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# Does unemployment hurt less if there is more of it around? A panel analysis of life satisfaction in Germany and Switzerland

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# **Does unemployment hurt less if there is more of it around? A panel analysis of life satisfaction in Germany and Switzerland**

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## **Abstract**

This paper examines the existence of a habituation effect to unemployment: Do the unemployed suffer less from job loss if unemployment is more widespread, if their own unemployment lasts longer and if unemployment is a recurrent experience? The underlying idea is that unemployment hysteresis may operate through a sociological channel: if many people in the community lose their job and remain unemployed over an extended period, the psychological cost of being unemployed diminishes and the pressure to accept a new job declines. We analyze this question with individual-level data from the German Socio-Economic Panel (1984-2009) and the Swiss Household Panel (2000-2009). We find no evidence for a mitigating effect of high surrounding unemployment on unemployed individuals' subjective well-being: Becoming unemployed hurts as much when regional unemployment is high as when it is low. Likewise, the strongly harmful impact of being unemployed on well-being does not wear off over time, nor do repeated episodes of unemployment make it any better. It thus appears doubtful that an unemployment shock becomes persistent because the unemployed become used to, and hence reasonably content with, being without a job.

**Keywords:** subjective well-being, unemployment, hysteresis, happiness, social norm

## **Introduction**

Since the 1980s, unemployment in Western Europe tended to rise much faster during a recession than it receded during the ensuing cyclical upturns. This phenomenon of unemployment persistence has come to be known as ‘hysteresis’ (Blanchard and Summers 1986). A possible explanation for hysteresis is that prolonged periods of substantial unemployment lead to a ‘culture of unemployment’. As the number of unemployed people in a region increases and the average duration of unemployment extends, the stigma associated with living on welfare benefits diminishes and the subjective well-being of the unemployed improves. Unemployment becomes a status people are getting used to and the social norm of working weakens (Blanchard 1988: 26, Lindbeck et al. 1999: 3). Hysteresis may thus operate through a sociological channel: if an unemployment crisis hits many people in the community, the psychological cost of being unemployed diminishes and the pressure for the unemployed to accept a new job declines.

The aim of our paper is to put this assumption to a test with panel data. By now, it is a well-established fact that becoming unemployed strongly depresses individuals’ subjective well-being (e. g. Whelan 1994, Winkelmann and Winkelmann 1998, Whelan and McGinnity 2000, Clark 2003). However, much more controversial is the question whether unemployment hurts less if there is more of it around and if it lasts longer. We thus examine whether unemployment is less detrimental to subjective well-being (i) in high- than low-unemployment regions, (ii) in long- than short-term unemployment, and (iii) in latter than earlier spells of unemployment. Our analysis covers Germany and Switzerland and exploits two particularly well-suited datasets for the questions at hand, namely the German Socio-Economic Panel (1984-2009) and the Swiss Household Panel (2000-2009). By taking advantage of the data’s longitudinal design, our study analyzes how the entry into (and on-

stay in) unemployment changes the reported life satisfaction of the unemployed over time and across regions.

This question has clear policy implications. If the subjective well-being of the unemployed declines less in a context of higher surrounding unemployment and even increases during longer unemployment spells, a strategy against hysteresis needs to put greater strain on the unemployed in order to force them back onto the labour market. In contrast, if higher ambient unemployment and longer unemployment duration do not mitigate the negative impact of unemployment on the jobless, there is no point in retrenching unemployment benefits. More adequate responses would then consist in the combination of an expansive macro-economic policy destined to stimulate aggregate demand with an active labour market policy geared towards helping the unemployed in their search process.

Summarizing our results in a nutshell, we find no evidence for a mitigating effect of high surrounding unemployment on unemployed individuals' subjective well-being: Becoming unemployed hurts as much in regions and periods of high as in regions and periods of low ambient unemployment. Likewise, the strongly harmful impact of unemployment on well-being does not wear off over time: In Germany and Switzerland, the second year of unemployment seems as bad as the first year. Moreover, repeated episodes of unemployment do not induce a process of habituation: in terms of well-being, the psychological cost of repeated unemployment spells is as high as that of the first spell.

Our paper is structured as follows. The next section reviews the literature on the link between the social context and subjective well-being of the unemployed. Section 3 describes our panel data and the estimation methods used. Section 4 then provides descriptive evidence, while section 5 shows the estimation results of hierarchical linear models. Section 6 concludes by discussing the policy implications of our findings.

## **Surrounding unemployment and the well-being of the unemployed**

What is the likely influence of ambient unemployment on the life satisfaction of the unemployed? The seminal contribution by Jahoda, Lazarsfeld and Zeisel (1933/1971) suggested that an unemployment crisis is all the more devastating for a community, the more people it concerns and the longer it lasts. Likewise, from a purely utilitarian point of view, the loss of a job should be particularly hurtful in regions with high rates of unemployment, where a job is a rare commodity and as such very valuable. Accordingly, individuals losing their job in high-unemployment regions face bleaker labour market perspectives than the unemployed in economically thriving regions and should thus be more strongly affected in their well-being. A similar reasoning could apply to long-term unemployment: as time goes by, social isolation becomes more acute, unemployment benefits diminish and despair sets in (Clark 2006: 2). Unhappiness may thus increase with the duration of unemployment.

These arguments of social and economic deprivation contrast with a growing literature emphasizing a work-based social norm and social stigma. Already in the 1980s, Blanchard (1988: 26) argued that it is not so much economic pressure, but social stigma which motivates the unemployed to take on a new job. In times of near full employment, being unemployed reflects negatively on the individual. However, attitudes towards the unemployed change with higher levels of unemployment, when stigma and social disapproval become less widespread. A rise in the number of people who receive unemployment benefits thus weakens the social norm to live off one's own work. Likewise, long and frequent spells of unemployment change the values, social relations and life-style of the unemployed. They come to appreciate their increase in leisure time and suffer less from a negative reputation effect (Lindbeck et al. 1999: 3, Frey and Stutzer 2002: 421). Unemployment thus becomes a way of life that results – if it lasts long enough and is geographically concentrated – in a ‘culture of worklessness’ (for a critical discussion, see Theodore 2007: 937). Accordingly, the social-norm hypothesis expects

the jobless to suffer less from unemployment where surrounding unemployment is high and unemployment duration long: Individual unemployment should hurt the less, the more people it concerns and the longer it lasts (Clark 2003: 326). This is a possible micro-level explanation why high levels of unemployment tend to perpetuate themselves and result in hysteresis.

In the growing literature on happiness and subjective well-being, the existence of a social norm effect tends to be taken for granted: being unemployed is expected to depress people's well-being less if they are not alone in their fate (Frey and Stutzer 2002: 421, Layard 2005: 67). However, the empirical evidence for such an effect is surprisingly scarce and often contradictory. This applies in particular to surrounding unemployment. In a fixed-effect analysis on the British Household Panel Survey 1991-97, Clark (2003: 340) finds higher regional unemployment to have no influence on unemployed women, but to possibly increase the well-being of unemployed prime-age men. In contrast, the same author comes to the opposite result for Germany. Using the German Socio-Economic Panel (SOEP) 1984-2006, he finds that higher regional unemployment does not affect unemployed men, but significantly diminishes the well-being of unemployed women (Clark et al. 2010: 58). The same conclusion emerges from a cross-sectional analysis that uses 835 unemployed Germans from the SOEP 2001, which finds higher regional unemployment to be significantly correlated with *lower* life satisfaction of the unemployed (Grözinger and Matiaske 2004: 99).

For several smaller countries, there is indirect evidence on the link between unemployment and well-being. A cross-sectional analysis for Switzerland finds the unemployed to have lower well-being in communities with a stronger work norm – that is in the mainly conservative rural communities where a majority of people voted in favour of unemployment benefit cuts (Stutzer and Lalive 2004: 715). A study that uses panel data from Sweden finds no indication of an unemployment culture: On the contrary, unemployed individuals who had an unemployed partner and more than half of their friends unemployed reported lower levels

of well-being than the other unemployed (Nordenmark 1999: 56). Neither did a parallel study unearth any signs of a dependency culture for Denmark, as even among those individuals out of employment for several years, most preferred to work (Goul Andersen 2002: 188). For Ireland, psychological distress has been found to increase more strongly among professionals and managers who had become unemployed than among manual workers (Whelan 1994: 56) – a result confirmed by a recent British panel data analysis (Andersen 2009: 17). Two explanations are possible: The social norm to work may thus be stronger for the highly educated than for other categories. Alternatively, professionals and managers may derive greater satisfaction from their (more rewarding) job than manual workers and hence suffer more when losing it.

The available empirical evidence is less ambiguous with respect to the well-being effect of unemployment duration. A Swedish study based on cross-sectional data finds the long-term unemployed to have lower well-being than the short- and middle-term unemployed, all the while showing unchanged orientation towards work: 66 per cent of the long-term unemployed answered they would work after a major lottery win as compared to 63 per cent of the short- and mid-term unemployed (Åberg 2001: 137). Analyses based on panel data are better suited to uncover the effect of long-term unemployment on well-being, because there is a good chance of reverse causality: happy people are likely to find more easily a way out of unemployment than unhappy persons. Yet despite the use of panel data, an Australian study still finds well-being to decline with increasing unemployment length (Carroll 2007: 296). In contrast, studies that use panel data from Britain and Germany find that well-being remains constant – *constantly low* – during people's unemployment (Winkelmann and Winkelmann 1998, Clark 2006, Clark et al. 2008).

In sum, the social-norm explanation of hysteresis maintains that weaker social pressure takes off some of the burden of unemployment – and thus renders it persistent. If this argument is true, we should observe the following implications:

- (i) Higher regional unemployment weakens the work norm and should lead to a smaller decline in the well-being of the unemployed (*geographical* habituation effect);
- (ii) Longer individual unemployment should lead the unemployed to adapt their lifestyle to unemployment and diminish its negative effect on well-being (*temporal* habituation effect);
- (iii) More frequent unemployment spells should lead the unemployed to become used to live off welfare benefits and mitigate the negative effect of unemployment on well-being (*life-course* habituation effect).

### **Data and estimation method**

Our analysis of unemployment and subjective well-being covers Germany, 1984 to 2009, and Switzerland, 2000 to 2009. There are two rationales to our country selection. First, regional labour markets differ strongly in these two countries. Over the last two decades, no other Western European country witnessed stronger variation in regional unemployment than Germany, with rates ranging from under 3 per cent in Baden-Württemberg and Bavaria (1990, 1991, 1992) to above 20 per cent in Saxony-Anhalt and Mecklenburg-West Pomerania (1998, 2004, 2005). While regional disparities in unemployment are smaller in Switzerland, its linguistic communities may differ in their work norms. It has been argued that attitudes towards work are more positive in the German-speaking than the French- and Italian-speaking regions, possibly explaining why unemployment is lower in German-speaking Switzerland (Brügger et al. 2009). Hence, Switzerland should be a particularly favourable test case for the social-norm hypothesis of unemployed people's well-being.

A second reason for our country selection is the availability of high quality panel data. Our empirical work is based on the first 26 waves of the German Socio-Economic Panel (SOEP, 1984-2009, see Wagner et al. 2007)<sup>1</sup> and 10 waves of the Swiss Household Panel (SHP, 2000-2009, see Voorpostel et al. 2010)<sup>2</sup>. As there is both entry and exit of respondents from the panels, the data are unbalanced. Our focus is on respondents aged between 20 and 60 years who were active in the labour market at the date of the first measurement. This leaves us with a total of 251,137 observations for Germany and 40,192 observations for Switzerland. However, the phenomenon of interest – transitions from employment to unemployment – is much less frequent: there are 7913 transitions in the SOEP, but only 282 in the SHP. Accordingly, our analyses for Germany will be both more detailed and of greater substantive interest than those for Switzerland.

Our dependent variable is people's self-reported psychological well-being and is based on the question: 'How satisfied are you at present with your life as a whole?', with answers ranging from 0 (totally dissatisfied) to 10 (totally satisfied). By now, there is evidence from a large literature in psychology and economics that self-reported measures of satisfaction are valid, reliable and consistent proxies for subjective well-being (e. g. Diener et al. 1999, Frey and Stutzer 2002). The variable's distribution is shown in the appendix (see figure A.1). In Germany and Switzerland, the majority of respondents appear quite satisfied with their lives, the value of 8 being the modal category. Life satisfaction seems somewhat higher among Swiss than German respondents: only 29 per cent of the former report a score of life satisfaction below 8 as compared to 53 per cent in Germany.

Our decisive independent variable is labour market status where we distinguish four states: (i) employment (other than a year before becoming unemployed), (ii) employment a year before becoming unemployed, (iii) the first year of unemployment, (iv) the second and following years of unemployment. Unemployment refers to registered unemployment in

Germany and to self-reported unemployment in Switzerland. We create a separate category for employment in the year preceding unemployment, because people are likely to anticipate their unemployment. Since dismissal decisions and firm closure usually imply a period of notice, well-being due to job loss may already decline before unemployment actually sets in. By further distinguishing the first from the following years of unemployment, we get an idea whether unemployment becomes better or worse with duration. For Germany, we also add a variable for the unemployment spell and differentiate the first observed episode of unemployment from the ensuing ones.<sup>3</sup> The objective is to find out how the repeated experience of unemployment affects people's well-being. In the Swiss sample the number of unemployment spells is too low to warrant a systematic analysis.

A second key variable is aggregate unemployment on the regional level. For Germany, yearly unemployment rates are distinguished for the *Bundesländer*<sup>4</sup> and range from 2.3 (Baden-Württemberg 1991) to 22.4 per cent (Sachsen-Anhalt 2004). For Switzerland, regional unemployment is calculated for six main regions and varies between 1.7 (Central Switzerland 2002) and 6.5 per cent (Lake Geneva Region 2005). Alongside individual labour market status, unemployment spell and regional unemployment, we add controls for sex, age, age squared and living together with a partner. In order to account for regional differences not captured by the unemployment rate, we use dummy variable for East and West Germany as well as for German- and French-/speaking Switzerland (Italian-speaking Ticino is dropped from the analysis)<sup>5</sup>. Descriptive statistics for all these variables are shown in the appendix (see table A.1).

The analysis of subjective well-being typically faces two problems. First, the direction of causality: unemployment is likely to depress people, but depressed people also make less productive workers and are thus prone to become (and remain) unemployed. A second difficulty concerns the possibility that unobserved common determinants of well-being and

unemployment lead to spurious correlations: a major negative life event (such as widowhood, loss of a child or cancer) may be the cause for both lower well-being and unemployment. While these two problems are acute with cross-sectional data, longitudinal data offer a way out. By providing repeated observations for the same individual, panels make it possible to address the issue of causality and to control for unobserved individual characteristics that are time-invariant, but correlated with unemployment – such as for instance personality traits (Winkelmann and Winkelmann 1998: 2).

This leads us to our estimation method. We treat our ordinal well-being scale as if it were a cardinal variable, which allows us to estimate linear models. Several studies have shown that assuming cardinality or ordinality of the satisfaction answers in the SOEP leads to identical substantive findings (Ferrer-i-Carbonell and Frijters 2004: 655; Clark et al. 2008: 236; Headey et al. 2010). Our panel data have a hierarchical structure where repeated observations are nested within persons and persons within regions. This hierarchy between units of analysis calls for a three-level model. Multilevel models enable us to determine whether the causal effect of a lower-level predictor (for instance individual unemployment) is increased or moderated by a higher-level predictor (for instance regional unemployment). We estimate a random-intercept three-level model which contains error terms both at the regional and the individual (within-regions) level, in addition to the time (within-individuals) level. This more complex error structure allows us to decompose the total variance in well-being into the within-person (between time points), the between-person (within-regions) and the between-region variance,<sup>6</sup> and to study these components for the micro-level outcome (Di Prete and Forristal 1994). However, in order to make sure that our results are robust across different model specifications, we will also report the results of the more widely used fixed-effects model which relies on within-person variance only.

## Descriptive results

We start our analysis with descriptive statistics and show in figure 1 the well-being score of four categories: (i) all the employed (other than those becoming unemployed in the subsequent year), (ii) the employed in the year before becoming unemployed, (iii) the unemployed in their first year of unemployment; (iv) the unemployed in the second and following years of unemployment. Simply using our data as pooled cross-sections, these average scores in well-being are further differentiated geographically – for West and East Germany and for German- and French-speaking Switzerland. Three results are noteworthy.

First, not only are the unemployed much unhappier than people with a job, but already anticipated future unemployment depresses life satisfaction. Hence, individuals still employed but about to become unemployed over the following year report substantially lower well-being than those in stable employment. This is not surprising as plant closure and individual lay-offs are usually announced several months ahead. More surprisingly, figure 1 shows the long-term unemployed to have *lower* levels of well-being than the short-term unemployed. In both countries, people unemployed for more than a year are the unhappiest labour market category.

Second, there is a striking similarity in Germany and Switzerland's well-being results. While the general level of life satisfaction is somewhat higher in Switzerland than in Germany, the *well-being gap* between people in stable employment and people in their first year of unemployment is almost identical: in both countries, the former report a by 17 per cent higher well-being score than the latter. Similarly, self-reported well-being of the long-term unemployed lies 22 per cent below that of the stably employed in Germany and 24 per cent in Switzerland.

Third, regional levels of well-being differ substantially in Germany, the respondents being unhappier in the East than the West in every single one of the four labour market states.

Contrary to what the social norm argument expects, this finding does not only apply to the employed, but also the unemployed. Hence, despite substantially higher ambient unemployment, unemployed East Germans report lower well-being than the unemployed in West Germany. The same observation can be made for Switzerland, where well-being is somewhat lower in the French- than the German-speaking region, although unemployment is more widespread in French-speaking Switzerland.

About here figure 1

These results are based on pooled cross-sections and do not take advantage of our data's panel structure. They thus need to be interpreted with caution. Cross-sectional analyses regularly find the long-term unemployed to have lower well-being than the short-term unemployed – yet the result may be driven by a selection process: Happier people make better job candidates and find more quickly a job than unhappy people. Figure 1 may thus simply show that employed and unemployed people have different personality traits, the former being happier and performing better on the labour market than the latter. In order to obtain more reliable evidence for the link between unemployment and well-being, we need to control for unobserved character traits and hence different baseline levels of life satisfaction (individuals' unobserved heterogeneity) by following the same individual over time.

Accordingly, we compute the change in people's self-reported well-being when transiting from employment (in year  $t_1$ ) to unemployment (in year  $t_2$ ). The fall in respondents' well-being when becoming unemployed – averaged over the German regions (*Bundesländer*) and four six-year periods – is then plotted in figure 2 against the regional unemployment rates. The changes in well-being are only shown for a region if they are statistically significant; typically, they need to be based on a minimum of 70 to 80 individual transitions into

unemployment. This leaves us with observations for 39 region-periods. The results reveal a remarkable absence of correlation between the regional unemployment rate and the average drop in the unemployed people's well-being – echoing the finding of the pooled analysis in figure 1. While East German regions have significantly higher levels of surrounding unemployment (and thus cluster to the right in figure 2), the average fall in well-being is not significantly different from that in the West German regions. To give an example: average unemployment 2002-09 was below 6 per cent in Bavaria and Baden-Württemberg, but above 15 per cent in Brandenburg and Saxony. Nonetheless, the drop in well-being associated with a transition from employment (year before becoming unemployed) to unemployment (first year of unemployment) amounted in all four *Bundesländer* to almost identical 9 to 10 per cent. Hence, unlike what the social norm hypothesis stipulates, the unemployed in Germany do not seem to take job loss more lightly in regions and periods with higher ambient unemployment.

About here figure 2

For Switzerland, the number of transitions from employment into unemployment is in most regions too small to warrant statistically significant changes. However, when comparing the two large regions Zurich (41 transitions) and Lake Geneva (84 transitions) over the period 2000-09, we find for these two metropolitan areas the same average decline in respondents' well-being when becoming unemployed (-8 per cent) – even though aggregate unemployment in the French-speaking Lake Geneva region stood at an average of 4.8 per cent as compared to 3.6 per cent in German-speaking Zurich.

## **Multivariate results**

Figure 1 and 2 throw serious doubt on the hypothesis that unemployment hurts the less, the more widespread it is and the longer it lasts. However, these descriptive results are tentative and need to be substantiated by multivariate analysis. We choose a model consistent with the expectation of the social-norm argument that the regional context affects unemployed workers' well-being. In statistical terms, this means that we deal with a hierarchical data structure, where individual observations are nested within regions. We use a three-level random-effects model, with levels set for the individual, the region and the time of measurement, and estimate panel regressions with generalized least squares (GLS). As described above, our dependent variable is well-being. The three independent variables of interest are labour market status, unemployment spell and regional unemployment – with, additionally, the interactions between labour market status and regional unemployment. Further controls are introduced for age, sex, living together with a partner, and region. Table 1 shows the regression results for Germany and Switzerland.

In both countries, personal unemployment has a strongly negative effect on well-being even if other controls are introduced. To give an idea of the effect's size, unemployment's detrimental impact on life satisfaction clearly outweighs the beneficial influence of living together with a partner, being twice as important. Moreover, it is striking how similar the impact of unemployment on well-being is in our two countries. Compared to being employed, well-being drops in the first year of unemployment by 0.83 points in Germany and by 0.84 points in Switzerland.

There is an anticipation effect to unemployment in both countries. Well-being thus decreases already in the year before actual unemployment sets in. In contrast, we do not find a habituation effect to unemployment. There is no difference in people's (lowered) well-being between the first and the following years of unemployment. Hence, in neither country does

unemployment become more pleasant with longer duration. Unlike for other negative life events such as divorce or widowhood, people do not seem to get adapted to being unemployed. As noted by Clark et al. (2008: 225), ‘unemployment starts off bad and stays bad’. For lack of observations in the Swiss sample, the impact of repeated unemployment spells on subjective well-being is only examined for Germany. Again, we find no habituation effect. Whether episodes of unemployment are recurrent or not does not make a difference for well-being. This means that having experienced job loss before and thus being used to unemployment does not take off the mental burden of a new unemployment spell in Germany.

How does surrounding unemployment affect life satisfaction? In both countries, higher regional unemployment rates leads to a significant drop in people’s well-being. This result holds true even though we introduce controls for East Germany and French-speaking Switzerland, where overall well-being is lower and aggregate unemployment higher. High surrounding unemployment makes the workforce in general more miserable, and this effect is the same for the employed and unemployed: In none of the two countries are the interaction terms between regional and individual unemployment statistically significant. We thus find no mitigating social-norm effect of higher regional unemployment on the unemployed. Unlike what the happiness literature assumes, an individual spell of unemployment appears to hurt as much with low as with high surrounding unemployment.

Perhaps, the social-norm effect operates through different contextual variables than regional unemployment. We examine three possibilities: (i) sectoral unemployment, (ii) urban vs. rural contexts, (iii) larger geographical region. From running additional regressions with these controls and the respective interaction terms does not result much additional insight (results available from the authors). In both Germany and Switzerland, sectoral unemployment depresses the unemployed workers’ well-being – yet without changing anything else. Compared to rural areas and smaller towns, the anonymity of large cities does

not moderate the fall in well-being for the unemployment in Germany. In Switzerland, people in general are somewhat less satisfied with their life in large cities than in small town and rural areas – and this effect is even somewhat stronger for the unemployed. Hence, anonymity makes unemployment worse – not better. Finally, when introducing an interaction term for personal unemployment and geographical region (East/West Germany, French-/German-speaking Switzerland), we find the unemployed to be no happier in East than in West Germany. In contrast, the unemployed in Switzerland have higher levels of well-being in the French- than the German-speaking part of the country. Hence, if there is a social norm effect influencing unemployed workers' well-being, it stems from other regional differences than aggregate unemployment.

#### About here table 1

How robust are our findings? We run a robustness check by comparing the results from our random-effects model in table 1 with those obtained from a fixed-effects model. Moreover, by estimating separate models for men and women, we allow for a differential impact of unemployment on well-being for the two sexes. As the fixed-effects model only allows for within-variance, we have to drop the random intercept estimate for region. The number of transitions into unemployment is too small in our Swiss sample to warrant separate analyses by sex. Accordingly, we confront the random-effects and fixed-effects models for the much larger German sample only and show the results in table 2.

Although the Hausman test<sup>7</sup> suggests – not surprisingly, given the large sample size – that differences between the two models are significant and thus that the fixed-effects model should be preferred, the random-effects model seems more adequate for our problem at hand. The main reason is that the fixed-effect model ignores the multilevel structure of the data design – the fact that individuals are nested in regions. Besides this theoretical argument,

there is a practical reason which makes a random-effects model better suited for our analysis: since fixed-effects estimations require a separate model for each individual invariant category such as region (East / West Germany) and gender, sample size drops dramatically and the estimation of the actually interesting unemployment effects on well-being becomes difficult.

However, table 2 shows that from a substantial view, this discussion is largely academic. All independent variables (except the – here secondary – age-square term) lead to the same interpretation in the fixed-effects and random-effects models. Moreover, since the random-effects model is more efficient and thus leads to lower standard errors, it should make it easier than the fixed-effects model to identify a social-norm influence of regional unemployment and unemployment duration on well-being – an influence we do not find with either model.

While the comparison of the fixed-effects and random-effects models does not produce any new findings, the differentiation by sex in table 2 leads to two additional insights. First, men seem more troubled by unemployment than women, the drop in life satisfaction being twice as large for men becoming unemployed than for women becoming unemployed. Second, surrounding unemployment has a different effect on the well-being of unemployed men and women. While unemployed men suffer *less* from high ambient unemployment than employed men, unemployed women suffer *more* from high surrounding unemployment than employed women. Yet the result for men does not change the finding made above that the unemployed *in general* are worse off in a context with high than with low unemployment. In effect, the strongly negative effect of surrounding unemployment on men's well-being is not compensated by the weakly positive effect of the interaction between men's own unemployment and surrounding unemployment. When adding up the main effect with the interaction effect, unemployed men are still unhappier when regional unemployment is high than low. This interpretation holds regardless the model specification.

About here table 2

## **Conclusion**

Our paper analyzed the existence of a habituation effect to unemployment: Do the unemployed suffer less from job loss if unemployment is more widespread, if their own unemployment lasts longer and if unemployment is a recurrent experience? We examined this question against the backdrop of a popular view among both economists and laymen that an unemployment shock becomes persistent because the ever more numerous unemployed become used to – and hence reasonably content with – being without a job. As job loss becomes more widespread, the social norm to work weakens, the unemployed are no longer ostracized and accordingly suffer less from being unemployed. Our analysis of panel data provides no support for this argument. In particular four findings are noteworthy.

First, higher levels of regional unemployment do not moderate the psychological cost of individual unemployment. Unemployed people in economically barren East German regions experience a similar drop in well-being when losing their job as the unemployed in thriving regions of Southern Germany. The same finding applies to Switzerland. No matter the regional unemployment rate, job loss massively impairs subjective well-being.

Second, gender makes a difference: While unemployed women suffer more than employed women from high ambient unemployment, unemployed men are less concerned by high unemployment than employed men. But for men and women alike, the unemployed are less satisfied with their lives in regions and periods with high than in regions and periods with low unemployment.

Third, unemployment does not become any better with duration: In both Germany and Switzerland, the unemployed are as unhappy in their first year of unemployment as in the following year(s). Unlike what the argument of a ‘culture of worklessness’ maintains, the bulk of the long-term unemployed do not seem to install themselves comfortably in a life without a job.

Fourth, we do not find a life-course habituation effect to unemployment. Recurrent spells of unemployment do not mitigate the strongly detrimental impact of job loss on subjective well-being. Whether unemployment has been experienced before or not does not change the fall in people's well-being when becoming unemployed.

In sum, regardless whether unemployment hits many others or almost nobody in the community, it massively impairs the unemployed individuals' well-being. And they find it difficult to mentally come to grips with being without a job, even if they have time to adapt to the new situation and if spells of unemployment are recurrent. These results throw serious doubt on the argument that unemployment persistency – hysteresis – is due to the fact that widespread and prolonged unemployment reduces the psychological costs of being unemployed and thus makes unemployment, to a greater extent, voluntary.

A potentially more promising account of hysteresis focuses on the combined effect of depressed well-being and employer stigma on labour market success. The idea is that job loss reduces the cognitive and emotional status of those laid off. In parallel, unemployment in general and unemployment duration in particular are taken by employers as signals for unobserved worker characteristics such as a lack of resourcefulness and/or motivation. Hence, when unemployment leads to loss of self-esteem and helplessness on the one hand and to stigma by employers on the other, it undermines people's prospects to find a new job. Unemployment persistence is then caused by the rapid aggregation of unfavourable labour force histories in a recession – and thus the consequence of a worsened psychological state of and employer stigma towards a substantial part of the workforce (Darity and Goldsmith, 1996: 132-6).

In policy terms, our results imply that a strategy primarily trying to lower aggregate unemployment by reducing unemployed workers' utility is bound for little success – the utility of the unemployed is already very low. Putting greater strain on them by cutting

unemployment benefits, shortening entitlement periods and tightening entitlement conditions appears to just make difficult lives more miserable. A more promising strategy consists in the combination of efficient job-placement services and adequate training programs that help people to move from welfare to work with fiscal and monetary policies that fully exploit an economy's growth potential and create the job vacancies for the unemployed to effectively find work (Oesch 2010). Based on evidence on people's well-being, these policies seem more logical components of a full-employment policy than efforts aimed at solely pressurizing the unemployed.

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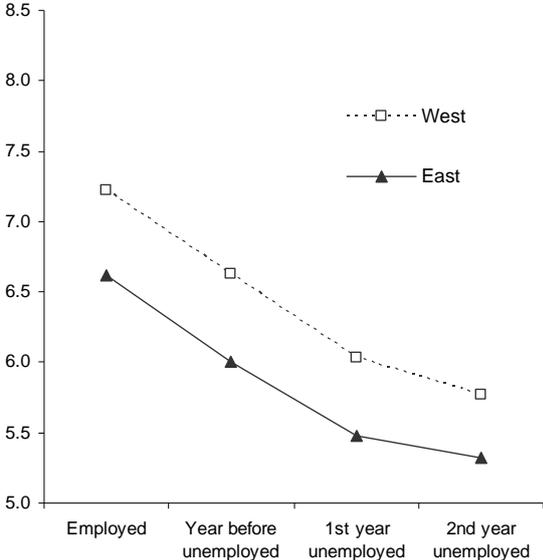
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**Tables and figures**

Figure 1: subjective well-being (measured on a scale from 0 to 10) and employment status – results from pooled cross-sectional analysis

Germany, 1984-2009



Switzerland, 2000-2009

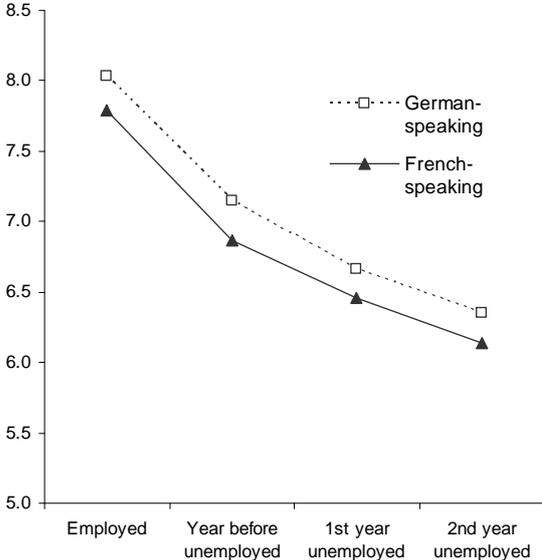
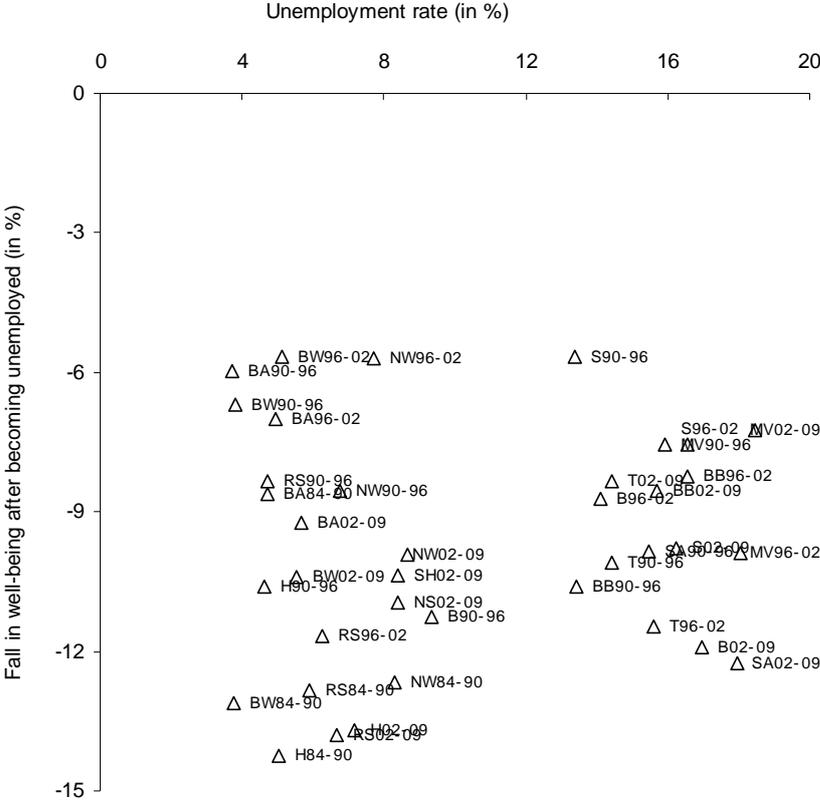


Figure 2: regional unemployment and the fall in individuals' well-being when becoming unemployed, averaged over 6-year periods in German regions



Notes: observations for the German *Bundesländer* are averaged over the following periods: 1984–1990 (only former West Germany), 1990–1996, 1996–2002, 2002–2009.

Key: B=Berlin, BA=Bavaria, BB=Brandenburg, BW=Baden–Württemberg, H=Hessen, NS=Lower Saxony, MV=Mecklenburg-West Pomerania, NW=North Rhine-Westphalia, RS=Rhineland-Palatinate/Saarland, S=Saxony, SA=Saxony-Anhalt, SH=Schleswig-Holstein and T=Thuringia.

Table 1: determinants of subjective well-being in Germany - coefficients and standard errors of random-effects three-level regressions (region, individual, and time)

	Germany, 1984-2009		Switzerland, 2000-2009	
	(1) Baseline model	(2) Interactions: unemp x u-rate	(3) Baseline model	(4) Interactions: unemp x u-rate
Year	-0.011 0.0007	-0.011 0.0007	-0.025 0.002	-0.025 0.002
Male	-0.023 0.015	-0.023 0.015	-0.078 0.025	-0.079 0.025
Partner	0.252 0.010	0.252 0.010	0.444 0.021	0.443 0.021
Age	-0.035 0.003	-0.035 0.003	-0.068 0.007	-0.068 0.007
Age squared	0.0002 0.00003	0.0002 0.00003	0.00077 0.00008	0.00077 0.00008
East Germany	-0.492 0.070	-0.492 0.070	–	–
French-speaking Switzerland	–	–	-0.328 0.034	-0.328 0.034
Employment status (reference: employed)				
Employed year before becoming unemployed	-0.287 0.016	-0.283 0.036	-0.412 0.068	-0.413 0.068
1 <sup>st</sup> year unemployed	-0.834 0.017	-0.803 0.036	-0.839 0.067	} -1.062 0.215
2 <sup>nd</sup> and following year unemployed	-0.831 0.020	-0.836 0.044	-0.810 0.102	
Spell of unemployment: 2 <sup>nd</sup> or more frequent	-0.009 0.031	-0.008 0.031	-0.023 0.008	-0.024 0.008
Regional unemployment rate (u-rate)	-0.012 0.002	-0.012 0.002	-0.024 0.008	-0.023 0.008
Interactions: status x u-rate				
Year before unemployed x u-rate		-0.0005 0.0032		–
1 <sup>st</sup> year unemployed x unemployment rate		-0.0031 0.0031		–
2 <sup>nd</sup> year unemployed x u-rate		0.0003 0.0036		–
Unemployed x regional u-rate		–		0.058 0.052
Constant	7.727 0.044	7.726 0.044	8.333 0.046	8.335 0.046
Random intercept standard deviation: Region	0.119 0.026	0.119 0.026	0.042 0.022	0.042 0.022
Random intercept standard deviation: Individual	1.124 0.006	1.124 0.006	1.002 0.010	1.002 0.010
Residual	1.311 0.002	1.311 0.002	0.967 0.004	0.967 0.004
Log likelihood (DF)	-449,165 (11)	-449,179 (14)	-60,746 (10)	-60,746 (10)
N observations	250,298	250,298	38,836	38,836

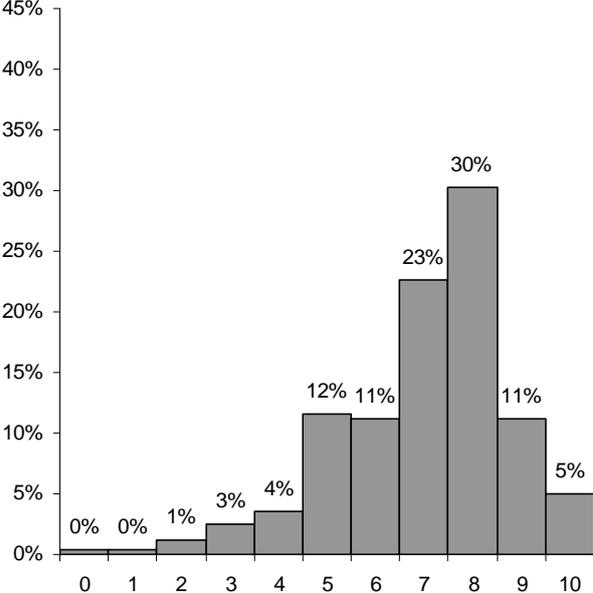
Table 2: determinants of subjective well-being in Germany – a comparison between random-effects (RE) two-level regressions and fixed-effects (FE) regressions

	RE – men	FE – men	RE – women	FE - women
Partner	0.294	0.240	0.230	0.165
	0.014	0.017	0.015	0.017
Age	-0.041	-0.039	-0.039	-0.036
	0.004	0.004	0.004	0.004
Age squared	0.00025	0.00007	0.00022	0.00004
	0.00004	0.00005	0.00005	0.00005
Employment status (reference: employed)				
Employed year before becoming unemployed	-0.321	-0.228	-0.261	-0.191
	0.023	0.023	0.024	0.024
1 <sup>st</sup> year unemployed	-1.136	-1.039	-0.463	-0.419
	0.049	0.050	0.052	0.052
2 <sup>nd</sup> and following year unemployed	-1.157	-1.000	-0.527	-0.417
	0.060	0.061	0.065	0.066
Spell of unemployment: 2 <sup>nd</sup> or more frequent	0.012	0.068	-0.085	-0.034
	0.043	0.044	0.044	0.045
Regional unemployment rate (u-rate)	-0.038	-0.018	-0.033	-0.016
	0.002	0.002	0.002	0.002
Interactions: status x u-rate				
1 <sup>st</sup> year unemployed x unemployment rate	0.010	0.010	-0.016	-0.013
	0.004	0.004	0.005	0.005
2 <sup>nd</sup> year unemployed x u-rate	0.012	0.011	-0.010	-0.009
	0.005	0.005	0.005	0.005
Constant	7.766	7.786	7.745	7.743
	0.023	0.027	0.025	0.028
Hausman chi <sup>2</sup> test (equality of coefficients)	1049.1		823.9	
	.000		.000	
N observations	132,191	132,191	118,107	118,107

**Appendix**

Figure A.1: distribution of responses to the well-being question: ‘How happy are you at present with your life as a whole?’, with answers ranging from 0 (totally dissatisfied) to 10 (totally satisfied)

Germany 1984-2009 (N=250,298)



Switzerland 2000-2009 (N=38,836)

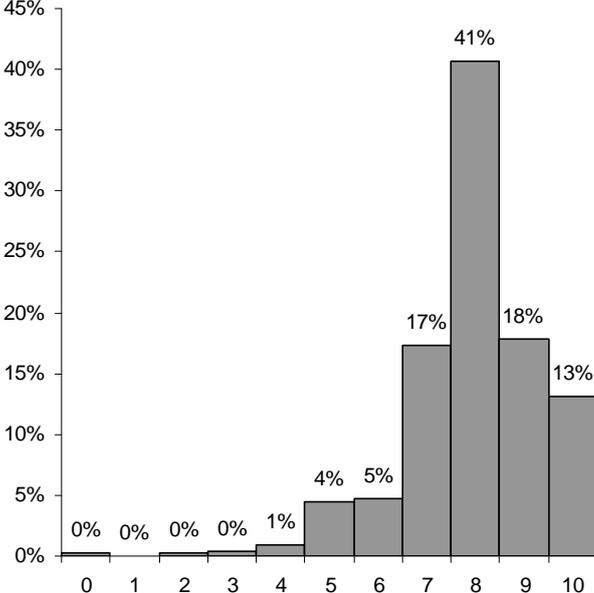


Table A.1: descriptive statistics of the variables used in the analysis

Variable	Germany (SOEP)			Switzerland (SHP)		
	mean	min	max	mean	min	max
Satisfaction with life	7.02	0	10	7.95	0	10
Male	0.53	0	1	0.47	0	1
Year	1997.8	1984	2009	2004.5	2000	2009
Living with partner in household	0.66	0	1	0.73	0	1
Age	40.00	20	60	41.83	20	60
East (SOEP), French-speaking (SHP)	0.186	0	1	0.289	0	1
1 <sup>st</sup> year unemployed	0.032	0	1	0.007	0	1
2 <sup>nd</sup> and following year unemployed	0.028	0	1	0.003	0	1
Spell of unemployment: 1=1 <sup>st</sup> , 2=2 <sup>nd</sup> or more frequent (N=22,860 / N=672)	1.190	1	2	1.015	1	2
Regional unemployment rate	0.085	0.023	0.224	0.035	0.015	0.065

SOEP N=250,298 observations, 29,908 individuals, 15 Regions

SHP N=38,836 observations, 8,282 individuals, 6 Regions

Individuals active in the labour market at the moment of the first measurement.

## Endnotes

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<sup>1</sup> Note that German data prior to 1990 refer to West Germany only.

<sup>2</sup> The question about life satisfaction was not yet asked in the first wave SHP 1999.

<sup>3</sup> Our panel data are left-censored. Hence, strictly speaking, we do not differentiate the ‘first’ spell of unemployment from later spells, but earlier spells (that is, the first observed spells) from later spells.

<sup>4</sup> Because of its small size, the *Bundesland* of Saarland is combined with Rhineland-Palatinate.

<sup>5</sup> There are too few observations – notably of unemployed individuals – for Italian-speaking Ticino, the smallest of Switzerland’s main regions, to warrant any systematic analysis.

<sup>6</sup> As the between-*region* variance is of no substantive interest for our question at hand, it will not be discussed here.

<sup>7</sup> The Hausman test tells us whether the coefficients of the more efficient random-effects model are essentially the same as those of the more precise fixed-effects model.