



Subjective well-being and socio-ecological transition

Policy Paper no 6

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Subjective well-being and socio-ecological transition*

The WWWforEurope project intends to lay the analytical foundation for a new development strategy that enables a dynamic socio-ecological transition to high levels of employment, social inclusion, gender equity and environmental sustainability. This task arises from the wide gap between the broad formal acceptance of these goals and their troublesome realisation. Citizens are not prepared to change their behaviour, powerful policy instruments are missing, serious trade-off problems exist, and strong externalities drive a wedge between social and private goals. To solve these problems potential differences between the urgency and hierarchy of a society's goals on the one hand and individuals' goals on the other must be known. This is indeed a near-blind spot in mainstream economics. Utility functions are almost unavoidably based on rational behaviour and purely economic goals, while the widely chosen alternative, revealed preferences, necessarily has to assume that individuals come to their decisions 'rationally' and are aware of longer-term consequences. The rather new field of Subjective-Well-Being (SWB) research can help to deal with these problems. One must be cautious in applying it, however, as SWB research has become (too) popular in the last decade, proving an explosive topic in the media. Marketing-oriented terminology does not differentiate between subjective well-being and happiness ("Lebenszufriedenheit" versus "Glück" in German). The quest for happiness has created a specific market (Flora, 2009) and "[i]ncreasing public happiness has become an overt goal of public policy in many countries, sitting, sometimes uneasily alongside more familiar goals such as economic growth, national security, and social justice." (Mulgan, 2013: 517). In the striving for popularity, the term "happiness" has lost precision¹ and its relevance to policy.

1. Definitions and data

In contrast to psychologists and sociologists, who accurately differentiate between SWB,² happiness and life satisfaction, economists frequently interchange these terms and, sadly, often do this in a deliberately marketing-oriented way. The following quotation from the World Happiness Report provides a good example, as it contains the correct definitions but nevertheless uses the term 'happiness' incorrectly:

* Thanks are due to K. Aiginger and M. Schratzenstaller for inspiring discussion and helpful comments on an earlier draft.

¹ "Thus what the media (and often SWB researchers themselves) have referred to as 'happiness' rankings may be a misnomer. The term happiness (in contrast to life satisfaction) connotes an experience that is emotional and momentary." (Tov and Au, 2013: 453).

² Kahneman and Deaton (2010) found "that emotional well-being (measured by questions about emotional experiences yesterday) and life evaluation (measured by Cantril's Self-Anchoring Scale) have different correlates. Income and education are more closely related to life evaluation, but health, care giving, loneliness, and smoking are relatively stronger predictors of daily emotions." See also section 3.

“Subjective well-being’ is the general expression used to cover a range of individual self-reports of moods and life assessments. The word ‘happiness’ is often used in an equally general way, as in the title of this report. It does help to focus thinking, and *attracts attention* (my emphasis G.T.) more quickly than does ‘subjective well-being’. But there is a risk of confusion. A bit of advance explanation may help to keep things clear.

Among various measures of subjective well-being, the primary distinction to be made is between cognitive life evaluations (represented by questions asking how happy or satisfied people are with their lives as a whole), and emotional reports. Early modern attempts to classify different types of subjective well-being in psychology have also made a distinction between two types of emotional reports: positive affect (a range of positive emotions) and negative affect (a range of negative emotions). The primary distinction between life evaluations and emotional reports continues to be accepted today. It is also accepted, although less generally, that positive and negative affect carry different information, and need to be separately measured and analyzed. In this report we shall present all three types of measure.

How does happiness come into this classification? For better or worse, it enters in three ways. It is sometimes used as a current emotional report – ‘How happy are you now?’, sometimes as a remembered emotion, as in ‘How happy were you yesterday?’, and very often as a form of life evaluation, as in ‘How happy are you with your life as a whole these days?’ People answer these three types of happiness question differently, so it is important to keep track of what is being asked. The good news is that the answers differ in ways that suggest that people understand what they are being asked, and answer appropriately. Thus when people are asked about their *happiness now or yesterday, the answers are closely correlated with current activities and events in their lives today or yesterday. By contrast, when people are asked how happy they are with their lives a whole these days, their answers match very closely the answers to other similar evaluations of life as a whole.*” (Helliwell and Wang, n.d.: 11; my italics G.T.).

In addition to cognitive (life satisfaction) and affective (happiness, anger, worry) elements of SWB, which focus on a person’s experiences, the psychological literature further distinguishes a state of *eudaimonia* or good psychological functioning (Clark and Senik, 2011). This paper follows the psychology nomenclature and restricts the term “happiness” to the emotional aspects (“How happy are you now?” or “How happy were you yesterday?”), while for the cognitive aspects (“How happy are you with your life as a whole these days?”) the term “life satisfaction” is used. “Subjective Well-Being” (SWB) comprises both (and *eudaimonia* additionally). For the problems of trade-offs between goals and externalities, which drive a wedge between social and private goals, the cognitive aspects – life satisfaction – are relevant. These will form the core of this paper. This stands in accordance with the substance (as

opposed to terminology) of the economic literature,³ while sociologists and psychologists concentrate on the emotional aspects, namely happiness (Glück) and to some extent eudaimonia. Section 3 will nevertheless provide a brief outline of the differing determinants of life satisfaction and happiness.

The studies dealing with SWB are based on a *large number of surveys*: The World Databank of Happiness comprises 4027 entries, of which two thirds (Europe 70%, USA 54%) refer to global cognitive measures, representing the more reflective of enduring social conditions. The surveys most heavily used by economists are

- World Values Survey (WVS): 5 waves since 1981, the number of countries (from all continents) rising from 42 to 62, with a very broad program of about 250 questions;
- General Social Survey (GSS): Yearly since 1972 (1979, 1981 and 1992 missing), about 3000 US-American adults, applying a 3-point Likert scale⁴ for the SWB question;
- European Social Survey (ESS): 6 rounds since 2001, comprising EU15 countries, applying a 11-point Likert scale for the SWB question;
- The Eurobarometer (EB), semi-annually since 1973, comprising all EU-countries, ~1000 telephone interviews/country, applying a 4-point Likert scale for the SWB question;
- Gallup World Poll: Annually since 1977/2005, comprising 54/150 countries (distributed around the world), applying a 11-step Cantril ladder⁵ for the SWB question;
- German Socio-Economic Panel (GSOEP), tracking the same individuals each year since 1984, surveying about 20,000 persons from about 11,000 households.

Table 1 **Number of data points in the World Database of Happiness**

	Cognitive		Affective	
Global	Life satisfaction	1	Overall happiness	1
	Life evaluation	1 2678	General depression	1 885
	Overall quality of life	1		
Time inclusive	--	Satisfaction with previous day	Past month depression	1
		179	Frequency of happiness in past week	1 285
			Previous day emotions	1

Source: Tov and Au (2013: 452), modified.

The relevant questions concerning life satisfaction are similar in the different surveys. The European Social Survey uses two questions: “Taking all things together, how happy would you

³ Economists factually deal almost exclusively with life satisfaction but, as mentioned before, predominately call it happiness: See e.g. “World Happiness Report” (Helliwell et al., n.d.), “Happiness Lessons” (Layard, 2005), “Happiness, growth, and the life cycle” (Easterlin, 2010).

⁴ When responding to a Likert questionnaire item, respondents specify their level of agreement or disagreement on a symmetric agree-disagree scale for a series of statements. Thus, the range captures the intensity of their feelings for a given item. Likert scaling assumes that distances on each item are equal.

⁵ The Cantril ladder (self-anchoring scale) is a particular approach to measuring life evaluation that asks respondents to imagine a ladder with rungs from 0 to 10, where 10 is the best possible life for them. Respondents are asked to indicate where on the ladder they would place their own life.

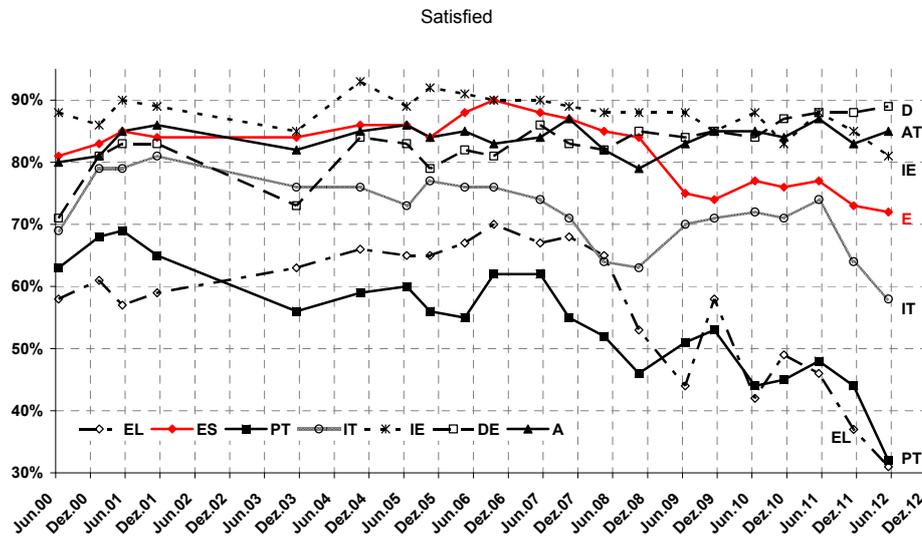
say you are?” and “All things considered, how satisfied are you with your life as a whole nowadays?”, while the World Values Survey asks almost the same question, except that it uses “these days” instead of “nowadays”, and Eurobarometer asks: “On the whole, are you very satisfied, fairly satisfied, not very satisfied or not at all satisfied with the life you lead?” The three separate Cantril ladder questions in the Gallup World Poll ask respondents to evaluate their lives “at the present time”, five years ago and five years in the future on a ten-point ladder. According to the similarity of the questions, research has been able to discover very similar stories about the likely sources of a good life.⁶

The following section will use the determinants of self-reported life satisfaction to work out the preferences of individuals and compare them with the necessities of the envisaged socio-ecological transition. Beforehand, three caveats need to be voiced: general objections to self-evaluation, the problem of bias due to cultural differences, and the limited qualification of life satisfaction (and likewise of happiness) as a yardstick of peoples’ assessments and decisions.

Some critics do not trust the *reliability of self-evaluations* and maintain that they are not correlated with actual behaviour (e.g. Glaeser et al., 2000). The bulk of evidence contradicts this, however. Psychological studies confirm that persons who characterize themselves as satisfied laugh more frequently (Fernandéz-Dols and Ruiz-Belda, 1990), are less suicide-endangered (Oswald, 1997: 1823ff; Koivumaa et al., 2001), and are considered satisfied by relatives and friends (Sandvik et al., 1993). Their satisfaction is also reflected in a variety of objective measures, including facial expressions, brain-wave patterns, cortisol measures and pulse at the individual level (Shedler et al., 1993). People generally give similar answers when asked the same question at different points in time, and test-retest results for subjective well-being measures yield correlations of between 0.6 and 0.7 for self-reports done on the same day (Krueger and Schkade 2007). Reversing the direction of research, Freeman (1998) and Clark et al. (2008b: 119ff), demonstrate that one can use the level of life satisfaction of respondents to assess their behaviour with respect to productivity, unemployment, conjugal behaviour, mortality, etc. Bjørnskov (2010) demonstrated that Gallup’s Cantril-ladder measure of life satisfaction correlates highly (0.75) with WWS’s Likert scale. Economic studies have succeeded in explaining the individual and social determinants of satisfaction consistently over countries and time (Di Tella et al., 2003: 812; Blanchflower and Oswald, 2011), with figure 1 showing that satisfaction reflects the wealth gap as well as the Northwest-Southeast gap. Furthermore, it reveals that satisfaction has responded to the financial crisis in a sensitive and differentiated way (Tichy, 2013).

⁶ “But when happiness is seen as an emotional report, and measured at a point in time, then it looks very like other measures of positive affect. Thus ‘happiness yesterday’ measured on a 0 to 10 scale as a positive affect measure has very different properties from life satisfaction, asked on the same scale of the same respondents.” (Helliwell and Wang, n.d.: 15).

Figure 1 **Life satisfaction in countries differently affected by the financial crisis**



Source: Tichy (2013).

It is the distinctive feature of subjective well-being measures that they offer people the chance to report on the quality of their own lives, reflecting their own histories, personalities and preferences. These are arguably the most democratic of well-being measures, since they do not reflect what experts or governments think should define a good life, but instead represent a direct personal judgment. In this light, the subjectivity of happiness is a strength rather than a weakness.⁷ The availability of the respondents' personal characteristics and the size of the samples enables an extraction of the very aspects that cause the respondents' happiness. This makes it possible to surpass direct answers (opinion polls) or utility functions as a guide to economic policy: SWB research does not report what people believe makes them happy, but rather carves out the conditions that lay the foundation for their happiness. This is an important guide for policy, but section 3 will reveal that this will not work without some further deliberations.

The second caveat refers to the potential bias of *cultural differences*. Subjective well-being, like income, is unequally distributed within and among nations, and the question is whether this reflects actual differences. Danes, for instance, always report the by far highest life satisfaction in Eurobarometer surveys,⁸ and some evidence exists that cultural norms encourage US-

⁷ "The most fundamental indicator of your happiness is how happy YOU feel, not whether others see you smiling, your family thinks you are happy, or you have all the presumed material advantages of a good life." (Helliwell and Wang, n.d.: 21; original emphasis). Above, it has been shown that these elements are nevertheless highly correlated.

⁸ "The happiness of Danes may be better characterised by contentment rather than over-flowing ebullience." (Safer, 2008).

Americans to present their lives in a more positive light (Kahneman and Riis, 2005).⁹ Reported SWB tends to be higher in individualistic cultures than in collectivist ones, in which more emphasis is placed on personal modesty, self-criticism and social harmony (Suh, 2000). “The metaphor people adopt, and the myth they perpetuate shape emotional life and happiness levels” (Vittersø, 2013: 14). One can, however, easily overemphasise the cultural differences. The Gallup-World Poll’s Cantril ladder, for example, shows that the variation of subjective well-being across the world’s population largely takes place *within* countries (Helliwell and Wang, n.d., 12). Blanchflower and Oswald (2008), furthermore, find a strong correlation between psychological well-being and blood pressure among countries, and consider this as a confirmation of the reliability of country comparisons. Finally, cultural differences, if they exist at all, are irrelevant in explaining the constituents of happiness within one country or in analysing time series.

The third caveat hints at the *narrow definition of life satisfaction* (and even more of happiness) in this paper (as well in all of the respective economic literature). Philosophy employs much broader definitions which, furthermore, constantly change over time (see Section III of David et al., 2013). For Aristippus in Greek antiquity, happiness was the sum of momentary pleasures, and both Bentham at the turn of the 18th to the 19th century and today’s Kahneman (1999) have endorsed this interpretation. Defining happiness as the pleasures with life as a whole, Epicurus was not far from this conception (Kahneman et al., 2010), but in Stoicism happiness was not considered an end in itself, as the Stoic philosophy preached detachment from emotional life. Kierkegaard, Nietzsche or Heidegger perceived happiness as an obstacle to the deeper goal of wisdom, and for Aristotle good life followed from the exercise of virtuous acts. The Enlightenment saw happiness as the right of all human beings, which is reflected in the US constitution’s pursuit of happiness as an inalienable right. Happiness may be pleasure, virtue, fulfilment of human nature, and, similarly to health, may be more than the mere absence of unhappiness. All this should be kept in mind, but it is not the subject of this paper, whose task it is to extricate the facts which determine self-reported life satisfaction, and to confront these with the requirements and policy implications of a socio-ecological transition path to sustainable development.

Even if it is important to keep in mind this paper’s (and the economic SWB literature’s in general) restricted conception of life satisfaction, it appears fully appropriate for the problems at hand in our individualistic and materialistic epoch indeed. “[T]he type of widespread popular interest in happiness ... is particularly characteristic of a consumer culture (Ahuvia and Izberk-Bilgin, 2013: 485), and “... the new heroes of consumer culture make lifestyle a life project and display their individuality and the sense of style in the particularity of the assemblage of goods, clothes, practices, experiences, appearance and bodily dispositions they design together into a lifestyle.” (Ahuvia and Izberk-Bilgin, 2013: 484)

⁹ “... the USA appears to have significantly higher levels of life satisfaction than France, yet more detailed analysis of happiness levels day by day shows Americans doing worse than the French, pointing to the power of cultural norms ...” (Mulgan, 2013: 519).

2. Determinants of life satisfaction

It is important to bear in mind that the surveys themselves do not ask for the determinants of life satisfaction, they only ask if the respondent is more or less satisfied with the life he leads. It is left to SWB research to discover these determinants by comparing the individuals' degree of life satisfaction with the characteristics of the respondent (marital status, religion, income, etc.) and his economic and social environment. The estimation is restricted to orders of magnitude, however, for three reasons. First, only dichotomous variables, such as divorce or employment, can be defined clearly, while qualitative but equally important ones, such as health, distribution, trust or participation, are less easy to isolate. Second, many determinants are correlated, so that coefficients and causalities may be less reliable. And finally, to compare the importance of determinants they must be transformed into income equivalents, which is a hazy task to begin with, but all the more so when income belongs to the less important determinants of life satisfaction.

For a clearer presentation the following sections will distinguish individual, economic and social determinants of life satisfaction. This distinction is to some extent arbitrary and not exclusive. Income, for example, has elements of all three categories. Furthermore, the various determinants frequently influence each other, with income, for example, positively correlating with health. The separation of the three categories, however, points to the fact that the economic rather than individual determinants provide the main starting point for policy, and the social ones indicate the elements of altruism determining life satisfaction.

2.1 Individual determinants of life satisfaction

Most of the studies concur that health and marital status are among the most important determinants of life satisfaction. Blanchflower and Oswald (2004: 12) found for the U.S. and Great Britain that an existing (first) *marriage* contributes two thirds more to life satisfaction than being employed. On an OECD-wide basis and roughly a decade later (data for 2009 and 2010), Boarini et al. (2012: 21) identified marriage as contributing only half as much as employment, but still the 1.7-fold of a doubling of income. The quality of the marriage, however, as well as that of social relations, is more important than the marriage itself or the sheer number of relations (Demir, 2013: 817-18). Divorce reduces life satisfaction by 40% (Gardner and Oswald, 2005), while becoming a widower reduces it somewhat less and separation without divorce somewhat more. In all these cases, the general adaptation effect applies: about one half of the original effect is restored within two years.

The satisfaction-heightening effect of *health* is assessed even more strongly by most respondents (Oswald, 1997, 1827; Clark and Oswald, 2002; Helliwell, 2002). This information is less reliable and less suited to quantification, however, for two main reasons: The responses appear to be identical to those about life satisfaction in general¹⁰ and self-assessed health is

¹⁰ A 1% better assessment of own health is connected with a 1% increase in life satisfaction (Helliwell, 2002: 9).

weakly correlated with actual (measured) health (Diener et al., 1999; Deaton, 2008: 66). Furthermore, there is good evidence that some of the association between good health and high life satisfaction is due to high life satisfaction causing good health (Diener and Chan, 2011). Serious illness or being disabled reduces life satisfaction, but again a part this loss wears off (Donovan and Halpern, 2002: 24). Disabled people are less satisfied with their lives by ½ percentage points (severely disabled by 1 percentage point) on a seven-point scale according to Oswald and Powdthavee (2005).

A less frequently considered determinant of life satisfaction is *relational goods*, “the affective/expressive, non instrumental, side of interpersonal relationships”. The Relational Time Index, comprising the elements “attend social gatherings”, “attend cultural events”, “participate in sports”, “perform volunteer work” and “attend church or religious events” is significantly correlated with satisfaction (Becchetti et al., 2008). “The strongest unique predictors of current happiness were Mental Control (inversely related), Direct Attempts, Affiliation, Religion, Partying, and Active Leisure. Gender differences suggest that men prefer to engage in Active Leisure and Mental Control, whereas women favour Affiliation, Goal Pursuit, Passive Leisure, and Religion. Relative to Asian and Chicano(a) students, White students preferred using high arousal strategies.” (Tkach and Lyubomirsky, 2006: 183).

Religion, such as belief in god and regular attendance of church, influences satisfaction positively (Diener et al., 1999; Helliwell, 2002: 13), especially in bad times. Persons *trusting each other* are in general more satisfied (Helliwell, 2002: 13), as are introverted people more than extroverted people (Kasser and Ryan, 2001).

With respect to *age*, Blanchflower and Oswald (2004: 9) found a U-shaped relation. The trough lies between 45 and 55 years (Donovan and Halpern, 2002: 14) and between 35 to 45 years in the international investigation by Helliwell (2002: 12), both of these studies reflecting the well-known midlife crisis.

The influence of *education* on life satisfaction appears contested: Boarini et al. (2012) found a significant positive effect, especially for tertiary education for 34 OECD countries. Blanchflower and Oswald (2004: 11) detected a small positive effect in their earlier study for the USA and Britain; Diener et al. (1999), Helliwell (2002: 11) as well as Kahneman and Deaton (2010) found no effect exceeding the difference in income. Education, nevertheless, may have some non-income benefits for individuals who get an education, especially in poor countries. However, this appears smaller than is often claimed by educationalists, reflecting the well-known gap between individual and social returns. On top of this, important social effects may work through an informed electorate and in poor countries through reduced birth rates, better health and reduced mortality (Layard et al., n.d.: 78).

Contrary to the contested influence of education on life satisfaction, numerous results of research point towards substantial positive effects of *self-determination*, as in personal freedom, employee participation, participation in society and an adequate degree of leisure. Veenhofen (2000) demonstrated the positive influence of *personal freedom* on life satisfaction for a broad sample of countries, and Inglehart and Klingemann (2000: 171f) described this dependence as

S-shaped. For the descendents of former Russia, the increase in personal freedom did not contribute much to life satisfaction, while it was considerably higher in the less suppressed Eastern European countries¹¹ and Latin America. In Western democracies, the effect of a further increase in personal freedom on life satisfaction is again small.

A second component of self-determination that increases life satisfaction is *participation*. Blinder (1990), Kruse und Blasi (1995) as well as OECD (1995) emphasise the positive influence of *employee participation* on life satisfaction.¹² Frey and Stutzer (2000) point towards the satisfaction-increasing effects of *political participation*, with Swiss direct democracy as an example. The importance of *participation in society* has been worked out for the U.S. by Putnam (2001), for Great Britain by Donovan and Halpern (2002: 26), and by Helliwell (2002: 13) for a large number of quite different states, with membership in clubs, tax compliance and trust showing a markedly positive contribution to life satisfaction. Putnam (2001) and Bjørnskov (2003) emphasise the general contribution of *Social Capital* to life satisfaction.

Leisure contributes to satisfaction, even in the U.S. (Donovan and Halpern, 2002: 25f). This is astonishing, as US-Americans work considerably longer hours than Europeans, naming this as an explanation for their superior economic performance and explaining it as a deliberate reaction to lower taxation (Prescott, 2004). Life satisfaction research, however, suggests that US-Americans' long working hours are not deliberately chosen. In 1955, 49% indicated that they would prefer to have more leisure, and in 1991 this share had risen to 68% (Donovan and Halpern, 2002: 25). Alesina et al. (2001b) and Alesina et al. (2005) demonstrated that it is beyond the power of the individual employee to reduce his working time; only collective action by labour unions can achieve this. No corresponding studies evidently exist for Europe, but Englishmen working in the garden or going in for sport once a week – both indicating more leisure – report a higher amount of life satisfaction (75% satisfied versus 70%), as found by Donovan and Halpern (2002: 25f).

Social connections and human contact contribute strongly to life satisfaction. Living in a stable relationship has an effect on life satisfaction roughly half as large as a doubling of income (Helliwell, 2008). Other measures of social support and trust in others are also positively associated with life satisfaction (Helliwell and Wang, 2011).

Last but not least, *gender aspects* appear to have some influence on life satisfaction. Women are more satisfied with their lives than men in Great Britain and the USA, but not in Switzerland (Frey and Stutzer, 2000: 925). Similarly to the USA and Great Britain, Boarini et al. (2012) found that being female was associated with higher levels of life satisfaction in 34 OECD countries, but with lower levels of affect balance. "Given the consistency in terms of the sign on other coefficients, this raises questions about the different gender responses to alternative measures of subjective well-being. One possibility is that women are more willing to report more extreme

¹¹ The difference between Byelorussia and Hungary is equal to the effect of a well-functioning marriage (Helliwell, 2002: 20).

¹² According to Freeman (1998: 9) even firms with employee participation, profit sharing or employee ownership profit from the increased life satisfaction of their employees, as they "seem to do a bit better than other firms."

responses than men, which would be consistent with a higher average score on life satisfaction (with more women scoring highly overall due to the general rightward skew of the life satisfaction data distribution), but a lower affect balance (with women reporting both more positive and more negative emotions).” (Boarini et al., 2012: 22) Contrary to expectations, women’s life satisfaction declined in the U.S., (Blanchflower and Oswald, 2004: 6). As a rather curious addition, even *images of beauty* appear to be relevant for life satisfaction, with images of ideal beauty bolstering young women’s satisfaction and images of body size boosting that of men (Argyle, 1987).

2.2 Economic determinants of life satisfaction

Unemployment influences life satisfaction (negatively) more than any other economic determinant. 40% of Europe’s unemployed are not at all satisfied (compared to 19% of the total population),¹³ and only 15% (compared to 26%) are very satisfied (Alesina et al., 2001a: table 2.2). The average American unemployed person attains only 54% of the total population’s satisfaction (Di Tella et al., 2003: 811). Boarini et al. (2012) estimate that unemployment decreases life satisfaction three times more strongly than a doubling of (the log of) household income. Life satisfaction studies distinguish carefully between the effects of unemployment *per se* on life satisfaction and the resulting loss of income: for example, to what extent is an unemployed person less satisfied than an employed person with the same personal characteristics (sex, age, status, etc.) and the same income? The isolated pure unemployment effect is the psychological sequel and it corresponds to a plunge from the top income quartile to the lowest one (Di Tella et al., 2003: 812), or to a loss of \$ 60,000/year (Blanchflower and Oswald, 2004: 13). The bulk of evidence shows that even low quality jobs are associated with higher life satisfaction than unemployment, and this effect is statistically significant for most specifications of ‘bad’ jobs. Even concerns about potential job loss considerably reduce life satisfaction (Uhde, 2010: 425). A study examining the German workfare program (Wulfgramm, 2011) concludes that people’s life satisfaction rises substantially when they go from being completely out of work to joining the program (Layard et al., n.d.: 67). The loss of income resulting from the loss of a job, whose size depends on the replacement ratio, must be added to the psychological loss of satisfaction, but this effect is considerably smaller.

Men of working age suffer most from the psychological impact of unemployment (Blanchflower and Oswald, 2004: 13), and women over 50 the least (Gerlach and Stephan, 1996: 326). The psychological impact of unemployment levels off gradually due to the ‘adaptation effect’ (Clark and Oswald, 1994), but the previous level of satisfaction is never attained, even in subsequent employment (Lucas et al., 2004). A ‘relativity effect’ reduces the psychological consequences when marriage partner or friends are also unemployed, when the local unemployment rate is high, or when the unemployed person can rate his unemployment as ‘normal’ or ‘undeserved’ (Clark, 2001). As section 2.3 will show, a high unemployment rate not only reduces the life satisfaction of the unemployed, but also that of employed persons (Clark et al., 2008a).

¹³ As compared with the lowest income quartile in which only 28% are very unsatisfied.

The effect of *income* on life satisfaction is complex. Persons with higher income are more satisfied, which seems to support the American saying: “Those who say that money can’t buy happiness don’t know where to shop”. 87% of respondents in the top income quartile consider themselves highly or fairly satisfied, compared to only 73% in the lowest quartile (Di Tella et al., 2003: 811). In Boarini’s et al. (2012) study of the 34 OECD countries, (log) household income is highly significant, with a doubling of income associated with an increase of nearly 0.2 points in life satisfaction on a 10-rung Cantril ladder. This is somewhat smaller than the coefficient found by Stevenson and Wolfers (2008), but this may be partly accounted for by the inclusion of variables referring to “Not having enough money to buy food”, unemployment and education. The marginal utility of additional income, however, decreases rapidly according to most studies and stops at an income level of about (then) € 10,000 (Donovan and Halpern, 2002: 10; Layard, 2003, lecture 1; Frey and Stutzer, 2002: 423).¹⁴ For a rich person, an additional euro of wealth brings only one tenth of the life satisfaction it would give to a poor person (with one tenth of the rich’s income; see Layard et al., 2008). “Whilst money might buy a little happiness, it does not buy very much” (Dixon, 1997: 1813).

This is the first explanation of the so-called Easterlin paradox (Easterlin, 1974), which rests on the contrasting evidence that the rich are more satisfied, but that an increase in income does not increase overall satisfaction. A second, fairly obvious explanation results directly from the way in which life satisfaction is measured. More than “very satisfied” (the highest point on the Likert scale or the Cantril ladder) is impossible to attain, suggesting that the share of satisfied respondents cannot surpass 100%. Thus, even if recent proponents of the hypothesis that rising income does in fact generally raise life satisfaction (Deaton, 2008; Stevenson and Wolfers, 2008; Sacks et al., 2010; Kahneman and Deaton, 2010) are correct,¹⁵ neither the Likert scale nor the Cantril ladder can indicate it. The third argument explaining the Easterlin paradox rests on the adaptation effect, which describes the mere temporary satisfaction new goods and services offer and the adaptation of aspirations. Di Tella et al. (2007) emphasise, for example, that the satisfaction resulting from a rise in income evaporates within five years. The observation that the rich are nevertheless more satisfied with their lives, as the fourth argument says, results from the financial security they enjoy. Income uncertainty definitely reduces life satisfaction (Uhde, 2010: 425), while income security definitely boosts it (Freiberger Stiftung, 2010: 19; Noll und Weick, 2010).

The last and probably most important explanation of the Easterlin paradox is the ‘relativity effect’: the consequences of rich people’s consumption for the average consumer, and the different effects of individual and national increases in income. The literature unanimously confirms that the effects of *relative* income on life satisfaction by far dominate those of absolute

¹⁴ For the explanation of the differences in life satisfaction within EU, therefore, even the low ones of Portugal and Greece (see figure 1), income differences are barely relevant.

¹⁵ Anecdotal evidence suggests that it is not income *per se* to which the rich aspire, but certain positional goods or a specific lifestyle.

income.¹⁶ *Poverty* (“Not having enough money to buy food”) strongly reduces life satisfaction (Boarini et al., 2012). Next to employment, *income distribution*, is therefore one of the dominant economic determinants of life satisfaction. Unequal income distribution reduces life satisfaction in the U.S. and even more significantly in Europe (Alesina et al., 2001a): An increase in the Gini-coefficient of 10 percentage points – matching a transition from the Austrian to the Italian income distribution or from the Danish to the British – implies a reduction of the share of “very satisfied” from 26½% to 21% and an increase of the unsatisfied from 19½% to 25%. One strange finding is that in the U.S. an unequal distribution primarily reduces the satisfaction of the rich. Given the heavy unequal distribution in this country, this might point toward a guilty conscience amongst the rich, which translates into private – not policy-induced – charitable action.¹⁷ Given the importance of the income distribution, it is evident that social security increases the life satisfaction of the recipients of transfers (Uhde, 2010). Transfers and a more equal income distribution even increase the life satisfaction of a society in general; the net effect, however, is reduced by the negative side of the relative-income effect, the loss of satisfaction of those with higher incomes.

The influence of absolute income on life satisfaction still remains an important topic for further research, however. Previous unanimity with respect to a limited importance of income level has been increasingly questioned (Deaton, 2008; Stevenson and Wolfers, 2008; Sacks et al., 2010; Kahneman and Deaton, 2010). Furthermore, Inglehart and Rabier (1986), found a significant positive contribution of the increase of income in the preceding 12 months for Western Europe (1973-83), and Clark et al. (2008a: 127) refers to the fact that life-income profiles with current modest increases are preferable to those with constant income, a growth boosting perception that is most relevant for the WWWforEurope project.

The conclusion that relative income is more important than absolute income nevertheless holds but raises the question as to what is relative. The European Social Survey (ESS) asked people “Whose income would you be most likely to compare your own with?” Instead of ‘the rich’, and somewhat surprisingly with respect to widely held preoccupations, ‘colleagues’ was the group mentioned most often (Layard et al., n.d.: 62). Layard (2005) similarly found that colleagues, friends and neighbours were the most frequently named reference group, and Runciman (1966) argued that people tend to compare themselves most with their nearest equals. Comparison is indeed an important element of life satisfaction, however too much comparison with others reduces satisfaction: ESS asked “How important is it for you to compare your income with other people’s incomes?” Those answering that income comparisons were more important for them were on average less satisfied with their lives – again a fact highly relevant for the

¹⁶ 90% of the U.S. population prefer a more equal distribution of wealth than today’s historic high inequality (Norton and Ariely, 2011).

¹⁷ The fact is surprising, nevertheless, as 71% of Americans compared to only 40% of EU-Europeans believe that the poor would be richer if they applied themselves more (Alesina and Angeletos, 2003: 2), and 60% Europeans compared to only 29% of Americans believe that it is not possible to leave a poverty trap through own effort (Alesina et al., 2001b). “Interestingly, the actual facts are actually the other way round: there is more intergenerational social mobility in Europe than the U.S. And there is more mobility where there is greater income equality. But attitudes have an effect on perceptions and thus on happiness.” (Layard et al., n.d.: 71)

WWWforEurope project. According to Layard et al. (n.d.: 62), similar results have been found for the U.S.

The regression studies based on the surveys are unavoidably restricted in comparing the satisfaction of individuals at the same point of time; they cannot track the satisfaction of *specific* individuals over time. The West German Socio-Economic Panel (GSOEP), however, has been tracking the same individuals over time on an annual basis since 1984. Using the Eurobarometer series since 1972 and the GSOEP since 1984, Layard et al. (n.d.: 61-62) found that differences in income explain about 1% of the variance of life-satisfaction in the population; no effect is left in this study for absolute income, only relative income matters. To this extent the study explains why average life satisfaction has not risen despite the growth of GDP, but one should add that income distribution deteriorated markedly as well in this period.

One further argument contributing to the discussion on the influence of absolute income posits that it is not income *per se* which people desire but their *position in society*, which is governed by the rank in the income hierarchy and/or by commanding specific goods and services which are inevitably in limited supply – position goods (Hirsch, 1977). The tragedy of the position goods and their contribution to life satisfaction, as well as to the income-growth race, is that everybody works hard to catch them, but the goal is attainable for a few only, not to society as a whole. Whenever a lower income group has come to a position enabling them to obtain these goods, they lose their character of position goods and other goods, not available to them, take on this position. And so the race continues indefinitely as one of the main contributors to the growth race and to *un-sustainability*.

Summarising the impact of income on life satisfaction, it is uncontested that higher income contributes to life satisfaction, as it reduces income uncertainty, providing financial safety and access to position goods. Additional income, however, has – according to most studies – decreasing marginal returns, but this result has recently been put into question. Life-income profiles with consecutive modest increases are indeed preferred to those with constant income, and the race to acquire position goods appears to accelerate even further. The impact of relative income and income distribution is, nevertheless, considerably stronger than that of absolute income. However, the desire to improve one's relative position and the craving for position goods and rank in society strongly boost growth, even in the richest countries – a set of conditions evidently detrimental to the potential transition path of the WWWforEurope project.

The impact of *inflation* on life satisfaction, if investigated at all, is estimated to be relatively small and weak. Under the aspect of the violent policy debate confronting unemployment with price stability, this is astonishing and stands in strict conflict with the direct assessment to be reported in section 3. The coefficient of the inflation term is frequently insignificant in life satisfaction regressions (Di Tella and MacCulloch, 2004: 14); Alesina et al. (2001a) estimate that increasing inflation by one standard deviation (5¾ percentage points) reduces the share of the “very satisfied” by 3 percentage points. This implies a trade-off of 1¾% unemployment to 1% inflation, compared to the traditional misery index's 1:1 trade-off. The estimates furthermore reveal differences in ideological positions: A rise in inflation of 10 percentage points reduces the share of satisfied right-wing persons by 7 percentage points, which is more than double the average,

while left-wingers' life satisfaction suffers more from unemployment (Di Tella and MacCulloch, 2004: 14, 19).

Few studies deal with the impact of the *environment* on life satisfaction. As the environment has many dimensions with a strongly diverse local impact, it is difficult to find relevant indicators in the SWB regressions, and the environment is frequently assumed to be internalised, such as, for example, in the case of air pollution in housing prices. Furthermore, while pollution has strongly decreased in the Western hemisphere, awareness of it has increased since the early seventies, so that the effects of the two tendencies on life satisfaction may to an unknown extent compensate each other. According to Rehdanz and Maddison (2005), using data on 67 countries between 1972 and 2000, cold temperatures increase life satisfaction, which implies a negative impact of global warming. Welsch (2002) found no effect of SO₂ concentration on life satisfaction in a cross section of 54 countries, while Boarini et al. (2012) found a rather small effect of air and no effect of water quality. In Luechinger's (2009) careful study for Germany, which uses regional GSOEP data, SO₂ concentration negatively affects life satisfaction to an extent of about 1% to 1½% of household income. This is larger for individuals concerned about the environment and, contrary to earlier assumptions, Luechinger finds air pollution incompletely capitalised in the private housing market.

Geographical mobility definitely reduces life satisfaction: The longer individuals had lived at the same address, the higher was their well-being (Ballas and Tranmer, 2012), probably as a consequence of the better chances to build social and support networks. This is in accordance with the above-mentioned observation that single people appear to be on average less happy than married couples. Boarini et al. (2012) report significant lower life satisfaction of persons born abroad.

Life satisfaction studies do not deal with *growth* explicitly, instead addressing it indirectly via unemployment. "In the overall balance, happiness rises in booms because a one-point decrease in unemployment has at least twice as large an effect on happiness as a one-point increase in the inflation rate. Economic stability is a crucial goal for any society, due largely to the fact of loss aversion, whereby individuals hate to lose x dollars more than they love to gain x dollars. But economic stability is a quite different goal from long-term economic growth. Long-term growth has much less impact on human happiness than do human relationships in all their dimensions." (Layard et al., n.d.: 66)

2.3 Social determinants of life satisfaction

A considerable body of knowledge has accumulated, not least in the field of experimental economics (see Fehr and Gächter, 2000 for an early survey), demonstrating that men's decisions not only rely on selfish economic motives but also on social considerations and fairness. Life satisfaction research enhances these perceptions, with income distribution and unemployment serving as good examples.

Alesina et al. (2001a) revealed, as already shown above, that unequal *income distribution* lowers life satisfaction. The effect is larger for the poor and for those with left-wing political

beliefs, but it also affects total population. Corneo and Grüner (2000) distinguish a “homo oeconomicus-effect”, a “public values-effect” and a “social rivalry-effect”. The first one lowers the satisfaction of those immediately affected by the unequal distribution, the second affects those rejecting inequality, while the third involves keeping an eye on one’s respective own group: life satisfaction declines when reducing inequality enables a rival group to compete for the same position goods.¹⁸ Tests using the International Social Survey programs 1992 for the USA, Canada, Australia, New Zealand, Norway, East and West Germany as well as five East-European countries suggest that the selfish homo oeconomicus-effect is the largest, but the public values-effect is strong as well. Norwegians and Germans have the most positive attitude toward redistribution, while Americans and Australians see it in the least favourable light.

The social component in the relation of *unemployment* to life satisfaction appears to be even stronger. “When we total up all the well-being effects of a rise in the unemployment rate, the loss to the rest of the population (which is a large number of people) is twice as large as the loss to the unemployed themselves.” (Layard et al., n.d.: 67) In addition to the psychological effect and the considerably smaller income effect, a social effect works, reducing the life satisfaction of those not affected by unemployment. A rise in unemployment by 5 percentage points – as frequently observed in these days – reduces the life satisfaction of the population (whether employed or not) by 0.06 units on a four-point scale. This is equivalent to a transition of more than 10% of the population to the next lower step (Di Tella et al., 2001), which is a rather strong effect. Even workers with a secure position lose satisfaction when general unemployment rises (Clark et al., 2008a).

The interpretation of the social effect of unemployment is still under discussion. Life satisfaction studies emphasise a “fear effect” (Di Tella et al., 2003: 809): High unemployment gives a signal to the still employed that their jobs could be endangered, and fear and stress reduce life satisfaction of normal job holders, while government employees are not affected (Luechinger et al., 2010). At least two arguments raise considerable doubt about this explanation. First, surveys do not offer evidence for a widespread fear of losing one’s job in normal times, not in even in ‘normal’ recessions. Second, surveys provide strong evidence that workers consider their own job to be at least twice as safe as jobs in general (Tichy, 2013), so that a widespread *general* fear is rather implausible. Justice and fairness considerations appear to provide a more plausible explanation.

There are no studies, nor surprisingly even methods, available for an exact comparison of the relative strength of the determinants of life satisfaction. The frequently used comparisons of additional income are not very reliable, as (absolute) income belongs to the less important (and even contested) determinants of life satisfaction, and the monetary evaluation of determinants such as health, marriage or freedom is already problematic. Given these warnings, some cautious hints are available. Boarini et al. (2012) conclude that sickness, isolation and lack of freedom are amongst the most important personal obstacles to life satisfaction, while poverty

¹⁸ Examples of this are rent provisions, enabling ‘lower classes’ to enter ‘good’ living quarters, or measures that give immigrants access to good schools. The current Austrian discussion on education can serve as an example as well.

and unemployment are the most important economic ones. The quality of the environment did not come out as significant determinant of life satisfaction (see table 2). The World Happiness Report (Helliwell et al., n.d.: 90) adds separation and widowhood as negative personal social determinants and social support as a positive one. Relative income, income distribution and position goods are not included in both evaluations, but other studies (see section 2.2 above) clearly show that they are highly relevant for life satisfaction. Social determinants are of some relevance in more altruistic cultures (Scandinavia), where employment and income distribution have an immediate impact not only on the concerned individuals but on society as a whole. In the more individualistic cultures (USA, Australia, New Zealand) they evidently have less weight.

Table 2 **Relative effect sizes of different variables on satisfaction**

Independent Variable Coefficient size relative to a doubling of income

Female	0.6*
Age	-0.4***
Number of children	-0.3
Born abroad	-1.9***
Small town	-0.6
Large city	-1.3**
Suburb	-2.0***
Log household income	1.0***
Not enough money for food	-6.2***
Unemployment	-3.1***
Health problems	-3.1***
Secondary education	1.5**
Tertiary education	3.0***
Married	1.7***
Have friends to count on	5.2***
Volunteering	2.5***
Aggregate average social trust	0.3***
Confidence in judicial system	1.1***
Afraid to express political views	-0.4
Freedom to choose what you do with your life	2.8***
Satisfaction with air quality	0.8**
Satisfaction with water quality	0.2
Safe walking alone	1.1***
Money or property stolen	-1.0**

Note: Stars denote the significance of the variable in regression model (3): ***p<0.01, **p<0.05, *p<0.1
 Source: Boarini et al. (2012, table 4); some signs changed according to table 3.

3. Life satisfaction and the goals of WWWforEurope

It is remarkable that the determinants of life satisfaction, revealed by SWB research, differ from those dominating the public debate. Growth *per se* and inflation have not been found to be particularly relevant for individuals' life satisfaction.¹⁹ In assessing the results of SWB research it

¹⁹ Helliwell et al. (n.d.: 91) emphasise that GDP and its growth are at best means to an end, and the end is evidently life satisfaction. "The first lesson of happiness research is that GDP is a valuable goal but that other things also

is important to keep in mind that the determinants of life satisfaction are not the respondents' answers to questions in the surveys but rather the results obtained by research: Based on the self assessment of people who consider themselves as satisfied (or not) with their lives, SWB studies search for the specific facts that make individuals more or less satisfied. These need not be the facts the individuals themselves are conscious of. People may misjudge the satisfaction resulting from their choices (Stutzer and Frey, 2007), they may not be aware of the consequences of their decisions, and they continuously adapt their aspirations to news, thereby superimposing previous choices. Furthermore, their satisfaction with material things almost inevitably wears off within four to five years – the adaptation effect mentioned above. If asked *directly* about the problems concerning them most (so to say, the short term inverse of satisfaction), rather different assessments are indeed discovered. Table 3 reveals that in spring 2013 most Europeans are *personally* most concerned with inflation, which has neither been found as an important constituent of life satisfaction, nor has it been a real-world problem at this time. The problem mentioned second frequently when people are asked directly is unemployment, which in fact matches the results of life satisfaction research. The environment, the climate and energy belong to the least pressing problems in direct surveys – and these are probably even less significant as determinants of life satisfaction. For their *countries* – in contrast to themselves personally – respondents consider unemployment to be the largest problem, which implies that they do not feel that they could get involved personally – unemployment is evidently considered a problem for the other ones.²⁰ Inflation is relegated to third place in the survey's list of country problems; surprisingly, it is perceived as a high-ranking personal problem, less so as a problem for the country and even less so for the EU or the world. Climate and energy are in no case considered serious problems, neither personally nor for the country, nor for the EU, only attaining rank 12.

Table 3 **Main problems indicated by EU-respondents in spring 2013**

	For the respondent	country	EU
Inflation	41% (1)	20% (3)	13% (3)
Unemployment	22% (2)	51% (1)	38% (2)
Economic situation	18% (3)	33% (2)	48% (1)
Climate, energy	5% (12)	4% (12)	3% (12)

Source: Eurobarometer 79 (2013).

A similar result emerges when people are asked directly to which main goal the EU should aspire (Eurobarometer 78, 2012): 24% mentioned an increase in the standard of living, 22%

matter greatly. So GDP should not be pursued to the point where economic stability is imperilled, community cohesion is destroyed, the weak lose their dignity or place in the economy, ethical standards are sacrificed, or the environment, including the climate, is put at risk."

²⁰ Tichy (2013) calls this general phenomenon the "two-stage optimism gap": People strongly tend to assess their individual situation, as to their job or their financial situation, much more positive than those of their country, and those of their country better than those of the EU or even the world. Predominantly this may reflect an optimism bias, but a minor explanation could be a selection bias: As the Eurobarometer survey is based on telephone interviews in general, they may over-represent those with jobs, especially those with secure jobs.

suggested promoting growth, and 15% were above all for the maintenance of peace and stability, but only 5% thought it was most important to fight against “global threats (terrorism, climate change)”. Surprisingly, climate policy ranks higher in combination with the current crisis. If asked “For each of the following initiatives, please tell me how important or not you think they are in order for the EU to exit the present financial and economic crisis and prepare for the next decade” on a 10-point scale (Eurobarometer 78, 2012), 74% of the respondents indicate using fewer natural resources and emitting less greenhouse gas, superseded only by “modernise labour markets” and “help the poor and socially excluded” (both 80%). 26% of respondents claim to often buy environmentally-friendly products and 54% sometimes (Flash Eurobarometer 367, 2013: 12); primarily the elderly (55+) mainly buy these products, (32%) while the younger ones – contrary to expectations – refrain from doing so (15-24 15%; 25-39 22%). In general, one cannot suppress the supposition that citizens are aware of environmental problems, but evidently do not know how to act in response.

Table 4 **Main country problems indicated by EU-respondents in spring 2013**

QA6a. What do you think are the two most important issues facing (OUR COUNTRY) at the moment?

	Un-employment	Economic situation	Rising prices/inflation	Government debt	Crime	Health and social security	Immigration	Taxation	Pensions	The education system	Housing	The environment, climate and energy issues	Terrorism
EU27	51%	33%	20%	15%	12%	11%	10%	9%	9%	8%	5%	4%	3%
BE	39%	29%	16%	22%	17%	4%	15%	17%	16%	3%	7%	3%	3%
BG	63%	51%	24%	2%	15%	17%	2%	3%	8%	6%	0%	3%	1%
CZ	44%	36%	30%	22%	14%	11%	3%	6%	14%	3%	4%	2%	1%
DK	61%	40%	6%	5%	18%	19%	10%	5%	2%	18%	1%	9%	1%
DE	21%	15%	24%	29%	15%	9%	14%	8%	18%	20%	6%	10%	4%
EE	34%	31%	51%	1%	7%	25%	3%	10%	12%	10%	1%	3%	0%
IE	67%	38%	16%	15%	16%	11%	7%	13%	1%	3%	3%	1%	1%
EL	65%	49%	10%	19%	10%	7%	6%	17%	4%	6%	0%	0%	1%
ES	79%	50%	7%	7%	4%	12%	2%	6%	4%	6%	7%	0%	1%
FR	66%	33%	17%	12%	19%	5%	8%	5%	11%	6%	10%	4%	2%
IT	58%	42%	22%	13%	6%	3%	4%	23%	5%	2%	2%	1%	1%
CY	72%	75%	3%	13%	8%	1%	4%	3%	1%	2%	1%	1%	1%
LV	55%	38%	16%	5%	5%	17%	9%	21%	12%	6%	3%	0%	1%
LT	46%	28%	36%	7%	15%	7%	11%	26%	5%	4%	1%	3%	0%
LU	43%	21%	22%	10%	13%	5%	13%	9%	8%	16%	25%	4%	1%
HU	60%	39%	24%	20%	14%	10%	2%	4%	6%	3%	4%	2%	1%
MT	17%	28%	24%	24%	6%	10%	29%	5%	11%	8%	3%	22%	1%
AT	31%	30%	38%	17%	8%	12%	12%	8%	12%	12%	8%	7%	1%
NL	51%	50%	7%	10%	11%	35%	4%	5%	8%	6%	5%	5%	1%
PL	69%	25%	34%	8%	5%	15%	3%	4%	9%	2%	3%	1%	2%
PT	72%	40%	24%	17%	3%	7%	1%	14%	8%	3%	0%	0%	1%
RO	33%	44%	35%	7%	19%	21%	2%	9%	11%	6%	4%	1%	1%
SI	49%	57%	10%	24%	26%	4%	1%	14%	5%	1%	1%	1%	1%
SK	59%	34%	36%	9%	8%	18%	0%	8%	10%	6%	4%	0%	0%
FI	47%	24%	20%	22%	7%	37%	5%	10%	9%	3%	5%	6%	0%
SE	65%	17%	1%	1%	10%	29%	13%	2%	4%	32%	5%	19%	0%
UK	36%	23%	10%	19%	18%	13%	32%	7%	7%	7%	7%	4%	8%
HR	76%	48%	17%	13%	21%	3%	1%	3%	5%	1%	2%	0%	0%

1st ITEM MOST FREQUENTLY MENTIONED
 2nd ITEM MOST FREQUENTLY MENTIONED
 3rd ITEM MOST FREQUENTLY MENTIONED

Source: Eurobarometer 79 (2013: 21).

Table 4 gives the full information on problems respondents saw at the country level when asked directly. The answers point towards interesting cultural differences (even) within the EU and

considerably diverging views of various elements of sustainability. For example, Germany is the only country whose inhabitants consider government debt as the most pressing problem for *their* country (Germany's government debt ratio is 81% compared to 85% EU average), while for Greece, Cyprus and Malta government debt ranks only third, and this is not at all considered a problem in the other GIPS countries. Austrians are similar to Germans in their elevated concern about government debt and inflation, while, somewhat surprisingly, the Finns are primarily concerned about health or health insurance and the Swedes about education. Neither pensions nor the environment are among the problems that seriously preoccupy European citizens. The same is true for terrorism, which in contrast with U.S. propaganda and media campaigns, is not considered a problem at all (the UK only to an extent mirrors the U.S.). As supposed by SWB research (see section 1), direct questions evidently reflect the immediate problems and feelings (affects) on the day of the poll.

While this paper deals with the life satisfaction aspects of SWB, a few remarks may be worth making with respect to the *affect balance*. Boarini et al. (2012) carried out the same regression for both aspects of SWB and found comparable determinants and signs; only being Female and Being Afraid To Express Political Views changed signs. The coefficients, however, differed: Volunteering, Trust, Tertiary Education, Log Income and Unemployment have less than 40% of the impact on affect balance than they have on life satisfaction, while Children, Personal Safety, Freedom and Health have almost twice the impact (Boarini et al., 2012: 24).

All of this points towards the necessity of accurately distinguishing three different layers of contributing factors to *social* well-being:

- what individuals themselves consider the most pressing problems when asked directly;
- what turns out to have contributed to individuals' life satisfaction, as discovered by life satisfaction research, asking how satisfied people are with their lives on the whole nowadays; and
- what is sustainable in the long run, given the unintended consequences of pursuing intended and unintended individual goals, as revealed by direct questions or by SWB research.

The differentiation clearly reveals the most important result that a policy directly based on opinion polls would turn out to be myopic and unsuitable to bringing about life satisfaction. However, even a policy attempting to maximise peoples' (revealed actual) life satisfaction would be prone to reducing life satisfaction in the long run, as such a policy would necessarily neglect the externalities reducing life satisfaction in the long run, at least the life satisfaction of the next generation. *The Unique Selling Proposition (USP) of the WWWforEurope project is to extricate the compatibility of the goals of these three layers and design a dynamic socio-ecological transition path to the social goals of high levels of employment, social inclusion, gender equity and environmental sustainability.* This is in accordance with the UN General Assembly, which has invited Member States to "pursue the elaboration of additional measures that better capture the importance of the pursuit of happiness and well-being in development with a view to guiding their public policies." (Helliwell et al., n.d.: 91) This is no easy task for at least three reasons:

- First, “in terms of public discourse, the well-being and sustainability debates have been held at some distance from one another. To date, research on thinking on well-being has often emphasized the contribution of psychological and psychosocial factors over actual material circumstances (such as individual wealth), with very little explicit consideration of the role of the environment or of ecological behaviour. ...
- Second, ... popular debate about sustainable development is conducted largely at the national level. Where reference is made to the impact of environment on individuals’ well-being, it is usually to ‘future generations’ rather than those living now.” (Thompson et al., 2013: 500).
- Third, it is widely believed that technical or institutional solutions rather a change of individual behaviour can solve the problems.

Taking the three layers of contribution to subjective well-being into account, it is important to carefully work out their consistencies and incompatibilities. While compatibility may dominate in the short run, serious problems can arise in the long run, mainly due to sustainability. A social dilemma exists in the form of serious tensions between the elements of life satisfaction, involving behaviour that is not aimed at the environment, yet has a direct impact on it, at least in the long term. However, environment is not the only aspect of sustainability. Not much less important are the ‘sustainabilities’ of full employment with secure and humane jobs and an adequate work-life balance, of pensions²¹ and health systems, the position-goods rat-race, or of government finance. All these problems have trade-offs which are considered relevant by most people indeed, but are far from inducing the majority to change their behaviour. Citizens frequently find consolation in persuading themselves that they alone can’t change the disaster, or – as the Eurobarometer reveals – considering themselves not personally involved. In consequence, they complain about emissions, while marketing and buying high-emission cars,²² fighting violently against higher gasoline prices and striving for traffic-generating and energy-wasting single family houses. They fear old-age poverty (at least in the media, less so in the Eurobarometer, as shown in table 4), but are neither prepared to work longer nor to agree to higher contributions. They lament overly high government debt, but reject a curtailing of public expenditure. As an excuse, they frequently cling to ‘technical’ solutions (which are supposed to work ‘automatically’ and do not afford any personal action or renunciation), even if experience has shown that no one technical solution has ever sufficed to solve environmental problems. The majority implicitly rejects the idea that a change in behaviour is indispensable and that policy will have to shift the incentive structure. Experts, however, say that “so-called ‘downshifting’ whereby people consciously adopt simple lower-consumption lifestyles ... are widely assumed to be required for a really substantive effect on the environment” (Thompson et al., 2013: 507). However, ‘downshifting’ is hampered by people, who are locked-in in

²¹ The literature on pension reforms almost exclusively suggests an increase in labour input as a solution, either through a longer life working period or higher participation, both of which imply higher production and consequently higher consumption (see e.g. Börsch-Supan, 2013), clearly contradicting the sustainability goals.

²² The German government, under pressure from the German car lobby, has recently used the trick of postponing a session in Brussels to delay the discussion on stricter emissions standards for cars.

individualism and materialism, resisting a change in their patterns of behaviour. In a relative way and to a lesser extent, absolute income and continuous augmentation of income are still the dominant targets.²³ As a solution, Singapore reports: „Citizens willing to trade civil liberties for a cleaner, safer and efficient society” (Weir, 2008). This unavoidably implies repressing regulations, a solution which indeed does not appear adequate for Europe.

4. Some reflections on policy solutions

In determining their goals, “[a]t present many countries use a traditional form of cost-effectiveness analysis, in which benefits are measured in money units on the basis of what citizens would be willing to pay for those benefits. This works quite well when the primary benefits are indeed financial or can be readily transferred into monetary equivalents. This is often true for policies on industry, transport, education and employment. However expenditure in these areas is often no more than a quarter or so of public expenditure. The bulk of public expenditure is on health, social care, law and order, the environment, child welfare, and income support. In none of these cases does willingness to pay provide adequate guidance to the benefits that arise. Happiness would be an excellent added criterion for evaluating these expenditures.” (Helliwell et al., 2013: 95)²⁴ Does this imply that governments should maximise life satisfaction? Starkly different views exist.

Following liberal conceptions, governments should “confine themselves to being just. We shall assume the responsibility of being happy for ourselves” (B. Constant in the 19th century, according to Mulgan, 2013: 518). Even if this is not the position of most of the current European governments, society inevitably “stopped telling people who they were, and instead it was let up to the individual to construct his or her own identity” (Baumeister, 1991: 95). “This construction of identity is not an easy task. ... Since both what we purchase and refuse to purchase plays an important role in defining our sense of identity, consumer choices also become an overwhelming concern.” (Ahuvia and Izberk-Bilgin, 2013: 484) In Ancient Greece, Aristotle argued that happiness was the only good that was “good in itself.” This argument still has relevance, but maximising life satisfaction under the modern aspects of citizens’ uncertainty would be a mixed blessing, given the evidence of the contrasting goals of the above-mentioned three layers. Even if they are less problematic than immediately relying on opinion polls (see section 3), attempts to maximise life satisfaction would combine the election-term myopia of governments with consumers’ disregard of long-term sustainability goals. The task is to find ways to maximise *life satisfaction under the restrictions of internalising externalities and taking proper account of sustainability*, not life satisfaction *per se*.

²³ Thompson et al. (2013: 508) refer to an increasing literature which purports to demonstrate that holding a strongly materialistic value orientation is, all else being equal, detrimental to well-being.

²⁴ As mentioned before, the authors use the term “happiness” even if they are fully aware of a risk of confusion, because “it does help to focus thinking, and attracts attention more quickly than does ‘subjective well-being’.” (Helliwell and Wang, n.d.: 11)

Neither national nor EU policies have been successful in this respect up to now. National policy exculpates itself with arguments of drawbacks in international competition and the inefficiency of national solo flights. EU policy, on the other hand, is advancing in big steps in some fields as liberalising markets or promoting competition, but it is much more hesitant towards promoting sustainable development, and the steps taken in this area are much smaller. To some extent, this is due to the heavy opposition of national governments, industries and electorates (see footnote 22 for an example), but to an even greater extent due to the heterogeneity of the EU and the complexity of the subject. The big differences in income and environmental damage among members require different country-specific solutions and exacerbate a common EU policy. Even worse, policy has to act against established consumption patterns and industry interests, some instruments are heavily contested, powerful instruments are wanting, and the mode of action and the power of new instruments are under discussion. Strong headwinds result from the “collective welfare optimism” (Hobsbawm, [1994] 1997: 531ff), increasingly opposing distribution.²⁵

Kasser (2006) proposed a threefold strategy to shift people’s values and goals, and thus behaviours: decrease the likelihood that people will be exposed to materialistic messages (e.g. banning advertisements to children, removing tax-write-offs for advertising), increase people’s resilience to the materialistic messages that remain in the environment (e.g. by building intrinsic values, teaching individuals to decode advertisement messages), and help people to act more consistently with the intrinsic goals that they may value (e.g. encouraging ethical consumption and investments). This is fully correct but sounds somewhat naïve with regard to implementation, and one may doubt if it suffices to win the sustainability race. Much more is needed in order to shift incentives and change peoples’ values and goals. Minority groups (‘Greens’) in the richer countries are already cautiously trying to approach a sustainable lifestyle (e.g. a shift from work/income to leisure, from prestige cars to public transport and bicycles, from accumulating goods to renting and sharing, etc.), but the development continues to go in the wrong direction, as majorities’ behaviour over-compensates these hesitant beginnings. Prisching (2009) has worked out how difficult it is to change the current culture of consumption, and life satisfaction research has revealed the importance of monetary aspects. People feel happier if their income increases in the course of their life time, and position goods and at least relative (but also absolute) income continue to be highly decisive motives for the majority – despite the fact that position goods are a mixed blessing, immediately ceasing to be position goods (and therefore worth striving for) whenever they become available to those desiring them, and thus forcing individuals to aspire to obtaining other (inaccessible) goods – a vicious cycle, which keeps the growth race in motion.²⁶

²⁵ This is reflected in the efforts of richer regions to separate by splitting (Slovenia, Czech republic, Catalonia, etc.), and the increasing resistance against the welfare state and redistribution in general.

²⁶ Position goods are the carrot the donkey can never reach, but which keep him going. Nobody knows if the anecdotal donkey is as disappointed as the consumers, which after having attained a position good after long effort, realise that it is no longer a position good, as others dispose of it as well. And so the race for the new position good begins anew, sustaining growth rather than sustainability.

Subjective well-being research teaches us that citizens' desires and attitudes diverge substantially from what is required for sustainability. The new WWWforEurope development strategy will have to strive for ways to get around this problem of changing peoples desires and attitudes, and devise ways to do so that are less restrictive and at the same time more comprehensive than Singapore's confinement of civil liberties. This involves a broad mixture of instruments. The current policy debate has become stuck in pro- and anti-growth ideologies, leaving aside the questions of the effects of potential EU solo flight on the world climate as well as the heterogeneity of the EU. However, the poorer member need both qualitative and quantitative growth in order to catch up, while the richer members will have to find ways to avoid further rounds of rising aspirations and induce citizens to downsize their demand at least quantitatively. Traditional goals will have to be reformulated to take care of trade-offs with other goals, and well-known instruments will have to be redesigned, with greater attention paid to their (unintended) side effects.

It cannot be the task of this paper to specify the policy needed to accomplish the new WWWforEurope transition path; it can merely provide a sketch of the goals to strive towards. Concentration on full employment will have to be retained as an important goal, but given the trade-off with environmental sustainability, higher growth should no longer be the dominant and single instrument applied in the richer countries. Other instruments will have to complement it, including the proper setting of incentives. The prevailing tax structure, for example, promotes both labour-saving and resource- and energy-wasting technical progress,²⁷ giving incentives for decentralised housing and commuting and promoting energy supply (even if renewable) rather than energy saving. Even if a full-time job should be the goal of a policy, several forms of reducing working time could help to reduce unemployment. Needless to say, this would involve workers accepting the shift from work/income to leisure, which is not currently the case. The goals of social inclusion and gender equity should gain greater weight, and more than taxes, transfers or minimum shares of women in specific jobs will be required as instruments to accomplish them. Meanwhile, a broad revision of different facets of the social system, ranging from education and labour rules to the treatment of part-time work and child-bearing in taxation and social security, will prove unavoidable. Trade-offs towards budgetary stability, however, will have to be taken into consideration. Participation in all their dimensions should be promoted, as it increases life satisfaction; however, given citizens' goals and attitudes, it will not lead to more sustainability *per se*. Environmental sustainability, surely the goal least realised at the moment, not only affords the traditional instruments as promotion of renewable resources, recycling, regulation, taxation, internalisation or reliance on the price mechanism,²⁸ etc., which may imply trade-offs to full employment or international competitiveness; additionally, and more importantly, they require a far-reaching change in the behaviour of producers and consumers. Civil society will have a major role to play, in the form of environment-conscious groups setting

²⁷ The economic policy discussion must redirect its focus from boosting labour productivity to boosting both resource productivity and total factor productivity.

²⁸ A good example is energy policy. The extreme rise of oil and gas prices in the last decades has had less effect on demand than on supply, exploiting new technologies.

the stage for more conservative consumers, as well as by firm-NGO-consumer interaction exploiting producers' reputation awareness.

5. Summary

The goal of WWWforEurope – and its unique selling proposition – is to lay the analytical foundation for a new development strategy that will enable a dynamic socio-ecological transition to high levels of employment, social inclusion, gender equity and environmental sustainability. These goals do not appear to rank highly in populations', and consequently politicians', order of priorities. When asked directly, people rank price stability, employment and growth highest, while SWB research reveals employment, relative income and a continuous (small) rise in income as the main determinants among those goals, which can be influenced by policy. The order of preferences, indicated by both approaches, reveals serious sustainability problems, and, consequently, problems in designing the indispensable transition path to a more sustainable development: Environmental sustainability, probably the world's dominant problem today, ranks rather low in both cases. Growth *per se*, a goal still considered important, is not the dominant and only determinant of life satisfaction and has an unavoidable trade-off with environmental sustainability; the same trade-off exists with full employment, as long as growth is considered the dominant policy instrument to achieve it. Social inclusion appears to rank somewhat higher than environmental sustainability amongst citizens' goals, but again a serious trade-off exists with the importance of relative-income position (and the acquisition of position goods) for their life satisfaction.

To change the path towards greater sustainable development, therefore, means carefully devising a consistent combination of a wide range of instruments. A considerable number of these have already been proposed and discussed, but they are in most cases isolated and there has been little consideration of trade-offs and consistency with other goals. The trickiest problem, however, has not even been afforded appropriate attention up to now, namely how to change citizens' goals and attitudes by primarily setting the appropriate incentives. If one can't find innovative solutions for this problem, it will prove impossible to design a promising transition path outside of an authoritarian regime.

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Project Information

Welfare, Wealth and Work for Europe

A European research consortium is working on the analytical foundations for a socio-ecological transition

Abstract

Europe needs a change: The financial crisis has exposed long neglected deficiencies in the present growth path, most visibly in unemployment and public debt. At the same time Europe has to cope with new challenges ranging from globalisation and demographic shifts to new technologies and ecological challenges. Under the title of Welfare, Wealth and Work for Europe – WWWforEurope – a European research consortium is laying the analytical foundations for a new development strategy that enables a socio-ecological transition to high levels of employment, social inclusion, gender equity and environmental sustainability. The four year research project within the 7th Framework Programme funded by the European Commission started in April 2012. The consortium brings together researchers from 33 scientific institutions in 12 European countries and is coordinated by the Austrian Institute of Economic Research (WIFO). Project coordinator is Karl Aiginger, director of WIFO.

For details on WWWforEurope see: www.foreurope.eu

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