

How Job Changes Affect People's Lives — Evidence from Subjective Well-Being Data

Adrian Chadi  and Clemens Hetschko 

Abstract

Starting a new job is able to boost people's careers, but might come at the expense of other areas of life. To investigate individual implications of job mobility, we analyse the effects of job changes on time-use and indicators of subjective well-being using rich data from a representative German panel survey. We find that job switchers report relatively high levels of life satisfaction, at least for the first time after the job change. There is no such 'honeymoon' period for job changes triggered by plant closures. Instead, we find evidence for a harmful impact of involuntary mobility on family life.

1. Introduction

Job mobility can boost a worker's career. Starting fresh with a new employer can lead to a leadership position, higher earnings and better opportunities to acquire human capital. Switching the job occasionally might also help workers to escape from tiring routines and to have new challenges in their lives. The downsides of job mobility may reveal themselves in the form of economic uncertainty about the future, especially at the beginning of a new employment when workers need to establish themselves as valuable newcomers to a firm. Starting with a new employer may thus come along with the necessity to spend additional time on working at the expense of family life and free-time activities.

Previous research on job mobility focuses on its role for income (see, e.g. Borjas 1981; García Pérez and Rebollo Sanz 2005; Groes *et al.* 2015; Lam *et al.* 2012; Light and McGarry 1998). This literature suggests that involuntary mobility is less beneficial than voluntary mobility, which is the case when

Adrian Chadi is at Department of Economics, University of Konstanz. Clemens Hetschko is at Economics Division, University of Leeds.

workers quit to start a new job. Yet, recent evidence from the US survey data reveals that many workers get paid higher even after being forced to switch jobs, raising the question why they need that ‘kick in the rear’ (Farber 2017, p. S267). Traits, such as risk aversion, or behavioural phenomena, such as status-quo bias, might prevent people from initiating beneficial job switches. This may explain why many workers hesitate to change the employer, despite the decline in job satisfaction when they continue to work on the same job for a long time (e.g. Barmby *et al.* 2012; Borjas 1979; Chadi and Hetschko 2018; Theodossiou and Zangelidis 2009). While potential effect heterogeneity in the implications of job changes is one important issue, we generally note that there is a lack of research on the non-monetary implications of mobility.

In this study, we provide the first comprehensive discussion of how job changes affect people’s well-being.¹ We consider this question to be relevant from various angles, including the debate on employment protection legislation, through which policy-makers affect the prevalence of both voluntary and involuntary mobility (e.g. Kan and Lin 2011; Kugler and Pica 2008). To provide policy-relevant insights, we investigate life satisfaction, as a broad assessment of people’s life situation, as well as satisfaction indicators concerning areas of life beyond work, such as family life, which may inform us about potentially negative side effects of job mobility.

So far, research on labour markets based on subjective well-being data has strongly focused on job insecurity and unemployment, which reduce life satisfaction dramatically (e.g. Clark and Oswald 1994; Clark 2003; Clark *et al.* 2008; Green 2011; Green and Heywood 2011; Helliwell and Huang 2014; Luechinger *et al.* 2010; Stutzer and Lalive 2004). Moreover, life satisfaction strongly depends on the circumstances of a job, such as part-time versus fulltime employment (Berger 2013; Booth and van Ours 2008, 2009, 2013) or self-employment (Binder and Coad 2013; Hetschko 2016). While researchers are increasingly using satisfaction data to inspect the potential trade-offs between family and work life (e.g. Bertrand 2013; Iseke 2014; Lauber and Storck 2019), the consequences of job changes on life satisfaction and the well-being in specific areas of life have not been analysed so far (for an overview, see Weimann *et al.* 2015).

An exception to this is the research on job satisfaction, which rises in the wake of a job change, but sharply declines afterwards. This so-called ‘honeymoon-hangover effect’ (Boswell *et al.* 2005) constitutes an important finding for human resource policies.² In an earlier contribution to that research (Chadi and Hetschko 2018), we find a strong honeymoon-hangover pattern in job satisfaction among those workers who voluntarily start a new job, while we find no such pattern for those who are forced to switch jobs. In the present study, we contribute to the research on the determinants of people’s well-being by analysing how job changes affect people’s lives in general. We hereby consider especially relevant the impact of job changes on partnership and family commitments as well as the limited time that needs to be allocated to different life domains.³

In methodological respects, we follow the previous literature on job changes and pay particular attention to the distinction between voluntary and involuntary job switching. Voluntary job changes constitute a selection of people who take the opportunity to improve their well-being. This selection of positive cases prevents us from identifying the direct impact of the event itself and makes it difficult to interpret the honeymoon period observed for voluntary job changes. Among other things, the honeymoon-hangover pattern of voluntary job changes might originate from various reasons motivating the switch, be it higher pay or non-monetary motives (e.g. Chadi and Hetschko 2018; Grund 2013). Hence, we argue that it is very promising to also look at a situation where the job change was made necessary by an event outside of the worker's sphere of influence. Arguably, this is the case when a plant closes. For the purpose of empirical identification, this event offers us the advantage that the ultimate trigger of job mobility does not result from individual motives, which in addition to pursuing career goals might also include work–life balance. Instead, plant closures force job switching among both the willing and unwilling, those with high ability and those with low ability. Thanks to its usefulness for identification purposes, plant closures were exploited as trigger events for various purposes, including the analysis of exogenously triggered unemployment on life satisfaction (Kassenboehmer and Haisken-DeNew 2009) and health (Schmitz 2011). In our own study on job satisfaction (Chadi and Hetschko 2018), we are the first to make use of plant closures as an exogenous trigger for the identification of the individual implications of job changes, an idea suggested by, for instance, Heywood *et al.* (2002).

To translate our research objectives into an empirical strategy, we make use of representative data from the German Socio-Economic Panel (SOEP). We consider Germany an important example, as it stands for high employment protection, which we also observe in a number of European countries (OECD 2013). The level of job mobility is hence relatively low, rendering job changes a rare event in life (e.g. Borghans and Golsteyn 2012). Expecting job changes to shape one's life for a long time, the effects on well-being may thus be particularly pronounced and long-lasting. The SOEP contains rich information on individuals, including various indicators of well-being as well as a time-use questionnaire. This is a particularly useful feature of the panel data, as we expect that the time people spend either at work or at home may point to potential drawbacks of job changes. Furthermore, some of the annual SOEP questionnaires include information on people's traits, which may inform us about possible heterogeneity in the effect of job changes.

Most importantly, the SOEP asks people about whether they have terminated a job and started a new one, including the reasons why the previous job ended. This allows us to distinguish between two types of job switches. One follows a resignation and is by and large considered to be voluntary. The other job switch is involuntary and triggered by a plant closure. Considering the methodological debate on potential selection issues regarding those individuals who are affected by plant closure, we follow the

previous research in order to address possible identification concerns with regard to this approach (e.g. Kunze and Suppa 2017; Nikolova and Ayhan 2019). Our longitudinal data allow us to take fixed-person characteristics into account, as we only look at changes in people's well-being in consequence of a job change. In doing so, we ensure that our findings are not driven by different levels of ability across individuals. Beyond that, our rich survey data allow us to consider people's changing circumstances of life extensively. As a methodological alternative to the standard individual fixed-effects estimation approach, we combine a difference-in-differences design with a matching technique, in line with other research utilizing plant closures (e.g. Marcus 2013).

We find that life satisfaction increases on average when workers switch jobs. This life satisfaction premium declines within the first two years of the new job. Hence, we are the first to show the honeymoon-hangover pattern of job changes, known from the literature on job satisfaction, for a measure of general well-being. Importantly, this pattern is only observed among those workers who initiate the job changes by quitting their previous jobs. For exogenously triggered job mobility, we do not find a significant effect in life satisfaction.

To examine potential consequences of job changes for people's work–life balance, we first discuss a potential substitution in daily time-use between working and non-work-related activities. Descriptively, time spent on hobbies and home production reduces in the first year after a job change, while working time increases. In addition, we find that involuntary job switching substantially reduces satisfaction with family life. This is mirrored by a decline in free-time satisfaction, which becomes statistically significant in the second year after the job change. Housing satisfaction slightly declines after voluntary job changes. For life satisfaction and domain satisfactions, we conduct heterogeneity analyses. It turns out, for instance, that involuntary mobility might be beneficial for the life satisfaction of people with low risk aversion, whereas negative effects for satisfaction with family life are driven by men.

Our study complements several strands of literature. We extend the aforementioned research on the outcomes of job mobility to non-monetary aspects of life and beyond working life. We add to the literature on labour markets and well-being by comprehensively studying how job changes affect a broad range of well-being indicators, as well as by revealing work–life imbalances. In the process, we are the first to examine job changes as determinant of both life satisfaction and satisfaction with life domains, namely family life (e.g. Elmslie and Tebaldi 2014; Ford *et al.* 2007), housing (e.g. Diaz-Serrano 2009) and free time (e.g. Gimenez-Nadal and Sevilla-Sanz 2011). Our finding on the dissatisfaction with family life among those who are forced to switch jobs points to work–family conflict as a potential consequence of job mobility. Studying the role of risk aversion in the implications of job changes, we furthermore contribute to ongoing research on the role of traits and attitudes in labour market outcomes (e.g. Boyce *et al.* 2010; Caliendo *et al.* 2010, 2015; Fossen and Glocker 2017; Jaeger *et al.* 2010; Schurer 2017).

We proceed as follows. Section 2 outlines our theoretical expectations for the empirical analysis. Data and sampling are described in Section 3. A mean analysis (Section 4) documents the evolution of life satisfaction and time-use around job changes. Section 5 introduces our methodology and presents the corresponding estimation results for various satisfaction outcomes. Section 6 concludes and offers policy implications. We complement our study with additional information and material, as provided in the Online Appendix.⁴

2. Theoretical considerations

In this section, we develop expectations about the empirical consequences of job changes for different dimensions of subjective well-being. We start with the case of involuntary mobility and life satisfaction as a measure of overall well-being. On the one hand, it appears rather implausible that those type of job changes lead to improvements. The simple reason is a rational choice argument. If workers had been able to increase well-being in a different job before having been forced to switch, they would have switched voluntarily anyway. However, we hereby implicitly assume risk-neutral individuals. A risk-averse person may not necessarily switch jobs even if the expected returns are positive, but uncertain to some extent (Farber 2017). We, therefore, examine the role of risk aversion in the well-being effects of job mobility in the course of our empirical analysis. Similar arguments may be made regarding irrational behavioural patterns, as in the case of status-quo bias (Samuelson and Zeckhauser 1988). On the other hand, it also appears unclear why involuntary job changes should lead to reductions in life satisfaction. As research shows that people suffer from a job interruption dependent on the length of unemployment (Gregory and Jukes 2001; Knabe and Rätzl 2011), we assume that in a competitive labour market, earnings and job characteristics are similar as before in cases where people are quickly reemployed after being forced to switch jobs for reasons beyond their control.

However, there may be negative side effects of mobility on other areas of life, suggesting to consider workers' satisfaction with non-work domains when analysing the consequences of involuntary job changes: After having switched employers, people may need to establish themselves to survive probation and to obtain a permanent contract (Ichino and Riphahn 2005). 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; Engelland and Riphahn 2005).⁵ We, therefore, expect working time to be particularly high after a job change, and we start our empirical analysis by shedding light on this issue. An empirical question is as to whether this need of signalling productivity applies rather to high-skilled workers who could suffer severe income losses in absolute terms (Hetschko and Preuss forthcoming) or to low-skilled workers who may be trapped in a low-pay-no-pay cycle when being out of work for a long time (Fok *et al.* 2015).

Now, consider the case of voluntary mobility. While we cannot clearly identify the benefits of voluntary job changes later on in the empirical part because of endogeneity, still from a theoretical perspective it is worthwhile to think about the possible benefits, given that those could indeed exist and most job changes usually are of a voluntary nature. If people behave rationally and do not severely overestimate future gains in life satisfaction (see Frijters *et al.* 2009; Odermatt and Stutzer 2019), there should be an overall well-being premium of a voluntary job change, as it motivates the decision to switch in the first place. The literature on job changes and job satisfaction discusses improvements in working life, such as higher earnings and better job characteristics (e.g. Grund 2013), which may also benefit a worker's life satisfaction. Work–life balance might play a particular role in the context of job changes and life satisfaction, as it concerns family life as a further life domain. Also, those who change jobs voluntarily may feel a need to invest a relatively large amount of working hours in their new jobs at the expense of other life domains. For some workers, however, improving on the work–life balance may actually be the motivation for switching jobs (Surienty *et al.* 2014). As a result, the role of the work–life balance in the context of job changes is unclear, which is another reason for us to comprehensively inspect satisfaction with particular life domains in our study.

Assuming that workers spend more time working on a new job, we expect various domains of life to be impaired. A loss of leisure time may translate into a decline of satisfaction with free time (see, e.g. Gimenez-Nadal and Sevilla-Sanz 2011). This indicator may measure the well-being obtained from free time activities globally, taking into account both the quality and quantity of free time. While the quality of free time might even increase in response to a job change (just like a marginal utility), we assume the overall well-being obtained from free time to decrease due to the expected change in time use.

Whether people reduce time spent on leisure or other activities for the sake of spending more time at work depends on the weights that the different areas of life have for overall well-being (Van Praag *et al.* 2003). As withdrawing from family-related activities and domestic work could lead to harmful work–family conflicts (e.g. Gallie and Russel 2009), we expect that people are able to ensure that this domain, reflected in their satisfaction with family life, does not suffer from voluntarily initiated job changes. Instead, other types of home production may be reduced, such as cleaning, repairs and gardening. As this might impair the quality of the dwelling, thereby lowering satisfaction with housing, we consider this facet of people's lives as relevant in our context, too. Contrary to the area of family life, housing might play a rather minor role in the set of life domains and reflect a domain that could be seen as an easy victim for workers who need to spend more time and effort on their jobs. This view is supported empirically, as the correlation of housing satisfaction with life satisfaction has been found to be, at best, moderate (Van Praag *et al.* 2003; Powdthavee 2012), whereas the family domain appears to be rather important for overall well-being (Benjamin *et al.* 2014b). Hence, in order to test our considerations, we analyse satisfaction with free time, family life and housing

around job changes alongside life satisfaction. In addition, we consider job satisfaction to contrast our results for various outcomes with the potential benefits of mobility known from previous research, which has focused on voluntary job changes (e.g. Boswell *et al.* 2005).

3. Data

We use data from the German SOEP Study, which is an ongoing and annual survey of people in Germany (SOEP 2019; Wagner *et al.* 2007). SOEP data are well suited for our research purpose, given the huge variety of information provided on subjective well-being and employment. The panel structure enables us to follow the same workers from one job to another.

The SOEP provides generated variables indicating (i) if people terminated a job after the last SOEP interview and (ii) if the person has started a new job since then. Combining these pieces of information, we identify job changes that took place between two SOEP interviews, that is within approximately the last 12 months. Using generated variables ensures that in our analysis, observations of workers who report inconsistently about employer changes are eliminated. We use further SOEP variables on both job terminations and new jobs to identify different types of job changes from one employer to another. Regarding how workers terminated their jobs, respondents can choose from a list of possible reasons answering on a separate question (*'How did that job end?'*). We categorize those who answer that they *resigned* as voluntary changers and those who say their *place of work or office has closed* as involuntary changers. Other reasons are not considered to clearly distinguish between intended and unintended job mobility. Regarding the new job, the SOEP asks about the *type of occupational change* and offers several answer categories, from which we only consider cases where workers report that they *started a new position with a different employer*.

In our data analyses, these steps allow us to distinguish between voluntary job changes (after resignation), involuntary job changes (after plant closure) and having experienced no job change. The latter is our reference status and is defined as being in employment without a new job and without a job termination since the last SOEP interview. To focus on regular employment, we make only use of data of wage workers who are at least 18 years old, but younger than 60 years, and who work at least 15 hours per week, according to their actual weekly working hours, thus excluding self-employed people, working retirees as well as marginal jobs. We apply these data restrictions regarding employment and age for both job stayers and job changers. As our focus is on job-to-job transitions, we generally do not consider observations of individuals who report being unemployed after resigning or due to a plant closure. However, the group of job changers may include some individuals who experienced a couple of weeks or even a few months of unemployment after the last job had ended. We examine this phenomenon deeper as part of our sensitivity analyses.

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

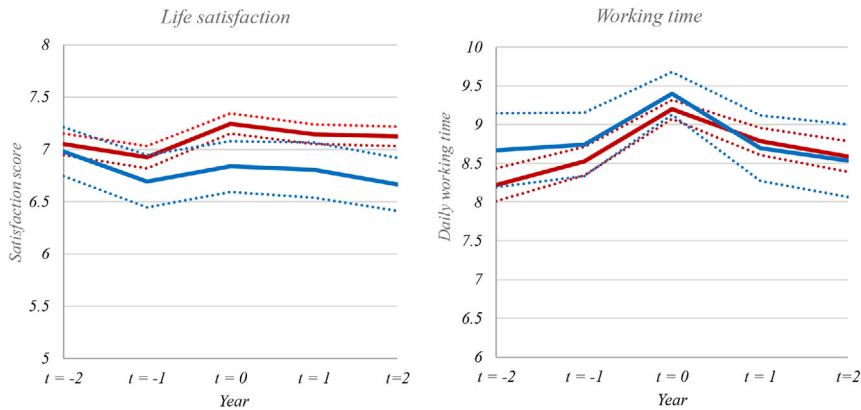
How satisfied are you with your life, all things considered / your family life / your free time / your place of dwelling / your job? Please answer by using the following scale: 0 means 'completely dissatisfied', 10 means 'completely satisfied'.

The SOEP annually includes a time-use questionnaire that allows us to examine people's activities on a regular workday before and after a job change. The time-use battery includes items that inform us about three main activities in which we are interested. First, people indicate how many hours they spend doing their jobs, including commuting time, which we refer to as working time. Second, respondents also indicate the time spent on free-time activities, which we refer to as hobbies. Third, we add up hours invested in errands, housework, care for children or other persons and repairs (including gardening) as home production.

Moreover, we consider various further information as control variables in our multivariate analyses. Online Appendix B includes a detailed description of these data in Table B1, where we distinguish between our three groups of interest: those who did not change jobs recently, those who changed recently after resigning and those who changed recently because of a plant closure. We consider the SOEP waves from 1994 to 1998 and from 2001 to 2017 in our analysis. The reason for the gap is that information on plant closures is not available in the SOEP waves of 1999 and 2000. We also do not make use of waves from before 1994 due to changes in the questionnaire design. For instance, earlier waves do not consistently provide us with objective indicators of health, which we consider as important control variables in our analyses. Note that when we analyse respondents' time-use and life satisfaction up to two years before and after the transition from one job to another (see Section 4), our analyses also consider information from the SOEP waves of 1992, 1993, 1999 and 2000. For our main analyses, we arrive at a sample size of 139,683 observations (including 593 cases of involuntary job changes and 4,048 cases of voluntary job changes). This sample already excludes missing values as well as observations from individuals who drop out of our panel estimations if observed only once.

The SOEP includes a question on risk attitude, that is people's self-assessed willingness to take risks, which we employ to examine effect heterogeneity.⁶ Note that this question was not included in SOEP questionnaires before 2004, which reduces the available data when we consider risk attitude. Similarly, the sample size shrinks when we use domain satisfaction variables. In particular, satisfaction with the family life has been part of the SOEP questionnaire only since 2006. We mention observation numbers in the notes of figures and tables if they deviate from our main sample.

FIGURE 1
Life Satisfaction and Working Time around Job Changes.
[Colour figure can be viewed at wileyonlinelibrary.com]



Notes. Points in time ($t = -2, -1, 0, 1, 2$) mark time lags of approximately one year. Job changes take place between $t = -1$ and $t = 0$. Red (blue) lines denote voluntary (involuntary) switching. Dotted lines denote 95% confidence intervals. Observations are population-weighted. The satisfaction patterns (time use patterns) in the left-hand diagram (right-hand diagram) rely on 2,444 (2,312) voluntary job changes and 393 (374) involuntary job changes, which are observed at all points in time. [Color figure can be viewed at wileyonlinelibrary.com]

4. Life satisfaction and time use around job changes

To provide first insights into well-being patterns around employer changes, we compare the mean life satisfaction scores of switches after resignations and switches after plant closures in Figure 1. Satisfaction scores are drawn for five SOEP interviews around job changes, resulting in five points in time, $t = -2, -1, 0, 1$ and 2. Workers change employers between $t = -1$ and $t = 0$. For this first analysis, we use the main sample as illustrated in Online Table B1 and do not employ further restrictions regarding employment status in the years before or after the job change. Comparing the life satisfaction score of $t = 0$ to that of $t = -2$ is a 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 left diagram of Figure 1 indicates for voluntary job changes that the honeymoon-hangover pattern known from research on job satisfaction shows up in life satisfaction, too. In $t = 0$, satisfaction scores of voluntary mobility exceed the level of $t = -2$ by 0.20 points ($p < 0.01$). Compared to the time directly before the switch ($t = -1$), it even increases by 0.32 points ($p < 0.01$). Following the honeymoon period, the hangover sets in, as satisfaction scores decrease significantly from $t = 0$ to $t = 1$ ($p < 0.05$). Still, however, workers in their new jobs are slightly happier in $t = 1$ compared to $t = -2$ ($p < 0.1$). In comparison to the last year in the previous job, life satisfaction is significantly higher in $t = 1$ and even still in $t = 2$ ($p < 0.01$).

When the employer change is triggered by a plant closure, life satisfaction does not change significantly from $t = -2$ to $t = 0$. This also applies to the change in satisfaction compared to the time directly before the switch (i.e. $t = 0$ compared to $t = -1$). According to this first piece of evidence, switching itself seems to have no direct impact on life satisfaction.

As hypothesized 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 voluntary and involuntary job mobility. We illustrate the working time patterns in the right diagram of Figure 1. Working time is measured by the SOEP's time use data for a typical workday. In both cases of job mobility, working time increases considerably with the employer change. The overall difference between $t = -2$ and $t = 0$ is +0.73 hours per day ($p < 0.01$) for changes triggered by plant closure and +0.98 ($p < 0.01$) for changes triggered by resignations. Afterwards, time spent working is greatly reduced (between $t = 0$ and $t = 1$).

Increasing working time at the expense of domestic work, family interactions or free-time activities might imply reducing well-being obtained from other areas of life. As can be seen in Online Appendix B, Figure B1, we find for both types of job changes that workers reduce time used for home production activities and hobbies on a typical working day, motivating us further to examine satisfaction with housing, free time and family life after job changes.

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

Methodology

In order to analyse the consequences of job mobility for life satisfaction and satisfaction with other areas of life, we follow the common procedure in the happiness literature (Ferrer-i-Carbonell and Frijters 2004) and apply an individual fixed-effects regression approach as our main method. As an advantage of this approach, we can easily extend our basic regression model by adding lags and leads of our independent variables, thereby following previous satisfaction research again (e.g. Clark *et al.* 2008; Frijters *et al.* 2011). The following model explains *Satisfaction_{it}* of worker *i* at time *t* whereby the dependent variable can be either life satisfaction or a domain satisfaction:

$$\begin{aligned} \text{Satisfaction}_{it} = & \beta \text{VJC}_{it} + \gamma \text{INVJC}_{it} + \delta' \text{P}_{it} + \chi' \text{F}_{it} + \varphi' \text{HH}_{it} + \mu' \text{JOB}_{it} \\ & + \sigma_i + \tau_t + \rho_{it} + \varepsilon_{it} \end{aligned}$$

We inspect two independent variables reflecting different types of job changes. A first binary variable (*VJC_{it}*) becomes one for observations of recent job changes (at time $t = 0$) after resignation and describes the empirical

relation of voluntary job changes and the different satisfactions. We then focus on recent job switches that are exogenously triggered by plant closures (involuntary job change, $INVJC_{it}$), as our second binary variable of interest. The joint reference category of the two binary variables are observations of workers who did not switch jobs recently. By distinguishing between endogenous and exogenous reasons for changes in people's work lives, we follow previous research (Kassenboehmer and Haisken-DeNew 2009) that aims at providing causal evidence in well-being data. The idea is that the event of a plant closure triggers changes in people's working lives that do not result from individual motives, as everyone is affected independently of their own background and characteristics.

The individual fixed-effect (σ) in our model ensures that the estimated coefficients do not reflect satisfaction differences related to between-person differences in stable characteristics of workers. In this way, we address the issue that workers who find jobs quickly after plant closure have individual characteristics that are not necessarily representative for the whole population of workers. Furthermore, we control for a variety of time-variant aspects of people's lives. This includes a basic set of control variables, reflecting time effects (τ_t), that is year and month of the interview, and region effects (ρ_{it}), that is the federal state the respondent lives in. Our preferred specification also includes rather exogenous personal characteristics (P_{it} , e.g. being disabled). In further steps, we add sets of variables, reflecting changes in family life (F_{it} , e.g. being married), household characteristics (HH_{it} , e.g. home ownership) and job characteristics (JOB_{it} , e.g. earnings).

As part of our sensitivity analyses, an alternative empirical strategy addresses remaining issues for the identification of effects of unintended job switches (see Online Appendix C). Our test follows the literature on identifying causal effects of labour market events (or policies) that cannot be analysed by field experiments by combining a difference-in-differences (DiD) approach with a matching technique (e.g. Card *et al.* 2010, 2011).

Life Satisfaction

(a). Main results

A first specification of our empirical model with life satisfaction as the dependent variable groups the two 'job change' types (voluntary/involuntary) in one binary variable. Individual fixed-effects, region and interview timing (year, month) are always controlled for. The results of the corresponding estimation (and further specifications) are summarized in Table 1 and displayed in detail in Online Appendix B, Table B2. It turns out that recent job mobility is associated with improved life satisfaction. According to the second specification that divides recent switching into the two types of mobility, this holds true solely for voluntary job changes. When we turn to exogenously triggered switches due to plant closures, we observe no evidence for a significant effect on life satisfaction. Adding further and rather exogenous control variables on personal characteristics does not change this result

TABLE 1
Life Satisfaction and Job Changes (Summary)

Specification (dep. variable: life satisfaction)	(1)	(2)	(3)	(4)	(5)
Job change	0.138*** (0.032)				
Voluntary job change		0.167*** (0.034)	0.167*** (0.034)	0.155*** (0.034)	0.156*** (0.034)
Involuntary job change		-0.052 (0.074)	-0.049 (0.074)	-0.050 (0.073)	-0.031 (0.073)
Individual fixed effects	Yes	Yes	Yes	Yes	Yes
Interview year and month, region	Yes	Yes	Yes	Yes	Yes
Personal controls			Yes	Yes	Yes
Family controls				Yes	Yes
Household controls				Yes	Yes
Job controls					Yes
Observations	139,683	139,683	139,683	139,683	139,683
Number of persons	22,564	22,564	22,564	22,564	22,564
R ²	0.013	0.013	0.017	0.030	0.035

Notes. ***denotes significance at the 1% level. Robust standard errors are in parentheses. Observations correspond to the sample described in Online Table B1. Observations are population-weighted. The results are presented in detail in Online Table B2.

(specification 3). In further specifications, we consider additional variables for family and household characteristics (specification 4), as well as job characteristics (specification 5). While these are aspects that might change when workers switch jobs and may thus be seen as endogenous, using the extended variable sets does not yield other qualitative findings than those from our main specification. We conclude that the honeymoon pattern is only observed in cases of voluntary job switching. As can be seen in Online Table B2, an increase of about 0.2 points is also found for childbirth and in case of the literal honeymoon effect of marriage, which are two life events that are discussed as potentially positive determinants of life satisfaction in the literature (e.g. Clark *et al.* 2008; Qari 2014).

In additional analyses, we first test whether our main life satisfaction findings are sensitive towards alternative sample compositions. Among other aspects, we raise the minimum levels of household incomes and earnings, and we set minimum and maximum of daily working hours, according to the time-use data. In the process, we exclude potentially unrealistic cases and we check whether our findings are driven by people who are not regularly employed. Moreover, we exclude public servants who essentially cannot lose their jobs. This improves the comparability of job changers and stayers with respect to job insecurity. To further consider the role of job insecurity, we control for people's reported concerns about the security of their jobs. Scarring effects of unemployment (Knabe and Rätzl 2011) are accounted for by controlling for recent unemployment spells that took place between the previous SOEP interview (i.e. the last interview before a possible job change) and the current interview. We also check the role of commuting by adding control variables

reflecting how often a person commutes from the dwelling to the workplace. Thereby, we consider potential increases in the frequency of commuting after job changes, which could be reflected in working time, as measured by the broadly defined time-use variable that we use. Finally, we control for possible measurement errors related to survey-specific phenomena by adding variables for interview mode (Conti and Pudney 2011) and panel experience (Chadi 2013). None of these analyses yield any other qualitative finding than those reported above. Detailed results of all of these robustness checks are available on request.

In another set of sensitivity analyses, we employ an alternative empirical approach to address remaining issues (see Online Appendix C). In fact, when using fixed effects, the current values of our variables are compared with the mean over time, but the mean is affected by the timing of the observations and for example, how long a worker is observed in the new job. To address this, we analyse plant-closure triggered job changes using a DiD approach. This allows us to directly compare satisfaction levels in the current and in the previous job prior to the event, similar to first-difference models that have been employed in other research (e.g. Mohrenweiser *et al.* 2019). We combine the DiD approach with a matching technique to control for ex-ante differences in individual characteristics prior to the job change and thereby also address further issues. For example, information on anticipation of events in the SOEP data allows us to consider potential foreknowledge and a possible selection of workers who might quit before the plant closes. As can be seen in Online Appendix C, Table C1, our main finding regarding involuntary job changing is robust across specifications (with and without matching).

(b). Heterogeneous effects of job changes on life satisfaction

In the following, we conduct interaction analyses based on our main fixed-effects approach and our main sample illustrated in Online Table B1. Specifically, we add an interaction term for each job change variable and another variable of interest to our empirical model. We first focus on potential gender differences and age differences in the effects of job changes on life satisfaction to inspect whether our results are robust across socio-demographic subgroups. Table 2 presents the results and shows insignificant interaction effects in both specifications (1) and (2). Next, we test whether high versus low skills interact with job mobility in estimates of life satisfaction by using educational attainment as a proxy. We define 'high education' as the two highest categories according to ISCED97. As can be seen in specification (3), we do not detect significant interaction effects. The same is true when we use years of education, hourly wage and leadership position, as alternative proxy variables for skills (results available on request).

To further analyse our theoretical considerations of Section 2, we consider interactions of recent job switching and changes in working time. We thereby examine whether people avoid suffering from switching jobs if they work less thereafter. Accordingly, we determine whether the change in working time from the year before the switch to the year afterwards was negative ('working

TABLE 2
Job Changes, Interaction Variables and Life Satisfaction

<i>Interaction variable: Dependent variable: life satisfaction</i>	<i>Gender (1)</i>	<i>Age (2)</i>	<i>Education (3)</i>	<i>Working time (4)</i>	<i>Risk attitude (5)</i>
Voluntary job change	0.135 ^{***} (0.048)	0.201 ^{***} (0.045)	0.203 ^{***} (0.043)	0.127 ^{**} (0.055)	0.148 ^{***} (0.050)
× female	0.069 (0.068)				
× age (mean-centred)		0.003 (0.004)			
× high education (ISCED97)			-0.106 (0.073)		
× working less				0.076 (0.067)	
× risk attitude (within-person mean)					0.064 (0.057)
Involuntary job change	-0.128 (0.091)	-0.091 (0.090)	-0.027 (0.081)	-0.081 (0.111)	0.039 (0.095)
× female	0.241 (0.158)				
× age (mean-centred)		-0.008 (0.008)			
× high education (ISCED97)			-0.097 (0.187)		
× working less				0.058 (0.148)	
× risk attitude (within-person mean)					0.194 [*] (0.111)
High education (ISCED97)			0.065 (0.046)		
Working less				0.006 (0.011)	
Individual fixed effects	Yes	Yes	Yes	Yes	Yes
Interview year and month, region	Yes	Yes	Yes	Yes	Yes
Personal controls	Yes	Yes	Yes	Yes	Yes
Observations	139,683	139,683	138,550	139,683	96,745
Number of persons	22,564	22,564	22,391	22,564	17,809
R ²	0.017	0.017	0.016	0.017	0.010

Notes. * denotes significance at the 10% level, ** at the 5% level and *** at the 1% level. Robust standard errors are in parentheses. Observations are population-weighted. Numbers of observations in columns (1), (2) and (4) correspond to the sample described in Online Table B1. The number of observations in column (3) is lower due to missing information on education according to ISCED97 classification (observation numbers of involuntary/voluntary job changes: 590/3,983). The number of observations in column (5) is lower due to missing information on risk attitude and because the data are restricted to the years since 2004, which is the first year this information was elicited in the SOEP (observation numbers of involuntary/voluntary job changes: 350/2,744).

less') or not, according to the time use data. For both types of job changes, however, the interaction effects are insignificant, according to specification (4) of Table 2. We can confirm this result for the more narrowly defined working time measure of the SOEP (actual weekly working hours), which again suggests that changes in working time do not modify the implications of job switching for life satisfaction.

Finally, we turn to the potential role of risk aversion in the relationship of job changes and life satisfaction. We assume that a survey respondent reports a risk attitude that comprises a stable trait and a contemporary component, in line with the literature on the stability of self-reported risk attitudes (e.g. Hetschko and Preuss forthcoming). Accordingly, the contemporary component could be affected by recent life events, such as job changes. Therefore, we calculate the within-individual mean of the self-assessed willingness to take risks across all waves of SOEP participation.⁷ This provides us with a time-invariant measure of risk attitudes that might interact with recent job mobility regarding satisfaction outcomes. To simplify interpretation, we follow related research and standardize the risk attitude measure such that a marginal increase represents scoring one standard deviation above the mean risk attitude of all SOEP participants (e.g. Boyce *et al.* 2013). We then interact this measure with both types of job changes. Specification (5) reveals a weakly significant positive interaction effect, suggesting that relatively risk-prone people may benefit from involuntary job changes, while relatively risk-averse people may suffer. We suspect that the risk-averse dislikes the uncertainty about one's future working life at the beginning of a new job.

Satisfaction with Family Life, Free Time, Housing and Job

Our theoretical considerations (Section 2) as well as our empirical inspection of time-use data (Section 4) suggest that family life, free time activities and the housing situation may suffer from (in)voluntary job mobility. In all of the three cases, we apply the same methodology described at the beginning of Section 5 and separately estimate each domain satisfaction as the dependent variable of the empirical model. We complement this analysis of domain satisfactions by adding job satisfaction as a dependent variable to show potential benefits of job mobility. We summarize the results in Table 3.

We find that a single binary variable indicating recent job mobility is not significantly related to satisfaction with family life (specification 1 in Table 3.1). Estimating a second specification that distinguishes between the reasons for mobility shows 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. Our preferred specification (3) adds a set of personal characteristics as controls, which leaves this finding unchanged. Furthermore, the picture does not change when further variables are added to the model (specifications 4 and 5). The results of our family satisfaction analysis also hold when we conduct the same robustness checks as for life satisfaction above, including the DiD-based analysis outlined in Online Appendix C.

Job changing does not seem to be associated with free-time satisfaction (Table 3.2). This is different for housing satisfaction for which we observe a negative association with voluntary job changing (Table 3.3). This result is weakly significant in our preferred specification and not very robust, as we go

TABLE 3
Job Changes and Satisfaction with Different Areas of Life

<i>Specification</i>	<i>(3.1) Satisfaction with family life</i>					<i>(3.2) Satisfaction with free time</i>				
	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>
Job change	-0.042 (0.058)					-0.011 (0.044)				
Voluntary job change		-0.009 (0.062)	-0.009 (0.062)	-0.027 (0.061)	-0.027 (0.060)		-0.003 (0.046)	-0.009 (0.046)	-0.012 (0.046)	-0.002 (0.046)
Involuntary job change		-0.343** (0.160)	-0.339** (0.160)	-0.360** (0.163)	-0.362** (0.162)		-0.065 (0.132)	-0.071 (0.132)	-0.062 (0.132)	-0.059 (0.130)
Individual fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Interview year and month, region	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Personal controls			Yes	Yes	Yes			Yes	Yes	Yes
Family controls, household controls				Yes	Yes				Yes	Yes
Job controls					Yes					Yes
Observations	82,659	82,659	82,659	82,659	82,659	126,412	126,412	126,412	126,412	126,412
Number of persons	16,299	16,299	16,299	16,299	16,299	20,828	20,828	20,828	20,828	20,828
R ²	0.004	0.004	0.004	0.042	0.044	0.005	0.005	0.006	0.010	0.021

(Continued)

TABLE 3
Continued

Specification	(3.3) Satisfaction with housing					(3.4) Satisfaction with job				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Job change	-0.066* (0.039)					0.601*** (0.047)				
Voluntary job change		-0.085** (0.043)	-0.083* (0.043)	-0.119*** (0.041)	-0.120*** (0.041)		0.690*** (0.051)	0.692*** (0.051)	0.691*** (0.051)	0.695*** (0.051)
Involuntary job change		0.062 (0.078)	0.065 (0.077)	0.097 (0.074)	0.106 (0.074)		0.019 (0.104)	0.026 (0.105)	0.026 (0.105)	0.054 (0.106)
Individual fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Interview year and month, region	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Personal controls			Yes	Yes	Yes			Yes	Yes	Yes
Family controls, household controls				Yes	Yes				Yes	Yes
Job controls					Yes					Yes
Observations	139,395	139,395	139,395	139,395	139,395	139,049	139,049	139,049	139,049	139,049
Number of persons	22,539	22,539	22,539	22,539	22,539	22,501	22,501	22,501	22,501	22,501
R ²	0.010	0.010	0.011	0.094	0.095	0.014	0.015	0.017	0.019	0.025

Notes. * denotes significance at the 10% level, ** at the 5% level and *** at the 1% level. Robust standard errors are in parentheses. The controls correspond to the analysis of life satisfaction (Table 1 and Online Table B2). Observations are population-weighted. The estimations are based on the following numbers of voluntary job changes/involuntary job changes: (3.1) family life satisfaction 2,483/298; (3.2) free time satisfaction 3,529/509; (3.3) housing satisfaction 4,040/593; and (3.4) job satisfaction 4,030/591.

through the above robustness checks, but it might explain why the honeymoon in job satisfaction (Table 3.4) is less pronounced in life satisfaction. Given that workers are extraordinarily satisfied with their working life when voluntarily switching jobs, they might accept reduced well-being obtained from other areas of life.

We also conduct analyses of effect heterogeneity for the domain satisfactions by adding interaction terms for each job change variable and several variables of interest (gender, age, education, working time and risk attitude). In line with our expectation that work–life balance might be a motive for changing jobs voluntarily, the results in Online Appendix B, Table B3, show that after a resignation, working less in the new job compared to the previous job plays a positive role for satisfaction with family life, satisfaction with free-time and job satisfaction. Likewise, the highly educated show an improvement in satisfaction with family life when switching jobs voluntarily. The negative association between voluntary job mobility and housing satisfaction is particularly strong for people who work more than in their previous jobs. In addition, we find that the association between voluntary job changes and satisfaction with family life interacts negatively with age. This suggests that job changes are more burdensome for older workers' family lives, if the decision to switch was voluntary.

When it comes to involuntary mobility, Online Table B3 reveals that the negative impact found in satisfaction with family life is clearly driven by male workers. This suggests that men are more likely than women to sacrifice their family lives and accept negative consequences in this respect while focusing on their work life. Overall, the analysis of effect heterogeneity suggests once again that voluntary and involuntary mobility are distinct experiences given that the associations with subjective well-being have different facets and allow for different interpretations.

Dynamic Analysis

In the following, we use the fixed-effects methodology to extend our empirical model by two lag variables and two lead variables reflecting different points in time around job changes.⁸ Thereby, we find out (i) about possible differences in life satisfaction prior to the job change and (ii) about possible long-run satisfaction differences when having experienced a job change in the past. Up to here, we have analysed changes in satisfaction related to recent job changes, in comparison to not having experienced a job change recently. Now, we also analyse past job changes, respectively, future job changes, in comparison to not having experienced a job change in the past, respectively, in the future. As usual in fixed-effects regressions, the coefficients reflect the deviation from the individual satisfaction mean and thus reveal within-person differences in satisfaction when a job change variable is one compared to when it is zero.

Table 4 reveals a honeymoon-hangover pattern around voluntary employer changes, similar to the picture discovered in our descriptive analysis of life satisfaction averages (Figure 1). Individual life satisfaction exceeds its mean

TABLE 4
Lags and Leads Analysis

Dependent variable Specification	Life satisfaction (1)	Job satisfaction (2)	Housing satisfaction (3)	Free time satisfaction (4)	Family life satisfaction (5)
Voluntary job change, $t = -2$	-0.048 (0.095)	-0.533*** (0.123)	-0.153 (0.099)	-0.156 (0.122)	0.117 (0.148)
Voluntary job change, $t = -1$	-0.394*** (0.092)	-1.064*** (0.125)	-0.161 (0.131)	0.007 (0.123)	0.197 (0.134)
Voluntary job change, $t = 0$	0.189** (0.092)	0.840*** (0.121)	0.039 (0.095)	-0.048 (0.111)	0.199 (0.159)
Voluntary job change, $t = 1$	0.042 (0.079)	0.405*** (0.100)	-0.004 (0.093)	-0.011 (0.111)	0.254* (0.131)
Voluntary job change, $t = 2$	-0.012 (0.066)	0.079 (0.087)	-0.103 (0.071)	-0.211** (0.100)	0.029 (0.118)
Involuntary job change, $t = -2$	-0.036 (0.129)	0.063 (0.187)	0.186 (0.152)	-0.012 (0.239)	0.210 (0.225)
Involuntary job change, $t = -1$	-0.302** (0.142)	-1.122*** (0.245)	0.211 (0.161)	0.005 (0.198)	-0.099 (0.263)
Involuntary job change, $t = 0$	0.087 (0.157)	-0.042 (0.189)	0.056 (0.174)	-0.506 (0.344)	-0.667** (0.325)
Involuntary job change, $t = 1$	-0.038 (0.174)	0.053 (0.204)	0.193 (0.138)	-0.717** (0.334)	-0.588 (0.411)
Involuntary job change, $t = 2$	-0.012 (0.113)	-0.038 (0.186)	-0.011 (0.133)	-0.227 (0.206)	0.156 (0.261)
Individual fixed effects	Yes	Yes	Yes	Yes	Yes
Interview year and month, region	Yes	Yes	Yes	Yes	Yes
Personal controls	Yes	Yes	Yes	Yes	Yes
Observations	49,316	49,241	49,283	47,227	35,154
Number of persons	9,179	9,180	9,177	8,891	7,519
R^2	0.016	0.029	0.011	0.007	0.009

Notes. * denotes significance at the 10% level, ** at the 5% level and *** at the 1% level. Robust standard errors are in parentheses. The estimations are based on the following numbers of voluntary job changes/involuntary job changes: (1) life satisfaction 646/109; (2) job satisfaction 643/109; (3) housing satisfaction 645/109; (4) free time satisfaction 595/106; and (5) family life satisfaction 489/70. Observations are population-weighted.

level significantly in $t = 0$, but not beyond the year directly after the switch, that is we observe full adaptation already at $t = 1$. Having said that, life satisfaction remains 0.29 points ($p < 0.1$) higher even at $t = 2$ than at the particularly negative time directly before the job switch (negative coefficient for $t = -1$). If we looked at another lag, we would also observe that workers after voluntary job changes are significantly better-off in comparison to the year before the job change (results available upon request). The decline in life satisfaction preceding resignations has been documented before for job satisfaction (e.g. Böckerman and Ilmakunnas 2009; Clark 2001; Delfgaauw 2007; Green 2010; Lévy-Garboua *et al.* 2007; Shields and Price 2002). As can be seen in Table 4 when comparing specifications (1) and (2), it appears that the honeymoon-hangover pattern in job satisfaction is much stronger than the one in life satisfaction.

The lags and leads approach also yields additional findings regarding involuntary job changes. Most importantly, we find evidence for adaptation to the negative impact of forced mobility on family life satisfaction, which turns out to be short-lived. Table 4 also reveals a negative effect in free-time satisfaction one year after the job change. This suggests that side effects of spending more time on the job do not necessarily come into fruition immediately. One interpretation here is that these two findings are related to each other. Workers might compensate the problems in their family lives at the beginning of their new jobs by shifting attention from free-time activities to domestic work. In doing so, they avoid overall reductions in their life satisfaction. Furthermore, it might be that there are psychological benefits from having a job that offset the negative implications for both leisure and family life. Perhaps, the variation of tasks, routines or daily life accompanying each employer change improves well-being per se. Arguably, working in a new job environment might increase the feeling of leading a purposeful and meaningful life, which is expected to be as important for the people as it is difficult for empirical researchers to measure (Loewenstein 1999).

Another important aspect that might help interpreting the results in Table 4 might lie in the scope of the different satisfaction outcomes. In the case of life satisfaction, people are asked to evaluate their own life on the whole, while the question on satisfaction with family life places more emphasis on the well-being of family members who might suffer from one's own job change. Considering the evidence for gender differences in the effects of involuntary job changes presented in the previous subsection, it might be that men in particular report lower satisfaction with family life because their partners are unhappy with their focus on the work life. They may simply consider their work life as more important than their family life at the beginning of a new job. We conclude that a promising avenue for future research could be the interdependency in well-being between family members (Winkelmann 2005), as, for example, individuals might respond very differently to changes in the employment situation of a partner (e.g. Clark 2003).⁹

6. Conclusion

This study extends the literature on labour markets and well-being by presenting the first comprehensive discussion of how starting a new job affects people's lives. By applying life satisfaction as a global measure of individual welfare to the consequences of job changes, we establish several important findings with policy relevance. First, we show that people starting a new job experience the honeymoon-hangover phenomenon of significantly high satisfaction with their lives followed by quick adaptation back to the individual's average level. Second, when we turn to the case of involuntary job switching triggered by the exogenous event of plant closure, we do not observe an effect in people's life satisfaction on average. Moreover, we observe increases in time spent working when people start a new job. In the case of

involuntary job mobility, our study also provides evidence for dissatisfaction with family life, suggesting a potential work–family conflict. For voluntarily switching workers, we find a decline in housing satisfaction, which is in line with the idea that individuals are willing to sacrifice this facet of life satisfaction when time and effort are needed at the workplace. As we show in a separate analysis (Online Appendix A), family life satisfaction is significantly related to future life events implying that this rarely examined measure may serve as an informative supplement to the standard sets of domain satisfaction outcomes (Powdthavee 2012; Van Praag *et al.* 2003).

Our study yields implications for policy-makers and thereby contributes to research on employment protection in particular. On the one hand, our results may support labour market flexibility. The honeymoon phenomenon of a new job suggests that job changes can be very beneficial to people. This seems to speak in favour of flexible labour markets, which allow severely frustrated workers to leave their employers and generate a honeymoon from switching. On the other hand, our results regarding involuntary job mobility give reason to regard labour market flexibility negatively. Dissatisfaction with family life points to welfare gains from having strong employment protection. Given the correlation between satisfaction with family life and future domestic events, one might speculate about potential implications of involuntary job mobility when it comes to the family, such as cancelling having a child or even separating from the partner. Furthermore, while we exclude the unemployed from our analysis, the dramatic losses of life satisfaction among those workers who are not able to find a new job also have to be taken into consideration when assessing the prospects of flexible labour markets.

Related to the discussion of the benefits and drawbacks of flexible labour markets, the question arises as to whether our results would be different if the analysed labour market was more flexible. The fact that Germans rarely switch jobs and experience fairly long tenures might mean that the consequences of the observed job changes are more far-reaching, leading to more pronounced impacts on well-being than in other countries with more flexible labour markets. In addition, people often get used to repeated events, a phenomenon that psychologists call ‘habituation’, which leads to the expectation that people display weaker satisfaction changes when they experience job changes more often in life. However, psychologists also discuss the opposite phenomenon ‘sensitisation’, which has been found for the experience of unemployment (Luhmann and Eid 2009) and implies that experiencing life events frequently might amplify corresponding impacts on well-being. It, therefore, remains a direction for future research to examine whether job changes yield different satisfaction patterns in more flexible labour markets.

Finally, another finding of our study adds to this discussion, which is that involuntary job changes appear to yield more negative effects for life satisfaction the more risk-averse individuals are. Considering that societies can be very different in their economic preferences for cultural reasons (Kwok and Tadesse 2006; Vieider *et al.* 2015), this provides an interesting, though

truly speculative hypothesis why some societies favour having relatively flexible labour markets, whereas others prefer high employment protection.

Final version accepted on 15 March 2020

Acknowledgements

Comments by the Associate Editor Melanie Jones and three anonymous reviewers are gratefully acknowledged. We also thank Pierluigi Conzo and Christian Pfeifer, as well as participants of a seminar at IFN (Stockholm, 2016), the HEIRS conference (Rome, 2016), the Workshop in Microeconomics (Lüneburg, 2016), the annual meetings of the European Economic Association (Geneva, 2016), the Royal Economic Society (Brighton, 2016), as well as the European Society for Population Economics (Izmir, 2015), the Journées Louis-André Gerard-Varet Conference in Public Economics (Aix-en-Provence, 2015) and the Colloquium on Personnel Economics (Vienna, 2015). Clemens Hetschko moreover acknowledges funding by the German Science Foundation through grant number SCHO 1270/5.

Notes

1. To allow for a clear interpretation, we focus in our paper on cases of individual job changes from one employer to another, thereby excluding within-firm job mobility. In consequence, we use the terms job switches, job changes as well as employer changes interchangeably.
2. The honeymoon-hangover pattern that Boswell *et al.* (2005) found in a sample of US managers also appears in other investigations of job satisfaction. See, for example Boswell *et al.* (2009), Chadi and Hetschko (2016), Georgellis and Tabvuma (2010), Gielen (2013), and Johnston and Lee (2012, 2013).
3. For research on people's well-being obtained from work and non-work activities, see, for example Knabe *et al.* (2010), Gimenez-Nadal and Molina (2015) as well as Bryson and MacKerron (2017).
4. In particular, we show in Online Appendix A that satisfaction with family life is a meaningful predictor of future domestic events, such as childbirths, and thus constitutes an economically relevant indicator for individual behaviour in this area of life.
5. The economic literature considers absenteeism as another productivity signal (see, e.g. Audas *et al.* 2004; Chadi and Goerke 2018; Flabbi and Ichino 2001; Hesselius *et al.* 2009; Ichino and Maggi 2000).
6. Analyses conducted by Dohmen *et al.* (2011) show that this measure approximates risk attitude in a behaviorally valid way. The exact wording in the SOEP is: 'Would you describe yourself as someone who tries to avoid risks (risk-averse) or as someone who is willing to take risks (risk-prone)? Please answer on a scale from 0 to 10, where 0 means risk-averse and 10 means risk-prone'.
7. As an alternative way of ensuring that the measure of risk attitude remains unaffected by changes in peoples' working lives, we conduct robustness checks for

- which we use data on risk attitude from 2004, which is the first year risk attitude is available in the SOEP, and restrict our analysis to subsequent waves. Results (available upon request) are qualitatively similar.
8. To minimize the loss of observations due to missing values in this analysis, we rely on our preferred specification here (see column 3 in Table 1) and do not require subjects to provide us with data on the full list of potential further control variables listed in Online Table B1. Apart from that, we apply all sample restrictions as before (e.g. age range and employment status).
 9. This discussion raises the question how relevant satisfaction with family life actually is. Summarizing the findings in Benjamin *et al.* (2012) and Benjamin *et al.* (2014b), Benjamin *et al.* (2014a, p. 3526) conclude that 'family-SWB measures are not commonly used in empirical applications, but warrant exploration'. Bertrand *et al.* (2015) find that couples where the wife earns more than the husband are less happy with their marriage and are more likely to divorce. Inspired by this, we examine how satisfaction with family life relates to future life events. In the process, we also assess the economic significance of the impact of job changes on family well-being (Online Appendix A).

References

- Audas, R., Barmby, T. and Treble, J. (2004). 'Luck, effort, and reward in an organizational hierarchy'. *Journal of Labor Economics*, 22: 379–95.
- Barmby, T., Bryson, A. and Eberth, B. (2012). 'Human capital, matching and job satisfaction'. *Economics Letters*, 117: 548–51.
- Bell, L. A. and Freeman, R. B. (2001). 'The incentive for working hard: explaining hours worked differences in the US and Germany'. *Labour Economics*, 8: 181–202.
- Benjamin, D. J., Heffetz, O., Kimball, M. S. and Rees-Jones, A. (2012). 'What do you think would make you happier? What do you think you would choose?' *American Economic Review*, 102: 2083–110.
- , —, — and — (2014a). 'Can marginal rates of substitution be inferred from happiness data? Evidence from residency choices'. *American Economic Review*, 104: 3498–528.
- , —, — and Szembrot, N. (2014b). 'Beyond happiness and satisfaction: toward well-being indices based on stated preference'. *American Economic Review*, 104: 2698–735.
- Berger, E. M. (2013). 'Happy working mothers? Investigating the effect of maternal employment on life satisfaction'. *Economica*, 80: 23–43.
- Bertrand, M. (2013). 'Career, family, and the well-being of college-educated women'. *American Economic Review*, 103: 244–50.
- , Kamenica, E. and Pan, J. (2015). 'Gender identity and relative income within households'. *Quarterly Journal of Economics*, 130: 571–614.
- Binder, M. and Coad, A. (2013). 'Life satisfaction and self-employment: a matching approach'. *Small Business Economics*, 40: 1009–33.
- Böckerman, P. and Ilmakunnas, P. (2009). 'Job disamenities, job satisfaction, quit intentions, and actual separations: putting the pieces together'. *Industrial Relations*, 48: 73–96.
- Booth, A. L. and vanOurs, J. (2008). 'Job satisfaction and family happiness: the part-time work puzzle'. *Economic Journal*, 118: F77–99.

- and — (2009). ‘Hours of work and gender identity: does part-time work make the family happier?’ *Economica*, 76: 176–96.
- and — (2013). ‘Part-time jobs: what women want?’ *Journal of Population Economics*, 26: 263–83.
- Borghans, L. and Golsteyn, B. (2012). ‘Job mobility in Europe, Japan and the United States’. *British Journal of Industrial Relations*, 50: 436–56.
- Borjas, G. J. (1979). ‘Job satisfaction, wages and unions’. *Journal of Human Resources*, 14: 21–40.
- (1981). ‘Job mobility and earnings over the life cycle’. *Industrial and Labor Relations Review*, 34: 365–76.
- Boswell, W. R., Boudreau, J. W. and Tichy, J. (2005). ‘The relationship between job change and job satisfaction: the honeymoon-hangover-effect’. *Journal of Applied Psychology*, 90: 882–92.
- , Shipp, A. J., Payne, S. C. and Culbertson, S. S. (2009). ‘Changes in newcomer job satisfaction over time: examining the pattern of honeymoons and hangovers’. *Journal of Applied Psychology*, 94: 844–58.
- Boyce, C. J., Wood, A. M. and Brown, G. D. A. (2010). ‘The dark side of conscientiousness: conscientious people experience greater drops in life satisfaction following unemployment’. *Journal of Research in Personality*, 44: 535–9.
- , — and Powdthavee, N. (2013). ‘Is personality fixed? Personality changes as much as ‘variable’ economic factors and more strongly predicts changes to life satisfaction’. *Social Indicators Research*, 111: 287–305.
- Bryson, A. and MacKerron, G. (2017). ‘Are you happy while you work?’ *Economic Journal*, 127: 106–25.
- Caliendo, M., Cobb-Clark, D., Uhlendorff, A. (2015). ‘Locus of control and job search strategies’. *Review of Economics and Statistics*, 97: 88–103.
- , Fossen, F. M. and Kritikos, A. S. (2010). ‘The impact of risk attitudes on entrepreneurial survival’. *Journal of Economic Behavior & Organization*, 76: 45–63.
- Card, D., Ibararán, P. and Villa, J. M. (2011). ‘Building in an Evaluation Component for Active Labor Market Programs: A Practitioner’s Guide’. IZA Discussion Paper No. 6085.
- , Kluge, J. and Weber, A. (2010). ‘Active labour market policy evaluations: a meta-analysis’. *Economic Journal*, 120: F452–77.
- Chadi, A. (2013). ‘The role of interviewer encounters in panel responses on life satisfaction’. *Economics Letters*, 121: 550–4.
- and Goerke, L. (2018). ‘Missing at work – sickness-related absence and subsequent career events’. *Journal of Economic Behavior & Organization*, 153: 153–176.
- and Hetschko, C. (2016). ‘Flexibilization without hesitation? Temporary contracts and job satisfaction’. *Oxford Economic Papers*, 68: 217–37.
- , and — (2018). ‘The magic of the new: how job changes affect job satisfaction’. *Journal of Economics and Management Strategy*, 27: 23–39.
- Clark, A. E. (2001). ‘What really matters in a job? Hedonic measurement using quit data’. *Labour Economics*, 8: 223–42.
- (2003). ‘Unemployment as a social norm: psychological evidence from panel data’. *Journal of Labor Economics*, 21: 323–51.
- , Diener, E., Georgellis, Y. and Lucas, R. E. (2008). ‘Lags and leads in life satisfaction: a test of the baseline hypothesis’. *Economic Journal*, 118: F222–43.
- and Oswald, A. J. (1994). ‘Unhappiness and unemployment’. *Economic Journal*, 104: 648–59.

- Conti, G. and Pudney, S. (2011). 'Survey design and the analysis of satisfaction'. *Review of Economics and Statistics*, 93: 1087–93.
- Delfgaauw, J. (2007). 'The effect of job satisfaction on job search: not just whether, but also where'. *Labour Economics*, 14: 299–317.
- Diaz-Serrano, L. (2009). 'Disentangling the housing satisfaction puzzle: does homeownership really matter?' *Journal of Economic Psychology*, 30: 745–55.
- Dohmen, T., Falk, A., Huffman, D., Sunde, U., Schupp, J. and Wagner, G. G. (2011). 'Individual risk attitudes: measurement, determinants and behavioural consequences'. *Journal of the European Economic Association*, 9: 522–50.
- Elmslie, B. T. and Tebaldi, E. (2014). 'The determinants of marital happiness'. *Applied Economics*, 46: 3452–62.
- Engelland, A. and Riphahn, R. T. (2005). 'Temporary contracts and employee effort'. *Labour Economics*, 12: 281–99.
- Farber, H. S. (2017). 'Employment, hours, and earnings consequences of job loss: US evidence from the displaced workers survey'. *Journal of Labor Economics*, 35: S235–72.
- Ferrer-i-Carbonell, A. and Frijters, P. (2004). 'How important is methodology for the estimates of the determinants of happiness?' *Economic Journal*, 114: 641–59.
- Flabbi, L. and Ichino, A. (2001). 'Productivity, seniority and wages: new evidence from personnel data'. *Labour Economics*, 8: 359–87.
- Fok, Y.-K., Scutella, R. and Wilkins, R. (2015). 'The low-pay no-pay cycle: are there systematic differences across demographic groups?' *Oxford Bulletin of Economics and Statistics*, 77: 872–96.
- Ford, M. T., Heinen, B. A. and Langkamer, K. L. (2007). 'Work and family satisfaction and conflict: a meta-analysis of cross-domain relations'. *Journal of Applied Psychology*, 92: 57–80.
- Fossen, F. M. and Glocker, D. (2017). 'Stated and revealed heterogeneous risk preferences in educational choice'. *European Economic Review*, 97: 1–25.
- Frijters, P., Greenwell, H., Haisken-DeNew, J. P. and Shields, M. A. (2009). 'How well do individuals predict their future life satisfaction? Evidence from panel data following a nationwide exogenous shock'. *Canadian Journal of Economics*, 42: 1326–46.
- , Johnston, D. W. and Shields, M. A. (2011). 'Life satisfaction dynamics with quarterly life event data'. *Scandinavian Journal of Economics*, 113: 190–211.
- Gallie, D. and Russell, H. (2009). 'Work–family conflict and working conditions in Western Europe'. *Social Indicators Research*, 93: 445–67.
- García Pérez, I. and Rebollo Sanz, Y. (2005). 'Wage changes through job mobility in Europe: a multinomial endogenous switching approach'. *Labour Economics*, 12: 531–55.
- Georgellis, Y. and Tabvuma, V. (2010). 'Does public service motivation adapt?' *Kyklos*, 63: 176–91.
- Gielen, A. C. (2013). 'Repeated job quits: stepping stones or learning about quality?' *IZA Journal of European Labor Studies*, 2: 1–22.
- Jimenez-Nadal, J. I. and Molina, J. A. (2015). 'Voluntary activities and daily happiness in the United States'. *Economic Inquiry*, 53: 1735–50.
- and Sevilla-Sanz, A. (2011). 'The time-crunch paradox'. *Social Indicators Research*, 102: 181–96.
- Green, C. P. and Heywood, J. S. (2011). 'Flexible contracts and subjective well-being'. *Economic Inquiry*, 49: 716–29.

- Green, F. (2010). 'Well-being, job satisfaction and labour mobility'. *Labour Economics*, 17: 897–903.
- (2011). 'Unpacking the misery multiplier: how employability modifies the impacts of unemployment and job insecurity on life satisfaction and mental health'. *Journal of Health Economics*, 30: 265–76.
- Gregory, M. and Jukes, R. (2001). 'Unemployment and subsequent earnings: estimating scarring among British Men 1984–94'. *Economic Journal*, 111: F607–25.
- Groes, F., Kircher, P. and Manovskii, I. (2015). 'The U-shapes of occupational mobility'. *Review of Economic Studies*, 82: 659–92.
- Grund, C. (2013). 'Job preferences as revealed by employee-initiated job changes'. *International Journal of Human Resource Management*, 24: 2825–50.
- Hainmueller, J. (2012). 'Entropy balancing for causal effects: a multivariate reweighting method to produce balanced samples in observational studies'. *Political Analysis*, 20: 25–46.
- Helliwell, J. F. and Huang, H. (2014). 'New measures of the costs of unemployment: evidence from the subjective well-being of 3.3 Million Americans'. *Economic Inquiry*, 52: 1485–502.
- Hesselius, P., Johansson, P. and Nilsson, J. P. (2009). 'Sick of your colleagues' absence?' *Journal of the European Economic Association*, 7: 583–94.
- Hetschko, C. (2016). 'On the misery of losing self-employment'. *Small Business Economics*, 46: 461–78.
- and Preuss, M. (forthcoming). 'Income in jeopardy: how losing employment affects the willingness to take risks'. *Journal of Economic Psychology*
- Heywood, J. S., Siebert, S. and Wei, X. (2002). 'Worker sorting and job satisfaction: the case of union and government jobs'. *Industrial & Labor Relations Review*, 55: 595–609.
- Ichino, A. and Maggi, G. (2000). 'Work environment and individual background: explaining regional shirking differentials in a large Italian firm'. *Quarterly Journal of Economics*, 115: 1057–90.
- and Riphahn, R. T. (2005). 'The effect of employment protection on worker effort: absenteeism during and after probation'. *Journal of the European Economic Association*, 3: 120–43.
- Iseke, A. (2014). 'The part-time job satisfaction puzzle: different types of job discrepancies and the moderating effect of family importance'. *British Journal of Industrial Relations*, 52: 445–69.
- Jaeger, D. A., Dohmen, T., Falk, A., Huffman, D., Sunde, U. and Bonin, H. (2010). 'Direct evidence on risk attitudes and migration'. *Review of Economics and Statistics*, 92: 684–9.
- Johnston, D. W. and Lee, W.-S. (2012). 'Climbing the job ladder: new evidence of gender inequity'. *Industrial Relations*, 51: 129–51.
- and — (2013). 'Extra status and extra stress: are promotions good for us?' *Industrial and Labor Relations Review*, 66: 32–54.
- Kan, K. and Lin, Y.-L. (2011). 'The effects of employment protection on labor turnover: empirical evidence from Taiwan'. *Economic Inquiry*, 49: 398–433.
- Kassenboehmer, S. and Haisken-DeNew, J. (2009). 'You're fired! The causal negative effect of entry unemployment on life satisfaction'. *Economic Journal*, 119: 448–62.
- Knabe, A. and Rätzel, S., (2011). 'Scarring or scaring? The psychological impact of past unemployment and future unemployment risk'. *Economica*, 78: 283–93.
- , —, Schöb, R. and Weimann, J. (2010). 'Dissatisfied with life but having a good day: time-use and well-being of the unemployed'. *Economic Journal*, 120: 867–89.

- Kugler, A. and Pica, G. (2008). 'Effects of employment protection on worker and job flows: evidence from the 1990 Italian reform'. *Labour Economics*, 15: 78–95.
- Kunze, L. and Suppa, N. (2017). 'Bowling alone or bowling at all? The effect of unemployment on social participation'. *Journal of Economic Behavior & Organization*, 133: 213–35.
- Kwok, C. C. Y. and Tadesse, S. A. (2006). 'National culture and financial systems'. *Journal of International Business Studies*, 37: 227–47.
- Lam, S. S. K., Ng, T. W. H. and Feldman, D. C. (2012). 'The relationship between external job mobility and salary attainment across career stages'. *Journal of Vocational Behavior*, 80: 129–36.
- Lauber, V. and Storck, J. (2019). 'Helping with the kids? How family-friendly workplaces affect parental well-being and behaviour'. *Oxford Economic Papers*, 71: 95–118.
- Lévy-Garboua, L., Montmarquette, C. and Simonnet, V. (2007). 'Job satisfaction and quits'. *Labour Economics*, 14: 251–68.
- Light, A. and McGarry, K. (1998). 'Job change patterns and the wages of young men'. *Review of Economics and Statistics*, 80: 276–86.
- Loewenstein, G. (1999). 'Because it is there: the challenge of mountaineering for utility theory'. *Kyklos*, 52: 315–44.
- Luechinger, S., Meier, S. and Stutzer, A. (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: 998–1045.
- Luhmann, M. and Eid, M. (2009). 'Does it really feel the same? Changes in life satisfaction following repeated life events'. *Journal of Personality and Social Psychology*, 97: 363–81.
- Marcus, J. (2013). 'The effect of unemployment on the mental health of spouses – evidence from plant closures in Germany'. *Journal of Health Economics*, 32: 546–58.
- Mohrenweiser, J., Zwick, T. and Backes-Gellner, U. (2019). 'Poaching and firm-sponsored training'. *British Journal of Industrial Relations*, 57: 143–81.
- Nikolova, M. and Ayhan, S. H. (2019). 'Your spouse is fired! How much do you care?' *Journal of Population Economics*, 32: 799–844.
- Odermatt, R. and Stutzer, A. (2019). '(Mis-)predicted subjective well-being following life events'. *Journal of the European Economic Association*, 17: 245–83.
- OECD. (2013). *OECD Employment Outlook 2013*. Paris: OECD Publishing.
- Powdthavee, N. (2012). 'Jobless, friendless and broke: what happens to different areas of life before and after unemployment?' *Economica*, 79: 557–75.
- Qari, S. (2014). 'Marriage, adaptation and happiness: are there long-lasting gains to marriage?' *Journal of Behavioral and Experimental Economics*, 50: 29–39.
- Samuelson, W. and Zeckhauser, R. (1988). 'Status quo bias in decision making'. *Journal of Risk and Uncertainty*, 1: 7–59.
- Schmitz, H. (2011). 'Why are the unemployed in worse health? The causal effect of unemployment on health'. *Labour Economics*, 18: 71–78.
- Schurer, S. (2017). 'Bouncing back from health shocks: locus of control and labor supply'. *Journal of Economic Behavior & Organization*, 133: 1–20.
- Shields, M. A. and Price, S. W. (2002). 'Racial harassment, job satisfaction, and intentions to quit: evidence from the British Nursing Profession'. *Economica*, 69: 295–326.
- SOEP. (2019). *Socio-Economic Panel (SOEP), Data for Years 1984–2017, Version 34*. <https://doi.org/10.5684/soep.v34>.

- Stutzer, A. and Lalive, R. (2004). 'The role of social work norms in job searching and subjective well-being'. *Journal of the European Economic Association*, 2: 696–719.
- Surienty, L., Ramayah, T., Lo, M.-C. and Tarmizi, A. N. (2014). 'Quality of work life and turnover intention: a partial least square (PLS) approach'. *Social Indicators Research*, 119: 405–20.
- Theodossiou, I. and Zangelidis, A. (2009). 'Career prospects and tenure–job satisfaction profiles: evidence from panel data'. *Journal of Socio-Economics*, 38: 648–57.
- Van Praag, B. M. S., Frijters, P. and Ferrer-i-Carbonell, A. (2003). 'The anatomy of subjective well-being'. *Journal of Economic Behavior & Organization*, 51: 29–49.
- Vieider, F. M., Lefebvre, M., Bouchouicha, R., Chmura, T., Hakimov, R., Krawczyk, M. and Martinsson, P. (2015). 'Common components of risk and uncertainty attitudes across contexts and domains: evidence from 30 countries'. *Journal of the European Economic Association*, 13: 421–52.
- Wagner, G. G., Frick, J. R. and Schupp, J. (2007). 'The German Socio-Economic Panel Study (SOEP) — scope, evolution and enhancements'. *Journal of Applied Social Science Studies*, 127: 139–69.
- Weimann, J., Knabe, A. and Schöb, R. (2015). *Measuring Happiness: The Economics of Well-Being*. Cambridge, MA: MIT Press.
- Winkelmann, R. (2005). 'Subjective well-being and the family: results from an ordered probit model with multiple random effects'. *Empirical Economics*, 30: 749–61.

Supporting Information

Additional supporting information may be found online in the Supporting Information section at the end of the article.