker Effort: Absenteeism during and after Probation”, *Journal of the European Economic Association*, 3, pp. 120-143.

- Johnston, David W. and Wang-Sheng Lee (2012): “Climbing the Job Ladder: New Evidence of Gender Inequity”, *Industrial Relations*, 51, pp. 129-151.
- Johnston, David W. and Wang-Sheng Lee (2013): “Extra Status and Extra Stress: Are Promotions Good for Us?”, *Industrial and Labor Relations Review*, 66, pp. 32-54.
- Kan, Kamhon and Yen-Ling Lin (2011): “The Effects of Employment Protection on Labor Turnover: Empirical Evidence from Taiwan”, *Economic Inquiry*, 49, pp. 398-433.
- Kassenboehmer, Sonja and John Haisken-DeNew (2009): “You’re Fired! The Causal Negative Effect of Entry Unemployment on Life Satisfaction”, *Economic Journal*, 119, pp. 448-462.
- Kugler, Adriana and Giovanni Pica (2008): “Effects of Employment Protection on Worker and Job Flows: Evidence from the 1990 Italian Reform”, *Labour Economics*, 15, pp. 78-95.
- Kunze, Lars and Nicolai Suppa (2014): *Bowling alone or bowling at all? The effect of unemployment on social participation*, SOEPpaper no. 703.
- Levinson, Arik (2012): “Valuing public goods using happiness data: The case of air quality”; *Journal of Public Economics*, 96, 869-880.
- Lévy-Garboua Louis, Claude Montmarquette, and Véronique Simonnet (2007): “Job satisfaction and quits”, *Labour Economics*, 14, pp. 251-268.
- Loewenstein, George (1999): “Because it is there: The challenge of mountaineering for utility theory”, *Kyklos*, 52, pp. 315-344.
- Luechinger, Simon, Stephan Meier and Alois Stutzer (2010): “Why Does Unemployment Hurt the Employed? Evidence from the Life Satisfaction Gap between the Public and the Private Sector”, *Journal of Human Resources*, 45, pp. 998-1045.
- Luttmer, Erzo F.P. (2005): “Neighbors as negatives: relative earnings and well-being”, *Quarterly Journal of Economics*, 120, pp. 963-1002.
- Marcus, Jan (2013): “The effect of unemployment on the mental health of spouses – Evidence from plant closures in Germany”, *Journal of Health Economics*, 32, pp. 546-558.
- Powdthavee, Nattavudh (2011): “Jobless, friendless and broke: what happens to different areas of life before and after unemployment?”, *Economica*, 79, pp. 557 - 575
- Rätzel, Steffen (2012): “Labour Supply, Life Satisfaction, and the (Dis) Utility of Work”, *Scandinavian Journal of Economics*, 114, pp. 1160-1181.
- Schmitz, Hendrik (2011): “Why are the unemployed in worse health? The causal effect of unemployment on health”, *Labour Economics*, 18, pp. 71-78.
- Schwarze, Johannes and Rainer Winkelmann (2011): “Happiness and altruism within the extended family”, *Journal of Population Economics*, 24, pp. 1033-1051.
- Shields, Michael A. and Stephen Wheatley Price (2002): “Racial Harassment, Job Satisfaction, and Intentions to Quit: Evidence from the British Nursing Profession”, *Economica*, 69, pp. 295-326.
- Stutzer Alois and Rafael Lalive (2004): “The role of social work norms in job searching and subjective well-being”, *Journal of the European Economic Association*, 2, 696-719.

- Van Praag, Bernard M.S., Paul Frijters and Ada Ferrer-i-Carbonell (2003): “The anatomy of subjective well-being”, *Journal of Economic Behavior & Organization*, 51, pp. 29-49.
- Wagner, Gert G., Joachim R. Frick, and Jürgen Schupp (2007): “The German Socio-economic Panel Study (SOEP) - Scope, Evolution and Enhancements”, *Journal of Applied Social Science Studies*, 127, pp. 139 – 169.
- Weimann, Joachim, Andreas Knabe and Ronnie Schöb (2015): *Measuring Happiness: the Economics of Well-being*, Cambridge: MIT press.
- Winkelmann, Rainer (2005): “Subjective Well-being and the Family: Results from an Ordered Probit Model with Multiple Random Effects”, *Empirical Economics*, 30, pp. 749 – 761.
- Wooden, Mark, Diana Warren and Robert Drago (2009): “Working Time Mismatch and Subjective Well-being”, *British Journal of Industrial Relations*, 47, pp. 147-179.
- Wunder, Christoph and Guido Heineck (2013): “Working time preferences, hours mismatch and well-being of couples: Are there spillovers?”, *Labour Economics*, 24, pp. 244-252.

Appendix

Table A1. Sampling

Number of observations*	No recent switch				Switch: resigned		Switch: plant closed	
	min	max	mean / share	standard deviation	mean / share	standard deviation	mean / share	standard deviation
			53,380		956		176	
Satisfaction with life	0	10	7.10	1.57	7.26	1.49	6.91	1.65
Satisfaction with job	0	10	6.99	1.91	7.42	1.92	6.51	2.15
Satisfaction with place of dwelling	0	10	7.79	1.81	7.57	1.93	7.59	1.94
Satisfaction with family life	0	10	7.73	1.88	7.80	1.83	7.52	1.89
Satisfaction with free time	0	10	6.54	2.06	6.23	2.18	6.28	2.24
Female (share)			0.45		0.47		0.38	
Age (years)	19	59	42.82	9.28	35.86	8.62	40.43	9.86
Overnight stays in hospital last year	0	290	0.74	4.76	0.42	2.49	0.48	1.98
Disability (share)			0.06		0.02		0.06	
Unemployment experience (years)	0	24	0.38	1.02	0.46	0.95	0.33	0.55
Employment experience (years)	0	48.4	19.97	9.61	12.53	8.13	18.44	9.94
<i>Marital status (shares):</i>								
married			0.68		0.54		0.66	
separated			0.02		0.02		0.02	
divorced			0.08		0.06		0.06	
widowed			0.01		0.01		0.00	
Not having a life partner (share)			0.13		0.17		0.10	
Employed partner (share)			0.68		0.65		0.67	
Not-employed partner (share)			0.19		0.18		0.23	
Children (< 18 years old) in household	0	9	0.67	0.93	0.72	0.96	0.70	0.99
People in need of care in household (share)			0.02		0.01		0.01	
Housing space (m ²)	9	470	106.88	42.93	98.93	41.80	96.82	36.85
Owning home (share)			0.54		0.37	0.48	0.46	0.50
Number of household members	1	14	2.92	1.23	2.83	1.29	2.98	1.25
Monthly equivalised income (2006 Euros)	5.29	44,317	1,711.78	887.34	1,639.17	736.04	1,497.79	554.78
Monthly labour earnings (Euros)	42	18,000	1,706.60	997.83	1,553.61	953.19	1,480.85	739.39
<i>Sector (shares):</i>								
manufacturing			0.20		0.17		0.29	
construction			0.12		0.13		0.18	
trade			0.12		0.18		0.20	
transport			0.05		0.05		0.05	
banking and finance			0.05		0.04		0.02	
public administration			0.11		0.03		0.03	
education			0.08		0.05		0.00	
health and social services			0.11		0.16		0.05	
other services			0.10		0.14		0.14	
agriculture, energy, mining			0.03		0.02		0.02	
<i>Company size (shares):</i>								
< 20 employees			0.20		0.26		0.35	
20-199 employees			0.30		0.32		0.35	
200-1999 employees			0.24		0.23		0.15	
≥ 2000 employees			0.25		0.18		0.15	
White collar (share)			0.59		0.69		0.60	
Blue collar (share)			0.31		0.28		0.38	
Public servants (share)			0.10		0.03		0.02	
Autonomy in carrying out tasks	1	5	2.81	1.07	2.80	1.06	2.70	1.02
Daily working time (hours)	0	24	8.86	2.07	9.23	2.24	9.35	1.87

Note. * the numbers of observation are smaller because of missing information in the cases of satisfaction with free time, satisfaction with family life, partners' employment states, sectors, and company size.

Table A2. Life satisfaction and job changes (detailed results)

Specification	(1)	(2)	(3)	(4)	(5)	(6)
New job, t=3	0.215*** (0.058)					
Resignation, t=1					-0.129* (0.067)	-0.130* (0.067)
Resignation, t=2					-0.268*** (0.070)	-0.267*** (0.069)
Resignation, t=3		0.246*** (0.064)	0.246*** (0.064)	0.240*** (0.064)	0.171** (0.067)	
Resignation, t=3, working more						0.155 (0.097)
Resignation, t=3, working less						0.181** (0.086)
Resignation, t=4					-0.062 (0.062)	-0.062 (0.062)
Plant closure, t=1					0.040 (0.085)	0.043 (0.086)
Plant closure, t=2					0.076 (0.097)	0.079 (0.097)
Plant closure, t=3		0.045 (0.126)	0.049 (0.126)	0.067 (0.123)	0.072 (0.127)	
Plant closure, t=3, working more						-0.201 (0.196)
Plant closure, t=3, working less						0.246 (0.163)
Plant closure, t=4					-0.125 (0.121)	-0.124 (0.121)
Working time, typical working day						0.008 (0.008)
Number of children: 0			0.017 (0.048)	-0.049 (0.049)	-0.048 (0.049)	-0.048 (0.049)
Number of children: 1			0.023 (0.035)	-0.003 (0.035)	-0.003 (0.035)	-0.003 (0.035)
Number of children: 3 or more			-0.013 (0.069)	0.009 (0.068)	0.006 (0.068)	0.006 (0.068)
Living with people in need of care in the same household: yes			-0.430*** (0.132)	-0.403*** (0.128)	-0.401*** (0.128)	-0.401*** (0.128)
Being widowed: yes			0.022 (0.104)	0.022 (0.104)	0.028 (0.104)	0.025 (0.104)
Recent death of spouse: yes			-1.252*** (0.240)	-1.065*** (0.259)	-1.070*** (0.259)	-1.069*** (0.259)
Recent child birth: yes			0.176*** (0.049)	0.190*** (0.052)	0.188*** (0.052)	0.187*** (0.052)
Recent positive change in living with people in need of care in the same household: yes			0.135 (0.166)	0.139 (0.164)	0.142 (0.164)	0.142 (0.164)
Home ownership: yes			-0.033 (0.040)	0.000 (0.040)	0.001 (0.040)	0.001 (0.040)
Size of housing			0.006*** (0.001)	0.004*** (0.001)	0.004*** (0.001)	0.004*** (0.001)
Size of housing squared			-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)
Number of people living in household			-0.000 (0.020)	-0.016 (0.020)	-0.017 (0.020)	-0.016 (0.020)
Positive change in home ownership: yes			0.173*** (0.050)	0.071 (0.055)	0.070 (0.055)	0.069 (0.055)
Age squared			-0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Number of overnight stays in hospital			-0.011*** (0.003)	-0.011*** (0.003)	-0.011*** (0.003)	-0.011*** (0.003)
Disability: yes			-0.251*** (0.079)	-0.247*** (0.077)	-0.244*** (0.078)	-0.243*** (0.078)
Years of unemployment experience			0.034 (0.056)	0.033 (0.058)	0.028 (0.059)	0.030 (0.059)
Years of employment experience			-0.020 (0.031)	-0.038 (0.030)	-0.035 (0.030)	-0.036 (0.030)
Partner: yes, not employed				0.280*** (0.066)	0.284*** (0.066)	0.283*** (0.066)
Partner: yes, fulltime employed				0.381*** (0.061)	0.386*** (0.061)	0.386*** (0.061)
Partner: yes, part-time employed				0.352*** (0.068)	0.354*** (0.068)	0.354*** (0.068)

To be continued on the next page

<i>Specification (ctd.)</i>	(1)	(2)	(3)	(4)	(5)	(6)
Partner: yes, other type of employment				0.273*** (0.076)	0.277*** (0.076)	0.276*** (0.076)
Partner: yes, employment status missing				0.324*** (0.046)	0.326*** (0.046)	0.327*** (0.046)
Being married: yes				0.023 (0.067)	0.024 (0.067)	0.025 (0.067)
Being divorced: yes				0.245** (0.095)	0.244** (0.095)	0.244** (0.095)
Being separated: yes				-0.068 (0.238)	-0.067 (0.238)	-0.067 (0.238)
Recent marriage: yes				0.233*** (0.060)	0.229*** (0.060)	0.228*** (0.060)
Recent divorce: yes				-0.054 (0.121)	-0.054 (0.121)	-0.054 (0.121)
Recent separation: yes				-0.119 (0.074)	-0.119 (0.074)	-0.119 (0.074)
Recently moved together with partner: yes				0.140** (0.058)	0.137** (0.058)	0.139** (0.058)
Recently moved housing: yes				0.130*** (0.035)	0.130*** (0.035)	0.131*** (0.035)
Log. equalised household income at 2006 €				0.264*** (0.044)	0.260*** (0.044)	0.260*** (0.044)
Log. labour earnings				0.105** (0.046)	0.098** (0.046)	0.098** (0.046)
Manufacturing sector: yes				0.084 (0.111)	0.078 (0.110)	0.079 (0.110)
Construction sector: yes				0.020 (0.113)	0.009 (0.111)	0.011 (0.111)
Trade sector: yes				0.148 (0.115)	0.144 (0.114)	0.144 (0.114)
Transport sector: yes				0.052 (0.129)	0.045 (0.127)	0.049 (0.127)
Banking and finance sector: yes				0.239 (0.164)	0.224 (0.163)	0.226 (0.162)
Public administration sector: yes				0.130 (0.122)	0.121 (0.121)	0.122 (0.120)
Education sector: yes				0.159 (0.137)	0.143 (0.136)	0.143 (0.136)
Health and social services sector: yes				0.130 (0.138)	0.119 (0.137)	0.118 (0.137)
Other services sector: yes				0.030 (0.113)	0.031 (0.112)	0.031 (0.112)
Missing sector information sector: yes				-0.014 (0.121)	-0.022 (0.120)	-0.021 (0.120)
Company size 20-199 employees: yes				0.079* (0.045)	0.076* (0.045)	0.077* (0.045)
Company size 200-1999 employees: yes				0.070 (0.053)	0.063 (0.053)	0.063 (0.053)
Company size 2000 employees or more: yes				0.053 (0.056)	0.048 (0.056)	0.049 (0.056)
Missing company size information sector: yes				0.137 (0.119)	0.133 (0.119)	0.134 (0.119)
White collar: yes				-0.086 (0.102)	-0.082 (0.102)	-0.082 (0.102)
Blue collar: yes				-0.030 (0.111)	-0.021 (0.111)	-0.020 (0.111)
Level of autonomy in carrying out tasks: 2				0.048 (0.055)	0.048 (0.055)	0.049 (0.055)
Level of autonomy in carrying out tasks: 3				0.130** (0.064)	0.131** (0.064)	0.130** (0.064)
Level of autonomy in carrying out tasks: 4				0.161** (0.072)	0.162** (0.072)	0.162** (0.072)
Level of autonomy in carrying out tasks: 5				0.247*** (0.092)	0.248*** (0.092)	0.248*** (0.092)
Individual fixed effects	yes	yes	yes	yes	yes	yes
Interview time	yes	yes	yes	yes	yes	yes
Observations	51,969	51,969	51,969	51,969	51,969	51,969
R ²	0.014	0.015	0.022	0.035	0.036	0.036
Number of persons	10,131	10,131	10,131	10,131	10,131	10,131

*Notes: * denotes significance at the 10% level, ** at the 5% level and *** at the 1% level. Robust standard errors are in parentheses. Observations correspond to the sample described in Table A1 except that the fixed-effects regressions exclude one-observation groups. The dependent variable is life satisfaction. Regressions consider individual fixed effects and sample weights.*

Table A3. Satisfaction with family life and job changes (detailed results)

<i>Specification</i>	(1)	(2)	(3a)	(3b)	(4)
New job	0.019 (0.085)				
Recent resignation		0.092 (0.087)	0.095 (0.087)	0.096 (0.087)	0.093 (0.086)
Recent plant closure		-0.555** (0.280)	-0.555** (0.279)	-0.546** (0.278)	-0.545** (0.268)
Working time, typical working day					-0.024** (0.012)
Number of children: 0			-0.244*** (0.077)	0.053 (0.081)	-0.035 (0.082)
Number of children: 1			-0.061 (0.058)	0.056 (0.059)	0.000 (0.060)
Number of children: 3 or more			0.258** (0.109)	0.132 (0.107)	0.160 (0.104)
Living with people in need of care in the same household: yes			-0.195 (0.203)	-0.274 (0.199)	-0.175 (0.210)
Being widowed: yes			0.224 (0.552)	0.224 (0.552)	0.224 (0.552)
Recent death of spouse: yes			-1.244** (0.534)	-1.180** (0.533)	-0.843* (0.487)
Recent child birth: yes			0.269*** (0.086)	0.242*** (0.087)	0.250*** (0.087)
Recent positive change in living with people in need of care in the same household: yes			0.230 (0.225)	0.253 (0.223)	0.235 (0.234)
Home ownership: yes				-0.070 (0.081)	-0.035 (0.080)
Size of housing				0.008*** (0.002)	0.005** (0.002)
Size of housing squared				-0.000*** (0.000)	-0.000 (0.000)
Number of people living in household				0.172*** (0.036)	0.059* (0.035)
Positive change in home ownership: yes				0.107 (0.078)	0.008 (0.083)
Age squared				-0.001 (0.000)	-0.001 (0.000)
Number of overnight stays in hospital				-0.001 (0.003)	-0.002 (0.003)
Disability: yes				-0.124 (0.112)	-0.081 (0.111)
Years of unemployment experience				-0.124 (0.279)	-0.122 (0.268)
Years of employment experience				0.067 (0.045)	0.062 (0.044)
Partner: yes, not employed					0.712*** (0.128)
Partner: yes, fulltime employed					0.784*** (0.119)
Partner: yes, part-time employed					0.811*** (0.123)
Partner: yes, other type of employment					0.707*** (0.140)
Partner: yes, employment status missing					0.712*** (0.087)
Being married: yes					-0.017 (0.096)
Being divorced: yes					0.110 (0.167)
Being separated: yes					-0.247 (0.183)
Recent marriage: yes					0.224 (0.552)
Recently moved together with partner: yes					0.426*** (0.080)
Recently moved housing: yes					0.068 (0.210)
Log. equalised household income at 2006 €					0.185*** (0.070)
Log. labour earnings					-0.192*** (0.068)

To be continued on the next page

<i>Specification (ctd.)</i>	(1)	(2)	(3a)	(3b)	(4)
Manufacturing sector: yes					0.153 (0.156)
Construction sector: yes					0.070 (0.163)
Trade sector: yes					0.025 (0.164)
Transport sector: yes					0.315 (0.220)
Banking and finance sector: yes					-0.550** (0.238)
Public administration sector: yes					-0.096 (0.186)
Education sector: yes					0.068 (0.204)
Health and social services sector: yes					0.153 (0.201)
Other services sector: yes					0.090 (0.164)
Missing sector information sector: yes					0.023 (0.187)
Company size 20-199 employees: yes					0.039 (0.076)
Company size 200-1999 employees: yes					0.060 (0.084)
Company size 2000 employees or more: yes					0.049 (0.088)
Missing company size information sector: yes					-0.095 (0.151)
White collar: yes					0.275 (0.223)
Blue collar: yes					0.359 (0.235)
Level of autonomy in carrying out tasks: 2					0.117 (0.089)
Level of autonomy in carrying out tasks: 3					0.228** (0.112)
Level of autonomy in carrying out tasks: 4					0.229* (0.123)
Level of autonomy in carrying out tasks: 5					0.189 (0.163)
Individual fixed effects	yes	yes	yes	yes	yes
Interview time	yes	yes	yes	yes	yes
Observations	37,773	37,773	37,773	37,773	37,773
R ²	0.002	0.003	0.006	0.011	0.039
Number of persons	8,274	8,274	8,274	8,274	8,274

Notes: * denotes significance at the 10% level, ** at the 5% level and *** at the 1% level. Robust standard errors are in parentheses. Fewer observations are used compared to the life satisfaction regressions because of missing data about satisfaction with family life before the 2006 SOEP wave. The dependent variable is satisfaction with family life. Regressions consider individual fixed effects and sample weights.

Table A4. Housing satisfaction and job changes

<i>Specification:</i>	(1)	(2)	(3a)	(3b)	(4)
New job	-0.002 (0.072)				
Recent resignation		-0.008 (0.081)	0.002 (0.075)	0.004 (0.075)	-0.064 (0.075)
Recent plant closure		0.027 (0.129)	0.027 (0.121)	0.044 (0.118)	0.063 (0.115)
Individual fixed effect	yes	yes	yes	yes	yes
Interview time	yes	yes	yes	yes	yes
Personal controls				yes	yes
Family controls				yes	yes
Household controls			yes	yes	yes
Additional controls					yes
Observations	51,969	51,969	51,969	51,969	51,969
R-squared	0.012	0.012	0.073	0.075	0.099
Number of persons	10,131	10,131	10,131	10,131	10,131

Notes: * denotes significance at the 10% level, ** at the 5% level and *** at the 1% level. Robust standard errors are in parentheses. Observations correspond to the life satisfaction analysis. The dependent variable is housing satisfaction. Regressions consider individual fixed effects and sample weights. Detailed results are available on request.

Table A5. Satisfaction with free time and job changes

<i>Specification:</i>	(1)	(2)	(3a)	(3b)	(4)
New job	-0.036 (0.081)				
Recent resignation		-0.006 (0.084)	-0.009 (0.084)	0.000 (0.084)	-0.006 (0.083)
Recent plant closure		-0.207 (0.254)	-0.214 (0.254)	-0.213 (0.255)	-0.221 (0.254)
Individual fixed effect	yes	yes	yes	yes	yes
Interview time	yes	yes	yes	yes	yes
Personal controls			yes	yes	yes
Family controls				yes	yes
Household controls				yes	yes
Additional controls					yes
Observations	47,787	47,787	47,787	47,787	47,787
R ²	0.004	0.004	0.005	0.009	0.021
Number of persons	8,968	8,968	8,968	8,968	8,968

Notes: * denotes significance at the 10% level, ** at the 5% level and *** at the 1% level. Robust standard errors are in parentheses. The number of observations is fewer compared to the life satisfaction analysis because of information about the satisfaction with free time is missing in the SOEP wave of 1995. The dependent variable is free time satisfaction. Regressions consider individual fixed effects and sample weights. Detailed results are available on request.

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