

Chapter 4

Happiness in Denmark and Switzerland*

4.1 Introduction

Everybody wants to be happy and certainly nobody wants to be unhappy. Danes and Swiss are very satisfied with their lives. International studies on happiness systematically show both countries at the top (see Frey and Stutzer 2000; Stutzer and Frey 2008 or Veenhoven 2011 etc.) and both are often labeled as success models for economic development and societal achievements in comparative analyses. However, this book also sketches and uncovers differences between the two countries with respect to institutions, sociodemographic and economic conditions. Thus, we investigate in this chapter whether Danes and Swiss are so happy for the same or different reasons and which factors matter for their respective happiness.

4.1.1 *Happiness as an “Ideal Measure” for Comparisons*

Throughout the remainder of this chapter we shall treat the notions “happiness”, “life satisfaction”, and “reported well-being” as synonyms. They shall all refer to the same concept of individual satisfaction with one’s personal life as a whole. Certain arguments and concepts described in this chapter are inspired by the general literature on happiness research. In particular, we draw largely on Frey and Stutzer (2002) who outline many general arguments and explanations which we reproduce and then apply to our analysis of Denmark and Switzerland. Our contribution therefore is the application of the methods of happiness research to these two countries and the comparative interpretation of the respective results.

The intriguing idea of simply asking individuals about their life satisfaction has also established an important, interdisciplinary scientific research field in the last decades. Researchers now generally agree that life satisfaction surveys can serve as

*This chapter has been written with the help of Marco Portmann and David Stadelmann.

an important complementary tool for public policy. Some politicians even suggest the creation of aggregate happiness accounts to complement national income accounts as today's standard for comparisons between countries, and there is serious discussion in certain European countries about applying the findings of happiness research to policy questions.¹

Nevertheless, many people will still argue at first that happiness is a very elusive and highly subjective measure which cannot be used for interpersonal, not to speak of international, comparisons. However, it is exactly this characteristic of happiness measures that make them an outstandingly interesting topic for research. Happiness researchers do not believe that they have found a "true" welfare indicator, but they argue convincingly that their measure solves some of the issues prevailing with other indicators. Remember the issues we faced in the last chapter when discussing just some of the shortcomings of GDP comparisons and the question how to aggregate the multitude of indicators presented into one indicator.² As many readers may be unfamiliar with the concept of measuring happiness we include a short discussion of the concept in Sect. 2 of this chapter.³

4.1.2 Comparing Denmark and Switzerland with Happiness Data

In this chapter we want to understand how different factors influence life satisfaction and how these factors differ between Denmark and Switzerland. We will analyze personal, social and economic factors. Figure 4.1 offers an overview over the chapter's insights. Jesper and Simon are two synthetic persons who are, respectively, citizens of Denmark and Switzerland, live in their countries, but otherwise face identical life situations. The graphs plot their estimated happiness which ranges from extremely dissatisfied (= 0) to extremely satisfied (= 10).

Jesper and Simon are 34 years old. They are both married, have each a child, and they are in best health. Their respective employment in Jutland and Central Switzerland provides them with a yearly income of 480,000 Danish Crowns for Jesper and 85,000 Swiss Francs for Simon.

Jesper and Simon are very happy (a score of 9.1 and 8.7) regarding their present life situation. But now they are faced with two important negative shocks in their respective lives. First, both get divorced from their wives. Clearly, personal

¹ The United Kingdom and France have reacted to these suggestions and there are ongoing efforts to introduce certain measures and insights into the public debate. The Kingdom of Bhutan is said to try to maximize general happiness.

² In the assessment of their happiness, individuals mitigate a string of issues in international comparisons of living conditions.

³ The well informed reader may, of course, skip Sect. 4.2 without losing any information on the comparison between Denmark and Switzerland.

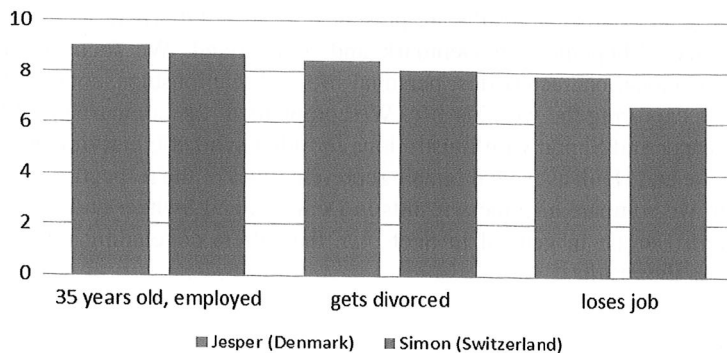


Fig. 4.1 Happiness in Denmark and Switzerland in different life situations (Notes: In regular surveys Danish and Swiss residents are asked “How satisfied are you with your life as a whole these days”. They can rank their answer on a scale from 0 to 10. Higher numbers indicate a higher level of life satisfaction. The graphs plot happiness for Jesper and Simon, both facing identical life situations, the first in Denmark and the latter in Switzerland. As their life situations change, their satisfactions with life changes too)

relationships and in particular the partner are an important factor for individual happiness and certainly most people would intuitively agree on that. In general, singles tend to be less happy than married persons or persons in a partnership. Obviously, a divorce is a decisive turning-point in an individual’s life and indeed divorced persons without a new partner are particularly unhappy. As shown in the data, both Jesper’s and Simon’s individual life satisfaction receives a significant blow due to the divorce as one would expect. The effect on life satisfaction of not having a partner anymore is comparable in the two cases. Both Jesper and Simon lose 0.6 points on the happiness scale. Put differently, Danes and Swiss feel similar “pains” in terms of foregone happiness due to being divorced. Next, suppose that because of their private distress and a multitude of adverse economic circumstances they become unemployed which also will reduce their income. Again, it is intuitive that the adverse event of unemployment also reduces their respective happiness. Jesper’s happiness now only amounts to 7.9 points while Simon’s happiness drops to 6.7 points. While both persons feel the shock, Simon from Switzerland perceives unemployment as a greater loss in terms of life satisfaction than does Jesper from Denmark.

These two examples of typical people are, of course, not fully representative for the Danish and Swiss population. However, as our research identifies a large number of determinants of happiness in Denmark and Switzerland, we can potentially construct happiness scores for a great variety of individuals.

The remainder of this chapter is structured as follows: Sect. 4.2 provides a detailed description of the measure for subjective life satisfaction or happiness as well as a discussion of some important problems involved with the concept. We argue in detail why happiness is important, how happiness is measured in theory and how determinants of happiness can be identified. Sect. 4.3 explains how happiness is measured in the field and which data our research relies on. Our

econometric and statistical results are presented in Sect. 4.4. There we explain the determinants of happiness in Denmark and Switzerland. We focus on factors capturing personal characteristics, personal life and relationships, societal factors and factors capturing the working life. We complement the comparison of happiness for Jesper and Simon with illustrations for other synthetic individuals, among others Mette and Heidi as typical female representatives of the respective countries. Moreover, we compare happiness results in Denmark and Switzerland with results for Western Europe in general in Sect. 4.5. that offers concluding remarks and summarizes the results.

4.2 Description and Discussion of Subjective Life Satisfaction as Measure for Comparisons

4.2.1 Objective Versus Subjective Measures of Comparisons

It may seem odd at first sight to measure subjective life satisfaction. In particular, the notion “subjective” combined with “life satisfaction” may raise questions. So called “objective” approaches and “objective” measures have a somewhat longer tradition in social science indicators research than “subjective” approaches and measures (see Veenhoven 2007). Objective measures for international comparisons rely on observable facts such as a person’s income, employment status, years of schooling or working hours per week, etc. Subjective measures on the other hand take into account a person’s valuation and perception of such facts, for instance their satisfaction with income, job satisfaction or their satisfaction with life as a whole. A large number of objective measures can often be considered as measuring “inputs” while subjective life satisfaction has the clear notion of being a perceived “output/outcome” of personal and social factors.

When performing comparisons of the quality of life across regions or countries, many social scientists tend to focus on money-metric inputs, such as expenditures, gross domestic product or personal incomes (Gasper 2005). They implicitly assume that individuals are pretty good in transforming inputs such as income into what serves them best and what increases their utility most. In fact, this is the main underlying assumption allowing economists to consider money as a measure for welfare. You can spend your money to increase your utility. If you were really fed up with all the money you have got, you could dispose part of it easily by handing it to a charitable organization or to any random individual. Thus, so the argument goes, by observing income and revealed consumption patterns we may infer something about how people live up to their preferences, or, put the other way round, income may directly (at least in parts) reflect utility according to this line of reasoning.

However, the assumption that revealed choices represent utility maximizing behavior is not necessarily true as people may make errors when choosing between

alternatives and may also underestimate the disutility of certain choices. Standard economics usually focuses solely on revealed preferences as an indicator for individual welfare. As happiness measures are based on surveys, they also allow uncovering discrepancies between expressed and revealed preferences. Consider the following example. A Swiss person decides to either work in Berne or in Zurich. She lives currently in Berne with her husband, but salaries are higher in Zurich. She knows that commuting from Berne to Zurich leaves her less time for her family. Nevertheless, she decides to sacrifice this time for the higher income. From a revealed preferences perspective we would conclude that the person values the additional money higher than the additional time she may spend with her family. Thus, we would infer that subjective well-being increases for the person when commuting to Zurich. However, the opposite seems to be the case when considering happiness data. Stutzer and Frey (2008) empirically show that many Swiss who decide to commute are not compensated for the stress of commuting and the family time lost in terms of overall life satisfaction. Put differently, the additional money earned does not increase happiness sufficiently to fully compensate for the time lost in commuting.⁴ Thus, empirical analyses which focus on life satisfaction may easily lead to new and sometimes different conclusions than seemingly “objective” analyses focusing on revealed choices.

Attempts exist to find partly objective factors which are related to favorable outcomes in life (Veenhoven 2007). This reflects an attempt to focus less on (monetary) inputs when evaluating life satisfaction. The approach is based on the assumption that people have a certain list of needs which should be satisfied in order to lead a good life and that such requirements are universal (Camfield et al. 2010).

4.2.2 The Strengths of Subjective Life Satisfaction as a Measure for Comparisons

The comparison of different aspects of life in Chap. 3 revealed many differences between Denmark and Switzerland. However, it turned out that it is not evident what the pieces of the puzzle imply for the ultimate goal of a good life, i.e. happiness. Thus, why not ask people directly? Every person may be supposed to be the best judge concerning his own life satisfaction. As economists rely on revealed behavior, why not rely on what people say about their life satisfaction? Indeed, many prominent social scientists in the field of happiness research follow exactly this consistent line of thought. The proponents of subjective well-being argue that people are best judges of their well-being and thus we should just ask them about their happiness (see Diener 2000; Frey and Stutzer 2002; Dolan et al. 2008; Graham 2010 among many others).

⁴ Clearly, this study (Stutzer and Frey 2008) has some direct practical implications: Think twice whether all the time lost in commuting is really worth the money!

Subjective life satisfaction can be captured by surveys. With the help of a simple question or multiple indicators it is possible to measure how individuals evaluate their present life situation in general and the satisfaction with their life in particular. Surveys allow individuals to evaluate their happiness compared to other persons, past experience, and expectations of the future. The general question asked in most surveys is about the following: "All things considered, how satisfied are you with your life as a whole nowadays?" Respondents may indicate their subjective life satisfaction by rating their answer on a scale mostly ranging from 0 to 10 where the first corresponds to the lowest and the second to the highest life satisfaction level.

What do people express when they are asked about their satisfaction with life? Do they "objectively" evaluate their situation? Answers to the question of subjective life satisfaction elicit rational as well as affective but always fully personal evaluations (Diener et al. 2003). This is exactly why surveys of happiness and analyses based on them are so important. According to Waterman (1993) happiness is related to the degree to which peoples' activities coincide with their most deeply held values. These are values which may touch upon personal autonomy, self-acceptance, aim in life and positive relations with others (see also Ryff and Keyes 1995; Benz and Frey 2003; Norrish and Vella-Brodrick 2008 for additional literature).

An important reservation which may come to mind concerns the reliability of survey results. Indeed, some people may overstate their satisfaction with life at the time of the survey. Similarly, others may just be in a bad mood at this particular day and tend to give a more pessimistic answer. However, such random mistakes often cancel out on average and do not cause problems to modern statistical approaches, especially if surveys are based on sufficiently large samples. More importantly, satisfaction with life inquiries are part of much broader surveys. People have therefore generally no specific intentions to give biased answers which is a great advantage of happiness research compared to other research based on very specific and narrow surveys. For instance, if authorities ask for a valuation of a public good, respondents strategically choose their answer (Frey and Stutzer 2006) which biases the results and the interpretation. This is not yet the case for happiness research.

Comparisons of the subjective well-being measure with other measurement methods also show that survey data deliver reliable and meaningful results. For instance, people indicating that they are happy in surveys are also found to smile more often in social interactions (Fernández-Dols et al. 1997). The likelihood of committing suicide correlates negatively with happiness at the individual level (Davidson et al. 2000), i.e. happy people are less likely to commit suicide.⁵ Other results show that expressed happiness is also related to physical, objective measures like hypertension (Blanchflower and Oswald 2008). Sarracino (2010) shows that the reliability of happiness surveys has been tested in many ways and the results of surveys are consistent with other measures of well-being such as low blood pressure and neurological tests of brain activity, according to Blanchflower and

⁵ For further literature refer to Frey and Stutzer (2002) or Dolan et al. (2008).

Oswald (2008) or van Reekum et al. (2007). Individual happiness results from surveys also correlate very well with different other proxies more often used to evaluate social well-being as shown by Schwarz and Strack (1999) among others. Other research shows that people who indicate that they are happy are also more often regarded as happy by their close relatives and friends (see Kahneman and Krueger 2006). Subjective life satisfaction data are also available for a wide number of less developed countries and the factors which drive happiness have been found to be broadly stable across different countries (Graham 2010).

4.2.3 Explaining Subjective Life Satisfaction and the Influence of Aspirations

As old as the question how to measure individual happiness is the inquiry into the factors which cause happiness. A simple but somewhat unsatisfying answer is that subjective human well-being is engraved in the genes. Some researchers focusing on individual happiness argue that up to 50 % of well-being differences between people could be determined by genetics (e.g. Lykken and Tellegen 1996; Weiss et al. 2008). Nes (2010) argues that the same holds for behavioral genetic research on happiness and well-being but that high heritability does not necessarily limit the effectiveness of policies aiming at raising average happiness. Moreover, as the environment changes so may the relative impact of genes according to research in natural sciences, i.e. the effects of genes may get “activated” by environmental changes.

Changes in life circumstances have a great impact on an individual’s life satisfaction, which is also confirmed by many studies. There is an extensive literature on the most diverse determinants of happiness. Age, health, employment, marriage and intimate relationship, social interaction, religion, trust, employment and even political institutions in a country have an influence on people’s happiness (Clark and Oswald 1994; Frey and Stutzer 2000, 2002; Lucas et al. 2003; Di Tella et al. 2003; Clark et al. 2008; Lim and Putnam 2010; Graham et al. 2011; Guven 2011; see e.g. Dolan et al. 2008 for a review). Quite expectedly, a person’s income also affects happiness.

However, the impact of income nicely illustrates some peculiarities of happiness in comparison to other measures. Easterlin (1974) famously showed that by comparing happiness of citizens within one country higher income is related to greater happiness. In contrast, comparing happiness across countries exhibits a weaker relationship between happiness and income. Even odder, while per head income in the USA rose dramatically over the last eighty years when the first surveys on life satisfaction were conducted, happiness did not follow this trend. Diener and Biswas-Diener (2002) argue that correlations between income and subjective well-being are usually significant but tend to be substantially small. In a review of studies comparing correlations of subjective well-being and income within

nations they found the strength of the relationship to generally range between 0.13 and 0.24.

Thus income is an important driver for happiness but its role should not be overemphasized. An explanation for this phenomenon is that life satisfaction is a relative and a dynamic concept. Whether a person is satisfied with her income depends on her aspiration level, i.e. her beliefs about her capabilities and what should be “right” for her. Aspiration levels in turn are often based on social comparison and, thus, depend on relative income (Veenhoven 1991; Stutzer 2004; Frey and Stutzer 2002). People do not feel better if their salary has increased by 20 % if everyone else’s income has increased by 35 % in the same period. Moreover, people tend to adapt their aspirations to new circumstances and they get quickly used to higher income. This tendency is often called the “hedonic treadmill” because people have to work just to keep their level of happiness as noted by Brickman and Campbell (1971). Thus, aspiration levels and comparisons play an important role in happiness research and may explain why certain people react more strongly to changes in individual and environmental circumstances such as income, personal relationships, unemployment and the political situation than others.

4.3 Capturing Happiness in the Field

Subjective life satisfaction or happiness is an innovative and unique measure to compare and evaluate well-being. As stated before, there are different methods to capture well-being in surveys. For the analysis of happiness in Denmark and Switzerland we rely on the European Social Survey (ESS). The European Social Survey is conducted in more than 30 nations including Denmark and Switzerland. The survey covers a broad range of topics including, for instance, education and occupational background, financial circumstances, household circumstances, health, ethnic and religious allegiances, sociopolitical orientations, and demographic composition including age, sex, marital status, beliefs and behavioral patterns. Participants are also asked how satisfied they are with their life as a whole.

As we have respondents’ answers on their life satisfaction as well as on questions about all areas of life we can bring happiness and these questions together and statistically elicit which factors drive happiness. The effects are inferred by means of *Weighted Least Squares (WLS)* estimation from the sample of 5,431 survey respondents from Denmark and 7,028 from Switzerland.⁶ We restrict the sample to the population older than 21 for our analysis. This is a common practice

⁶ It could be argued that happiness scores should be considered as ordinal because respondents can express their answer only in integers. This reasoning suggests the use of ordered probit estimations. However, Ferrer-i-Carbonell and Frijters (2004) and others show that results from OLS-estimations are very close to those obtained by using alternative techniques and many happiness studies use OLS.

as life satisfaction reported by the young is more volatile and less reliable. The sample extends over four waves of the European Social Survey. We control for the possibility that the relation between happiness and its determinants may have changed over time by including fixed effects for every wave of the survey, i.e. we purify our results from wave-specific effects by holding such effects constant.

4.3.1 Comparing First Results Across Countries

The comparability across nations of well-being measures has sometimes been claimed to perform badly. For example, Americans are said to have the tendency to proclaim that they are extremely happy while French people are sometimes reported to have exactly the opposite bias. For the questions posed by most people, namely which factors influence individual happiness, the precision with which happiness measures judge the absolute level of happiness across nations is of minor importance. Moreover, many studies have shown that even though the level of expressed life satisfaction across countries may be different, the factors influencing life satisfaction are commonly the same and often of similar magnitude (see e.g. Graham 2010).

Figure 4.2 shows happiness histograms for the year 2001. It represents the fraction of very unhappy to very happy people in the two countries.

The figures show that most people in Denmark as well as in Switzerland consider themselves as either happy or even very happy. Many people find themselves in the category 10 and the mode is 9 and 8 for Denmark and Switzerland respectively. Over 25 % of Danes consider themselves most happy (category 10) which is also the case for over 15 % of Swiss. Only very few persons in both countries report life satisfaction values below five. On average Danes obtain higher happiness scores than Swiss citizens.

This is not an artifact of Swiss and Danes reacting systematically differently to the word ‘satisfaction’ in the survey question due to potential cultural differences or different connotations of the word ‘satisfaction’ in the respective languages. In fact, making cross-cultural comparisons of a latent variable is not a trivial task. For instance Beuckelaer and Swinnen (2011) propose stringent measurement invariance conditions. Moreover, if we believe that people from fairly similar countries such as Denmark and Switzerland use very different benchmarks when evaluating themselves, direct comparisons of the level of expressed happiness may be biased (see Angelini et al. 2009). To address such potential problems, we performed econometric and statistical tests similar to those suggested by Steinmetz (2011). These tests consist of a comparison of different survey question which are related to happiness. Comparing different questions asking for slightly different aspects of happiness allows distilling the potentially latent variable “life satisfaction”. It turns out that in Denmark and in Switzerland these different questions are correlated in a similar way with the original happiness metric. Thus, the way of answering a survey

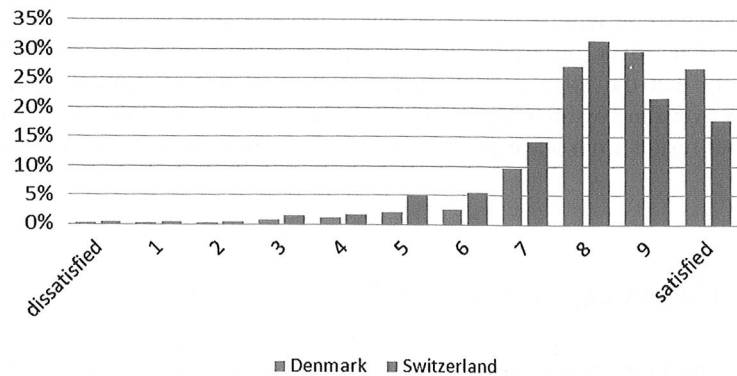


Fig. 4.2 Histogram of happiness in Denmark and Switzerland (Notes: The histogram shows the distribution of Danish and Swiss respondents' answers to the question "How satisfied are you with your life as a whole these days" in the 2008 wave of the European Social Survey)

question or the way Swiss and Danes express feelings does not seem to be systematically different.

Moreover, Angelini et al. (2009) analyzed how survey respondents from different countries rated the happiness implications from hypothetical life situations. Since all respondents were confronted with the same hypothetical life situations they should yield similar happiness for all respondents. Consequently, if respondents from different countries state different happiness consequences these differences should be mainly due to cross-cultural differences in the way of expressing happiness. They confirm that Danes are extremely happy compared to the other countries analyzed even taking such differences to express themselves into account.⁷

Nevertheless, we acknowledge that open questions remain when performing state of the art cross-cultural comparison and further research is needed in this field (see Davidov et al. 2011 for a discussion on different methods of cross-cultural analysis).

4.3.2 The Happiness of Danes Is More Than Words: Danes and Swiss Living Abroad

Happiness research in general has shown that cultural factors have only a minor effect on how personal and economic factors impact on individual happiness. However, when we observe high happiness within Denmark and Switzerland it is difficult to disentangle the potential influence on happiness of cultural differences from the actual influence of good circumstances within the two countries. To

⁷ Unfortunately, the authors did not include Switzerland in their study.

analyze whether cultural factors play a significant role, we analyzed the happiness of Danish and Swiss citizens living in other European countries. Danes and Swiss living abroad are not exposed to Danish and Swiss institutions; they are exposed to the institutions in their host country. Thus, they should be as happy as the citizens in the host country if we compare them to natives facing identical situations such as identical marital status or income unless they answer happiness questions differently for cultural reasons. Our results show that Danes living abroad are not happier than citizens of the chosen host country. For Swiss citizens abroad, we find a positive effect of being Swiss compared to other citizens of the chosen host country. Clearly, such results may suffer from a potential selection bias because people who migrate are most likely different in certain unobserved personal characteristics to people who do not migrate. Nevertheless, the results allow interesting insights into whether individual happiness depends on cultural influences or rather on personal, economic, and other demographic factors in a country. Our results rather point to the latter. In particular, for Danes individual factors seem to matter more for their happiness. To some extent, Swiss are happy just because they are Swiss which points to the possibility that there may be a small cultural effect for the happiness of Swiss people.

4.4 Explaining Happiness in Denmark and Switzerland

We empirically identify factors that make people happy or unhappy and estimate the contribution to happiness from these different factors in Denmark and Switzerland. We also compare whether these factors differ between Danes and Swiss in order to find out whether Danes and Swiss are happy for the same reasons. We shall also analyze if the variables which matter for individual happiness differ in the extent, i.e. in their mean values, across the countries analyzed. If, for instance, being married or living in a partnership makes Danes happier than Swiss, we should expect more people to live in a partnership in Denmark which would increase overall measured happiness in Denmark compared to Switzerland. Finally, we provide a comparison with results for Western European countries to get a general idea of how the Danish and Swiss happiness functions can be situated in an international context. When motivating the different variables used to explain happiness in both countries we largely draw on Frey and Stutzer (2002) for arguments and inspiration.

4.4.1 Variables Influencing Happiness: An Overview

Similar to other studies and the literature on happiness in general, we distinguish four types of determinants of individual life satisfaction. Firstly, we isolate *personal characteristics* such as gender and age. Secondly, we look at an individual's

personal life, e.g. his or her relationships and household characteristics. Thirdly, we focus on the *individual in society* where we analyze variables such as being a citizen of the resident country or not and different types of main activities performed during the day. Finally, we analyze different *economic factors* and constraints, in particular an individual's occupation and her/his salary.

For the interpretation of our results it is particularly important to recall that the results for the happiness determinants we analyze in the next subsection represent so called *partial effects*. The coefficient values capture a change in the respective determinant *ceteris paribus*, i.e. while all other factors are held constant (what we also refer to as “controlling for everything else”). This statistical method allows us to say, for instance, how a change from employment to unemployment influences individual happiness *directly*, that is, apart and independently of changes in other variables like a drop in income which often accompanies the loss of employment.

The methods applied start from the simplifying presumption that partial effects are identical for all Danes and all Swiss, respectively, independent of all other variables. For instance, becoming unemployed has the same effect on men and women as well as on rich and poor. It may be argued that some determinants could affect happiness fundamentally differently over certain socioeconomic groups. As it turns out, many effects on happiness are very homogenous across different groups in society. Thus, for the sake of simplicity and for statistical reasons we will refer to the “general” results including all observations presented in Table 4.1. We also provide additional analyses where we distinguish between men and women, high- and low-income earners and in the case of Switzerland we distinguish between French and German speaking individuals.⁸ Whenever noteworthy differences occur we will point them out; the full tables can be found in the appendix.

4.4.2 *Determinants of Danish and Swiss Happiness*

4.4.2.1 *Personal Characteristics*

Personal characteristics exert important effects on happiness. However, from an economic and social point of view, the effects of personal characteristics on individual life satisfaction are not necessarily of primary importance. One task of economists and social scientists, though not always performed effectively, is to give policy advice in order to improve people's living conditions. In general, many personal characteristics cannot be changed by policy interventions but are often subject to individual choice and behavior. If we happen to find that women are

⁸ The subsample of, respectively, French or German speaking Swiss is defined by restricting the sample to, first, Swiss citizens and, second, to those indicating, respectively, French or German as their first language spoken at home. We have chosen this definition because the regions captured in the ESS do not fully coincide with language borders. Moreover, the sample for Italian speaking Swiss is very small for statistical analysis.

Table 4.1 Satisfaction with life in Denmark and Switzerland

| | Satisfaction with life in Denmark (2002–2009) | | | Satisfaction with life in Switzerland (2002–2009) | | | Comparing satisfaction with life (Denmark – Switzerland) | | |
|--|--|-----------------------|------------------------------------|--|-----------------------|------------------------------------|---|------------------------------|--|
| | Weighted least squares | | | Weighted least squares | | | Who is happier? | Comparison of coefficient | |
| | Mean | Standard deviation | Coefficient (standard error) | Mean | Standard deviation | Coefficient (standard error) | | | |
| Personal characteristics | | | | | | | | | |
| Male | 0.4964 | 0.5 | Reference group | 0.452 | 0.4977 | Reference group | Reference group | Reference group | |
| Female | 0.5036 | 0.5 | 0.1320*** (0.0440) | 0.548 | 0.4977 | 0.0451 (0.0446) | <i>DK ~ CH</i> | 0.0869 (0.0612) | |
| Age (years – 65) | -14.3929 | 16.0949 | 0.0206*** (0.0037) | -14.5417 | 16.7639 | 0.0160*** (0.0035) | <i>DK ~ CH</i> | 0.0046 (0.0044) | |
| Age squared | 466.155 | 498.775 | 3.2e-04*** (9.5e-05) | 492.4489 | 489.7418 | 2.9e-04*** (8.8e-05) | <i>DK ~ CH</i> | 3.3e-05 (1.1e-04) | |
| Low education | 0.1874 | 0.3903 | Reference group | 0.2015 | 0.4011 | Reference group | Reference group | Reference group | |
| Middle education | 0.4043 | 0.4908 | -0.0633 (0.0632) | 0.5209 | 0.4996 | 0.0837 (0.0593) | <i>DK < ~ CH</i> | -0.1470* (0.0792) | |
| High education | 0.4082 | 0.4915 | -0.2418*** (0.0705) | 0.2776 | 0.4478 | 0.0440 (0.0702) | <i>DK < CH</i> | -0.2858*** (0.0938) | |
| Personal life, relationship and household | | | | | | | | | |
| Not hampered by illness, disability, etc. | 0.7465 | 0.4351 | Reference group | 0.7874 | 0.4092 | Reference group | Reference group | Reference group | |
| Hampered by illness, disability, etc. | 0.2535 | 0.4351 | -0.1130** (0.0558) | 0.2126 | 0.4092 | -0.1955*** (0.0627) | <i>DK ~ CH</i> | 0.0825 (0.0764) | |
| Subjective health (0: very bad; 5: very good) | 4.0827 | 0.9055 | 0.3684*** (0.0303) | 4.0882 | 0.7703 | 0.5314*** (0.0348) | <i>DK < CH</i> | -0.1630*** (0.0393) | |

(continued)

Table 4.1 (continued)

| | Satisfaction with life in Denmark (2002–2009) | | | Satisfaction with life in Switzerland (2002–2009) | | | Comparing satisfaction with life (Denmark – Switzerland) | |
|--|--|-----------------------|------------------------------------|--|-----------------------|------------------------------------|---|------------------------------|
| | Descriptive statistics | | Weighted least squares | Descriptive statistics | | Weighted least squares | Who is happier? | Comparison of coefficient |
| | Mean | Standard deviation | Coefficient (standard error) | Mean | Standard deviation | Coefficient (standard error) | | |
| Has no children | 0.3219 | 0.4672 | Reference group | 0.3418 | 0.4743 | Reference group | | |
| Has children | 0.6781 | 0.4672 | 0.0953* (0.0502) | 0.6582 | 0.4743 | -0.1000* (0.0522) | <i>DK > CH</i> | 0.1953*** (0.0725) |
| Married | 0.6148 | 0.4867 | Reference group | 0.5487 | 0.4977 | Reference group | Reference group | Reference group |
| Single, no partner | 0.1068 | 0.3089 | -0.4658*** (0.0875) | 0.172 | 0.3774 | -0.4227*** (0.0811) | <i>DK ~ CH</i> | -0.0431 (0.1087) |
| Single, with partner | 0.1073 | 0.3096 | -0.1928*** (0.0641) | 0.0484 | 0.2146 | -0.0539 (0.0827) | <i>DK ~ CH</i> | -0.1389 (0.1192) |
| Separated or divorced, no partner | 0.0733 | 0.2606 | -0.5836*** (0.0987) | 0.111 | 0.3141 | -0.6255*** (0.1047) | <i>DK ~ CH</i> | 0.0419 (0.1083) |
| Separated or divorced, with partner | 0.0252 | 0.1568 | -0.1329 (0.1106) | 0.0252 | 0.1567 | 0.0337 (0.1189) | <i>DK ~ CH</i> | -0.1666 (0.1678) |
| Widowed, no partner | 0.0663 | 0.2488 | -0.4515*** (0.1095) | 0.0885 | 0.284 | -0.3967*** (0.1250) | <i>DK ~ CH</i> | -0.0548 (0.1310) |
| Widowed, with partner | 0.0063 | 0.0789 | 0.0676 (0.2638) | 6.30E-03 | 7.89E-02 | -0.1535 (0.2693) | <i>DK ~ CH</i> | 0.2212 (0.3613) |
| Subjective degree of religion (0: not at all; 10: very religious) | 4.311 | 2.5714 | 0.0035 (0.0079) | 5.3818 | 2.8443 | 0.0506*** (0.0074) | <i>DK < CH</i> | -0.0470*** (0.0102) |

| | 0.9781 | 0.1464 | Reference group | 0.8717 | 0.3345 | Reference group | Reference group | Reference group |
|--|--------|--------|-------------------------|--------|----------|------------------------|--------------------|------------------------|
| Individual in society | | | | | | | | |
| Citizen of country | 0.9781 | 0.1464 | Reference group | 0.8717 | 0.3345 | Reference group | Reference group | Reference group |
| Not a citizen of country | 0.0219 | 0.1464 | -0.1951 (0.1711) | 0.1283 | 0.3345 | -0.1851*** (0.0619) | DK ~ CH | -0.0099 (0.1510) |
| Does not belong to minority group in country | 0.9768 | 0.1506 | Reference group | 0.9384 | 0.2405 | Reference group | Reference group | Reference group |
| Belong to minority group in country | 0.0232 | 0.1506 | -0.3777** (0.1919) | 0.0616 | 0.2405 | -0.4200*** (0.0936) | DK ~ CH | 0.0423 (0.1568) |
| Not a member of a political party | 0.9241 | 0.2648 | Reference group | 0.9216 | 0.2688 | Reference group | Reference group | Reference group |
| Member of a political party | 0.0759 | 0.2648 | 0.1605** (0.0634) | 0.0784 | 0.2688 | -0.0569 (0.0661) | DK > CH | 0.2174** (0.0992) |
| Main activity: paid work, employee | 0.5412 | 0.4983 | Reference group | 0.4744 | 0.4994 | Reference group | Reference group | Reference group |
| Paid work, self-employed or family-business | 0.0674 | 0.2507 | 0.0634 (0.0685) | 0.1032 | 3.04E-01 | 0.0523 (0.0616) | DK ~ CH | 0.0111 (0.1020) |
| Unemployed | 0.0322 | 0.1766 | -0.5911**** (0.1536) | 0.0208 | 1.43E-01 | -1.1754*** (0.1837) | DK > CH | 0.5843*** (0.1744) |
| In education | 0.0418 | 0.2001 | -0.0587 (0.1189) | 0.0209 | 0.1431 | 0.3588*** (0.1118) | DK < CH | -0.4176** (0.1655) |
| Retired | 0.2578 | 0.4375 | 0.0522 (0.0772) | 0.2221 | 0.4157 | 0.3816*** (0.0853) | DK < CH | -0.3294*** (0.1060) |
| Housework | 0.0416 | 0.1997 | -0.0382 (0.0942) | 0.1379 | 0.3448 | 0.2845*** (0.0581) | DK < CH | -0.3227*** (0.1157) |
| Currently disabled from work | 0.018 | 0.1331 | -0.5205** (0.2555) | 0.0208 | 0.1426 | -0.5410*** (0.2053) | DK ~ CH | 0.0205 (0.2080) |
| Working life and pay | | | | | | | | |
| Occupation as low skilled blue collar worker | 0.2048 | 0.4036 | Reference group | 0.1534 | 0.3604 | Reference group | Reference group | Reference group |

(continued)

Table 4.1 (continued)

| | Satisfaction with life in Denmark (2002–2009) | | | | Satisfaction with life in Switzerland (2002–2009) | | | | Comparing satisfaction with life (Denmark – Switzerland) | |
|---|--|-----------------------|------------------------------------|--|--|-----------------------|------------------------------------|--|---|------------------------------|
| | Descriptive statistics | | Weighted least squares | | Descriptive statistics | | Weighted least squares | | Who is happier? | Comparison of coefficient |
| | Mean | Standard deviation | Coefficient (standard error) | | Mean | Standard deviation | Coefficient (standard error) | | | |
| Occupation as high skilled blue collar worker | 0.1212 | 0.3263 | -0.0739 (0.0766) | | 0.1353 | 0.3421 | 0.0362 (0.0754) | | <i>DK ~ CH</i> | -0.1101 (0.1020) |
| Occupation as low skilled white collar worker | 0.2121 | 0.4088 | -0.1041 (0.0666) | | 0.2482 | 0.432 | 0.1088 (0.0678) | | <i>DK < CH</i> | -0.2129** (0.0891) |
| Occupation as high skilled white collar worker | 0.4581 | 0.4983 | -0.0760 (0.0613) | | 0.4627 | 0.4986 | 0.0823 (0.0658) | | <i>DK < CH</i> | -0.1583* (0.0879) |
| Allowed to decide how daily work is organized (0: not at all; 10: very independent) | 6.6879 | 3.4885 | 0.0367*** (0.0070) | | 5.7995 | 3.777 | 0.0295*** (0.0060) | | <i>DK ~ CH</i> | 0.0072 (0.0088) |
| Equivalent income less than 147,999 DKN (45,000 CHF) | 0.2176 | 0.4127 | Reference group | | 0.1258 | 0.3316 | Reference group | | Reference group | Reference group |
| Equivalent income 148,000–225,999 DKN (45,000–65,000 CHF) | 0.1924 | 0.3942 | 0.0559 (0.0703) | | 0.17 | 0.3757 | -0.0321 (0.0981) | | <i>DK ~ CH</i> | 0.0880 (0.0999) |
| Equivalent income 226,000–392,999 DKN (65,000–102,000 CHF) | 0.3029 | 0.4596 | 0.0769 (0.0714) | | 0.281 | 0.4495 | 0.1988** (0.0901) | | <i>DK ~ CH</i> | -0.1219 (0.0992) |
| Equivalent income 393,000–533,999 DKN (102,000–156,500 CHF) | 0.1372 | 0.3441 | 0.1179 (0.0796) | | 0.1622 | 0.3687 | 0.3329*** (0.0930) | | <i>DK < CH</i> | -0.2149* (0.1143) |
| Equivalent income above 534,000 DKN (156,500 CHF) | 0.0584 | 0.2345 | 0.2216*** (0.0994) | | 0.0748 | 0.2632 | 0.3151*** (0.0987) | | <i>DK ~ CH</i> | -0.0934 (0.1395) |
| Did not report equivalent income | 0.0915 | 0.2884 | -0.0634 (0.0913) | | 0.1861 | 0.3892 | 0.2840*** (0.0911) | | <i>DK < CH</i> | -0.3474*** (0.1077) |

overall happier, we surely cannot advise, although physically possible today, to transform men into women. Similarly, it is impossible to make an old person young again. Nevertheless, as earlier studies on happiness identify personal characteristics as important determinants of happiness we begin our analysis with three major demographic factors, namely gender, age, and education.

Effects of Gender

Gender differences have been documented to exist in almost any area affecting life (see, among others, Blau and Kahn 2001 for wages; Croson and Gneezy 2009 for experimental evidence; Davis et al. 2006 for other socioeconomic gender effects). We also know that there exist differences in expressed moods, behavior, personal conduct, etc. between women and men. A number of studies have shown that women exhibit higher subjective life satisfaction than men but that this difference is comparatively small when controlling for other factors such as income differences etc. Looking at our results for Denmark, we find that females are indeed happier than men when controlling for a large number of other variables that influence happiness. Note that certain factors such as having children may influence men and women differently and certain other variables may be more important in female than in male samples. We will discuss certain differences regarding happiness between women and men below. Here we focus on the isolated effect of being a woman, holding everything else constant.

Table 4.1 shows that the effect of the variable “Female” (“Male” is the reference category) is positive and has a value of 0.1320. Thus, females in Denmark are 0.1320 points happier than males in Denmark. Below the effects on happiness we report in parenthesis the standard error of the estimate. The Danish coefficient for the variable “Female” exhibits a low standard error which is indicated by means of three stars next to the coefficient. Thus, we know that the effect of gender is statistically significant for Denmark. This is not the case for the effect of being a woman in Switzerland. The coefficient value indicates with 0.0451 a positive influence on happiness similar to Denmark.⁹

How may such a difference in expressed life satisfaction between men and women be explained? In part, happiness results for women and men may differ due to different social expectations and different socialization processes. For instance, Kroll (2011) shows that the relationship between social capital and happiness varies by gender and parental status. But as Dolan et al. (2008) point out such gender differences may disappear or become small the more control variables are included in the estimations. Although the difference between 0.1320

⁹ Interestingly we find regional difference within Switzerland. While the happiness margin of women over man is comparable between Danes and German speaking Swiss the effect of being a woman is much less pronounced for French speaking Swiss as well as Italian speaking Swiss and migrants.

and 0.0451 looks large, it is not statistically significant, i.e. we cannot be sure that the difference is not due to random influences in the sampling procedure and could vanish if we enlarge the sample of surveyed persons.

Effects of Age

Many people think that it is desirable to be young and to stay young. They associate many qualities of life with being young. Thus, when asked, many people argue that old people are not as happy as young people. Naturally, the elderly are often physically and sometimes economically worse off than the younger generation. Often they experience a lower quality regarding health-related measures and they may also exhibit lower income levels. Controlling for these and other characteristics, it is somewhat surprising that almost all studies focusing on individual life satisfaction find that the elderly are happier than younger persons. One explanation for this general finding is that older people have had time to cope with their conditions. While younger people may aspire towards improving their material base, looking for the right employment and experiencing what could make them happy, older people may calmly rely on their experiences and know what makes them happy.

Older people are happier than younger ones in Switzerland as well as in Denmark. There is no significant difference between the two countries, and the results hold for women and for men, i.e. older women are happier than younger women, and older men are happier than younger men. Thus, in general, older persons are significantly happier than younger ones. Again, given that we control for everything else, this effect is relatively small. Note that the effect of age on happiness is nonlinear. As age enters the estimation via the $(\text{age} - 65)$ variable as well as the square of this term one has to take into account both terms. The total effect of age on happiness is shown in Fig. 4.3. Looking at the age coefficients only we find no statistically significant differences between Switzerland and Denmark.

In Fig. 4.3 we observe that happiness in Denmark and Switzerland is slightly falling until the age of 36 and increases quickly afterwards. To construct the solid lines in Fig. 4.3 we vary age and evaluate all other variables at their median value. To construct the dotted lines, we evaluate all variables at their median value again but we take into account the effect of retirement and change the variable from not retired to retired at the age when a retirement is probable. We observe that age itself exerts a positive influence on happiness and being retired particularly increases happiness by a large amount in Switzerland. In Denmark the effect of being retired is almost zero as will be discussed below.

Effects of Education

There is a common saying that only “fools are happy”. Intelligent and very able individuals are more likely to reflect intensely about their situation and have high

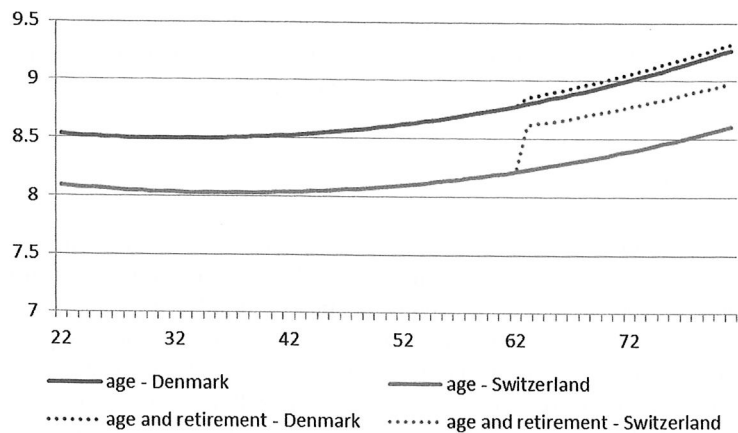


Fig. 4.3 Effects of age on happiness (Notes: The plot depicts happiness for a person whose characteristics are hold constant at national median values while age varies. In addition, *dotted lines* take into account the partial effect of retirement on happiness)

aspirations for what they want to achieve. Both effects do not necessarily result in a happier life. Altogether, the effect of education on reported subjective well-being is uncertain. In many studies there is only a weak relationship between happiness and education (see Dolan et al. 2008 for a review). Usually education is highly correlated with income which positively influences happiness as we will discuss later. However, education itself may exert a direct effect on happiness. We classify survey respondents into low, middle, and highly educated to learn about the influence of education on life satisfaction for Denmark and Switzerland. In Switzerland we do not find any significant influences of education on well-being, i.e. more educated people do not exhibit significantly different happiness values than less educated people. In Denmark the picture is a bit different. In particular the highly educated seem to be significantly less happy than people with low and middle education. The difference between the highly educated Danes and the highly educated Swiss is significant. It is also remarkable that more people are highly educated in Denmark than in the Swiss sample. This may be explained by differences in the schooling system. Differences in the schooling system and the valuation of education apparently also exist within Switzerland. While middle education exerts a positive effect on German speaking but none on French speaking Swiss the opposite is true for higher education.

Note again that above we evaluate the pure effect of education holding in particular income and job characteristics constant. For instance, if we do not control for income, we observe that education increases happiness significantly in Switzerland. In contrast, Danes with a high education and, thus, high income

remain less happy but the negative¹⁰ influence of education on happiness would be smaller and less significant.

4.4.2.2 Personal Life, Relationship and Household

Personal characteristics like age and gender are non-choice variables. Although we know that older people are happier than the young we cannot choose to become older instantaneously. In contrast, education is partly a choice variable which, however, also depends on innate abilities and on other factors which are determined not only by the individual but also by his or her parental background. On the other hand, people have greater liberty in choosing their marital status, their number of children and it is possible to adapt these choice variables to personal preferences and economic conditions. Health is at least partially influenced by a person's own actions. As it lies between what we refer to as personal characteristics and a person's life situation we start directly with explaining the effects of personal health on life satisfaction.

Effects of Health

Good health is often rated as one of the most important factors in life and is also found to have a large impact on self-reported well-being. We distinguish two measures for health. The first measure is a person's objective health situation. It measures whether the person is hampered in her daily activities by some form of disability or not. Thus, it is to some extent a measure of a personal characteristic. The second measure is a "subjective" and self-reported measure for a person's health. It shows how a person copes with her health situation in her personal life. Explaining happiness by a self-reported measure of health may introduce questions with respect to causality. On the one hand, a person may indicate that she does not perceive an illness as a very distracting factor and she therefore reports a relatively high health score and a high happiness score. Similarly, a person feeling often sick is likely to report a low life satisfaction. However, causality may also run the other way. Happy and generally satisfied persons may view their health as better which causes them to report a high health score. Usually, subjective self-reported health is more closely related to happiness than objective health. This makes good sense intuitively. When faced with a severe and objective health problem, people of course get unhappy but they try to cope with their situation. They do not necessarily compare themselves to persons who are healthy anymore but instead they compare themselves to persons with a similar health situation.

Our results show for Denmark and for Switzerland that people who are effectively hampered by illness or disability report lower life satisfaction in both

¹⁰ We note that the income gain from high education is fairly modest in Denmark.

countries. On average 25 % of people in Denmark are hampered by some form of illness or disability while this only applies to approximately 21 % in Switzerland. Swiss people tend to get unhappier than Danes when they are really hampered by illness. However, there are no significant differences between the two countries as far as the influence of objective health on happiness is concerned. There are certain differences between males and females with regard to the effect of objective health on happiness (see Appendix). In Denmark males suffer more when they are effectively hampered by illness than females while it is the other way around in Switzerland.

To address the above mentioned causality issue we also ran the regression without perceived health. The results for objective health are very stable to the inclusion/exclusion of subjective health. The coefficients of high education in Switzerland and the two highest income categories in Denmark become statistically significant. This confirms a result known from the literature that health is correlated with income and education. Thus, there exists not only a direct positive relationship between high education and income as well as happiness. An indirect relation via perceived health emerges because better education and higher income lead to better awareness and treatment of health issues, and a good health status is usually a prerequisite for earning money.

Turning to subjective health we find interesting differences between the two countries. On average, Danes and Swiss tend to evaluate their health in the same way as far as their subjective health is concerned. On a six point scale, on average they rate their subjective health at four points. However the influence of subjective health on individual life satisfaction is significantly higher in Switzerland than in Denmark. This pattern also holds when looking at men and women in both countries separately. Thus, feeling healthy is relatively more important to Swiss than to Danes. It is a possible hypothesis that the larger welfare state in Denmark mediates the negative influence of an impaired personal health status since persons can expect a higher support by the welfare state in such situations. This hypothesis might be explored further in future research.

Effects of Having Children

What is the effect of children on individual happiness? Does having children make people happier? Here our results show pronounced differences between Denmark and Switzerland. Having children in Denmark makes people significantly happier than being without children. The opposite is the case in Switzerland. Having children in Switzerland is seen as a burden which makes people unhappy. It is likely that this effect has something to do with differences in the social systems in the two countries. Having children in Denmark is probably "easier" as it is also "less costly". The Danish government provides more services for families and mothers than the Swiss authorities at the different federal levels. This hypothesis is strengthened when looking at data for women and men separately. Children have no effects on the happiness of men in either of the two countries. However, the

effect of children on the happiness of women is significant in both countries but of opposite sign. It is only women in Denmark who become happier when they have children. Women in Switzerland on the other hand become less happy when they have children. Indeed, in Switzerland it may be economically more challenging, in particular for women, to raise children. This is well reflected in the data. Taking a closer look at this issue we find that especially separated women in Switzerland suffer when they also have children but this effect is not very robust due to the small sample size.

Effects of Interpersonal Relationships

Personal relationships for women and men can contribute to achieving higher happiness together. Many people also regard having good relationships to other persons as a major goal in their lives which also contributes to their life satisfaction. Having an intimate companion has an important and positive effect on happiness which we observe in our analysis.

Note that a certain selection effect cannot be ruled out in the case of partnership, i.e. not everyone is equally likely to find a partner and to choose marriage. Moreover, having a partner may cause happiness but a happy person may also find a partner more easily. Thus, there is again a causality issue when analyzing the effects of personal relationships, and marriage in particular, on happiness. But research indicates that this possible problem of reverse causality is not severe (see Frey and Stutzer 2002). Thus, causality seems to run from having a partner to higher happiness which is also largely supported by different studies.

In particular, persons who are divorced and have not yet found another partner report significantly lower levels of happiness than persons in a partnership. For our analysis of Denmark and Switzerland we find effects similar to the ones established in the literature. Living in a partnership in general and being married in particular is positively and strongly associated with happiness.

Married individuals constitute the reference group in our estimation model. Being single instead of being married reduces subjective life satisfaction in Switzerland and in Denmark by approximately the same amount.¹¹ We note, however, that approximately 7 % points more people are singles in Switzerland than in Denmark. In Denmark, singles who found a partner but do not live with her/him are happier than those without partner but remain less satisfied than married couples. In Switzerland this effect is somewhat different. Unmarried couples living together are statistically not unhappier than married couples. Remarkably, however, 10 % of Danes live with a partner (without being married) but only 5 % of the Swiss.

Being divorced without having found a new partner decreases happiness in both countries significantly and strongly. Fortunately, living together with a new partner

¹¹ The negative effect is a little bit more pronounced for French speaking Swiss.

after a divorce almost fully redresses the initial negative effect of a divorce. In general, divorced persons who have not found a new partner tend to be unhappier than married persons while divorced persons with a new partner are almost as happy as married persons.

Approximately the same effect of partnership can also be found for women and men separately, i.e. there are no significant differences between men and women. Moreover, regarding all variables which measure the individual relationships we do not find any significant difference between Denmark and Switzerland.

Effects of Religion

As a final variable for the personal life we analyze the effects of religion. Some studies have found that believing in God and individual life satisfaction are positively associated. Various hypotheses have been forwarded to explain this result. For example, religion may help people to cope with adverse circumstances, church attendance is a form of social interaction, and religion may also provide an interpretation of the meaning of life which may be important for people. Clearly, there may be problems of reverse causality again. Looking at our data from Denmark and Switzerland, we observe that more religious people in Switzerland tend to report higher scores of life satisfaction. This is not the case in Denmark while at the same time Danes are also less religious than Swiss on average. The country differences in the influence of religion on subjective well-being are also statistically significant.

4.4.2.3 Individual in Society

Humans are social beings and assess their personal situation relative to other members in society. Most individuals presumably compare themselves with other individuals facing similar circumstances as themselves. Generally speaking, human beings are not able to make absolute judgments about their situation but they are very well able to make comparisons from the past or by looking at other members in society. Thus, to understand people's life satisfaction we have to look at their positions within society.

Effects of Citizenship

The estimations show that not being a citizen of the country a person lives in is associated with lower levels of happiness in both countries. The effect is significant for foreigners living in Switzerland but not significant for foreigners living in Denmark.

Being a foreigner in a country is associated with fewer political rights. Participating in democratic institutions and in democratic decision-making

processes has been shown to increase subjective well-being which may explain why noncitizens are unhappier (Benz and Stutzer 2004). Problems with integration or outright discrimination may be stated as additional reasons. We also note that the number of foreigners in our dataset is quite different for Denmark and Switzerland. Approximately 12 % of persons participating in the survey in Switzerland are foreigners while only approximately 2 % of the Danish respondents are foreigners. This corresponds well to the observation that the participation of foreigners is higher in Switzerland than in Denmark. Even though the effect of being a foreigner in Switzerland is significantly negative there is no statistical difference concerning the size of the coefficients between the two countries due to a high standard error in the Danish estimate. When looking at women and men separately, we find that particularly women tend to be unhappier if they are not citizens of the country they live in. There are no significant effects for men without citizenship of Denmark or Switzerland, respectively.¹²

Effects of Belonging to a Minority

Studies for the United States have found that blacks are less happy than whites. Similar results also hold for other countries and other minority groups. In some countries such differences can be explained by the lower income level and work in less skilled jobs among minority groups. However, Blanchflower and Oswald (2004) showed for the USA that even when controlling for differences in economic life conditions there still remains a negative effect of being black. People are asked in the European Social Survey whether they perceive themselves as belonging to a minority group. We thus analyze the effect of perceived minority status on individual life satisfaction. It is important to note that precisely the perceived effect of belonging to a minority is most likely more important with respect to happiness than the fact of being in a minority, i.e. people from Sweden may be a minority in Denmark and Switzerland but may not perceive themselves as such. Perceiving to belong to a minority group decreases happiness in Denmark as well as in Switzerland. The effect is slightly more negative in Switzerland than in Denmark but there is no significant difference between the two countries. Note that belonging to a minority is subjectively determined, i.e. it is the survey respondents who indicated whether they perceive themselves as belonging to a minority group. Approximately 2 % of persons in Denmark say that they belong to a minority while the same holds for approximately 6 % of persons interviewed in Switzerland. The effects of belonging to a minority are not systematically different for women and men in the two countries.

¹² Note that we also analyzed the effect of being a Danish and Swiss citizens living in other European countries (see Sect. 4.3). Danes living abroad are not happier than citizens of the chosen host country while we find positive effects for Swiss citizens abroad.

Effects of Democratic Institutions

In an empirical investigation for Switzerland institutions in the form of direct democracy and federalism have been shown to have a positive impact on citizens' happiness (Frey and Stutzer 2000). One reason might be that such institutions lead to policy outcomes which are closer to citizens' preferences. Another reason might be that not only outcomes but also the way they are generated counts (Frey et al. 2001) because people are more prone to accept an outcome if they are involved in its production.

The ESS asks respondents whether they belong to a political party. Our results show that belonging to a political party in Denmark increases happiness but belonging to a political party has no significant effect in Switzerland. With regard to the literature such effects can be expected. Swiss citizens can participate extensively in policy making via referenda, which makes them happy. In contrast, Danes who want to extensively participate in policy making have to join a political party which also makes them happy to some extent.

In an additional regression we also included people's satisfaction with the way democracy works in their countries as an explanatory variable. The scale of this variable ranges from 0 (extremely dissatisfied) to 10 (extremely satisfied) similarly to the happiness score. Satisfaction with democracy exhibits a strongly positive and significant relationship with happiness as satisfaction with the democracy in a country clearly reflects a part of overall happiness. The Danish coefficient amounts to 0.12 while it amounts to 0.11 for Switzerland. This indicates that an additional point on the satisfaction with democracy scale increase happiness by 0.12 points. Most importantly, the coefficients of the other variables are quite robust to the inclusion of satisfaction with the way democracy works. Additional analyses we carried out (results not included in the table) also indicate that in Switzerland women are less satisfied with democracy while highly educated individuals are more satisfied with the way democracy works. This is generally also consistent with potential explanations for the negative effects of the variable "Female" in Switzerland. In Denmark, especially people with children, noncitizens and white collar workers seem to be more satisfied with the way democracy works than other social groups. Again, this corresponds well with general perceptions regarding the generous Danish welfare state: Especially relatively weaker groups seem to gain in terms of happiness.

Effects of Main Activity

An economy providing full employment is one of the central goals of today's economic policy as already mentioned in other chapters in this book. In general, employment is seen as an indicator for an economy's strength and of general welfare. Indeed, unemployment induces costs because labor is a scarce resource. If people are unemployed fewer goods and services can be produced which reduces gross domestic product. Thus, it is important to understand how people use their

time and what effects different kinds of employment in general and unemployment in particular have on individual happiness.

In our study we are able to differentiate between a large number of different main activities indicated by our survey respondents. Persons who are employees in a form of paid work constitute our reference category. We then analyze whether being self-employed, unemployed, in education, retired, performing housework, or currently being sick or disabled from work increase or decrease life satisfaction in Denmark and Switzerland.¹³

In both countries, being self-employed or in a family business increases happiness compared to employed persons slightly but the difference in life satisfaction is not significant. Other studies often report that being self-employed increases happiness significantly. They argue that having the possibility to organize one's workday independently increases happiness (Benz and Frey 2003). Thus, it is not the effect of being self-employed in itself. We can show this later, as we are able to measure whether people are allowed to decide how their daily work is organized as an additional variable.

Next, we are interested in how self-reported life satisfaction is affected by unemployment. Unemployment was low in Denmark as well as in Switzerland during the period analyzed (2002–2008). However, the effects of being unemployed on happiness are huge and differ substantially between the countries. In Denmark and in Switzerland, unemployed persons are significantly less happy than employed persons. Unemployment is one of the single largest explanatory factors for becoming unhappy. Joblessness reduces subjective well-being more than any other single characteristic, including important negative ones such as divorce. It is important to note that the reported effects refer to pure effects of being unemployed. Lower income levels due to being unemployed are kept constant. Men tend to suffer more from becoming unemployed than women. This particular gender effect also holds in both countries. Men seemingly cannot adapt quickly to losing their jobs. It seems that women are faster in adapting to the new situation and are also able to occupy themselves with activities which benefit their family. This gender specific effect of unemployment is also confirmed in many other studies. Focusing on differences between Denmark and Switzerland we observe that being unemployed has a large negative effect in Switzerland and in Denmark. While being unemployed in Denmark reduces happiness by approximately 0.6 points it reduces happiness by almost 1.2 points in Switzerland. This difference of close to 0.6 points is also statistically significant. Thus, regarding subjective life satisfaction it is worse to become unemployed in Switzerland where it is considered as important to be productive and to earn one's own living. Higher incomes and higher inequality are most likely more accepted in Switzerland and working and earning money is therefore regarded as a high value. This view is partly also corroborated by the analysis of value orientation presented in the book. Moreover, the observed effects could be explained by the Danish welfare state which stigmatizes people less if they

¹³ These definitions follow the definitions used in the European Social Survey.