

The Effect of Unemployment on Life and Satisfaction An Analysis for Switzerland in its Cultural Diversity*

Annabelle Krause
(IZA)

November 15, 2010

PRELIMINARY DRAFT

Abstract

The effect of individual unemployment on life satisfaction has been of particular interest in the empirical research of happiness economics. This study aims to investigate this effect in Switzerland taking into account different cultures within the country in order to detect possible differences of the impact. A thorough analysis is conducted by analyzing next to life satisfaction, the effect of unemployment on other satisfaction domains, such as financial satisfaction or satisfaction with free time. The data comes from the Swiss Household Panel, where the waves from 2000 to 2007 are used. The empirical analysis uses several models, which differently deal with an ordered dependent variable in a panel data setting.

It is found that unemployment has a significant negative effect on life satisfaction, where no clear differences between regions could be detected; men in the non-German-speaking part of Switzerland seem to be slightly more affected. The difference between men and women appears to be larger. Satisfaction with the financial situation is also negatively affected by unemployment, whereas the impact on satisfaction with free time is strongly positive. Swiss German men and women are clearly more badly affected when it comes to depression. No effect of unemployment on other health domains is found.

Keywords: Life Satisfaction; Unemployment; Cultural Differences; Switzerland;

JEL Classification: I31; J60; Z1

*I would like to thank Beatrix Brügger, Anne Gielen, Rafael Lalive and Andrew Oswald for helpful discussions and comments on earlier drafts of this paper. This study has been realized using the data collected by the Swiss Household Panel (SHP), which is based at the Swiss Centre of Expertise in the Social Sciences FORS. The project is financed by the Swiss National Science Foundation. All remaining errors are mine.

1 Introduction

Various economists emphasize the importance of the insights related to well-being and its influence on (economic) policy decisions (Diener and Seligman, 2004; Frey and Stutzer, 2002a; Oswald, 2006). They argue that well-being is not only a personal goal but that also society benefits from happier citizens. Although the detection of the true causal effect still remains an issue for some conclusions, happier people seem to be more productive and cooperative at work as well as more sociable and healthy. After a society has reached a certain stage of economic development, not solely economic outcomes and indicators are able to predict what its citizens actually value.

There has been done a lot of research on personality, socio-demographic and contextual factors as determinants of happiness by psychologists. Economists started researching later in the field of happiness¹. The first modern economist, who analyzed the relationship between income and happiness, was Richard Easterlin. The so-called Easterlin-paradox describes the positive association between income and happiness within countries, however, happiness does not seem to vary much with economic growth, once the basic needs are met (Easterlin, 1974). There are several possible reasons for this finding, which at the same time are processes that have to be taken into account in all applications of happiness research. Social comparison is an important factor when assessing life satisfaction, so that for example relative income seems to matter more than absolute income. People are more dissatisfied if their neighbors earn more than they themselves. The processes of comparison can be applied to several situations though and will be taken up again in the course of this paper. Furthermore, people tend to adapt to new situations - good or bad - very well. The initial level of happiness is reached again usually after a certain amount of time, so that for example people who win the lottery converge back to their former satisfaction level after a short increase, as well as people who had a very bad accident recover most of their happiness some time after it happened. Aspirations also play a role, meaning people have certain aspiration levels, which are determined by their hopes and expectations. People will try to reach their aspiration level in order to be fully satisfied (Frey and Stutzer, 2002a; Oswald, 2006).

There have been many applications in the field of happiness economics since the analysis of the income-happiness relationship. For a short overview, see Graham (2008). A lot of work has been done with economic variables, such as income inequality, inflation, job satisfaction and unemployment. Frey and Stutzer (2002a) analyze the effect of political institutions on life satisfaction and Frey and Stutzer (2008) describe one new direction, namely the costs of terrorism for a society.

The effect of unemployment has been of particular interest. Full employment and economic wealth are closely related, so that governments should try to avoid high general unemployment. But how do people experience personal unemployment? There are different

¹The terms happiness, life satisfaction and subjective well-being will be used interchangeably throughout this paper, even though one could argue that they are not exactly the same. However, for the purpose of this paper the differences are rather negligible. See Diener (2005) for definitions concerning these kinds of measures.

views about whether individual unemployment is involuntary or not and therefore perceived with a decrease in subjective well-being, no significant effect or even an increase in life satisfaction. In order to create economic policies which suit the situation, one has to find out how unemployment is perceived by individuals. Most economists see it as an involuntary state from which individuals suffer psychologically as well as socially. The costs refer to the loss of a meaningful task in life and personal relationships. Besides, the social stigmatization, since a person's work and his position in life are often strongly associated, will lead to another form of suffering from unemployment. However, according to new classical macroeconomists, individuals choose to be unemployed voluntarily because they prefer getting unemployment benefits and additional leisure time to a dissatisfying wage and the time spent working. Unemployment as an involuntary state, which is related to lower life satisfaction, has been mostly proven empirically, even if a certain form of voluntary unemployment should not be neglected. There are certainly individuals who prefer to enjoy the benefits of the unemployment insurance or who are officially unemployed, but work in the shadow economy in order to avoid tax payments (Frey and Stutzer, 2002a). Clark (2003) finds that there exist social norms in labor market states and that the unemployed's well-being is strongly positively correlated with the reference group unemployment, which is related to the comparison hypothesis concerning happiness discussed above.

Another application of happiness economics is to take into account different cultural norms. Triandis (2000) examines the relationship between culture and subjective well-being and constitutes cultural syndromes to be composed of collective patterns of attitudes, beliefs, norms, role definitions and other subjective factors. It depends on certain characteristics how the culture will influence subjective well-being. Tightness, in other words non-tolerance for deviations from the norm, will result in more rules and norms about social behavior. This in turn will cause lower subjective well-being, because there is a high fear of criticism and rejection. Another characteristic is individualism, which is usually related to self-determination, which leads to a higher satisfaction level. In addition, cultural complexity plays a role. If the culture is more complex, people have more possibilities to compare oneself to, so that one can choose a comparison, which will raise the self-esteem and therefore also the satisfaction level. Diener and Suh (1999) point out that culture has an influence on how people value life satisfaction and that citizens from different cultures grow up with different norms indicating what kind of emotions are desirable. They take an example of Japan and Chile, and their national differences in subjective well-being. Taking income as predictor, Japan is supposed to have a higher satisfaction level than reported and Chile a lower one. They argue that beyond wealth, cultural norms seem to be important factors in order to explain differences in valuation of subjective well-being.

The aim of this paper is to investigate the effect of unemployment on subjective well-being against the background of cultural differences. Furthermore, the effect of unemployment on certain other satisfaction and life domains is examined. The analysis is performed for the case of Switzerland, which presents an interesting setting. Switzerland is often referred to as a nation of will rather than a population of the same ethnic origin or common

culture. The country is divided into several language regions, namely German and languages which originated from Latin – French, Italian and Romansh. Therefore it is argued that these different language regions also present different cultures concerning several domains in life, including the attitude towards working and the exposure to unemployment.² It is mainly referred to the difference between the German-speaking part and the other parts taken together.³ Speaking different languages let individuals turn to sources of media which they understand. Therefore the different regions are greatly influenced by culture which rather comes from their larger neighbor countries than their neighbors within the country as well as regional media sources. Besides, historical and geographical reasons might have influenced the development of different cultures. The pride of their independence and the harder living conditions in the Alp regions might have contributed for the Swiss-Germans to be harder working and having a stronger social norm towards work than the rest of the country. Questions regarding social and economic policy decisions as well as the foreign policies these days concerning the European Union for example often reveal divergences of opinions between the Swiss regions (Büchi, 2000).⁴ The assumption concerning the effect of unemployment is therefore firstly, that unemployment causes a drop in subjective well-being and secondly that Swiss Germans experience a stronger effect of unemployment, because they attach a stronger value to their working life than Swiss people in the non-German speaking regions.

The questions which are tried to be answered are the following: Is there a significant effect of unemployment on life satisfaction in Switzerland? Does this effect differ between the German and Latin region? Does this effect differ between men and women? Does unemployment have an effect on other satisfaction and life domains, such as satisfaction with the financial situation and variables concerning health, and are there significant differences regarding regions and gender? Thus, the contribution of this paper to the literature is a thorough analysis of the effect of unemployment on people's lives in Switzerland by using different estimation methods, a panel data set, several satisfaction and life domains as dependent variables and performing the analysis for four subgroups. The cultural dimension has never been taken into account when analyzing the unemployment–happiness relationship. Furthermore, most papers focus only on life satisfaction in general, where the effect on other satisfaction domains is left out. However, it is very interesting to find out, where it actually hurts and where it might not hurt at all. By including more specific satisfaction domains into the analysis, it becomes clearer in which parts of life unemployment plays an important role.

The empirical analysis will be done with data from the Swiss Household Panel, where the waves from 2000–2007 are used. The variables concerning different satisfaction do-

²See Hofstede (1984): “[...] in Switzerland, the two language areas show wide cultural differences and clearly belong to different cultural areas.”

³The two language regions will be referred to as German and Latin region in the following.

⁴A paper which has addressed the argument of cultural differences within Switzerland is Brügger et al. (2009). They argue that the cultural differences between the two Swiss regions have an effect on tastes for leisure, which in turn have an influence on the unemployment duration.

mains - including overall life satisfaction - are coded on an ordinal scale from 0 to 10, where higher values indicate higher life satisfaction. Besides ordinary least squares (OLS) estimation with and without fixed effects, two other models, namely the conditional logit model with fixed effects and a generalized ordered probit model are applied in order to deal with that kind of variables in a panel data setting. The main results are that there is a clear negative effect of unemployment on life satisfaction in Switzerland, which differs more by gender than by regions. Latin men seem to suffer slightly more than their German counterpart. Unemployment has a strong positive effect on satisfaction with free time, where there is no clear difference between German and Latin men, Latin women seem to be more positively affected than German women. Furthermore, the negative effect of unemployment on satisfaction with the financial situation is even stronger than the one on life satisfaction. German men and women are much more strongly affected by unemployment when it comes to depression, which is an indication of the confirmation of the hypothesis. No effect of unemployment on other health domains is found. Furthermore, the results show that it is important to use panel data, when existing, since several findings differ between estimation methods.

The remainder is structured as follows: the upcoming literature review on the related field will be followed by a data description and a descriptive analysis of the sample in chapter 3. Chapter 4 introduces the econometric methodology followed by the results in chapter 5. Chapter 6 concludes.

2 Literature Review

The body of empirical literature in economics on the relationship between unemployment and happiness has grown a lot over the past two decades.⁵ The result which is almost seen as standard nowadays is that unemployment lowers subjective well-being. Quite a lot of work has been done with the German Socio-Economic Panel (GSOEP). A number of articles in the last decade were based on the studies of Winkelmann and Winkelmann (1995, 1998) and extended it in several ways. Winkelmann and Winkelmann find the non-pecuniary costs of unemployment for working-age men having a much larger negative influence on life satisfaction than the pecuniary costs. Gerlach and Stephan (1996) extend their work by using a larger sample period and data for both, men and women. Besides, they control for different age groups. They also find a strong negative impact of unemployment on happiness, where middle-aged men (30-49 years old) suffer most and women, who are 50 years and older, suffer least. A more recent study by Kassenboehmer and Haisken-DeNew (2008) examines the effect of unemployment with an even longer sample period. Furthermore, they take into account different reasons to be unemployed, so that they can control for involuntary unemployment, which is an important factor in determining the impact of unemployment on life

⁵Psychologists have also done a lot of research in that field, but focus more on mental health and illness appearances, such as depression and anxiety. For an overview see Murphy and Athanasou (1999).

satisfaction.⁶ They distinguish three reasons for unemployment, which are 'voluntary', 'being fired' and 'plant closure'. They find that exogenous unemployment (which is certainly the case when there was a company closing)⁷ is strongly connected with non-pecuniary costs. The effects of voluntary unemployment are insignificant and for 'being fired' the coefficients are always negative, but for two out of six estimation methods they are not significant. Clark et al. (2001) focus on the psychological effect of past unemployment and find that the satisfaction of currently employed individuals is lowered when they have experienced unemployment in the past.

Apart from the German evidence, there are a lot of studies which used Scandinavian data. Björklund (1985) uses data from the Swedish Level of Living Survey and tests the effect of unemployment on mental health. With cross-section data he finds a negative effect. Using panel data, the unemployment coefficients are not significantly different from zero. He concludes that the estimates lack precision and therefore do not allow any certain statements. An overview of studies using Scandinavian data give Björklund and Eriksson (1998), where they again conclude that cross-sectional studies show a negative effect for unemployed compared to employed individuals. Panel studies unfold the same effect but with uncertainty about how long this effect persists. A more recent paper by Böckerman and Ilmakunnas (2005) suggests that, using cross sections for Finland, unemployment has a negative effect on subjective well-being at lower happiness levels, but insignificant effects at higher ones.

The three main findings of Clark and Oswald (1994), who use data from the British Household Panel Study, are that unemployed people living in high-unemployment areas as well as young individuals experience less suffering. Moreover, they give support to the hypothesis that people get used to everything in the long run as Easterlin (1974) suggests, because they find that the short-term unemployed are less happy than the long-term unemployed. Blanchflower and Oswald (2004), who analyze the case for the US and Britain, find a negative link between unemployment and life satisfaction as well. There is also one study about a transition economy, namely Kyrgyzstan. Namazie and Sanfey (1998) use household data from 1993 to analyze the determinants of subjective well-being and find that unemployment is one determinant for unhappiness. Di Tella et al. (2001) work with macroeconomic variables like the unemployment rate and inflation for several European countries and the United States to test their effect on life satisfaction. They find that life satisfaction is lower when unemployment and inflation are higher (so-called "misery index" – adding the unemployment rate to the inflation rate) and that unemployment seems to lower life satisfaction more than inflation does.

⁶As mentioned before, involuntary and voluntary unemployment most certainly have different effects on life satisfaction. For instance, individuals who quit are likely to be affected in a different way than individuals who are laid off (involuntarily). When one has the possibility to distinguish the reasons for unemployment, it is probably a big advantage in determining the correct impact on happiness.

⁷'Being fired' does not necessarily lead to involuntary unemployment, since the individual might want to quit but 'waits' to be laid off because of the possibility of severance pay for example.

3 Descriptive Analysis

This chapter will give information on the data source and continue with a descriptive analysis of the sample used, focussing on the distributions of life satisfaction, working status and region of residence.

3.1 Data

The data used for the analysis comes from the Swiss Household Panel (SHP), which was first conducted in 1999 and aims to observe social change in Switzerland.⁸ Starting out with a sample of 7,799 individuals for the personal interview and 5,074 households for the household interview, the SHP has suffered attrition problems as a lot of long term data sets do. Therefore in 2004 a recruitment of 2,538 new households and 3,654 new participants for the individual questionnaire took place. The survey is conducted annually and the waves between 2000 and 2007 are used for the analysis. Unfortunately the main outcome variable satisfaction with life in general (*sat_life*) was not conducted in 1999 yet, so that this year is not included in the sample. After dropping missing observations and only including individuals who are between 20 and 65 years old, one is left with a sample of 34,605 observations for the whole time period. The question concerning life satisfaction in the personal interview is the following:

In general, how satisfied are you with your life
if 0 means “not at all satisfied” and 10 means “completely satisfied”?

where the answers are given on an ordinal scale from 0 to 10. These kinds of variables, also referred to as ‘subjective variables’, pose some potential biases in the analysis and are reasons for which research with subjective data is still criticized by some economists. Since the answers are given by individuals, the variables rather measure what people say, not what they do (Freeman, 1978). Unobserved individual specific effects can have an influence on the given responses and the so-called omitted-variable bias may arise. If these unobserved traits are time-invariant, the use of panel data and inclusion of fixed effects help to overcome these problems (Frey and Stutzer, 2002b; Graham, 2008). Related to this is the problem that not all respondents might interpret the scale in the same way. However, Diener and Lucas (2000) argue that in the literature so far self-reported life satisfaction has shown to be a valid and consistent measure of subjective well-being. For instance, the self-reports and other variables such as interview ratings, peer reports and the average daily ratio of pleasant to unpleasant moods were found to show a strong convergence.

⁸For more information see www.swisspanel.ch.

3.2 Distribution of Average Life Satisfaction

Tables 1, 2 and 3 give information about the distribution of average life satisfaction regarding working status, residence, canton and interview language. Figures 1, 2 and 3 display the distribution of life satisfaction, also over time. Table 1 divides the sample up into different regions, working states and men and women.⁹ This table shows the French and Italian-speaking regions separately, even though they are combined for the econometric analysis (the subsample for the Italian part becomes too small otherwise). As one can see, the numbers do not differ strongly and are more similar to each other than the ones for the German part. Therefore it seems appropriate to combine the two regions for further analysis. The average life satisfaction for the sample is 7.968. Similar numbers have also been observed in other studies for countries such as Germany or Britain. One interesting insight is that the unemployed are always the least happy with having an average satisfaction level of about one point less than the overall average. This is true for whatever working status, gender or region of living. Thus, no preliminary conclusions on the hypothesis of a different effect of unemployment in the regions can be drawn. Employed men are always slightly happier than their overall average and men who are not in the labor force always slightly below average. On the contrary, women who are not in the labor force indicate slightly higher values of life satisfaction. This might reflect men's stronger attachment to the labor market. Furthermore, respondents living in German-speaking cantons always indicate higher satisfaction values on average than the French or Italian region, no matter what working status or gender they have. One exception is the number for unemployed men in the Italian-speaking region, which consists only of the canton Ticino (TI), where the value is slightly higher than for their German counterparts. However, there are only 5 observations for Ticino, so that it is quite difficult to draw a conclusion based on such few observations.

Table 2 shows the distribution of working status over cantons. It is apparent that all non German-speaking cantons have an average satisfaction below 8 and most of the German-speaking ones above 8. For Berne (BE), which has been placed into the German region, the average life satisfaction level goes into the same direction as its region dummy, namely slightly above 8. This is also true for Fribourg (FR) which belongs to the French region and has an average value below 8. It is not true for Valais (VS) belonging to the French region and having an average slightly above 8. The unemployed are again clearly below average, which is true for almost all cantons from all language regions. The exception here is Schwyz, where even the unemployed have an average above 8. A German-speaking canton whose residents indicate rather low values is Appenzell Inner Rhoden (AI), where the overall average is 7.643, which is before Geneva (GE) the lowest average of all cantons.

Table 3 gives a short insight about whether the language spoken during the interview corresponds on the whole to the language region where the respondent lives and if not,

⁹For an explanation of the division of the language regions and other constructed variables as well as inexplicit names see table 25. The bilingual cantons Berne, Fribourg and Valais are divided up according to what language the majority speaks.

whether there are significant differences in how the person feels. One interesting insight is that German-speaking respondents tend to indicate higher satisfaction levels, even if they live in French-speaking cantons like Geneva (GE), Fribourg (FR) or Vaud (VD). However, the German-speaking respondents living in Ticino indicated a quite low average of 7.186. Most numbers for French and Italian speakers are lower than for German speakers. Since often there are not many observations, it is difficult to draw reasonable conclusions. The overall direction of the average numbers according to the interview language seems to coincide with the ones for the different region. The division of the language regions should still be reasonable since the native speakers always dominate their canton/ region.¹⁰

In Figure 1 one can see the distribution of the variable *sat_life* in the year 2007. It is quite similar for the other years. As seen with the average values shown in tables 1–3, the distribution is skewed to the right with 8 as the most frequent response. Not even 100 out of 4,513 observations chose a satisfaction level below 5, which shows that there are very few people very dissatisfied.

Figure 2 shows the evolution of average life satisfaction over time for the different regions. Overall a downward trend is observable and the line for the German region is clearly above the other lines. Ticino experiences a lot more change over time, so that in 2000 it starts out with an average life satisfaction as high as the one for the whole sample, but experiences a large drop after. Between the years 2002 and 2004 there is an upward trend again. The French region average is always below the overall average and the German one. The French and Italian averages taken together as Latin average give a similar picture as the French one, only adjusted by the change in the Italian region.

Figure 3 also shows the evolution of average life satisfaction, but according to working states. It is obvious that the average life satisfaction of the unemployed is always clearly below the other ones and in 2002 and 2003 there is another decrease. One possible explanation for the low average in 2003 could be a change in the unemployment benefit regulation in that year. Maximal benefits were reduced from two years to 18 months for everyone younger than 55, who does not get disability pension and paid at least 18 months unemployment insurance. The rise in 2004 could be explained by an adaption to the new law, but in order to exploit strong evidence for this explanation, the data structure and analysis should be somewhat different from what it is. Also the reason for the drop in 2002 would not be explained by this, since the amendment was not valid before July 2003. The evolution of the other working states compared with the overall average is quite similar, one can see again a slight downward trend.

¹⁰The same analysis could also be done to detect an effect for the unemployed, but there are not enough observations in order to make clear statements in the descriptive analysis design.

3.3 Change in Life Satisfaction by Change in Working Status

There is a debate about what the causal direction of happiness and unemployment is. Are the people who become unemployed maybe the ones who were already less satisfied in the first place? Table 4 provides evidence against this argument. The numbers display the average change in life satisfaction from one period to the other according to the working status. One can see that people who do not change their working status do not indicate large changes in life satisfaction. Out of these the unemployed who stay unemployed are the ones who experience the largest changes, which are negative. This gives evidence against the hypothesis that unemployed people get used to their situation, but that the situation stays rather bad or even worsens. The strongest effects can be seen for people who change working status from unemployment to employment or not in the labor force and from employment to unemployment. Going from unemployment to employment raises the life satisfaction about 0.441 points on average, whereas going from unemployment to out of the labor force lowers it by 0.593. The effect is similar for people becoming unemployed when being employed before, the negative effect is -0.490 . These findings give further evidence for the argument that the causal effect goes from unemployment to dissatisfaction and not the other way around.

Table 5 shows the numbers of life satisfaction for the transition from employment to unemployment and vice versa separately for the four subgroups. The hypothesis that it is worse for Swiss German individuals to become unemployed can be partly confirmed. The change from being employed to being unemployed is causing a slightly higher drop in life satisfaction for German than for Latin men. For German men, becoming reemployed again also comes with a higher increase in life satisfaction than for Latin men. These figures point to a closer labor market attachment of German men. The numbers for women are not as clear. The drop in life satisfaction when becoming unemployed is much higher for Latin women. However, starting a job affects German women more positively than Latin women. There is a clear difference between men and women in the numbers, at least when losing a job, which is much worse for men. Interestingly, the subjective well-being does not increase for German men as much as for German women when going from unemployment to employment.

3.4 Summary Statistics

Summary statistics of all variables are shown in table 6. Most respondents in the sample are employed and only very few are unemployed. The distribution of the interview languages as well as the different language regions seem to fit the overall distribution within Switzerland quite well, since about 68% live in a German-speaking canton, about 28% in a French-speaking and about 4% in an Italian-speaking one. The interview languages are distributed almost in the same way. The average age is between 42 and 43 and with the binary variable *male* having a mean of 0.455, there are a few more women in the sample.

Besides, the majority is married and has an intermediate education, so at least compulsory schooling and no university degree. The average gross household income is 128,761.48 Swiss Francs.¹¹ The satisfaction variables always range from 0 to 10, where 0 displays a complete dissatisfaction and 10 a complete satisfaction. The average of satisfaction with health status is also around 8. Satisfaction with the financial situation and the amount of free time is lower on average, both around 7. The overall satisfaction with democracy has an average of about only 6. The mean of satisfaction with leisure activities is 7.689. The average frequency of depression symptoms, where 0 displays never and 10 always, is almost 2, but still very low. The variable of self-reported health status gives an average of about 4, which displays good health. Most of the respondents went to a doctor in the past year and if they did, they went about 4 times¹². These variables give a quite realistic demonstration of the Swiss society.

4 Methodology

The empirical analysis is performed using three different kinds of models. Since the dependent variable *sat_life* is a discrete variable with several outcomes, different methods are used to deal with that kind of variable in a panel data set.

First, a standard OLS analysis is done, even if the problem of not having a continuous dependent variable is obvious. A pooled regression is estimated first and then a fixed effects analysis is done in order to remove unobserved individual effects. This allows observing how fixed effects change the coefficients.

The second method relies on the conditional logit model with fixed effects based on the work of Chamberlain (1980, 1984) . The following underlying fixed effects model is assumed:

$$y_{it}^* = \alpha_i + x_{it}\beta + \varepsilon_{it} \quad i = 1, \dots, N; t = 1, \dots, T, \quad (1)$$

where y_{it}^* displays unobserved life satisfaction, α_i an individual-fixed effect and x_{it} is a vector of explanatory variables.

One observes

$$y_{it} = 1 \text{ if } y_{it}^* > 0, \text{ and } 0 \text{ otherwise.} \quad (2)$$

The dependent variable life satisfaction will be collapsed into a binary one, where individual average life satisfaction is taken as the threshold. This has to be done because this model is a binary variable approach and there is no formulation for the ordered logit case with fixed effects. The maximum likelihood estimator of β is inconsistent because it is a func-

¹¹The Federal Statistical Office in Neuchâtel indicates the average monthly gross income in 2006 in Switzerland as 8,492 Swiss Francs, which gives a yearly income of 101,904 Swiss Francs. The data sample seems to be composed of more respondents receiving a relatively high wage, which, however, should not seriously harm the analysis.

¹²Since only respondents who indicated they did go to a doctor at least once in the past year were asked how many times they went, there are fewer observations for this variable

tion of the estimators of α , which are not consistent, since they are not converging for fixed T . This is also called the incidental parameters problem. Chamberlain (1984) shows that the conditional likelihood function does not depend on α_i , after one found a minimal sufficient statistic for α_i and conditioned the likelihood function on it. This approach however only works for the logit model and not for the probit, since the logistic shape makes the α_i disappear. The conditional log-likelihood function conditioned on $s = \sum_t y_{it}$ is defined as follows:

$$L = \sum_{i=1}^N \ln \left\{ \frac{\exp(\beta \sum_{t=1}^T x_{it} y_{it})}{\sum_{d \in D_i} \exp(\beta \sum_{t=1}^T x_{it} d_t)} \right\}, \quad (3)$$

where D_i indicated by $d = (d_1, \dots, d_T)$ is the set of all possible combinations of s_i ones and $T - s_i$ zeros. Only $T - 1$ alternative sets are relevant, since individuals for which $\sum_t y_{it} = 0$ or T do not contribute any information to L . This means that only observations for individuals who switched status (from 0 to 1 or 1 to 0 in the 2-period case for example) are used in the estimation. Unfortunately this results in a large data loss.

The third method applied relies on the work of Boes and Winkelmann (2006). They develop a generalized ordered probit model with random effects for panel data. In contrast to the single-index ordered probit model, they formulate a multiple-index model, which is the case for the multinomial logit model for example. In other words the parameters are outcome or category-specific, so they can vary by the different outcome levels. The cut-points are not treated as constants but dependently on regressors. A model of this kind allows seeing if possible effects vary by the level of the satisfaction variable and where they are strongest or weakest.

The cumulative conditional probability that an outcome y_{it} (in this analysis life satisfaction for example) is less than or equal to a category j can be written as follows:

$$P(y_{it} \leq j | x_{it}; \theta_j) = \Phi(-x_{it}\theta_j) \quad j = 1, \dots, J - 1; \quad i = 1, \dots, N; \quad t = 1, \dots, T, \quad (4)$$

where x_{it} denotes a vector of explanatory variables, $\Phi(\cdot)$ the cumulative density function of the standard normal distribution and θ_j a vector of category-specific coefficients and intercepts. In order to make sure to get probabilities in the range of $[0,1]$, the following inequalities have to hold: $x_{it}\theta_j > \dots > x_{it}\theta_{J-1}$. Now unobserved effects which are allowed to be correlated with some elements of x_{it} are included to the model. Conditioning the model on such unobserved effects c_{ij} will avoid bias and take into account unobserved personality traits for example. The modified probability can be rewritten as follows:

$$P(y_{it} \leq j | x_{it}, c_{ij}; \theta_j) = \Phi(-x_{it}\theta_j - c_{ij}) \quad j = 1, \dots, J - 1 \quad (5)$$

and the complete model

$$\begin{aligned}
P(y_{it} = 1|x_{it}, c_i; \theta) &= \Phi(-x_{it}\theta_1 - c_{i1}) \\
P(y_{it} = j|x_{it}, c_i; \theta) &= \Phi(-x_{it}\theta_j - c_{ij}) - \Phi(-x_{it}\theta_{j-1} - c_{i,j-1}) \quad j = 2, \dots, J-1 \\
P(y_{it} = J|x_{it}, c_i; \theta) &= 1 - \Phi(-x_{it}\theta_{J-1} - c_{i,J-1}).
\end{aligned} \tag{6}$$

As seen before leaving the model like this introduces an incidental parameters problem, so the relationship between x_{it} and c_i has to be specified. The correlation between the two can be expressed by treating c_{ij} as a random variable following a conditional normal distribution:

$$c_{ij} = \bar{x}_i\gamma_j + \alpha_i, \tag{7}$$

where \bar{x}_i is the average of x_{it} over time and $\alpha_i|x_i \sim Normal(0, \sigma_\alpha^2)$, an orthogonal error, which accounts for the random effects specification. The latent variable can then be specified as follows:

$$y_{it}^* = x_{it}\theta_j + \bar{x}_i\gamma_j + \alpha_i + \varepsilon_{it}, \tag{8}$$

where ε_{it} is independently normal distributed (Wooldridge, 2002). Since the α_i are not observed, they cannot be part of the likelihood function. They are integrated out in the probabilities (5) when finding the joint distribution of $(y_{i1}, \dots, y_{iT_i})$ conditional on the observed x_i (Greene, 2003). The integral is approximated by a Gauss-Hermite quadrature.

5 Results

This chapter summarizes the results for two different kinds of analyses and a short sensitivity analysis. The baseline regression in the first part is performed using all three models and subsamples as well as for Switzerland as a whole. The subsamples are not only divided up for regions but also for men and women in order to detect possible deviations and to be able to compare the coefficients for the different groups. The following analysis is performed with the linear models and the conditional logit model.¹³

The dependent variable in the linear model with and without fixed effects is the satisfaction variable coded from 0 to 10, therefore falsely assumed to be a quantitative instead of qualitative variable. As explained before, for the conditional logit model one has to collapse the dependent variable into a binary one. Here, the individual average is taken as a threshold, so that the variable will indicate a 1 if the satisfaction response is higher than the individual average and a 0 if not. Ferrer-i Carbonell and Frijters (2004) show that using the individual average rather than the overall average as a cutoff point reduces the data loss significantly.

The baseline regression is also performed with the generalized ordered probit model

¹³The regressions are estimated without time effects since they do not majorly change the results and impose identification problems in the conditional logit case.

and here the dependent variable is the ordered satisfaction variable, from 0 to 10, where the levels 0, 1 and 2 were combined to one single level, since there are very few observations for them. They make up the lowest satisfaction level then.

All analyses were executed using Stata version 11.

5.1 Baseline Regression

Table 7 displays the results for whole Switzerland. There are several findings which are similar across estimation methods. There is a clear negative significant effect of unemployment on life satisfaction compared to the reference group employment. Age has a u-shaped effect since *age* is negative and *age2* is positive, meaning that up to a certain age individuals tend to indicate lower satisfaction levels, which then inverses after reaching the turning age. Being married has a positive effect, where the reference group is being single. The higher education levels show mostly a positive significant effect compared to the reference group low education degree. Income has a positive significant effect throughout estimation methods. Not being in the labor force seems to have a rather negative effect, which is not significant in the conditional logit model. The effect of the other variables is not clear throughout estimation methods. Comparing the pooled with the fixed effects model, one can see that the effect of unemployment reduces by more than twice from -0.914 to -0.371 when one includes fixed effects. Hence, two third of the cross-section effect is explained by unobserved individual characteristics. In the conditional logit model the effect is still highly significant and between the other two models regarding the magnitude. Most results are quite intuitive.

Table 8 and 9 show the results for the subgroups men in the German and Latin part. The negative effect of unemployment in the German-speaking part persists in all estimation methods, where one can again observe a large decrease of the coefficient on unemployment in the fixed effects model. For men living in the Latin region, the effect persists clearly and is stronger in all three estimation methods. The u-shaped effect of age and the positive effect of income are persistent throughout estimation methods, although interestingly in the conditional logit case, German men experience a positive effect from income whereas Latin men experience a positive effect from being married. The other effects differ between estimation methods and from the regression for whole Switzerland, where most signs are still rather intuitive.

The results for women are displayed in tables 10 and 11. The negative effect of unemployment also persists here throughout estimation methods and regions. It is unclear for whom the effect is stronger. Latin women seem positively affected by not being in the labor force. The u-shaped effect of age also seems to persist here. Being married has a clear positive effect, which is stronger for German women. Household income is positively significant throughout estimation methods and regions, whereas the variables concerning education do not yield any clear information. Comparing the unemployment effect for men and women, it is clearly stronger for men, as expected.

Tables 12–15 display the results for the generalized ordered probit model for the same regression. The coefficients have to be interpreted in a different way. As mentioned before, there are now different coefficients for the different satisfaction levels. There are nine levels (by combining the lowest three answers to one level) now and each θ_j displays the coefficients for the dichotomized categories. In other words θ_1 contrasts satisfaction level 1 with levels 2 to 9, θ_2 contrasts levels 1 and 2 with levels 3 to 9 etc.. Positive coefficients indicate a higher probability that the respondent will take a higher level of life satisfaction than the current one. Negative coefficients therefore indicate a higher probability to take the current level or a lower one. Such results help to understand where – at which satisfaction levels – the effects might be stronger or do not play an important role.

Starting with table 12, men in the German part, one can see that the unemployment coefficient is always significantly negative, except for θ_8 . So unemployment seems to matter at almost every satisfaction level for German men, although the coefficients of the intermediate levels indicate the highest significance and magnitude. The effect is quite similar for not being in the labor force, which has a negative significant effect up to the third highest satisfaction level. The table also yields interesting results for the other variables. The u-shaped effect of age seems to matter more for higher values of satisfaction, which is true for being married as well. Being separated or divorced has a negative significant effect for the rather low and intermediate satisfaction values, but does not seem to have an influence at the top. The two highest education levels have a positive significant impact between the intermediate and high values, which is diminishing though and the coefficient of *edu4* even changes sign for the highest value. This could be interpreted as people with higher education experiencing more stress and pressure, which then lowers life satisfaction at the top. The evolution of household income is similar only not significant at θ_8 , which would indicate a decreasing importance of income once people are already more satisfied.

Table 13 displays the results for men in the Latin region. The overall results are similar to the ones for German men, so that the focus will lie on the coefficients concerning the working status. The effect of unemployment is clearly negative and most coefficients are higher in magnitude than the corresponding ones for German men. For the highest satisfaction level it does not seem to have an influence as seen for German men as well. Not being in the labor force does not have such a clear impact though. Only θ_3 and θ_4 are negatively significant.

In table 14 one can see that German women experience a negative effect from unemployment, which is stronger at the bottom and intermediate levels and becomes lower for the high satisfaction levels. The effect is lower than for German men. The probability for the two highest satisfaction levels is not influenced by unemployment. At the low and intermediate values not being in the labor force has a negative effect. Age also shows the u-shaped effect for women and married a positive one. The coefficient on *edu3* has a positive effect for the intermediate values, otherwise education does not seem to have a significant effect on German women as seen in the previous results. On the contrary, the household income

has a clear positive effect up to the last satisfaction level, where it is not significant anymore. The effect is decreasing though, which is similar to the results for men.

Table 15 gives the results for Latin women, where some differences arise. Unemployment has a significant negative effect, whatever satisfaction level. However, the magnitude of the coefficients are not clearly below or above the ones from German women. Latin women are less affected than Latin men. For the three highest levels, the positive effect of not being in the labor force becomes apparent again, which is only observable for Latin women. Being widowed has a much stronger negative effect for Latin than German women in the higher levels and the lowest education level also shows a negative significant effect for almost all coefficients. The positive effect of income also persists here, although the decrease of magnitude is not as clear as for German women.

These tables suggest that there is a clear negative effect of unemployment on life satisfaction. The differences between regions are not very large. Latin men are slightly stronger affected than German men. For women there is no clear direction when comparing the two regions. As seen in the tables for the ordered probit model, unemployment seems to matter more for the intermediate values of life satisfaction than the higher ones. In general, men are stronger affected than women, which could be explained by a stronger attachment to the labor market, as already suggested in the descriptive analysis. The findings that German men seem to be the most negatively affected by not being in the labor force and Latin women the only ones who experience a positive effect support this argument. Also, it might reflect a more traditional view on role patterns in Latin cultures.

5.2 Other Satisfaction and Life Domains as Dependent Variables

Another part of the analysis is to what extent unemployment has an impact on other satisfaction and health domains. Five other satisfaction variables as well as depression and health variables are taken as dependent variable for the same kind of regression.

Table 16 displays the results for financial satisfaction. Unemployment has a clear negative effect, which is persistent throughout estimation methods, regions and gender. The effect is worse for the Latin than the German region, where the difference is more apparent for women. It also appears to be stronger for men than for women. All coefficients are higher than in the baseline regressions, so the relationship between financial satisfaction and unemployment seems stronger than for satisfaction with life as a whole. Since household income was added to the baseline regression already, the indicated effect of unemployment in the previous regression was non-pecuniary. However, this regression shows that a connection between unemployment and the financial situation clearly exists. A negative association between financial satisfaction and not being in the labor force seems to exist only for German men. For the other three regions only the pooled OLS coefficient is significantly different from zero, which is negative for Latin men and positive for women in both regions.

Satisfaction with health status on the contrary does not seem to have such a clear effect

of unemployment as one can see in table 17. The pooled model shows negative significant coefficients for both working states, in the other models not many are significant. In the linear fixed effects model the coefficient on not being in the labor force is also negatively significant for Latin women. After seeing the results for the relationship between not being in the labor force and life satisfaction for Latin women, one would have expected different signs. There does not seem to exist a clear effect of unemployment on satisfaction with health.

As displayed in table 18, satisfaction with democracy does not appear to be affected by unemployment or not being in the labor force, which can be seen as somewhat positive, since people do not form their opinion about the political system according to their working status. There are no significant coefficients for men. For women only in the pooled model are significant effects found, where not being in the labor force raises the overall satisfaction with democracy for women in both regions, and for Latin women unemployment has a negative effect.

Table 19 shows the results for depression as a dependent variable. One has to take into account that the higher the value of the dependent variable is, the more frequent are negative feelings such as feeling depressed in the linear case. The interpretation is similar for the binary dependent variable in the conditional logit, where a positive coefficient indicates a higher probability to have depression symptoms. German men and women appear to be the ones which are most strongly affected by unemployment. All coefficients are significant. For Latin men and women, not all coefficients are significantly different from zero. The coefficient on not in labor force for Latin women is significantly negative in the conditional case, which seems reasonable after having seen the results on life satisfaction. The German region seems to be clearly more affected by unemployment.

Table 20 displays the results concerning satisfaction with free time. As standard economic theory suggests, being unemployed significantly rises the satisfaction with free time and so does not being in the labor force. These effects are persistent throughout estimation methods, regions and gender. The effect of unemployment is weakest for German women. In general men seem to be more positively affected than women by not being in the labor force. This might have something to do with the fact that more women who are not in the labor force are housewives and therefore housework obligations take up a lot of their free time, whereas more men may be retired, so that the perceived value of free time differs between gender.

In table 21 one can see the results for satisfaction with leisure activities, where it is apparent that the results are not very robust throughout estimation methods. A lot of signs change between the pooled model and the other two. One could say that the overall effect is positive, which rather applies to unemployment than not being in the labor force. It is difficult to draw reasonable conclusions from these results.

Table 22 shows results for regressions with variables concerning the health status of a person. Six regressions are conducted, where in the first three self-reported health status

is the dependent variable and in the fourth a binary variable concerning a doctor's visit in the past year is the dependent variable. The last two regressions have the number of doctor visits as dependent variables. Different methods are used, where it is applicable. Unemployment only has a negative effect of the self-reported health status in the pooled model for all subgroups. Not being in the labor force seems to be unhealthy for German men, who were already negatively affected when life satisfaction was the dependent variable. For German men and women, the probability to go to a doctor increases significantly when they are not in the labor force, which could next to the explanation of actually being ill more frequently, also be explained by simply having more time. This issue of interpretation also exists when interpreting the results for the number of visits in the past year. These visits increase significantly especially for German men, no matter whether they are unemployed or not in the labor force. For Latin men, the increasing effect diminishes when applying the fixed effects model. German women go to the doctor more often, when they are not in the labor force.

The results shown above point out that unemployment has a strong effect on particular satisfaction and life domains. Satisfaction with the financial situation and free time show the clearest impacts, which are significant throughout regions, estimation methods and gender and have the intuitive signs. The negative effect on depression appears stronger in the German region, which tends to the hypothesis stated in the beginning that unemployment has a stronger negative effect for Swiss Germans than the other parts of Switzerland. Satisfaction with democracy does not seem to be very much affected and the effect on satisfaction with health and leisure activities is rather diverse and unclear. There seems to be no effect of unemployment on health itself, but the number of visiting a doctor increases, especially for German men. Overall, the effect of unemployment on health variables does not seem to be strong when applying fixed effects models next to the pooled one. This confirms findings by e.g. Böckerman and Ilmakunnas (2009), who find the cross-sectional negative relationship between unemployment and self-reported health disappears when using panel data. A difference between regions only appears with satisfaction with the financial situation, where the Latin region is stronger affected by unemployment, whereas for depression it is just the other way around.

5.3 Sensitivity Analysis

A limitation of the analysis is to estimate the actual correct effect of unemployment regarding the regional culture, since there are certain factors, which could not be controlled for in this study. The two language regions are characterized by a persistent difference in the unemployment rate. The Federal Statistical Office in Neuchâtel indicates that for the period of the analysis 2000-2007, the rate was always about 2 percentage points higher in the non-German-speaking part. In the German part it varied roughly between 1 and 3 percent, in the Latin part between 3 and 5 percent. According to the theory of social comparison, unemployed people living in the German part should then have lower life satisfaction levels when

unemployed since they live in a region with low unemployment compared to their Latin counterpart. This effect was not found. Opposed to the comparison hypothesis, the effect could also go exactly the other way around. Latin men might find it worse to be unemployed exactly because they live in a high unemployment area, which makes them more pessimistic in finding a new job. Furthermore, possible institutional differences concerning unemployment sanctions for instance (unemployment benefits are the same within Switzerland) might also vary between cantons. Therefore canton dummies are included to the regression. The results hardly changed at all, which gives evidence that the main analysis is not much biased regarding that concern. Another interesting idea is to additionally add an interaction term to the baseline regression, which interacts the unemployed individuals in one region with their mother tongue, which is the language of the other region. The interview language is taken as a proxy for the mother tongue, which seems quite reasonable. By doing this, one can find out whether the impact of unemployment is different for a person, who grew up in one region with that kind of cultural background, but now lives in the other region. The results are displayed in table 23. One interesting insight is that the interaction terms for German-speaking men who live in the Latin region are very negatively significant. So it seems that men in the Latin region in general are slightly stronger affected by unemployment than in the German region, which is even more true for men with a Swiss-German background. This could be an indication for the hypothesis that German men experience a stronger impact of unemployment. The other interaction terms are not significant, usually have a negative sign though, which indicates for the Switzerland regression that individuals who speak French or Italian are more negatively affected by unemployment and that in general individuals who live in the region where the mother tongue is not spoken are more strongly affected. An exception are German-speaking women who live in the Latin region, for whom the coefficient in the pooled regression is positive. These statements are very vague though, since no statistical significance is given.

A similar analysis is conducted for the three bilingual cantons, even if there is the obvious limitation of the reduction of the number of observations. The results are displayed in table 24. The interaction term refers to the French-speaking part, but none of them are significant. The signs are different for men and women, which indicate that French-speaking men are less negatively influenced than German-speaking men, since the interaction term is positive. This is another indication for the hypothesis that German men are more strongly affected by unemployment. However, since it is based on a non-significant coefficient, it will not be stated as a conclusion. For women it is the other way around, the interaction term for the French-speaking is negative, but not significant either.

It seems that it is very difficult to disentangle the effect of culture and regional environment, since there seem to be differences for the people who come from one region and live in the other. There is scope for further analysis whether this is really the case (since most coefficients are not significant) and where it comes from. Is it the cultural background one experiences life with or the different environment, which might make it harder to cope with the situation?

6 Conclusion

This paper examines the effect of unemployment on life satisfaction in Switzerland, where possible differences in the effect for different cultural regions are taken into account. In particular, the German-speaking region is compared with the region, where languages originated from Latin are spoken. Men and women are also separately analyzed. Furthermore, the effect on other satisfaction and life domains is investigated. The data is taken from the Swiss Household Panel and the sample covers the years 2000–2007. The estimations are performed with several models in order to treat an ordered dependent variable in a panel data setting.

The negative effect of unemployment on subjective well-being, which has been found in several other studies, is also very apparent in Switzerland. The effect is stronger for men than for women, but concerning the regions, the effect is not as clear. Latin men are slightly stronger affected, for women there is no clear difference. A sensitivity analysis shows that German-speaking men who live in the Latin region are affected more strongly by unemployment than the Latin-speaking residents. The effect of unemployment on other satisfaction domains becomes clearest for satisfaction with financial situation and free time, whose effects seem like a trade-off for the overall effect of unemployment. The negative effect on satisfaction with financial situation and the positive effect on free time have almost the same magnitude, the first effect seems slightly higher. One indication for German men and women to be worse affected by unemployment than Latin individuals are their results on depression, where unemployment hits the Swiss Germans harder. No robust effect of unemployment on other health domains is found.

One question concerns the way the different regions indicated their life satisfaction. The descriptive analysis showed that on average individuals in the German region indicated higher values. Here a difficulty in happiness research arises because one could interpret these results in several ways. Firstly, people in the German region are happier than the ones in the other region. Secondly, the interpretation of the scale is different between regions, so that individuals in the German region only tend to indicate higher values even if the subjective well-being is actually similar across groups (or higher in the Latin region). Thirdly, people in the German region might indicate higher values of life satisfaction even if they are not true. They might be ashamed of indicating lower values or feel like they have to be happier “officially”. The same interpretations of course also apply when looking from the perspective of the Latin region. Consequently, it is difficult to clearly interpret the data when working with subjective variables, especially when comparing different groups with each other.

The overall effect of unemployment and the analysis using other satisfaction variables yield some very clear results. However, the hypothesis of having distinct differences between the regions could not be clearly confirmed. Other data structures with more variables concerning the regional environment would be needed for clarification. New studies might change some of the results. Or maybe, Switzerland is less heterogenous than people think.

References

- Büchi, C. (2000). *Röstigraben. Das Verhältnis zwischen deutscher und französischer Schweiz. Geschichte und Perspektiven*. Verlag Neue Zürcher Zeitung.
- Böckerman, P. and P. Ilmakunnas (2005). Elusive Effects of Unemployment on Happiness. Discussion Paper 47, Helsinki Center of Economic Research.
- Böckerman, P. and P. Ilmakunnas (2009). Unemployment and self-assessed health: evidence from panel data. *Health Economics* 18, 161–179.
- Björklund, A. (1985). Unemployment and Mental Health: Some Evidence from Panel Data. *The Journal of Human Resources* 20(4), 469–483.
- Björklund, A. and T. Eriksson (1998). Unemployment and Mental Health: Evidence from Research in the Nordic Countries. *Scandinavian Journal of Social Welfare* 7, 219–235.
- Blanchflower, D. and A. Oswald (2004). Well-Being over Time in Britain and the USA. *Journal of Public Economics* 88, 1359–1386.
- Boes, S. and R. Winkelmann (2006). The Effect of Income on Positive and Negative Subjective Well-Being. Working Paper 0605, Socioeconomic Institute University of Zürich.
- Brügger, B., R. Lalive, and J. Zweimüller (2009). Does Culture Affect Unemployment? Evidence from the Röstigraben. IZA Discussion Paper 4283, Institute for the Study of Labor (IZA), Bonn.
- Chamberlain, G. (1980). Analysis of Covariance with Qualitative Data. *The Review of Economic Studies* 47, 225–238.
- Chamberlain, G. (1984). Panel Data. In Z. Griliches and M. Intriligator (Eds.), *Handbook of Econometrics*, Volume 2, Amsterdam, pp. 1247–1318. Elsevier.
- Clark, A., Y. Georgellis, and P. Sanfey (2001). Scarring: The Psychological Impact of Past Unemployment. *Economica* 68(270), 221–241.
- Clark, A. and A. Oswald (1994). Unhappiness and Unemployment. *The Economic Journal* 104, 648–659.
- Clark, A. E. (2003). Unemployment as a Social Norm: Psychological Evidence from Panel Data. *Journal of Labor Economics* 21(2), 323–351.
- Di Tella, R., M. R., and A. Oswald (2001). Preferences over Inflation and Unemployment: Evidence from Surveys of Happiness. *The American Economic Review* 91, 335–341.
- Diener, E. and R. Lucas (2000). Subjective Emotional Well-Being. In M. Lewis and J. Haviland (Eds.), *Handbook of Emotions*, New York, pp. 325–337. Guilford. 2nd edition.
- Diener, E. and M. Seligman (2004). Beyond Money: Toward an Economy of Well-Being. *Psychological Science in the Public Interest* 5, 1–31.
- Diener, E. and E. Suh (1999). National Differences in Subjective Well-Being. In D. Kahneman, E. Diener, and N. Schwarz (Eds.), *Well-being: The Foundations of Hedonic Psychology*, New York, pp. 434–450. Russell Stage Foundation.
- Easterlin, R. (1974). Does Economic Growth Improve the Human Lot? Some Empirical Evidence. In P. David and M. Reder (Eds.), *Nations and Households in Economic Growth: Essays in Honor of Moses Abramovitz*, New York and London, pp. 89–125. Academic Press.
- Ferrer-i Carbonell, A. and P. Frijters (2004). How important is Methodology for the Estimates of the Determinants of Happiness? *The Economic Journal* 114, 641–659.
- Freeman, R. (1978). Job Satisfaction as an Economic Variable. *The American Economic Review* 68, 135–141.
- Frey, B. and A. Stutzer (2002a). *Happiness and Economics: How the Economy and Institutions Affect Human Well-Being*. Princeton: Princeton University Press.
- Frey, B. and A. Stutzer (2002b). What can Economists learn from Happiness Research? *Journal of Economic Literature* 40, 402–435.

- Frey, B. and A. Stutzer (2008). Das Glück aus ökonomischer Sicht. In B. Hentschel and G. Staube (Eds.), *Glück – welches Glück.*, München, pp. 89–102. Carl Hanser Verlag.
- Gerlach, K. and G. Stephan (1996). A Paper on Unhappiness and Unemployment in Germany. *Economics Letters* 52, 325–330.
- Graham, C. (2008). The Economics of Happiness. In S. Durlauf and L. Blume (Eds.), *The New Palgrave Dictionary of Economics*. Palgrave Macmillan. 2nd edition.
- Greene, W. (2003). *Econometric Analysis* (5th ed.). Upper Sadle River, NJ: Prentice Hall.
- Hofstede, G. (1984). *Culture's Consequences. International Differences in Work-Related Values* (Abridged ed.). London and Beverly Hills: Sage Publications.
- Kassenboehmer, S. and J. Haisken-DeNew (2008). You're Fired! The Causal Negative Effect of Unemployment on Life Satisfaction. Ruhr Economic Paper 63, Rheinisch-Westfälisches Institut für Wirtschaftsforschung.
- Murphy, G. and J. Athanasou (1999). The Effect of Unemployment on Mental Health. *Journal of Occupational and Organizational Psychology* 72, 83–99.
- Namazie, C. and P. Sanfey (1998). Happiness in Transition: the Case of Kyrgyzstan. Studies in Economics 9808, University of Kent.
- Oswald, A. (2006). The Hippies were right all along about Happiness. Financial Times.
- Triandis, H. (2000). Cultural Syndromes and Subjective Well-Being. In E. Diener and M. Suh (Eds.), *Culture and Subjective Well-Being*, Cambridge, MA, pp. 13–36. MIT Press.
- Winkelmann, L. and R. Winkelmann (1995). Unemployment: Where does it hurt? Discussion Paper 1093, Center for Economic Policy Research.
- Winkelmann, L. and R. Winkelmann (1998). Why are the Unemployed So Unhappy? Evidence from Panel Data. *Economica* 65, 1–15.
- Wooldridge, J. (2002). *Econometric Analysis of Cross Section and Panel Data*. Cambridge, MA: MIT Press.

Appendix

Tables

Table 1: Average Life Satisfaction, Working Status & Residence (2000-2007)

	All	Frenchcanton	Germancanton	Italiancanton
All				
Mean	7.968	7.783	8.050	7.846
Std. Dev.	1.444	1.573	1.378	1.494
N	34605	9568	23728	1309
Employed				
Mean	7.992	7.805	8.069	7.888
Std. Dev.	1.359	1.484	1.299	1.376
N	28659	7724	19987	948
Unemployed				
Mean	6.917	6.679	7.091	6.714
Std. Dev.	2.005	2.175	1.887	1.782
N	630	240	362	28
Not in Labor Force				
Mean	7.965	7.842	8.038	7.820
Std. Dev.	1.733	1.807	1.693	1.740
N	5316	1604	3379	333
Men All				
Mean	7.929	7.803	7.982	7.855
Std. Dev.	1.394	1.502	1.348	1.385
N	15757	4247	10915	595
Men Employed				
Mean	7.97	7.858	8.015	7.911
Std. Dev.	1.32	1.426	1.275	1.305
N	14315	3800	9996	519
Men Unemployed				
Mean	6.621	6.370	6.793	7
Std. Dev.	2.056	2.277	1.893	1.225
N	240	100	135	5
Men Not in Labor Force				
Mean	7.703	7.611	7.761	7.507
Std. Dev.	1.872	1.790	1.909	1.843
N	1202	347	784	71
Women All				
Mean	8.000	7.767	8.108	7.838
Std. Dev.	1.483	1.628	1.400	1.581
N	18848	5321	12830	714
Women Employed				
Mean	8.013	7.753	8.122	7.86
Std. Dev.	1.397	1.536	1.321	1.458
N	14344	3924	9991	429
Women Unemployed				
Mean	7.100	6.9	7.269	6.652
Std. Dev.	1.953	2.079	1.866	1.898
N	390	140	227	23
Women Not in Labor Force				
Mean	8.042	7.905	8.122	7.905
Std. Dev.	1.683	1.808	1.613	1.705
N	4114	1257	2595	262

Source: Swiss Household Panel (SHP), own calculations.

Table 2: Average Life Satisfaction, Working Status & Canton (2000-2007)

Canton	All		Employed		Unemployed		Not in Labor Force	
	Mean	N	Mean	N	Mean	N	Mean	N
Argovia (AG)	8.007	3083	8.045	2583	6.667	57	7.950	443
Appenzell Inner-Rhodes (AI)	7.643	28	7.808	26	-	0	5.5	2
Appenzell Outer-Rhodes (AR)	8.013	237	7.913	196	4	1	8.6	40
Berne (BE)	8.097	4169	8.077	3558	7.326	46	8.281	565
Basel-Town (BS)	7.905	749	7.944	622	6.643	14	7.850	113
Basel-Country (BL)	8.071	1201	8.083	952	7.429	21	8.079	228
Fribourg (FR)	7.860	1419	7.887	1217	6.125	16	7.839	186
Geneva (GE)	7.626	1565	7.621	1261	6.25	52	7.937	252
Glarus (GL)	8.178	169	8.17	141	8	3	8.24	25
Grisons (GR)	8.381	682	8.433	580	7.714	7	8.116	95
Jura (JU)	7.708	65	7.614	57	-	0	8.375	8
Lucerne (LU)	8.008	1810	8.056	1530	7.486	35	7.784	245
Neuchâtel (NE)	7.747	1965	7.778	1586	6.846	52	7.737	327
Nidwalden (NW)	7.987	159	7.939	147	6	1	8.818	11
Obwalden (OW)	8.275	189	8.395	167	6.5	2	7.45	20
St. Gall (SG)	8.154	1920	8.154	1649	7.556	18	8.194	253
Schaffhausen (SH)	7.944	323	7.930	273	6.8	5	8.156	45
Solothurn (SO)	8.02	1241	7.999	1077	7.455	11	8.209	153
Schwyz (SZ)	8.177	640	8.199	529	8.111	9	8.059	102
Thurgovia (TG)	8.040	757	8.090	636	7	6	7.817	115
Ticino (TI)	7.846	1309	7.888	948	6.714	28	7.820	333
Uri (UR)	8.475	99	8.452	84	7	1	8.714	14
Vaud (VD)	7.756	3346	7.806	2681	6.901	101	7.668	564
Valais (VS)	8.033	1208	8.003	922	6.684	19	8.231	267
Zug (ZG)	8.002	425	7.969	354	7.333	12	8.339	59
Zurich (ZH)	7.984	5847	8.025	4883	6.867	113	7.892	851

Source: Swiss Household Panel (SHP), own calculations.

Table 3: Average Life Satisfaction, Interview Language & Canton (2000-2007)

Canton	All		French		German		Italian	
	Mean	N	Mean	N	Mean	N	Mean	N
AG	8.007	3083	6.824	34	8.026	3007	7.571	42
AI	7.643	28	-	0	7.643	28	-	0
AR	8.013	237	-	0	8.013	237	-	0
BE	8.097	4169	7.949	549	8.122	3608	7.333	12
BS	7.905	749	9	3	7.912	737	7	9
BL	8.071	1201	7.941	17	8.072	1179	8.199	5
FR	7.860	1419	7.832	1065	7.937	348	8.5	6
GE	7.626	1565	7.622	1528	8.24	25	6.917	12
GL	8.178	169	-	0	8.253	162	6.429	7
GR	8.381	682	-	0	8.419	637	7.844	45
JU	7.708	65	7.708	65	-	0	-	0
LU	8.008	1810	7.333	6	8.031	1782	6.318	22
NE	7.747	1965	7.739	1923	8.237	38	6.75	4
NW	7.987	159	-	0	7.987	159	-	0
OW	8.275	189	-	0	8.275	189	-	0
SG	8.154	1920	-	0	8.161	1898	7.545	22
SH	7.944	323	-	0	7.947	322	7	1
SO	8.02	1241	-	0	8.033	1224	7.059	17
SZ	8.177	640	-	0	8.212	632	5.375	8
TG	8.040	757	-	0	8.060	736	7.333	21
TI	7.846	1309	7.667	15	7.186	59	7.879	1235
UR	8.475	99	-	0	8.475	99	-	0
VD	7.756	3346	7.747	3265	8.154	71	7.7	10
VS	8.033	1208	7.945	955	8.371	251	8	2
ZG	8.002	425	10	1	8.035	404	7.25	20
ZH	7.984	5847	8.077	77	8.002	5651	7.067	119

Source: Swiss Household Panel (SHP), own calculations.

Table 4: Average Change in Life Satisfaction by Working Status

Working Status in t-1	Working Status in t		
	Employed	Unemployed	Not in Labor Force
Employed			
Mean	-0.052	-0.490	-0.113
Std. Dev.	1.233	1.824	1.345
N	18110	200	752
Unemployed			
Mean	0.441	-0.176	-0.593
Std. Dev.	1.465	2.221	1.984
N	238	85	59
Not in Labor Force			
Mean	-0.038	-0.057	-0.073
Std. Dev.	1.271	1.614	1.449
N	728	88	2526

Source: Swiss Household Panel (SHP), own calculations.

Table 5: Average Change in Life Satisfaction by Working Status & Regions

	German Men	Latin Men	German Women	Latin Women
Employed in t-1 and Unemployed in t				
Mean	-0.776	-0.771	-0.016	-0.543
Std. Dev.	1.797	2.184	1.396	1.986
N	58	35	61	46
Unemployed in t-1 and Employed in t				
Mean	0.542	0.349	0.581	0.230
Std. Dev.	1.414	1.289	1.507	1.564
N	48	43	86	61

Source: Swiss Household Panel (SHP), own calculations.

Table 6: Summary Statistics

Variable	Mean	Std. Dev.	Min.	Max.	N
Employed	0.828	0.377	0	1	34605
Unemployed	0.018	0.134	0	1	34605
Not in the labor force	0.154	0.361	0	1	34605
German Canton	0.686	0.464	0	1	34605
French Canton	0.276	0.447	0	1	34605
Italian Canton	0.038	0.191	0	1	34605
Latin Canton	0.314	0.464	0	1	34605
Interview language German	0.679	0.467	0	1	34605
Interview language French	0.275	0.446	0	1	34605
Interview language Italian	0.047	0.211	0	1	34605
Age	42.635	11.59	20	64	34605
Age Squared	1952.114	990.336	400	4096	34605
Male	0.455	0.498	0	1	34605
Single	0.252	0.434	0	1	34605
Separated/Divorced	0.1	0.3	0	1	34605
Widowed	0.015	0.122	0	1	34605
Married	0.633	0.482	0	1	34605
No educational degree	0.005	0.07	0	1	34605
Low educational degree	0.495	0.5	0	1	34605
Intermediate educational degree	0.355	0.479	0	1	34605
High educational degree	0.145	0.352	0	1	34605
Gross household income	128,761.48	106555.951	1700	5120000	34605
Logarithm of gross hh income	11.611	0.549	7.438	15.449	34605
Life Satisfaction	7.968	1.444	0	10	34605
Satisfaction with health	8.073	1.708	0	10	34605
Satisfaction with financial situation	7.075	2.095	0	10	34605
Satisfaction with democracy	6.037	1.881	0	10	34605
Satisfaction with free time	6.92	2.478	0	10	34605
Satisfaction with leisure	7.689	2.07	0	10	34605
Depression	1.972	2.039	0	10	34605
Health Status	4.106	0.588	1	5	34605
Doctor visit last year	0.726	0.446	0	1	34605
Number of doctor visits last year	4.324	8.276	0	300	28308

Source: Swiss Household Panel (SHP), own calculations.

Table 7: Baseline Regression Switzerland

	Pooled OLS (1)	OLS Fixed Effects (2)	Conditional Logit (3)
Unemployed	-0.914 (0.057)***	-0.371 (0.051)***	-0.589 (0.107)***
Not in labor force	-0.055 (0.022)**	-0.048 (0.028)*	0.009 (0.06)
Age	-0.081 (0.005)***	-0.127 (0.013)***	-0.216 (0.029)***
Age Squared	0.0009 (0.00006)***	0.0009 (0.0001)***	0.001 (0.0003)***
Married	0.28 (0.022)***	0.289 (0.056)***	0.669 (0.122)***
Separated/Divorced	-0.316 (0.032)***	0.046 (0.079)	0.308 (0.168)*
Widowed	-0.078 (0.066)	-0.477 (0.185)**	0.068 (0.38)
No educ. degree	-0.535 (0.108)***	0.096 (0.337)	-0.720 (0.714)
Intermediate educ. degree	0.053 (0.017)***	0.157 (0.064)**	0.293 (0.135)**
High educ. degree	-0.050 (0.023)**	0.23 (0.092)**	0.36 (0.198)*
Log. gross hh income	0.41 (0.015)***	0.16 (0.021)***	0.261 (0.045)***
Intercept	4.708 (0.199)***	9.502 (0.355)***	
N	34605	34605	28090
R ² /R ² /Log Likelihood	0.064	0.018	-11455.43

Source: Swiss Household Panel (SHP), own calculations.

Note: Significance levels: * : 10% ** : 5% *** : 1%. Dependent variable: life satisfaction. Standard errors in parentheses. Conditional Logit: Dependent variable = 1 if life satisfaction response is higher than individual average. The reference group for working status is being employed, for marital status being single and for the education variables low education degree.

Table 8: Baseline Regression Men German Part

	Pooled OLS (1)	OLS Fixed Effects (2)	Conditional Logit (3)
Unemployed	-1.098 (0.115)***	-0.457 (0.103)***	-0.688 (0.228)***
Not in labor force	-0.346 (0.053)***	-0.261 (0.066)***	-0.122 (0.146)
Age	-0.082 (0.009)***	-0.080 (0.023)***	-0.138 (0.052)***
Age Squared	0.001 (0.0001)***	0.0005 (0.0002)*	0.0008 (0.0006)
Married	0.223 (0.037)***	0.151 (0.091)*	0.318 (0.213)
Separated/Divorced	-0.222 (0.057)***	-0.280 (0.13)**	-0.357 (0.3)
Widowed	-0.151 (0.133)	-0.779 (0.456)*	-13.821 (624.899)
No educ. degree	-0.624 (0.178)***	0.102 (0.393)	-0.762 (0.861)
Intermediate educ. degree	0.08 (0.028)***	0.215 (0.1)**	0.385 (0.224)*
High educ. degree	0.015 (0.039)	0.214 (0.144)	0.443 (0.329)
Log. gross hh income	0.315 (0.025)***	0.075 (0.035)**	0.131 (0.079)*
Intercept	5.771 (0.357)***	9.470 (0.606)***	
N	10915	10915	8755

Source: Swiss Household Panel (SHP), own calculations.

Note: Significance levels: * : 10% ** : 5% *** : 1%. Dependent variable: life satisfaction. Standard errors in parentheses. Conditional Logit: Dependent variable = 1 if life satisfaction response is higher than individual average. The reference group for working status is being employed, for marital status being single and for the education variables low education degree.

Table 9: Baseline Regression Men Latin Part

	Pooled OLS (1)	OLS Fixed Effects (2)	Conditional Logit (3)
Unemployed	-1.306 (0.142)***	-0.648 (0.136)***	-0.899 (0.276)***
Not in labor force	-0.291 (0.08)***	-0.055 (0.1)	-0.020 (0.196)
Age	-0.102 (0.015)***	-0.221 (0.038)***	-0.335 (0.078)***
Age Squared	0.001 (0.0002)***	0.002 (0.0004)***	0.003 (0.0009)***
Married	0.296 (0.065)***	0.257 (0.145)*	0.618 (0.297)**
Separated/Divorced	-0.449 (0.094)***	-0.036 (0.205)	0.387 (0.417)
Widowed	0.253 (0.352)	-0.461 (0.691)	0.487 (1.349)
No educ. degree	0.351 (0.276)	-0.456 (1.410)	
Intermediate educ. degree	0.137 (0.047)***	0.046 (0.172)	0.146 (0.35)
High educ. degree	0.108 (0.057)*	0.018 (0.227)	-0.096 (0.476)
Log. gross hh income	0.49 (0.042)***	0.146 (0.061)**	0.18 (0.126)
Intercept	4.009 (0.578)***	11.132 (0.996)***	
N	4842	4842	3905

Source: Swiss Household Panel (SHP), own calculations.

Note: Significance levels: * : 10% ** : 5% *** : 1%. Dependent variable: life satisfaction. Standard errors in parentheses. Conditional Logit: Dependent variable = 1 if life satisfaction response is higher than individual average. The reference group for working status is being employed, for the marital status it is being single and for the education variables it is low education degree.

Table 10: Baseline Regression Women German Part

	Pooled OLS (1)	OLS Fixed Effects (2)	Conditional Logit (3)
Unemployed	-0.733 (0.092)***	-0.270 (0.082)***	-0.465 (0.18)***
Not in labor force	-0.086 (0.032)***	-0.055 (0.039)	-0.097 (0.086)
Age	-0.092 (0.008)***	-0.099 (0.022)***	-0.175 (0.049)***
Age Squared	0.001 (0.00009)***	0.0006 (0.0002)*	0.0007 (0.0005)
Married	0.314 (0.036)***	0.425 (0.093)***	1.128 (0.217)***
Separated/Divorced	-0.204 (0.049)***	0.47 (0.13)***	1.154 (0.288)***
Widowed	0.031 (0.092)	-0.461 (0.281)	0.371 (0.609)
No educ. degree	-0.480 (0.198)**	-0.429 (0.693)	-12.598 (504.110)
Intermediate educ. degree	0.09 (0.027)***	0.124 (0.101)	0.227 (0.218)
High educ. degree	-0.059 (0.044)	0.281 (0.156)*	0.349 (0.345)
Log. gross hh income	0.363 (0.023)***	0.2 (0.032)***	0.319 (0.073)***
Intercept	5.522 (0.308)***	8.585 (0.576)***	
N	12813	12813	10359

Source: Swiss Household Panel (SHP), own calculations.

Note: Significance levels: * : 10% ** : 5% *** : 1%. Dependent variable: life satisfaction. Standard errors in parentheses. Conditional Logit: Dependent variable = 1 if life satisfaction response is higher than individual average. The reference group for working status is being employed, for the marital status it is being single and for the education variables it is low education degree.

Table 11: Baseline Regression Women Latin Part

	Pooled OLS (1)	OLS Fixed Effects (2)	Conditional Logit (3)
Unemployed	-.710 (0.123)***	-.283 (0.113)**	-.486 (0.214)**
Not in labor force	0.155 (0.049)***	0.1 (0.066)	0.29 (0.126)**
Age	-.093 (0.014)***	-.199 (0.035)***	-.335 (0.068)***
Age Squared	0.001 (0.0002)***	0.002 (0.0004)***	0.003 (0.0008)***
Married	0.275 (0.059)***	0.297 (0.157)*	0.545 (0.296)*
Separated/Divorced	-.512 (0.077)***	-.104 (0.218)	-.164 (0.42)
Widowed	-.422 (0.148)***	-.351 (0.363)	0.288 (0.625)
No educ. degree	-.952 (0.249)***	2.802 (1.514)*	11.757 (425.234)
Intermediate educ. degree	0.058 (0.045)	0.107 (0.221)	0.252 (0.46)
High educ. degree	0.005 (0.059)	0.417 (0.314)	0.92 (0.627)
Log. gross hh income	0.534 (0.039)***	0.252 (0.058)***	0.467 (0.116)***
Intercept	3.581 (0.508)***	9.942 (0.927)***	
N	6035	6035	5007

Source: Swiss Household Panel (SHP), own calculations.

Note: Significance levels: * : 10% ** : 5% *** : 1%. Dependent variable: life satisfaction. Standard errors in parentheses. Conditional Logit: Dependent variable = 1 if life satisfaction response is higher than individual average. The reference group for working status is being employed, for the marital status it is being single and for the education variables it is low education degree.

Table 12: Generalized Ordered Probit Men German Part

	θ_1		θ_2		θ_3	
Unemployed	-0.670*	(0.350)	-0.570**	(0.266)	-0.653***	(0.220)
Not in labor force	-1.167***	(0.215)	-0.962***	(0.170)	-0.674***	(0.134)
Age	-0.080	(0.053)	-0.098**	(0.041)	-0.045	(0.031)
Age Squared	0.001*	(0.001)	0.001**	(0.000)	0.000	(0.000)
Married	0.001	(0.280)	-0.009	(0.179)	0.161	(0.134)
Separated/Divorced	0.498	(0.323)	-0.659***	(0.216)	-0.386**	(0.171)
Widowed	10.456	(405.070)	5.337	(220.873)	0.612	(0.613)
No educ. degree	0.182	(0.612)	-0.579	(0.454)	-0.684*	(0.399)
Intermediate educ. degree	0.546**	(0.230)	0.540***	(0.154)	0.171	(0.110)
High educ. degree	0.348	(0.283)	0.321	(0.200)	-0.027	(0.147)
Log. gross hh income	0.251*	(0.152)	0.287***	(0.106)	0.358***	(0.083)
Intercept	2.585	(2.233)	2.260	(1.523)	0.002	(1.190)
	θ_4		θ_5		θ_6	
Unemployed	-0.814***	(0.167)	-0.916***	(0.154)	-0.671***	(0.148)
Not in labor force	-0.479***	(0.104)	-0.423***	(0.094)	-0.176**	(0.082)
Age	-0.045**	(0.022)	-0.052***	(0.019)	-0.080***	(0.016)
Age Squared	0.000	(0.000)	0.001**	(0.000)	0.001***	(0.000)
Married	0.332***	(0.095)	0.358***	(0.082)	0.457***	(0.068)
Separated/Divorced	-0.345***	(0.126)	-0.316***	(0.113)	-0.215**	(0.102)
Widowed	0.043	(0.368)	0.155	(0.357)	0.563*	(0.332)
No educ. degree	-0.278	(0.326)	-0.437	(0.288)	-0.392	(0.266)
Intermediate educ. degree	0.370***	(0.078)	0.274***	(0.067)	0.192***	(0.057)
High educ. degree	0.306***	(0.112)	0.229**	(0.097)	0.201**	(0.080)
Log. gross hh income	0.484***	(0.062)	0.434***	(0.052)	0.295***	(0.043)
Intercept	-2.267***	(0.871)	-2.096***	(0.735)	-1.135*	(0.599)
	θ_7		θ_8			
Unemployed	-0.432**	(0.185)	-0.447	(0.284)		
Not in labor force	-0.081	(0.083)	-0.072	(0.099)		
Age	-0.103***	(0.016)	-0.069***	(0.018)		
Age Squared	0.001***	(0.000)	0.001***	(0.000)		
Married	0.350***	(0.069)	0.383***	(0.083)		
Separated/Divorced	-0.008	(0.109)	0.056	(0.129)		
Widowed	0.078	(0.283)	0.338	(0.298)		
No educ. degree	-0.295	(0.294)	-0.207	(0.365)		
Intermediate educ. degree	0.145**	(0.057)	-0.092	(0.064)		
High educ. degree	0.129*	(0.078)	-0.339***	(0.093)		
Log. gross hh income	0.134***	(0.040)	-0.043	(0.046)		
Intercept	-0.512	(0.573)	-0.157	(0.663)		
N	10915					
Log-likelihood	-15094.521					

Source: Swiss Household Panel (SHP), own calculations.

Note: Significance levels: * : 10% ** : 5% *** : 1%. Dependent variable: life satisfaction. Standard errors in parentheses. The reference group for working status is being employed, for the marital status it is being single and for the education variables it is low education degree.

Table 13: *Generalized Ordered Probit Men Latin Part*

	θ_1		θ_2		θ_3	
Unemployed	-1.039**	(0.454)	-0.515*	(0.305)	-0.872***	(0.225)
Not in labor force	-0.189	(0.296)	-0.262	(0.228)	-0.405**	(0.179)
Age	-0.177***	(0.069)	-0.140***	(0.050)	-0.118***	(0.043)
Age Squared	0.002**	(0.001)	0.002***	(0.001)	0.001***	(0.000)
Married	0.584**	(0.293)	0.202	(0.222)	0.230	(0.191)
Separated/Divorced	-0.189	(0.339)	-0.665**	(0.269)	-0.596***	(0.230)
Widowed	2.770	(570.999)	-9.305	(2133.897)	4.254	(410.408)
No educ. degree	-10.900	(286.805)	0.000	(0.000)	4.172	(221.591)
Intermediate educ. degree	0.242	(0.213)	0.390**	(0.174)	0.203	(0.141)
High educ. degree	0.604*	(0.319)	0.644**	(0.254)	0.435**	(0.202)
Log. gross hh income	0.122	(0.187)	0.343**	(0.135)	0.417***	(0.109)
Intercept	5.486**	(2.676)	1.853	(1.851)	0.255	(1.469)
	θ_4		θ_5		θ_6	
Unemployed	-1.089***	(0.185)	-0.896***	(0.180)	-0.892***	(0.181)
Not in labor force	-0.237*	(0.139)	-0.140	(0.124)	-0.051	(0.110)
Age	-0.135***	(0.033)	-0.116***	(0.028)	-0.104***	(0.025)
Age Squared	0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000)
Married	0.350**	(0.145)	0.487***	(0.128)	0.476***	(0.110)
Separated/Divorced	-0.377**	(0.183)	-0.254	(0.167)	-0.166	(0.151)
Widowed	-7.015	(5442.065)	5.096	(573.204)	0.956	(0.597)
No educ. degree	-8.840	(224.563)	5.997	(326.968)	1.757**	(0.714)
Intermediate educ. degree	0.424***	(0.107)	0.418***	(0.095)	0.144*	(0.083)
High educ. degree	0.597***	(0.149)	0.474***	(0.128)	0.259**	(0.109)
Log. gross hh income	0.542***	(0.084)	0.540***	(0.074)	0.397***	(0.065)
Intercept	-1.639	(1.158)	-2.516**	(1.011)	-2.022**	(0.875)
	θ_7		θ_8			
Unemployed	-0.636***	(0.229)	0.319	(0.243)		
Not in labor force	-0.035	(0.113)	-0.132	(0.138)		
Age	-0.137***	(0.025)	-0.118***	(0.029)		
Age Squared	0.002***	(0.000)	0.001***	(0.000)		
Married	0.218*	(0.111)	0.283**	(0.127)		
Separated/Divorced	0.015	(0.160)	0.110	(0.185)		
Widowed	0.219	(0.547)	0.274	(0.693)		
No educ. degree	0.455	(0.493)	0.721	(0.502)		
Intermediate educ. degree	0.147*	(0.083)	-0.124	(0.093)		
High educ. degree	0.133	(0.109)	-0.346***	(0.125)		
Log. gross hh income	0.190***	(0.067)	-0.053	(0.079)		
Intercept	-0.566	(0.904)	1.286	(1.059)		
N	4842					
Log-likelihood	-6917.196					

Source: Swiss Household Panel (SHP), own calculations.

Note: Significance levels: * : 10% ** : 5% *** : 1%. Dependent variable: life satisfaction. Standard errors in parentheses. The reference group for working status is being employed, for the marital status it is being single and for the education variables it is low education degree.

Table 14: *Generalized Ordered Probit Women German Part*

	θ_1		θ_2		θ_3	
Unemployed	-0.111	(0.328)	-0.440*	(0.233)	-0.672***	(0.185)
Not in labor force	-0.077	(0.189)	-0.419***	(0.133)	-0.456***	(0.108)
Age	-0.166**	(0.069)	-0.048	(0.042)	-0.116***	(0.034)
Age Squared	0.002**	(0.001)	0.001	(0.000)	0.001***	(0.000)
Married	0.518**	(0.246)	0.159	(0.174)	0.587***	(0.132)
Separated/Divorced	0.581*	(0.298)	-0.391**	(0.195)	-0.114	(0.152)
Widowed	0.944	(0.610)	-0.497	(0.336)	0.001	(0.283)
No educ. degree	-3.977***	(0.992)	-13.352	(20956.231)	7.391	(13403.935)
Intermediate educ. degree	-0.007	(0.206)	0.132	(0.136)	0.099	(0.111)
High educ. degree	0.012	(0.289)	-0.212	(0.195)	-0.112	(0.170)
Log. gross hh income	0.838***	(0.126)	0.577***	(0.090)	0.518***	(0.079)
Intercept	-1.870	(1.930)	-2.073*	(1.258)	-0.438	(1.076)
	θ_4		θ_5		θ_6	
Unemployed	-0.612***	(0.132)	-0.484***	(0.123)	-0.451***	(0.114)
Not in labor force	-0.245***	(0.071)	-0.201***	(0.061)	-0.061	(0.049)
Age	-0.106***	(0.021)	-0.101***	(0.018)	-0.082***	(0.015)
Age Squared	0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000)
Married	0.537***	(0.092)	0.526***	(0.080)	0.460***	(0.070)
Separated/Divorced	-0.033	(0.112)	0.040	(0.102)	0.028	(0.093)
Widowed	-0.014	(0.193)	-0.057	(0.177)	-0.048	(0.166)
No educ. degree	-0.273	(0.428)	-0.135	(0.405)	-0.206	(0.351)
Intermediate educ. degree	0.281***	(0.074)	0.161**	(0.063)	0.162***	(0.054)
High educ. degree	0.126	(0.124)	0.163	(0.111)	0.011	(0.090)
Log. gross hh income	0.528***	(0.052)	0.499***	(0.045)	0.350***	(0.038)
Intercept	-1.552**	(0.725)	-1.808***	(0.622)	-1.490***	(0.519)
	θ_7		θ_8			
Unemployed	-0.061	(0.123)	-0.090	(0.159)		
Not in labor force	0.046	(0.045)	0.007	(0.051)		
Age	-0.061***	(0.015)	-0.059***	(0.016)		
Age Squared	0.001***	(0.000)	0.001***	(0.000)		
Married	0.428***	(0.067)	0.379***	(0.076)		
Separated/Divorced	-0.006	(0.094)	0.129	(0.105)		
Widowed	0.039	(0.167)	0.406**	(0.174)		
No educ. degree	-0.074	(0.367)	0.438	(0.381)		
Intermediate educ. degree	0.056	(0.051)	-0.059	(0.056)		
High educ. degree	0.037	(0.083)	-0.139	(0.095)		
Log. gross hh income	0.168***	(0.036)	-0.006	(0.040)		
Intercept	-1.474***	(0.487)	-0.647	(0.534)		
N	12813					
Log-likelihood	-18135.305					

Source: Swiss Household Panel (SHP), own calculations.

Note: Significance levels: * : 10% ** : 5% *** : 1%. Dependent variable: life satisfaction. Standard errors in parentheses. The reference group for working status is being employed, for the marital status it is being single and for the education variables it is low education degree.

Table 15: *Generalized Ordered Probit Women Latin Part*

	θ_1		θ_2		θ_3	
Unemployed	-0.658**	(0.282)	-0.700***	(0.223)	-0.579***	(0.198)
Not in labor force	-0.067	(0.186)	-0.190	(0.144)	-0.096	(0.122)
Age	-0.124*	(0.074)	-0.220***	(0.052)	-0.141***	(0.039)
Age Squared	0.001	(0.001)	0.002***	(0.001)	0.001***	(0.000)
Married	0.211	(0.227)	0.325*	(0.186)	0.441***	(0.158)
Separated/Divorced	-0.077	(0.228)	-0.186	(0.199)	-0.205	(0.174)
Widowed	0.008	(0.413)	0.049	(0.367)	0.044	(0.331)
No educ. degree	-1.219**	(0.513)	-0.978**	(0.450)	-1.114***	(0.388)
Intermediate educ. degree	-0.111	(0.174)	0.076	(0.141)	0.099	(0.121)
High educ. degree	0.589*	(0.315)	0.177	(0.219)	0.059	(0.185)
Log. gross hh income	0.519***	(0.134)	0.501***	(0.111)	0.486***	(0.092)
Intercept	0.282	(2.019)	2.304	(1.564)	0.204	(1.259)
	θ_4		θ_5		θ_6	
Unemployed	-0.462***	(0.157)	-0.285*	(0.147)	-0.228*	(0.134)
Not in labor force	-0.040	(0.089)	0.058	(0.078)	0.151**	(0.067)
Age	-0.083***	(0.028)	-0.084***	(0.025)	-0.096***	(0.022)
Age Squared	0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000)
Married	0.288**	(0.123)	0.343***	(0.111)	0.381***	(0.099)
Separated/Divorced	-0.460***	(0.145)	-0.455***	(0.137)	-0.440***	(0.130)
Widowed	-0.171	(0.255)	-0.432**	(0.220)	-0.606***	(0.200)
No educ. degree	-0.646*	(0.350)	-1.130***	(0.341)	-0.880**	(0.354)
Intermediate educ. degree	0.241**	(0.094)	0.178**	(0.086)	0.056	(0.079)
High educ. degree	0.129	(0.148)	0.178	(0.138)	0.032	(0.122)
Log. gross hh income	0.576***	(0.067)	0.514***	(0.060)	0.405***	(0.053)
Intercept	-2.782***	(0.918)	-2.492***	(0.824)	-1.957***	(0.724)
	θ_7		θ_8			
Unemployed	-0.430**	(0.171)	-0.381*	(0.230)		
Not in labor force	0.258***	(0.066)	0.312***	(0.074)		
Age	-0.110***	(0.022)	-0.092***	(0.024)		
Age Squared	0.001***	(0.000)	0.001***	(0.000)		
Married	0.393***	(0.099)	0.328***	(0.110)		
Separated/Divorced	-0.218	(0.141)	-0.282*	(0.160)		
Widowed	-0.450**	(0.222)	-0.475*	(0.255)		
No educ. degree	-0.418	(0.396)	-0.391	(0.433)		
Intermediate educ. degree	0.049	(0.081)	-0.265***	(0.089)		
High educ. degree	0.086	(0.115)	-0.276**	(0.124)		
Log. gross hh income	0.275***	(0.057)	0.133**	(0.065)		
Intercept	-1.753**	(0.749)	-1.144	(0.845)		
N	6035					
Log-likelihood	-9105.389					

Source: Swiss Household Panel (SHP), own calculations.

Note: Significance levels: * : 10% ** : 5% *** : 1%. Dependent variable: life satisfaction. Standard errors in parentheses. The reference group for working status is being employed, for the marital status it is being single and for the education variables it is low education degree.

Table 16: Satisfaction with Financial Situation as Dependent Variable

	Pooled OLS	OLS Fixed Effects	Conditional Logit
German Men			
Unemployed	-1.941 (0.162)***	-1.165 (0.144)***	-1.051 (0.235)***
Not in labor force	-0.313 (0.075)***	-0.395 (0.091)***	-0.311 (0.142)**
N	10915	10915	9219
Latin Men			
Unemployed	-2.398 (0.199)***	-1.315 (0.188)***	-1.308 (0.287)***
Not in labor force	-0.226 (0.112)**	0.095 (0.139)	-0.006 (0.195)
N	4842	4842	4147
German Women			
Unemployed	-1.408 (0.13)***	-0.962 (0.118)***	-0.854 (0.177)***
Not in labor force	0.177 (0.045)***	-0.051 (0.055)	-0.083 (0.083)
N	12813	12813	10752
Latin Women			
Unemployed	-1.980 (0.167)***	-1.308 (0.152)***	-1.166 (0.225)***
Not in labor force	0.215 (0.067)***	-0.026 (0.088)	0.041 (0.12)
N	6035	6035	5180

Source: Swiss Household Panel (SHP), own calculations.

Note: Significance levels: * : 10% ** : 5% *** : 1%. Standard errors in parentheses. Conditional Logit: Dependent variable = 1 if satisfaction response higher than individual average. Additional control variables are age and age squared, dummies for marital status, education variables, logarithm of gross household income. The reference group for working status is being employed.

Table 17: Satisfaction with Health as Dependent Variable

	Pooled OLS	OLS Fixed Effects	Conditional Logit
German Men			
Unemployed	-0.690 (0.136)***	-0.059 (0.123)	-0.062 (0.224)
Not in labor force	-0.897 (0.062)***	-0.432 (0.078)***	-0.478 (0.143)***
N	10915	10915	9061
Latin Men			
Unemployed	-0.370 (0.163)**	0.01 (0.151)	0.169 (0.265)
Not in labor force	-1.024 (0.092)***	0.033 (0.112)	-0.087 (0.199)
N	4842	4842	3994
German Women			
Unemployed	-0.105 (0.113)	0.191 (0.101)*	0.261 (0.17)
Not in labor force	-0.291 (0.039)***	-0.074 (0.048)	0.021 (0.083)
N	12813	12813	10722
Latin Women			
Unemployed	-0.266 (0.152)*	-0.148 (0.134)	-0.164 (0.21)
Not in labor force	-0.424 (0.061)***	-0.142 (0.077)*	-0.142 (0.123)
N	6035	6035	5071

Source: Swiss Household Panel (SHP), own calculations.

Note: Significance levels: * : 10% ** : 5% *** : 1%. Standard errors in parentheses. Conditional Logit: Dependent variable = 1 if satisfaction response higher than individual average. Additional control variables are age and age squared, dummies for marital status, education variables, logarithm of gross household income. The reference group for working status is being employed.

Table 18: Satisfaction with Democracy as Dependent Variable

	Pooled OLS	OLS Fixed Effects	Conditional Logit
German Men			
Unemployed	-0.060 (0.157)	-0.032 (0.138)	-0.009 (0.224)
Not in labor force	0.1 (0.072)	-0.117 (0.087)	-0.042 (0.139)
N	10915	10915	9442
Latin Men			
Unemployed	-0.165 (0.209)	0.045 (0.181)	-0.002 (0.256)
Not in labor force	0.028 (0.118)	0.101 (0.134)	0.256 (0.192)
N	4842	4842	4176
German Women			
Unemployed	0.032 (0.112)	0.002 (0.101)	0.184 (0.171)
Not in labor force	0.202 (0.039)***	0.033 (0.048)	0.084 (0.082)
N	12813	12813	10950
Latin Women			
Unemployed	-0.432 (0.157)***	0.051 (0.14)	0.176 (0.212)
Not in labor force	0.108 (0.063)*	0.028 (0.081)	0.051 (0.121)
N	6035	6035	5179

Source: Swiss Household Panel (SHP), own calculations.

Note: Significance levels: * : 10% ** : 5% *** : 1%. Standard errors in parentheses. Conditional Logit: Dependent variable = 1 if satisfaction response higher than individual average. Additional control variables are age and age squared, dummies for marital status, education variables, logarithm of gross household income. The reference group for working status is being employed.

Table 19: Depression as Dependent Variable

	Pooled OLS	OLS Fixed Effects	Conditional Logit
German Men			
Unemployed	1.010 (0.152)***	0.347 (0.138)**	0.378 (0.221)*
Not in labor force	0.631 (0.07)***	0.09 (0.087)	-0.010 (0.142)
N	10915	10915	8586
Latin Men			
Unemployed	1.023 (0.208)***	0.318 (0.191)*	0.285 (0.275)
Not in labor force	0.614 (0.117)***	0.151 (0.141)	0.057 (0.209)
N	4842	4842	3749
German Women			
Unemployed	1.051 (0.129)***	0.449 (0.117)***	0.445 (0.169)***
Not in labor force	0.202 (0.045)***	0.022 (0.055)	0.031 (0.083)
N	12813	12813	10721
Latin Women			
Unemployed	0.679 (0.189)***	0.214 (0.169)	0.029 (0.207)
Not in labor force	0.118 (0.075)	-0.109 (0.098)	-0.251 (0.123)**
N	6035	6035	5134

Source: Swiss Household Panel (SHP), own calculations.

Note: Significance levels: * : 10% ** : 5% *** : 1%. Standard errors in parentheses. Conditional Logit: Dependent variable = 1 if satisfaction response higher than individual average. Additional control variables are age and age squared, dummies for marital status, education variables, logarithm of gross household income. The reference group for working status is being employed.

Table 20: Satisfaction with Free Time as Dependent Variable

	Pooled OLS	OLS Fixed Effects	Conditional Logit
German Men			
Unemployed	1.166 (0.2)***	1.310 (0.187)***	1.067 (0.239)***
Not in labor force	0.944 (0.092)***	0.828 (0.119)***	0.817 (0.149)***
N	10915	10915	9416
Latin Men			
Unemployed	1.090 (0.241)***	1.521 (0.245)***	0.848 (0.264)***
Not in labor force	1.241 (0.136)***	1.016 (0.181)***	0.765 (0.203)***
N	4842	4842	4184
German Women			
Unemployed	1.128 (0.154)***	0.925 (0.148)***	0.801 (0.177)***
Not in labor force	0.519 (0.053)***	0.293 (0.07)***	0.353 (0.082)***
N	12813	12813	10924
Latin Women			
Unemployed	1.259 (0.197)***	1.258 (0.189)***	0.903 (0.218)***
Not in labor force	0.987 (0.078)***	0.302 (0.109)***	0.328 (0.121)***
N	6035	6035	5118

Source: Swiss Household Panel (SHP), own calculations.

Note: Significance levels: * : 10% ** : 5% *** : 1%. Standard errors in parentheses. Conditional Logit: Dependent variable = 1 if satisfaction response higher than individual average. Additional control variables are age and age squared, dummies for marital status, education variables, logarithm of gross household income. The reference group for working status is being employed.

Table 21: Satisfaction with Leisure as Dependent Variable

	Pooled OLS	OLS Fixed Effects	Conditional Logit
German Men			
Unemployed	-.305 (0.172)*	0.414 (0.164)**	0.481 (0.228)**
Not in labor force	-.233 (0.079)***	0.077 (0.104)	0.303 (0.144)**
N	10915	10915	9190
Latin Men			
Unemployed	-.223 (0.193)	0.28 (0.192)	0.526 (0.265)**
Not in labor force	0.037 (0.109)	0.146 (0.142)	0.342 (0.206)*
N	4842	4842	4003
German Women			
Unemployed	0.131 (0.14)	0.128 (0.141)	0.289 (0.173)*
Not in labor force	-.028 (0.049)	-.050 (0.066)	-.027 (0.081)
N	12813	12813	10919
Latin Women			
Unemployed	0.25 (0.176)	0.203 (0.171)	0.544 (0.212)**
Not in labor force	0.392 (0.07)***	0.104 (0.099)	0.053 (0.123)
N	6035	6035	5105

Source: Swiss Household Panel (SHP), own calculations.

Note: Significance levels: * : 10% ** : 5% *** : 1%. Standard errors in parentheses. Conditional Logit: Dependent variable = 1 if satisfaction response higher than individual average. Additional control variables are age and age squared, dummies for marital status, education variables, logarithm of gross household income. The reference group for working status is being employed.

Table 22: Health Status and Doctor Visits as Dependent Variables

	Health Status			Doctor Visit	Number of Doctor Visits	
	Pooled OLS	OLS FE	Cond. Logit	Cond. Logit	Pooled OLS	OLS FE
German Men						
Unemployed	-0.186 (0.054)***	0.004 (0.057)	0.129 (0.41)	-0.291 (0.284)	2.747 (0.656)***	2.309 (0.686)***
Not in labor force	-0.230 (0.025)***	-0.115 (0.036)***	-0.668 (0.258)***	0.664 (0.207)***	4.107 (0.292)***	2.293 (0.428)***
N	10915	10915	2936	6575	8454	8454
Latin Men						
Unemployed	-0.153 (0.062)**	-0.094 (0.067)	-0.924 (0.601)	0.099 (0.339)	2.718 (1.177)**	1.933 (1.298)
Not in labor force	-0.275 (0.035)***	-0.015 (0.049)	-0.071 (0.37)	0.211 (0.263)	7.313 (0.622)***	0.675 (0.921)
N	4842	4842	1178	2764	3745	3745
German Women						
Unemployed	-0.105 (0.044)**	0.04 (0.046)	-0.100 (0.247)	0.029 (0.243)	1.326 (0.557)**	0.302 (0.587)
Not in labor force	-0.084 (0.015)***	-0.023 (0.022)	-0.281 (0.14)**	0.328 (0.116)***	1.924 (0.193)***	1.295 (0.279)***
N	12813	12813	4390	6509	10822	10822
Latin Women						
Unemployed	-0.179 (0.053)***	-0.073 (0.055)	-0.239 (0.301)	-0.047 (0.306)	0.463 (0.845)	-0.532 (0.925)
Not in labor force	-0.121 (0.021)***	-0.049 (0.032)	-0.352 (0.216)	0.185 (0.185)	1.278 (0.328)***	0.755 (0.528)
N	6035	6035	2122	2592	5287	5287

Source: Swiss Household Panel (SHP), own calculations.

Note: Significance levels: * : 10% ** : 5% *** : 1%. Standard errors in parentheses. Additional control variables are age and age squared, dummies for marital status, education variables, logarithm of gross household income. The reference group for working status is being employed.

Table 23: Adding Canton Dummies and Interaction Term

	Pooled OLS	OLS Fixed Effects
Switzerland		
Unemployed	-.797 (0.074)***	-.341 (0.067)***
Unemployed Latin	-.163 (0.113)	-.079 (0.103)
N	34605	34605
German Men		
Unemployed	-1.056 (0.119)***	-.435 (0.107)***
Unemployed Latin	-.403 (0.434)	-.343 (0.384)
N	10915	10915
Latin Men		
Unemployed	-1.128 (0.147)***	-.477 (0.141)***
Unemployed German	-2.003 (0.558)***	-2.173 (0.513)***
N	4842	4842
German Women		
Unemployed	-.678 (0.094)***	-.244 (0.084)***
Unemployed Latin	-.465 (0.403)	-.480 (0.348)
N	12813	12813
Latin Women		
Unemployed	-.744 (0.128)***	-.275 (0.117)**
Unemployed German	0.697 (0.46)	-.076 (0.431)
N	6035	6035

Source: Swiss Household Panel (SHP), own calculations.

Note: Significance levels: * : 10% ** : 5% *** : 1%. Dependent variable: life satisfaction. Standard errors in parentheses. Additional control variables are not in labor force, age and age squared, dummies for marital status, education variables, logarithm of gross household income. The reference group for working status is being employed.

Table 24: Bilingual Cantons and Interaction Term

	Pooled OLS	OLS Fixed Effects
Men		
Unemployed	-1.112 (0.327)***	-1.102 (0.307)***
Unemployed French	0.742 (0.494)	0.67 (0.459)
N	3054	3054
Women		
Unemployed	-.938 (0.246)***	-.501 (0.224)**
Unemployed French	-.224 (0.382)	-.536 (0.351)
N	3742	3742

Source: Swiss Household Panel (SHP), own calculations.

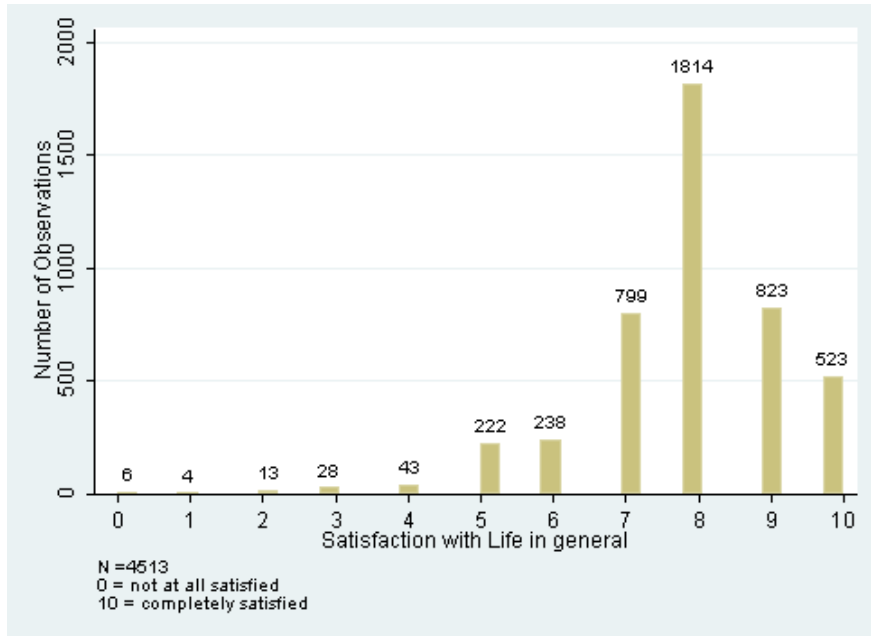
Note: Significance levels: * : 10% ** : 5% *** : 1%. Dependent variable: life satisfaction. Standard errors in parentheses. Additional control variables are not in labor force, age and age squared, dummies for marital status, education variables, logarithm of gross household income. The reference group for working status is being employed.

Table 25: Variable Definitions

Variable	Explanation
German Canton	1 if living in AG, AI, AR, BE, BS, BL, GL, GR, LU, NW, OW, SG, SH, SO, SZ, TG, UR, ZG, ZH
French Canton	1 if living in FR, GE, JU, NE, VD, VS
Italian Canton	1 if living in TI
Latin Canton	1 if living in FR, GE, JU, NE, VD, VS, TI
Employed	1 if employed
Unemployed	1 if unemployed
Not in the labor force	1 if not in labor force
Male	1 if male
Single	1 if single
Separated/Divorced	1 if separated or divorced
Widowed	1 if widowed
Married	1 if married
No educational degree	1 if incomplete compulsory school
Low educational degree	1 if compulsory school, vocational training, domestic science course, general training school, apprenticeship
Intermediate educational degree	1 if bachelor/ maturity, vocational high school with master certificate, technical school, vocational high school ETS, HTL etc.
High educational degree	1 if university, academic high school, HEP, PH, HES, FH
Interview Language French	1 if interview language French
Interview Language German	1 if interview language German
Interview Language Italian	1 if interview language Italian
Age	age at interview date
Age Squared	variable age squared
Gross household income	yearly household income, gross
Logarithm of gross household income	logarithm of variable gross_hh_inc
Satisfaction with <i>specification</i>	0=not at all satisfied & 10 completely satisfied
Depression	frequency of depression, blues, anxiety (0=never & 10=always)
Health Status	self-reported health status (1=not well at all & 5=very well)
Doctor visit last year	1 if doctor visit last year
Number of doctor visits	Number of doctor visits last year if doctor visit last year=1

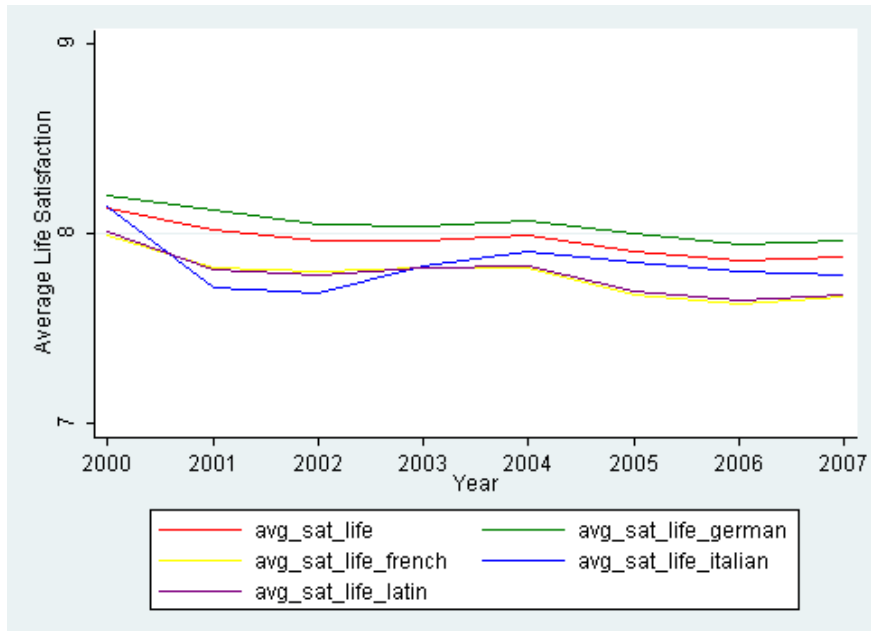
Figures

Figure 1: Life Satisfaction in Switzerland 2007



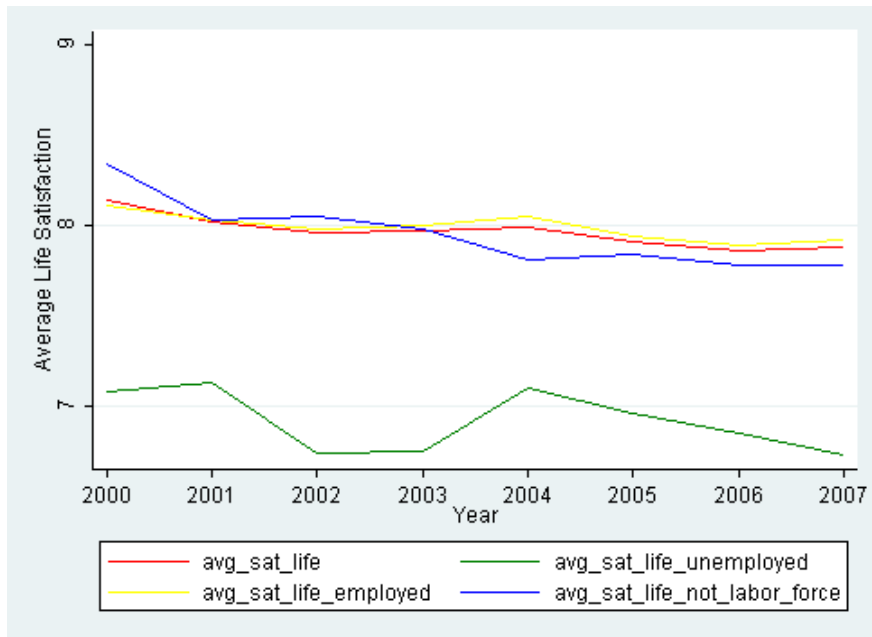
Source: Swiss Household Panel (SHP), own calculations.

Figure 2: Average Life Satisfaction in Regions over Time



Source: Swiss Household Panel (SHP), own calculations.

Figure 3: Average Life Satisfaction by Working States over Time



Source: Swiss Household Panel (SHP), own calculations.