

## Some Uses of Happiness Data in Economics

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**E**conomists are trained to infer preferences from observed choices; that is, economists typically watch what people do, rather than listening to what people say. Happiness research departs from this tradition. Instead, happiness researchers have been particularly interested in self-reports of well-being, which may be as simple as an answer to a question with the general form: “Are you very happy, pretty happy, or not too happy?” Hundreds of thousands of individuals have been asked this kind of question, in many countries and over many years, and as reviewed in Frey and Stutzer (2002), researchers have begun to use these data to tackle a variety of questions.

Richard Easterlin (1974) was the first economist to make prominent use of happiness data when he reported that despite increases in personal income over time, people were not reporting an increasing level of happiness. This paper begins with a recap of Easterlin’s puzzle and the various attempts that have been offered to resolve it by questioning either the interpretation of the happiness surveys or the underlying economic assumption of what economists should include in utility functions. The paper then discusses other examples of research using happiness surveys: to evaluate whether public policies have positive effects on social welfare, like taxes on cigarettes; to determine the welfare costs of inflation and unemployment; and to investigate determinants of political economy like whether the happiness of Europeans is more affected by inequality than the happiness of Americans.

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## Economic Growth without Happiness?

Most utility functions assume that higher levels of current personal income lead to higher utility. In 1974, Richard Easterlin introduced happiness data into economics and observed that their basic pattern was at odds with this assumption. Specifically, Easterlin (1974) observed that happiness responses are positively correlated with individual income at any point in time: the rich report greater happiness than the poor within the United States in a given year. Yet since World War II in the United States, happiness responses are flat in the face of considerable increases in average income. Figure 1 reports the average happiness response for repeated cross-sections of different Americans between 1975 and 1997 (with the three categorical answers assigned the numbers 1, 2 and 3). Figure 2 presents the cross-section results for the United States in 1994. A similar pattern has been observed in a large number of countries, including France, the United Kingdom, Germany and Japan, and for different periods of time (Easterlin, 1995; Blanchflower and Oswald, 2004). In Japan, income rose by a multiple of five between 1958 and 1987, and happiness remained stationary.<sup>1</sup>

It's true that small upward trends in happiness can be detected in Italy and the Netherlands. Also, sometimes differences in happiness arise depending on which cohort or which ethnic group is followed over time (Blanchflower and Oswald, 2000, 2004). Still, the general finding of growth without significantly greater happiness certainly raises questions about how a person's current income should enter a utility function. A number of possible responses have been offered in attempts to resolve this puzzle. We'll first review a number of explanations for which either the evidence seems weak, or which in the end shed little light on the puzzle that Easterlin (1974) identified: that happiness scores carry no meaning, that happiness scores aren't comparable across people, that people redefine their happiness scores over time, and that happiness should depend on health, the environment, leisure and variables other than income. We'll then consider two explanations for the paradox that have a stronger empirical basis: that happiness is based on relative rather than absolute income and that happiness adapts to changes in the level of income.

### Are Happiness Surveys Related to True Utility?

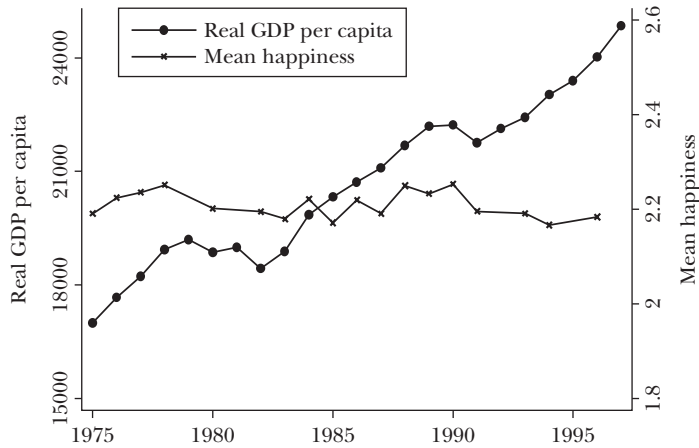
Compared to other subjective data used regularly in some fields of economics, happiness questions have the considerable appeal of requiring only a minimum of information processing.<sup>2</sup> But skeptics may argue that this simplicity is also a weakness because the data may be too simple and thus carry little information. The

<sup>1</sup> For a register of happiness surveys across 112 nations, visit the World Data Base of Happiness: (<http://www1.eur.nl/fsw/happiness/>). See also Veenhoven (1993).

<sup>2</sup> By contrast, for example, "contingent valuation" studies of the costs of environmental damage ask people to place a subjective value on hypothetical events. Problems include the risk of people answering strategically and the possibility that they will answer ignorantly, on the basis of little or misguided information.

Figure 1

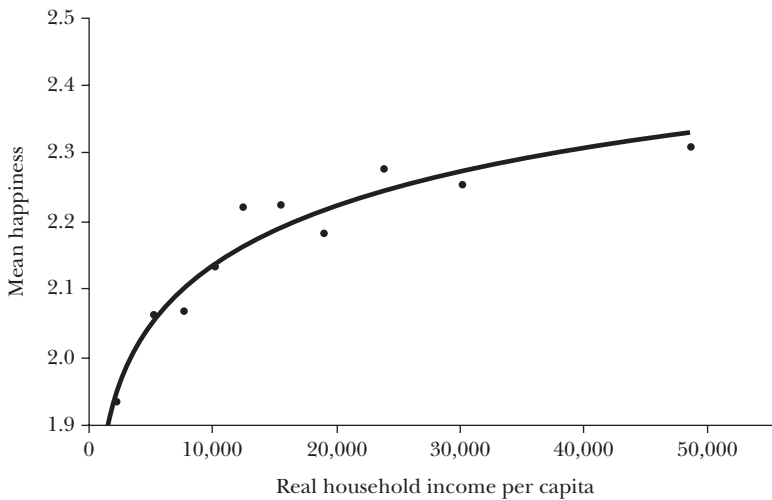
**Mean Happiness and Real GDP Per Capita between 1975 and 1997 for Repeated Cross-Sections of (Different) Americans**



Notes: Right-hand scale is the average of the answers to the question from the United States General Social Survey: "Taken all together, how would you say things are these days—would you say that you are (3) very happy, (2) pretty happy, or (1) not too happy?" Real GDP per capita is measured in 1990 U.S. dollars.

Figure 2

**Mean Happiness and Real Household Income for a Cross-Section of Americans in 1994**



Notes: Left-hand scale is the average of the answers to the question from the United States General Social Survey: "Taken all together, how would you say things are these days—would you say that you are (3) very happy, (2) pretty happy, or (1) not too happy?" The fitted regression line is  $0.13 \ln Y + 0.98$ , from Easterlin (2004b).

skeptical position seems to be: Talk is cheap, and unstructured talk as a result of open-ended questions such as “Are you happy?” is not meaningful. If the scores from happiness questionnaires are not actually related to true utility, then the Easterlin pattern of growth-without-happiness is unsurprising.

A simple test of the hypothesis that happiness data are just noise is to study whether happiness scores correlate with some other variable that we can plausibly claim is associated with true utility. For example, cross-sectional and panel studies reveal that unemployed individuals tend to report low happiness scores (Clark and Oswald, 1994; Winkelmann and Winkelmann, 1998). This outcome seems reasonable given that other “bads” like divorce, addiction, depression and violence are correlated with unemployment. The findings also suggest that happiness surveys are capturing something meaningful about true utility.

Admittedly, it is difficult to discern true utility accurately. In one famous experiment in psychology, Landis (1924) photographed students while they listened to music, looked at pornographic material, smelled ammonia or observed him decapitate a live rat. Third-party observers were unable to predict the activity by looking at the photographs. However, more recent research shows that this inability results from a failure to distinguish between ordinary smiles and the Duchenne smile, a type of smiling that involves a muscle near the eye (called *orbicularis oculi, pars laterali*), which can indeed distinguish between true and feigned enjoyment. Duchenne smiles are correlated with self-reported happiness (Ekman, Friesen and O’Sullivan, 1988; Ekman, Davidson and Friesen, 1990).

Happiness answers (and Duchenne smiles) are also correlated with left frontal brain activity, which in turn appears to be connected to different forms of what we are calling true utility. Fox and Davidson (1982), for example, show that 10-month old infants exhibit greater activation of the left frontal than of the right frontal area of the brain in response to videotapes of an actress generating happy facial expressions. In contrast, asymmetry in other parts of the brain failed to discriminate between the conditions. A good starting point for economists in the psychology literature on happiness is Diener, Suh, Lucas and Smith (1999) and Diener and Seligman (2004).

Ultimately, happiness research takes the view that happiness scores measure true internal utility with some noise, but that the signal-to-noise ratio in the available data is sufficiently high to make empirical research productive. Note that the work discussed in this section also implies that, conceptually, happiness research need not have to rely on subjective data. An example of happiness research involving suicide rates as a proxy for true utility is Stevenson and Wolfers (2003). However, it remains an open question as to whether happiness scores refer to current or delayed utilities.<sup>3</sup>

<sup>3</sup> See also Kimbell and Willis (2005). This could potentially be studied using neuroimaging, as recent work in this area has studied the systems that underlie discounting the value of rewards based on the delay until the time of delivery (McClure, Laibson, Loewenstein and Cohen, 2004).

### Can Happiness Scores be Compared?

Easterlin's (1974) observation of economic growth without increasing happiness involved comparing happiness scores of different people and at different points in time. The interpersonal comparability of happiness scores, however, is a thorny question. How much similarity across peoples' reporting of true utility needs to be assumed in happiness studies?<sup>4</sup>

At one end of the spectrum, the problem of comparing happiness scores between just two individuals remains very difficult. Consider an example with Amanda and Brad, who consume various quantities of good  $x$  on a number of occasions, each time reporting a happiness score. Then imagine that a social scientist decides to estimate a linear regression "happiness equation." The result of the equation is that Brad typically registers a greater increase in happiness scores for each unit consumed than does Amanda. Does this finding mean that if one extra unit of  $x$  falls from the sky then it should be given to Brad? Not really. Perhaps Amanda scores her true utility on a numeric happiness scale using a conversion factor equal to  $1/z$  times the size that Brad uses.

Another way of stating the problem is to say that there may be an unobservable variable we could call "exaggeration" that is missing from the happiness equation. If Brad exaggerates the effect on his utility of increases in  $x$  by more than Amanda does, then his regression coefficient will be biased up relative to hers. This well-known difficulty of comparing utilities is sometimes referred to as the "qualia problem"—Harsanyi (1955) calls it the metaphysical problem—and prevents us from making interpersonal comparisons using self-reported measures.

This problem becomes worse when the happiness scores are at the top of a certain measurement scale, so that they cannot rise higher, or at the bottom of the scale, so that they cannot fall lower. Then, even if Amanda and Brad have the same happiness score—say they both choose the top category—the bounded nature of the scoring method introduces a problem when using scores to make such comparisons. These bounds can also make it appear that marginal utility is diminishing as consumption increases, when in fact the scores are hitting the top of the scale and for that reason becoming less responsive to rising true utility.

However, once the analyst moves beyond comparing just two individuals and instead starts focusing on groups, the problems of comparing happiness are much reduced. After all, the possibility of systematic *differential* reporting biases when two groups containing large numbers of individuals are compared could become small. This is important because a large fraction of the happiness literature in economics is based on comparing average happiness scores for large numbers of people. As one example, consider some data from the German Socio-Economic Panel. These data track happiness scores for the same people over time, based on the answer to

<sup>4</sup> See also Ng (1996) and Tinbergen (1991), as well as the early work advocating the use of data on individual satisfaction with the level of income by van Praag and Kapteyn (1973). A related issue is that it remains arguable whether an arithmetic mean of individual utilities is a useful indicator of social welfare. See Harsanyi (1955).

the question: “In conclusion, we would like to ask you about your satisfaction with your life in general, please answer according to the following scale: 0 means completely dissatisfied and 10 means completely satisfied: How satisfied are you with your life, all things considered?” The scale on which the answers are recorded shows “0, 1, 2, . . . , 9, 10.” The survey tracks approximately 14,000 individual Germans over time, for a period of up to 16 years.

To illustrate the most problematic case, consider the first two columns in Table 1, which present the results of two ordinary least squares regressions, using the poorest and richest halves of the sample, where the dependent variable is the happiness score and the independent variables are the level of income and individual fixed effects. There are obviously many ways to tweak this estimation.<sup>5</sup> But the point is that the poor half of the sample in column 1 seems to make more pleasant noises, which we call happiness data, when they have more income. (A t-test of equality of the two income coefficients is rejected at conventional levels. Note that the shape of Figure 2 shows that the data from the United States in 1994 are broadly consistent with this result.)

The individual fixed effects included in the calculation reduce the chance that unobserved heterogeneity, like ability, exaggeration or family background, is driving our correlations. Kohler, Behrman and Skyttke (2005) address the issue of unobserved heterogeneity across individuals in a different way by using within-monozygotic twin pair estimation with data on identical Danish twins to show that partnerships and children have appreciable persistent effects on happiness.

But problems remain, however, when exaggeration is correlated with income over time for the same individual. For example, people who become richer may become more modest about reporting how much happier they are becoming. Thus, a politician wishing to achieve the highest average happiness and who is faced with the problem of how to distribute a windfall of one euro has only a partial use for these results. For example, the politician might take the position that the burden of proof is on the rich, who should have to make the case that they are obtaining at least 15 times more true utility from the extra euro than their happiness scores are indicating, or else the euro should go to the poor ( $15 = 0.12/0.008$ ).

As another application based on these data, consider the case of a politician who has to decide which part of Germany will enjoy a shock (such as a beneficial investment project) that decreases the unemployment rate. In this case, the data are divided by region, rather than by rich and poor. Thus, the regressions in the third and fourth columns of Table 1 continue to have happiness scores as the dependent variable, but the data are now aggregated at the state level (Germany has a federal system of government in which the country is divided into semi-

<sup>5</sup> For example, there may be convincing ways of obtaining exogenous measures of income, or one may want to employ a more flexible cardinalization of the data. One approach is to use ordered probits with different cut points for each group in the sample, as in Di Tella and MacCulloch (1998); see also the approach in van Praag and Ferrer-i-Carbonell (2004).

Table 1

### How Happiness Scores Vary with Personal Income, Germany, 1985–2000

	<i>Poor</i>	<i>Rich</i>	<i>Region 1</i>	<i>Region 2</i>
<i>Real income</i>	0.12 (0.02)	0.008 (0.007)	0.09 (0.07)	0.11 (0.08)
<i>Unemployment rate</i>			−.04 (0.02)	−0.03 (0.01)
<i>Dummy variables</i>	Individual	Individual	State	State
<i>Overall R<sup>2</sup></i>	0.01	0.003	0.48	0.02
<i>No. of observations</i>	8,355	8,370	75	75
<i>No. of groups</i>	1,392	1,305	5	5

*Source:* Data are from the German Socio-Economic Panel (GSOEP), which randomly samples households living in the Federal Republic of Germany.

*Notes:* The dependent variable is the answer to the question: “In conclusion, we would like to ask you about your satisfaction with your life in general, please answer according to the following scale, 0 means completely dissatisfied and 10 means completely satisfied: How satisfied are you with your life, all things considered?” The answers range on a scale from 0, completely dissatisfied, to 10, completely satisfied.

The method used is an ordinary least squares regression, with standard errors in parentheses. *Real income* is the individual’s income measured in thousands of 1995 Deutschmarks. In columns 3 and 4, it is averaged at the state-year level. *Unemployment rate* is the state’s unemployment rate. *Poor* is the bottom half of the sample of employed females (average income 40,938 DM). *Rich* is the top half of the sample of employed females (average income 84,864 DM).

*Region 1* consists of Schleswig-Holstein, Lower Saxony, Bremen, Rhineland-Pfalz and Baden Wurttemberg. *Region 2* consists of Berlin, Hessen, North Rhine-Westphalia, Hamburg and Bavaria.

autonomous states, similar to the United States). The variables assumed to be independent are income and the unemployment rate, and these variables are measured at the state level, too. The data include 15 years and ten German states. This case is simpler because there is no a priori reason to believe that large numbers of people living within each of these states in this time period should be scoring themselves systematically differently in a way that interferes with the interpretation of the coefficient on the unemployment rate. The coefficients on this variable for both regions of the country presented in the third and fourth columns are negative and significant. Since equality of the coefficients across the regions cannot be rejected, the politician has some basis for deciding to have both regions of Germany share equally in the shock that will reduce unemployment.

The kinds of comparisons suggested in this section are admittedly nonstandard. As Hammond (1991) puts it: “Following [Lionel] Robbins, it became fashionable for economists to eschew interpersonal comparisons of utility, apparently in an attempt to be *scientific*.” He also states: “And where interpersonal comparisons really have to be made, because the gainers from a change were not going to compensate the losers, the monetary comparisons that result from valuing all individuals’ dollars equally still seem to be the most popular among economists, who then wonder why their policy advice does not receive wider acceptance.” The underlying assumption of a large part of happiness research in economics is that when people

are measured in groups, the combination of their happiness scores does reveal useful information with which to make comparisons about social welfare.

### **Are People Redefining What Their Happiness Score Means?**

The happiness data typically available for the United States have only three response categories. Starting in 1972, the General Social Survey carried out by the National Opinion Research Center has asked: “Taken all together, how would you say things are these days—would you say that you are very happy, pretty happy, or not too happy?” Before that, surveys going back to the 1940s done by the American Institute for Public Opinion and the Gallup poll asked a similar three-part happiness question, with minor differences in wording. Perhaps with only three categories to choose from, Americans re-adjust their interpretation of the happiness scale so that they tend to fall somewhere in the middle.

However, the Easterlin (1974) puzzle is also present in the German Socio-Economic Panel used in Table 1, which has happiness data on a scale from 0 to 10 and records the answers of the same people over time. Figure 3 below plots average happiness and average real incomes for 8,649 West Germans aged from 21 to 65 years old who were followed between 1985 and 2000. The period is relatively short compared to life expectancy in Germany at the time, so it seems unlikely that a sweepingly different cultural notion of happiness has come into play. If we draw best-fit regression lines to approximate the two trends, the slope is significantly positive for the income series and significantly negative (although not large in magnitude) for the happiness series (both at the 5 percent level).

Luttmer (2004) has also worried about the possibility that what people mean by “happiness” might shift over time. He uses measures of well-being like the incidence of depression, poor appetite and poor sleep that are less likely to be purely subjective and finds similar results as those obtained using standard subjective happiness data.

Although the evidence is not conclusive, there seems little reason to believe that the average person in the present is substantially happier than the average person several decades ago, but is just answering the happiness questionnaires in a similar way.

### **Expanding the Concept of Social Welfare**

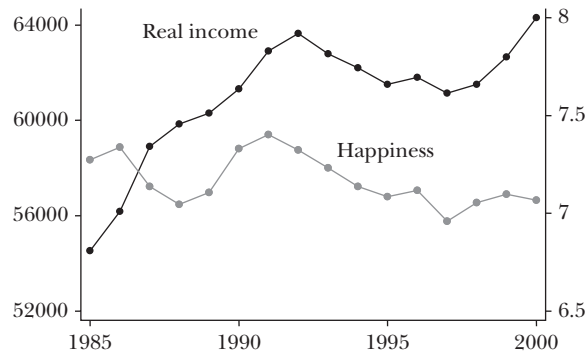
Another possible alternative is to study the role of omitted variables. Maybe you can’t just throw money at the problem of achieving happiness. If people care about other aspects of their lives, such as their health, the environment, leisure and so on, and if some of these variables are negatively correlated with GDP per capita, then higher GDP might accompany an unchanging level of happiness. This insight is related to the idea, sometimes observed in policy circles, of replacing GDP per capita in favor of broader measures of welfare, such as environmentally adjusted GDP or the Human Development Index from the United Nations Development Program.

The problem with this explanation, however, is that most of the variables that



Figure 3

**Average Happiness and Real Annual Income Per Capita between 1985 and 2000 for the Same Group of 8,649 Individuals Residing in West Germany**



*Notes:* Right-hand scale is the average of the answers to the question: “In conclusion, we would like to ask you about your satisfaction with your life in general, please answer according to the following scale, 0 means completely dissatisfied and 10 means completely satisfied: How satisfied are you with your life, all things considered?” Real annual income is measured in 1995 Deutschmarks.

economists would think about adding to the utility function have trended in the wrong way to explain why reported happiness levels have been so flat over time. Take leisure, for example. In most OECD countries, hours worked on average have gone down, not up. In France, for example, average annual hours worked per employee went from 1,865 in 1975 to 1,605 in 1997, a drop of almost 14 percent. If people in France cared about leisure and income, happiness reports should have risen even faster. With the exception of the unemployment rate, most candidate variables for inclusion in the utility function, such as health (proxied by life expectancy) and the environment also improved in France over this period. Di Tella and MacCulloch (2003) correlate happiness with a battery of variables (including leisure, crime and the environment) that some could argue belong in the utility function and observe that, given their evolution over time, happiness should have risen even more. Thus, introducing omitted variables doesn’t solve the Easterlin paradox; instead, it deepens the puzzle.

### Is Happiness Based on Relative Income?

Easterlin (1974) discussed the hypothesis that people care about their income relative to that of others as an explanation for the growth without happiness phenomenon. This argument is also made in models of interdependent preferences, which trace back at least to Duesenberry (1949) and Pardo (1968) but have also seen a recent resurgence in the work of Frank (1997), Clark and Oswald (1998), Blanchflower and Oswald (2004) and others. Frey and Stutzer (2002) present a good review. As a recent example, Luttmer (2004) studies a panel of almost 9,000 individuals in the United States. He matches individual data on happiness and income with the average earning in the locality in which individuals

live (which contains 150,000 inhabitants on average). He observes that approximately similar decreases in individual happiness are produced when individual income falls as when the locality's income increases and concludes that there are sizeable relative income effects.<sup>6</sup> In addition, the estimated effects appear to be larger amongst individuals who socialize more in the locality, possibly since this makes income differences with others more salient to the individual. (Of course, people may still wish to move to high-income localities to the extent that they offer other amenities that increase happiness.) Similarly, Clark (2003) presents panel evidence on the happiness drop associated with becoming unemployed and finds that the drop in happiness is smaller the higher is the unemployment rate in this person's reference group.

### **Does People's Happiness Adapt to Changed Circumstances?**

The pattern of economic growth without increases in happiness would result also if people become accustomed over time to increases in income, as in the model of Pollak (1970). A classic paper in psychology, Brickman, Coates and Janoff-Bullman (1978) showed that a very small sample of individuals who had won between \$50,000 and \$1,000,000 at the lottery the previous year reported "comparable" life satisfaction levels as those who did not. They also argued that individuals who had become paraplegic or quadriplegic within the previous year reported only slightly lower levels of life satisfaction than healthy individuals. More recently, Easterlin (2004a) has shown that the evidence suggests there is complete adaptation to income but incomplete adaptation to life's events (like marriage or disability). For an insightful review of studies that have evidence on the extent of adaptation, see Frederick and Loewenstein (1999). See also the recent evidence in Oswald and Powdthavee (2005), Riis, Loewenstein, Baron and Jepson (2005) and the discussion in Rayo and Becker (2004).

Consider again the German data from 1985 to 2000 as presented in Figure 3. Although the income time trend is overall positive and the happiness one is overall negative, the year-to-year fluctuations in happiness and incomes show signs of moving together—that is, changes in happiness and changes in real income are positively correlated over the period. Consequently, there appear to be transitory income effects that do not, however, translate into permanently different levels of happiness. Di Tella, MacCulloch and Oswald (2003) present results consistent with adaptation to income over time using country panels. A natural explanation behind adaptation is that people adjust their desires—a phenomenon sometimes called "preference drift" (van Praag and Kapteyn, 1973). In this spirit, van de Stadt, Kapteyn and van de Geer (1985) cannot reject the hypothesis of one-for-one changes in income aspirations and income (see also van Praag and Ferrer-i-Carbonell, 2004), whereas Stutzer (2003) directly measures a negative relationship between happiness and income aspirations.

<sup>6</sup> An alternative approach presented in Charness and Grosskopf (2001) is based on controlled experiments and obtains weaker results.

In brief, the overall evidence is consistent with the hypothesis that an individual's happiness or utility is not just a function of income at a point in time, as in the standard model most often used by economists, but that happiness adapts to changes in income over time, and that at a point in time, happiness also comes from relative levels of income. Note that for both adaptation and relative income effects to be relevant explanations of the Easterlin (1974) paradox we would need a very specific pattern: it would have to be the case that individuals adapt to income, but do not adapt to their relative position. This pattern is consistent with Easterlin (2004a), who argues that family aspirations do not change as marital status and family size change, but that material aspirations increase commensurately with household wealth. This is also the pattern that is present in the panel data analyzed in Di Tella, Haiklen-de-New and MacCulloch (2005), who show evidence consistent with strong adaptation to income (within four years) but no adaptation to (job) status.

## **Using Happiness Data to Evaluate Policy**

To measure how policies affect social welfare, economists have traditionally operated in two steps. First, they look at how policies affect behavior. Then, using these predictions, they connect policies to welfare through some theoretical model. A common problem with this approach is that, even if agreement exists on how a policy affects behavior, there is often a lack of consensus on how the consequences of policy will affect welfare.

For example, will a higher tax on cigarettes increase or reduce the welfare of smokers? A wide range of studies on the behavior of smokers have estimated that their purchases of cigarettes fall when the price rises. However, this behavioral effect is consistent with two models that have opposite welfare implications. In the Becker and Murphy (1988) "rational addiction" model, the welfare of smokers drops as cigarettes, which they enjoy, become more expensive. However, if smokers have self-control problems, then their preferences can be time-inconsistent in the sense of Laibson (1997) so that they always want to quit in the future, but never in the present. A cigarette tax is able to raise the welfare of these types of smokers by providing them with a commitment device that allows them to do something that they would not otherwise choose.

To resolve these ambiguous theoretical predictions, Gruber and Mullainathan (2002) match happiness data on smokers and nonsmokers from the United States and Canada to cigarette tax data from U.S. states and Canadian provinces. They exploit the fact that cigarette tax changes should only affect the happiness of current and former smokers. Since they do not have data on former smokers and smoking data are only available for a subset of years in their surveys, Gruber and Mullainathan compare the effect of cigarette taxes on those who are predicted to smoke with those who are not. Their paper finds that a 50-cent tax per pack of cigarettes would leave predicted smokers with the same level of happiness as those

who are not predicted to smoke in the United States (the actual average real tax equals 31.6 cents per pack in 1999 values). They explain that it seems extremely unlikely that some form of measurement error in the happiness data can be driving their results, since the error would have to change in those states and years where cigarette taxes change and in such a way that it only affects the happiness gap between predicted smokers and nonsmokers. Thus, the evidence from happiness surveys is inconsistent with the “rational addiction” model and favors the “psychological (hyperbolic)” model.<sup>7</sup>

To provide more help to policymakers, researchers will have to be more specific about the distributional details of the proposed policies. Presumably, in the case of the tax on cigarettes even within the group of predicted smokers, the effects will vary depending on the subgroup. For example, although smokers who quit will be happier, those that do not quit will be worse off because of the increase in price (and the frustration from failing to quit with this extra incentive).

A second example where happiness data can help in evaluating policy involves changes in unemployment benefits. Some evidence suggests that the unemployment rate should decrease when unemployment benefits fall. However, there is not much guidance as to what will happen to welfare. Just as in the smoking example discussed above, there are conflicting forces within each group. Those who were unemployed but end up taking jobs as a result of the lower benefits may become better off. However, the overall effect on welfare within the unemployed is ambiguous because those that remain unemployed have their welfare reduced by the cut in benefits, but also have their welfare increased because the average duration of their unemployment spell declines. Similarly the existing pool of employed workers face a mix of consequences: they gain if lower benefits lead to lower taxes and a reduced fear of job loss, but their welfare may drop since the risk of becoming unemployed with a lower level of unemployment benefits now involves a higher personal cost. The net effect of all these consequences is hard to estimate and a lot depends on debatable theoretical arguments.

However, a direct method to estimate at least a part of the consequences is to run a happiness regression for an employed person that includes the level of benefits (to proxy for the cost of risk) and the unemployment rate. In principle, a policymaker could then compare the effects on happiness for workers of losing their safety net with the gains from lower unemployment rates. In work along these lines, Di Tella, MacCulloch and Oswald (2003) show that in Europe, the happiness gap between the employed and the unemployed did not narrow with increases in benefits during the period from 1975 to 1992. Again, since the estimates involve

<sup>7</sup> More generally, an important finding in research in psychology is that people often miscalculate the utility associated with the choices they face (for example, Gilbert, Pinel, Wilson, Blumberg and Wheatley, 1998, 2002; Riis, Loewenstein, Baron and Jepson, 2005). Kahneman, Wakker and Sarin (1998), for example, distinguish between the hedonic experience of an outcome and decision utility (the weight assigned to an outcome in a decision). In this case, inferring preferences through revealed preference may be insufficient, and happiness data may provide a measure of hedonic experience, a point emphasized in Rabin (1998).

differences between two groups of workers within a panel, it seems unlikely that measurement error in the happiness data or omitted variables drive the results. This evidence weighs against the theory that high European unemployment arises because higher unemployment benefits have made life “too easy” for the unemployed. For example, Krugman (1994) observes that most economists share the same diagnosis that in Europe “the relatively generous level of unemployment benefits has made workers unwilling to accept the kinds of low-wage jobs that help keep unemployment comparatively low in the United States.”

Finally, some authors have used happiness data to study other, more permanent institutional features of the economy, such as the role of direct democracy. Frey and Stutzer (2000) exploit the large cross-sectional variation in the institutional rights to political participation across the 26 Swiss cantons. They find that average happiness and an index of direct democracy in a canton are positively correlated. Intriguingly, they also find that the effect is stronger for Swiss nationals relative to foreigners (about three times), which they interpret as suggesting that it is not the policy outcome of direct democracy that matters (from which foreigners cannot be excluded) but rather the process itself that matters (since only the Swiss can participate in referenda).

## **The Inflation-Unemployment Tradeoff**

A large literature in macroeconomics assumes that social welfare is reduced both by a higher rate of inflation and by a higher rate of unemployment. This literature has been subject to both a fundamental critique and a question about magnitudes. The fundamental critique is that nominal aspects of an economy like inflation should be of no consequence to rational people. But even if inflation and unemployment do both enter into people’s happiness, there remains a question of magnitudes: how much unemployment is equal to a percentage point of higher inflation, or vice versa.

Happiness data can address some of the issues in the unemployment-inflation literature. Wolfers (2003) presents a comprehensive set of estimates, using data on the happiness responses of more than half a million people in a maximum of 16 European countries for the period 1973–1998 (for a total of 274 country-years). Table 2 shows his main results from a regression in which people’s happiness data are the dependent variable and the explanatory variables are the unemployment and inflation rates that they are experiencing.<sup>8</sup>

The calculations show that inflation and unemployment both reduce happiness. The method of calculation used here—the ordered probit—takes the raw

<sup>8</sup> Shiller (1997) approached the problem by asking people directly about why they dislike inflation. Interestingly, macroeconomics is also the focus of some of the earliest work we found using a “happiness” approach, namely that by Durkheim (1897 [1951]) on the effect of social changes (including economic crisis) on “anomic” suicides.

Table 2

**How Happiness Scores Vary with Macroeconomic Variables: 16 OECD Countries, 1973–1998**

Macroeconomic variables	
<i>Unemployment rate</i>	–3.45 (0.50)
<i>Inflation rate</i>	–0.73 (0.33)
<i>Personal characteristics included?</i>	Yes
<i>Dummy variables</i>	Country and year
Unemployment-inflation tradeoff	4.7 (4.1–5.8)
Pseudo R <sup>2</sup>	0.06
No. of observations	504,581
Country-year clusters	274

Source: Data are from the Euro-barometer survey series (Wolfers, 2003).

Notes: The dependent variable is the answer to the question: “On the whole, are you very satisfied, fairly satisfied, not very satisfied or not at all satisfied with the life you lead?” where the individual chooses between a) “very satisfied,” b) “fairly satisfied,” c) “not very satisfied” and d) “not at all satisfied.” The method is an ordered probit regression, with standard errors in parentheses and adjusted for clustering at the country-year level.

happiness scores and transforms them into continuous scores based on the proportions in the sample and assumes a standard normal distribution. One way to obtain a feel for the size of the effects is to focus on a person with a relatively low happiness score, such that she has only 36 percent of the sample below her. An increase in unemployment equal to 10 percentage points would shift the whole distribution in the direction of lower scores (by 0.35 of a standard deviation) so that the median person in the new distribution has the same happiness score as the woman with the 36<sup>th</sup> percentile score in the original distribution. Table 2 also allows a comparison of the happiness costs of unemployment and inflation: specifically, a percentage point of unemployment causes 4.7 times more unhappiness than a percentage point of inflation.

The estimate that a percentage point of unemployment causes more unhappiness than a percentage point of inflation seems robust, although the precise multiple varies in different studies. Di Tella, MacCulloch and Oswald (2001) estimates that an additional percentage point of unemployment causes twice as much of a reduction in happiness as an additional percentage point of inflation in a smaller sample that includes country-specific time trends as controls. They note that the coefficient on the unemployment rate in Table 2 reflects how the *average* person changes their score when unemployment changes. But the average person is employed. Since the happiness regression in Table 2 also includes a control variable for whether each person is unemployed (in the set of personal characteristics) the coefficient on this variable measures the direct cost to those falling unemployed. Therefore, to calculate the total cost of unemployment, the cost to

the average person must be increased by adding the individual cost to the unemployed. Determined this way, all the estimates available of the happiness consequences of unemployment compared with inflation suggest that using a “misery index” with equal weights on inflation and unemployment (as is often done for policy purposes) would underestimate the costs of joblessness.

The coefficients on the unemployment and inflation rates can be useful for policy. Consider a government that thinks it can produce a recession that increases the unemployment rate by 2 percentage points for one year and gets a permanent reduction in inflation of 1 percentage point. Wolfers (2003) points out that, using a discount rate of 6 percent for the happiness effects of inflation, this tradeoff is equivalent to an increase in the unemployment rate of 2 percentage points for one year and a one-year drop in the inflation rate approximately equal to 18 percentage points. Should the government choose this policy? A government that buys the assumptions on which happiness research is based would look at the estimates in Table 2 and say yes. This is because the gain coming from the one-year drop of 18 percentage points in inflation is greater than the loss coming from 4.7 multiplied by the 2 percentage point rise in unemployment. It would be a way to justify Feldstein’s (1997) claim that there is widespread professional consensus on inflation’s adverse effects and that these justify the short-term unemployment sacrifices that are required to reduce inflation to lower levels.<sup>9</sup> Interestingly, Wolfers (2003) also finds evidence that individuals’ happiness scores tend to be lower when the volatility of unemployment and of inflation tend to be high. He then suggests some estimates of the costs of business cycle volatility.

## Political Economy

The potential uses of happiness data in political economy are vast. Such an application of happiness research can begin by studying in detail happiness responses across subsamples of people. For example, consider the literature on the “political business cycle”—that is, the theories that seek to explain business cycles by the actions of political parties to stimulate the economy at election time, even at a long-run cost, and the theories that explain the path of the business cycle by differing political preferences of the parties.

One version of this theory is built around the assumption that the main parties have different preferences over inflation and unemployment. A common approach is to assume that right-wingers care more about inflation (relative to unemployment)

<sup>9</sup> Positive theories of inflation assume that governments choose an inflation rate to maximize social welfare,  $s(u, \pi)$ , where  $u$  is unemployment and  $\pi$  is inflation, subject to a Phillips curve tradeoff, whereby unemployment depends on inflation and inflationary expectations. The government faces a commitment problem, and its choice of inflation depends on the ratio of the marginal welfare effects of inflation and unemployment, which can be estimated from our happiness regression. However, identification problems (as in the Lucas critique) can arise if, for example, real money balances that depend on expectations of future inflation enter the welfare function directly.



than do left-wingers (for example, Hibbs, 1977; Alesina, 1987). Di Tella and MacCulloch (2005) use happiness data to study these assumptions. The general strategy is to separate the sample using information on political self-identification, such as the answer on a scale of 1 to 10 to the question: "In political matters, people talk of 'the left' and 'the right.' How would you place your own views on this scale?" Respondents were classified as being left if their response was in categories 1 to 3 and right if their response was in categories 8 to 10. We then estimate the effect of the inflation and unemployment rates on the happiness of the left and right subsamples separately. A single happiness regression can also be estimated where the coefficients on unemployment and inflation are allowed to vary depending on whether the individual is left- or right-wing. Of course we must proceed with an awareness that people are not randomly selected into different political identifications and may change beliefs depending on their current economic circumstances.

The first two columns in Table 3 illustrate that the unemployment/inflation ratio is indeed higher for left-wingers than for right-wingers.<sup>10</sup> The calculation also demonstrates some strengths of this approach. This regression helps control for other economic shocks that are contemporaneous with the macroeconomic variables in the regression and that affect the average happiness of the members of the two partisan groups by the same amount. These results also show how happiness research imposes a minimum of structure: essentially, people are asked two questions—their happiness and their political orientation. The connection with macroeconomic variables like unemployment or inflation is made later on by the researcher.

Happiness data also provide some basis for inquiring into the origin of these differences. Paul Samuelson once said (as quoted by Hibbs, 1987, p. 213): "The difference between the Democrats and the Republicans is the difference in their constituencies. It's a class difference . . . . The Democrats constitute the people, by and large, who are around the median incomes or below. These are the ones whom the Republicans want to pay the price and burden of fighting inflation. The Democrats are willing to run some inflation (to increase employment); the Republicans are not." However, the results reported in the third and fourth columns, which divide the sample into the "rich," who are in the upper quarter of the income distribution, and the "poor" in the bottom quarter of the income distribution, do not support Samuelson's view. The unemployment/inflation tradeoffs of the rich and the poor are not significantly different. Further tests show that, if anything, the

<sup>10</sup> Similar results obtain if we use the answers to "If an election were to be held tomorrow, which party would you vote for?" and then classify parties into left and right using a standard political scientist's ideological index. Within the United States, there is also other evidence of partisan effects. Alesina, Di Tella and MacCulloch (2004) report that for a sample of 44 states between 1981 and 1996, higher state unemployment rates significantly decrease the happiness of the left, but not the right. "Left" respondents identified themselves as "Strong Democrat," "Not very strong Democrat" or "Independent, close to Democrat" when asked "Generally speaking, do you usually think of yourself as a Republican, Democrat, Independent, or what?" "Right" respondents are those answering "Independent, close to Republican," "Not very strong Republican" or "Strong Republican."



Table 3

**Partisan Social Happiness Functions, Left and Right: 10 OECD Countries, 1975–1992**

	<i>Left</i>	<i>Right</i>	<i>Poor</i>	<i>Rich</i>
Macro variables				
<i>Unemployment rate</i>	−6.67 (2.54)	−4.96 (2.43)	−5.50 (1.66)	−4.19 (1.99)
<i>Inflation rate</i>	−1.64 (1.35)	−6.09 (1.12)	−3.80 (1.04)	−2.69 (0.99)
<i>Personal characteristics included?</i>	Yes	Yes	Yes	Yes
<i>Dummy variables</i>	Country and year	Country and year	Country and year	Country and year
<i>Country specific time trends</i>	Yes	Yes	Yes	Yes
Unemployment inflation tradeoff	4.1	0.8	1.4	1.5
Pseudo R <sup>2</sup>	0.08	0.09	0.07	0.09
No. of observations	39,816	35,023	58,381	61,633
Country-year clusters	160	160	160	160

*Source:* Data are from the Euro-barometer survey series (Di Tella and MacCulloch, 2005).

*Notes:* The dependent variable is the answer to the question: “On the whole, are you very satisfied, fairly satisfied, not very satisfied or not at all satisfied with the life you lead?” where the individual chooses among a) “very satisfied,” b) “fairly satisfied,” c) “not very satisfied” and d) “not at all satisfied.” The method is an ordered probit regression, with standard errors in parentheses and adjusted for clustering at the country-year level.

poor tend to report lower levels of well-being than the rich at higher inflation rates. This is a particularly simple test of the hypothesis that inflation hurts the poor (contrast with, for example, the approach in Blinder and Esaki, 1978).

Happiness data also allow for tests that are more political in nature. As an example, Di Tella and MacCulloch (2005) construct a measure, similar to those used by political scientists, of the extent to which the government in a country in a particular year leans toward the right. The measure first counts the share of votes received by each party participating in cabinet and multiplies this percentage of support by a left/right political scale from Castles and Mair (1984). This variable is then included in regressions such as those presented in Table 3. Its coefficient is negative and significant in the regression for the left-winger subsample and is positive and significant in the right-winger subsample. The absolute size of the effect is similar for both groups. This coefficient captures the residual effect of the leanings of the government on partisan happiness of both sides—after controlling for macroeconomic outcomes and individual characteristics. An interpretation is that some people are not as concerned about differences in policies but care mainly about winning (like a soccer fan), or that politics enters directly into the utility function. Interestingly, the left/right position of the government creates no differences across the poor and rich subsamples, again suggesting that the “class” interpretation of differences in political party support or ideology is unlikely to be the full story.

As a final example, we note that happiness data can be used to help explain differences in economic policies between Europe and America. One common characterization is that Europeans believe less in the idea that effort pays (that is, effort is closely linked to income) than Americans, and so they support a larger public sector. Americans, in contrast, are more likely to believe that people, by and large, get what they deserve and support a smaller government (for example, Piketty, 1995). Alesina, Glaeser and Sacerdote (2002) report that 60 percent of Americans believe that the poor are lazy as opposed to just unlucky, while only 26 percent of Europeans hold this belief.

These differences in background beliefs imply different public reactions to economic circumstances. Alesina, Di Tella and MacCulloch (2004) obtain measures of inequality and happiness for the United States for the period 1981–1996 and for Europe for 1975–1992. They observe that individuals have a tendency to report themselves less happy when inequality is high, even after controlling for individual income, year and country (or state, in the case of the United States) dummies. The effect, however, is more precisely defined statistically in Europe (where the happiness regression coefficient on inequality is more negative and the standard error lower) than in the United States. In addition, striking differences exist across groups. In Europe, the poor and those on the left of the political spectrum tick down their happiness scores when inequality is high; in the United States, the happiness of the poor and of those on the left is largely uncorrelated with inequality. Indeed, in the United States, there is some evidence that the rich-left report lower happiness scores when inequality is high. These findings are consistent with the assumption that Americans have a perception (not necessarily a reality) of living in a mobile society, where individual effort can move people up and down the income ladder, whereas Europeans believe that they live in less mobile societies. Research on these issues is particularly interesting in the context of transition economies, where perceptions of mobility may strongly affect the support for reforms and legitimacy of capitalism (Graham and Pettinato, 2001; Senik, 2004).

Extending these ideas using micro-level data, we can test directly whether people who hold different beliefs about mobility may also differ in the effect of income on their happiness. The third wave of the World Values Survey (1995–1997) asked more than 43,000 people across 36 countries the question, “In your opinion, do most poor people in this country have a chance of escaping from poverty, or there is very little chance of escaping?” The two relevant answers are “1. They have a chance” or “2. There is very little chance.” Table 4 reports the effect of real income on the happiness of those who hold the mobility belief compared to those who hold the alternative belief (*No chance of escape*). In this regression, happiness scores on a scale of 1–10 are the dependent variable, while the explanatory variables are real income, a dummy variable indicating whether the person believes that there is little or no chance of escaping from poverty, this variable interacted with income, a dummy variable for country and other personal characteristics. The latter include age, sex, employment and marital status.

The coefficient on the interaction term is positive, suggesting that lower

Table 4

**How Beliefs Change the Effect of Personal Income on Happiness: 36 Countries in 1997**

<i>Real income</i>	0.54 (0.12)
<i>No chance of escape</i>	-0.65 (0.09)
<i>Real income * No chance of escape</i>	0.17 (0.05)
<i>Personal characteristics included?</i>	Yes
<i>Dummy variables</i>	Country
R <sup>2</sup>	0.30
No. of observations	43,790

Source: Data are from the Third Wave (1995–1997) of the World Values Survey.

Notes: The dependent variable in all regressions is the answer to the question: “All things considered, how satisfied are you with your life as a whole these days? Please use this card to help with your answer.” The answers range from 1, “Dissatisfied,” to 10, “Satisfied.” The method used is ordinary least squares regression, with standard errors in parentheses. *Real income* is measured in U.S. dollars using 1995 price levels and exchange rates. *No chance of escape* is a dummy variable that equals 1 when the second category is chosen as the answer to the question, “In your opinion, do most poor people in this country have a chance of escaping from poverty, or there is very little chance of escaping?” The two answers are a) “They have a chance” and b) “There is very little chance.”

income more adversely affects one’s happiness if it is accompanied by a belief that poverty tends to be a permanent state. The key idea is that the effect of income on happiness appears to depend on the beliefs that people hold.

## Conclusions

Happiness data are being used to tackle important questions in economics. Part of this approach is quite natural, as many questions in economics are fundamentally about happiness. But the approach departs from a long tradition in economics that shies away from using what people say about their feelings. Instead, economists have built their trade by analyzing what people do and, from these observations and some theoretical assumptions about the structure of welfare, deducing the implied changes in happiness. Economists who believe that welfare can be measured to some extent by happiness surveys have an easier time. They simply compare measures of welfare, and what causes changes in welfare, under different scenarios. Of course, results based on happiness surveys should be treated critically and cautiously. But the two main alternatives for determining social welfare—either trying to back social welfare out of observed behavior or simply giving up and leaving it to the politicians—surely need to be treated critically and cautiously, too. The patterns observed in the empirical measures of welfare and happiness deserve to play at least some role in the

evaluation of what social goals to emphasize, what macroeconomic tradeoffs are acceptable and what public policies are pursued.

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## References

- Alesina, Alberto.** 1987. "Macroeconomic Policy in a Two-Party System as a Repeated Game." *Quarterly Journal of Economics*. August, 102, pp. 651–78.
- Alesina, Alberto, Rafael Di Tella and Robert MacCulloch.** 2004. "Inequality and Happiness: Are Europeans and Americans Different?" *Journal of Public Economics*. 88:9, pp. 2009–042.
- Alesina, Alberto, Ed Glaeser and Bruce Sacerdote.** 2002. "Why Doesn't the US have a European Style Welfare State?" *Brookings Papers on Economic Activity*. 2, pp. 187–277.
- Barro, Robert and David Gordon.** 1983. "A Positive Theory of Monetary Policy in a Natural Rate Model." *Journal of Political Economy*. 91:4, pp. 589–610.
- Becker, Gary and Kevin Murphy.** 1988. "A Theory of Rational Addiction." *Journal of Political Economy*. 96:4, pp. 675–700.
- Bertrand, Marianne and Sendhil Mullainathan.** 2001. "Do People Mean What They Say? Implications for Subjective Survey Data." *American Economic Review*. May, 91:2, pp. 67–73.
- Blanchflower, David and Andrew J. Oswald.** 2000. "The Rising Well-Being of the Young," in *Youth Employment and Joblessness in Advanced Countries*. David Blanchflower and Richard Freeman, eds. Chicago: University of Chicago Press, pp. 289–330.
- Blanchflower, David and Andrew J. Oswald.** 2004. "Well-Being Over Time in Britain and the USA." *Journal of Public Economics*. 88:7–8, pp. 1359–386.
- Blinder, Alan and Howard Esaki.** 1978. "Macroeconomic Activity and Income Distribution in the Postwar United States." *Review of Economics and Statistics*. 60:4, pp. 604–09.
- Brickman, Philip, Dan Coates and Ronnie Janoff-Bullman.** 1978. "Lottery Winners and Accident Victims: Is Happiness Relative?" *Journal of Personality and Social Psychology*. 36:8, pp. 917–27.
- Charness, Gary and Brit Grosskopf.** 2001. "Relative Payoffs and Happiness: An Experimental Study." *Journal of Economic Behavior and Organization*. 45:3, pp. 301–28.
- Castles, Francis and Peter Mair.** 1984. "Left-Right Political Scales: Some Expert Judgements." *European Journal of Political Research*. 12:1, pp. 73–88.
- Clark, Andrew E.** 2003. "Unemployment as a Social Norm: Psychological Evidence from Panel Data." *Journal of Labor Economics*. April, 21, pp. 323–51.
- Clark, Andrew E. and Andrew J. Oswald.** 1994. "Unhappiness and Unemployment." *Economic Journal*. 104:424, pp. 648–59.
- Clark, Andrew E. and Andrew J. Oswald.** 1998. "Comparison-Concave Utility and following Behaviour in Social and Economic Settings." *Journal of Public Economics*. 70:1, pp. 133–55.
- Davidson, Richard and Nathan Fox.** 1982. "Asymmetrical Brain Activity Discriminates Between Positive and Negative Affective Stimuli in Human Infants." *Science*. December 17, 218, pp. 1235–237.
- Diamond, Peter and Jerry Hausman.** 1994. "Contingent Valuation: Is Some Number better than No Number?" *Journal of Economic Perspectives*. 8:4, pp. 45–64.
- Diener, Ed and Martin E. Seligman.** 2004. "Beyond Money: Toward an Economy of Well Being." *Psychological Science in the Public Interest*. Forthcoming.
- Diener, Ed, Eunkook Suh, Richard Lucas and Heidi Smith.** 1999. "Subjective Well-Being: Three Decades of Progress." *Psychological Bulletin*. 125:2, pp. 276–303.
- Di Tella, Rafael and Robert MacCulloch.** 2003. "Gross National Happiness as an Answer to the Easterlin Paradox?" Mimeo.
- Di Tella, Rafael and Robert MacCulloch.** 2005. "Partisan Social Happiness." *Review of Economic Studies*. 72:2, pp. 367–93.
- Di Tella, Rafael, John Haisken-de-New and**

- Robert MacCulloch.** 2005. "Happiness Adaptation to Income and to Status in an Individual Panel." HBS working paper.
- Di Tella, Rafael, Robert MacCulloch and Andrew J. Oswald.** 2001. "Preferences over Inflation and Unemployment: Evidence from Surveys of Happiness." *American Economic Review*. 91:1, pp. 335–41.
- Di Tella, Rafael, Robert MacCulloch and Andrew Oswald.** 2003. "The Macroeconomics of Happiness." *Review of Economics and Statistics*. 85:4, pp. 809–27.
- Duesenberry, James S.** 1949. *Income, Saving and the Theory of Consumer Behavior*. Cambridge, Mass.: Harvard University Press.
- Durkheim, Emile.** 1897 [1951]. *Suicide: A Study in Sociology*. John A. Spaulding and George Simpson, trans. New York: The Free Press.
- Easterlin, Richard.** 1974. "Does Economic Growth Improve the Human Lot? Some Empirical Evidence," in *Nations and Households in Economic Growth: Essays in Honour of Moses Abramovitz*. P. David and M. Reder, eds. New York and London: Academic Press, pp. 98–125.
- Easterlin, Richard.** 1995. "Will Raising the Incomes of All Increase the Happiness of All?" *Journal of Economic Behavior and Organization*. 27:1, pp. 35–48.
- Easterlin, Richard.** 2001. "Income and Happiness: Towards a Unified Theory." *Economic Journal*. 111:473, pp. 465–84.
- Easterlin, Richard.** 2004a. "Explaining Happiness." *Proceedings of the National Academy of Sciences*. 100:19, pp. 1176–183.
- Easterlin, Richard.** 2004b. "Diminishing Marginal Utility of Income: A Caveat." University of Southern California Law School, Law and Economics Working Paper Series No. 5.
- Ekman, Paul, Richard Davidson and Wallace Friesen.** 1990. "The Duchenne Smile: Emotional Expression and Brain Physiology II." *Journal of Personality and Social Psychology*. 58:2, pp. 342–53.
- Ekman, Paul, Wallace Friesen and Maureen O'Sullivan.** 1988. "Smiles When Lying." *Journal of Personality and Social Psychology*. 54:3, pp. 414–20.
- Feldstein, Martin.** 1997. "The Costs and Benefits of Going from Low Inflation to Price Stability," in *Reducing Inflation: Motivation and Strategy*. Christine Romer and David Romer, eds. Chicago: University of Chicago Press, pp. 123–66.
- Frank, Robert.** 1997. "The Frame of Reference as a Public Good." *Economic Journal*. November, 107, pp. 1832–847.
- Frederick, Shane and George Loewenstein.** 1999. "Hedonic Adaptation," in *Well-Being: The Foundations of Hedonic Utility*. Daniel Kahneman, Ed Diener and Norbert Schwartz, eds. New York: Russell Sage Foundation, pp. 309–22.
- Frey, Bruno and Alois Stutzer.** 2000. "Happiness, Economy and Institutions." *Economic Journal*. 110:466, pp. 918–38.
- Frey, Bruno and Alois Stutzer.** 2002. "What Can Economists Learn from Happiness Research?" *Journal of Economic Literature*. 40:2, pp. 402–35.
- Gilbert, Daniel T., Erin Driver-Linn and Timothy D. Wilson.** 2002. "The Trouble with Vronsky: Impact Bias in the Forecasting of Future Affective States," in *The Wisdom of Feeling*. L. Feldman-Barrett and P. Salvoney, eds. New York: Guilford, chapter 5.
- Gilbert, Daniel T., Elizabeth C. Pinel, Timothy D. Wilson, Stephen J. Blumberg and Thalia Wheatley.** 1998. "Immune Neglect: A Source of Durability Bias in Affective Forecasting." *Journal of Personality and Social Psychology*. 75:3, pp. 617–38.
- Graham, Carol and Stefano Pettinato.** 2001. *Happiness and Hardship: Opportunity and Insecurity in New Market Economies*. Washington, D.C.: Brookings Institution Press.
- Gruber, Jonathan and Sendhil Mullainathan.** 2002. "Do Cigarette Taxes Make Smokers Happier?" NBER Working Paper No. 8872.
- Hammond, Peter.** 1991. "Interpersonal Comparisons of Utility: Why and How They are and Should be Made," in *Interpersonal Comparisons of Well-Being*. Jon Elster and John Roemer, eds. Cambridge University Press, pp. 200–54.
- Harsanyi, John.** 1955. "Cardinal Welfare, Individualistic Ethics, and Interpersonal Comparisons of Utility." *Journal of Political Economy*. 63:4, pp. 309–21.
- Hibbs, Douglas.** 1977. "Political Parties and Macroeconomic Policy." *American Political Science Review*. 71:4, pp. 1467–487.
- Kahneman, Daniel, Peter Wakker and Rakesh Sarin.** 1998. "Back to Bentham? Explorations of Experienced Utility." *Quarterly Journal of Economics*. 112:2, pp. 375–406.
- Kimbell, Miles and Robert Willis.** 2005. "Utility and Happiness." Mimeo, University of Michigan.
- Kohler, Hans Peter, Jere Behrman and Axel Skyttke.** 2005. "Partner + Children = Happiness? An Assessment of the Effect of Fertility and Partnerships on Subjective Well-Being." *Population and Development Review*. 31:3, pp. 407–45.
- Krugman, Paul.** 1994. "Competitiveness: A Dangerous Obsession." *Foreign Affairs*. March/April, 73:2.
- Laibson, David.** 1997. "Golden Eggs and Hyperbolic Discounting." *Quarterly Journal of Economics*. 112:2, pp. 443–77.
- Landis, C.** 1924. "Studies of Emotional Reac-

- tions: General Behavior and Facial Expression." *Journal of Comparative Psychology*. 4, pp. 447–509.
- Luttmer, Erzo F.** 2004. "Neighbors as Negatives: Relative Earnings and Well-Being." *Quarterly Journal of Economics*. 120:3, pp. 963–1002.
- McClure, Samuel, David I. Laibson, George Loewenstein and Jonathan D. Cohen.** 2004. "Separate Neural Systems Value Immediate and Delayed Monetary Rewards." *Science*. 304:5695, pp. 503–07.
- Oswald, Andrew and Nattavudh Powdthavee.** 2005. "Does Happiness Adapt? A Longitudinal Study of Disability with Implications for Economists and Judges." Mimeo, Warwick University.
- Parducci, Allen.** 1968. "The Relativism of Absolute Judgements." *Scientific American*. 219:6, pp. 84–90.
- Pavot, William.** 1991. "Further Validation of the Satisfaction with Life Scale: Evidence for the Convergence of Well-Being Measures." *Journal of Personality Assessment*. 57:1, pp. 149–61.
- Piketty, Thomas.** 1995. "Social Mobility and Redistributive Politics." *Quarterly Journal of Economics*. 110:3, pp. 551–84.
- Pollak, Robert A.** 1970. "Habit Formation and Dynamic Demand Functions." *Journal of Political Economy*. 78:4, pp. 745–63.
- Pollak, Robert A.** 1976. "Interdependent Preferences." *American Economic Review*. 66:3, pp. 309–20.
- Rabin, Matthew.** 1998. "Psychology and Economics." *Journal of Economic Literature*. 36:1, pp. 1–46.
- Rayo, Luis and Gary Becker.** 2004. "Evolutionary Efficiency and Happiness." Mimeo, University of Chicago.
- Riis, Jason, George Loewenstein, Jonathan Baron and Christopher Jepson.** 2005. "Ignorance of Hedonic Adaptation to Hemodialysis: A Study using Ecological Momentary Assessment." *Journal of Experimental Psychology: General*. 134:1, pp. 3–9.
- Sandvitz, Ed, Ed Diener and Larry Seidlitz.** 1993. "Subjective Well-Being: The Convergence and Stability of Self and Non Self Report Measures." *Journal of Personality*. 61:3, pp. 317–42.
- Senik, Claudia.** 2004. "When Information Dominates Comparison. Learning from Russian Subjective Panel Data." *Journal of Public Economics*. 88:9-10, pp. 2099–123.
- Shedler, Jonathan, M. Mayman and M. Manis.** 1993. "The Illusion of Mental Health." *American Psychologist*. 48:11, pp. 1117–131.
- Shiller, Robert.** 1997. "Why Do People Dislike Inflation?" in *Reducing Inflation: Motivation and Strategy*. Christine Romer and David Romer, eds. Chicago: University of Chicago Press, pp. 13–67.
- Siedlitz, Larry, Robert Wyer and Ed Diener.** 1997. "Cognitive Correlates of Subjective Well-Being: The Processing of Valenced Events by Happy and Unhappy Persons." *Journal of Research in Personality*. 31:1, pp. 240–56.
- Stevenson, Betsey and Justin Wolfers.** 2003. "Bargaining in the Shadow of the Law: Divorce Laws and Family Distress." NBER Working Paper No. 10175.
- Stutzer, Alois.** 2004. "The Role of Income Aspirations in Individual Happiness." *Journal of Economic Behavior and Organization*. 54:1, pp. 89–109.
- Sutton, Steve and Richard Davidson.** 1997. "Prefrontal Brain Symmetry: A Biological Substrate of the Behavioral Approach and Inhibition Systems." *Psychological Science*. 8:3, pp. 204–10.
- van de Stadt, Huib, Arie Kapteyn and Sara van de Geer.** 1985. "The Relativity of Utility: Evidence from Panel Data." *Review of Economics and Statistics*. 67:2, pp. 179–87.
- van Praag, Bernard and Ada Ferrer-i-Carbonell.** 2004. *Happiness Quantified: A Satisfaction Calculus Approach*. Oxford: Oxford University Press.
- van Praag, Bernard and Arie Kapteyn.** 1973. "Further Evidence on the Individual Welfare Function of Income: An Empirical Investigation in the Netherlands." *European Economic Review*. 4:1, pp. 33–62.
- Veenhoven, Ruut.** 1993. "Happiness in Nations: Subjective Appreciation of Life in 56 Nations, 1946–92." RISBO, Erasmus University, Rotterdam.
- Winkelmann, Liliana and Rainer Winkelmann.** 1998. "Why are the Unemployed so Unhappy? Evidence from Panel Data." *Economica*. 65:257, pp. 1–15.
- Wolfers, Justin.** 2003. "Is Business Cycle Volatility Costly? Evidence from Surveys of Subjective Well-Being." *International Finance*. 6:1, pp. 1–31.



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8. Willem van der Deijl. 2018. Can welfare be measured with a preference-satisfaction index?. *Journal of Economic Methodology* **25**:2, 126-142. [[Crossref](#)]
9. Leonardo Becchetti, Pierluigi Conzo. 2018. Preferences for Well-Being and Life Satisfaction. *Social Indicators Research* **136**:2, 775-805. [[Crossref](#)]
10. M. Niaz Asadullah, Saizi Xiao, Emile Yeoh. 2018. Subjective well-being in China, 2005–2010: The role of relative income, gender, and location. *China Economic Review* **48**, 83-101. [[Crossref](#)]
11. Oliver Kunze, Florian Schlatterer. 2018. The Edgeworth Cube. *International Journal of Applied Behavioral Economics* **7**:2, 30-46. [[Crossref](#)]
12. André van Hoorn. 2018. Is the happiness approach to measuring preferences valid?. *Journal of Behavioral and Experimental Economics* **73**, 53-65. [[Crossref](#)]
13. Adam Okulicz-Kozaryn, Joan Maya Mazelis. 2018. Urbanism and happiness: A test of Wirth's theory of urban life. *Urban Studies* **55**:2, 349-364. [[Crossref](#)]
14. Patric Diriwaechter, Elena Shvartsman. 2018. The anticipation and adaptation effects of intra- and interpersonal wage changes on job satisfaction. *Journal of Economic Behavior & Organization* **146**, 116-140. [[Crossref](#)]
15. Gurudas Bandyopadhyay. Determinants of Psychological Well-being and Its Impact on Mental Health 53-95. [[Crossref](#)]
16. Minhaj Mahmud, Yasuyuki Sawada. Urbanization and Subjective Well-Being in Bangladesh 215-232. [[Crossref](#)]
17. Minhaj Mahmud, Yasuyuki Sawada. Happiness in Life Domains: Evidence from Rural Bangladesh 233-250. [[Crossref](#)]
18. Z. Bilgen Susanlı. 2018. Life satisfaction and unemployment in Turkey: evidence from Life Satisfaction Surveys 2004–2013. *Quality & Quantity* **52**:1, 479-499. [[Crossref](#)]
19. Amitai Etzioni. Happiness Is the Wrong Metric 3-40. [[Crossref](#)]
20. Olga Lorenz. 2018. Does commuting matter to subjective well-being?. *Journal of Transport Geography* **66**, 180-199. [[Crossref](#)]

21. Daniel A. Hojman, Álvaro Miranda. 2018. Agency, Human Dignity, and Subjective Well-being. *World Development* **101**, 1-15. [[Crossref](#)]
22. John Ifcher, Homa Zarghamee, Carol Graham. 2018. Local neighbors as positives, regional neighbors as negatives: Competing channels in the relationship between others' income, health, and happiness. *Journal of Health Economics* **57**, 263-276. [[Crossref](#)]
23. Zhenjun Zhu, Zhigang Li, Hongsheng Chen, Ye Liu, Jun Zeng. 2017. Subjective well-being in China: how much does commuting matter?. *Transportation* **45**. . [[Crossref](#)]
24. Chun-Hung A. Lin, Suchandra Lahiri, Ching-Po Hsu. 2017. Happiness and Globalization: A Spatial Econometric Approach. *Journal of Happiness Studies* **18**:6, 1841-1857. [[Crossref](#)]
25. Gregor Gonza, Anže Burger. 2017. Subjective Well-Being During the 2008 Economic Crisis: Identification of Mediating and Moderating Factors. *Journal of Happiness Studies* **18**:6, 1763-1797. [[Crossref](#)]
26. WILLEM VAN DER DEIJL. 2017. Which Problem of Adaptation?. *Utilitas* **29**:04, 474-492. [[Crossref](#)]
27. Julie Moschion, Nattavudh Powdthavee. 2017. The welfare implications of addictive substances: A longitudinal study of life satisfaction of drug users. *Journal of Economic Behavior & Organization* . [[Crossref](#)]
28. Alina Botezat. 2017. Austerity plan announcements and the impact on the employees' wellbeing. *Journal of Economic Psychology* **63**, 1-16. [[Crossref](#)]
29. Angeles Sánchez, María J. Ruiz-Martos. 2017. Europe 2020 Strategy and Citizens' Life Satisfaction. *Journal of Happiness Studies* **88**. . [[Crossref](#)]
30. Tal Gilead. 2017. Education's role in the economy: towards a new perspective. *Cambridge Journal of Education* **47**:4, 457-473. [[Crossref](#)]
31. Daniel Fujiwara, Ricky N. Lawton, George MacKerron. 2017. Experience sampling in and around airports. Momentary subjective wellbeing, airports, and aviation noise in England. *Transportation Research Part D: Transport and Environment* **56**, 43-54. [[Crossref](#)]
32. Erin C. Lentz. 2017. Keeping Up with the Neighbors? Reference Groups in Ghana. *Economic Development and Cultural Change* **66**:1, 91-112. [[Crossref](#)]
33. Xin Zhang, Xiaobo Zhang, Xi Chen. 2017. Happiness in the air: How does a dirty sky affect mental health and subjective well-being?. *Journal of Environmental Economics and Management* **85**, 81-94. [[Crossref](#)]
34. Matthew D. Adler, Paul Dolan, Georgios Kavetsos. 2017. Would you choose to be happy? Tradeoffs between happiness and the other dimensions of life in a large population survey. *Journal of Economic Behavior & Organization* **139**, 60-73. [[Crossref](#)]
35. Deniz Gevrek, Marilyn Spencer, David Hudgins, Valrie Chambers. 2017. I can't get no satisfaction: the power of perceived differences in employee intended retention and turnover. *Personnel Review* **43**, 00-00. [[Crossref](#)]
36. Kâzım Anıl Eren, Ahmet Atıl Aşıcı. 2017. The Determinants of Happiness in Turkey: Evidence from City-Level Data. *Journal of Happiness Studies* **18**:3, 647-669. [[Crossref](#)]
37. Artjoms Ivlevs. 2017. Happy Hosts? International Tourist Arrivals and Residents' Subjective Well-being in Europe. *Journal of Travel Research* **56**:5, 599-612. [[Crossref](#)]
38. Christopher Barrington-Leigh, Fatemeh Behzadnejad. 2017. Evaluating the short-term cost of low-level local air pollution: a life satisfaction approach. *Environmental Economics and Policy Studies* **19**:2, 269-298. [[Crossref](#)]
39. Frank Goetzke, Samia Islam. 2017. TESTING FOR SPATIAL EQUILIBRIUM USING HAPPINESS DATA. *Journal of Regional Science* **57**:2, 199-217. [[Crossref](#)]



40. Diana Weinhold, Frank J Chaloupka. 2017. Smoking status and subjective well-being. *Tobacco Control* **26**:2, 195-201. [[Crossref](#)]
41. Shun Wang, Weina Zhou. 2017. The Unintended Long-Term Consequences of Mao's Mass Send-Down Movement: Marriage, Social Network, and Happiness. *World Development* **90**, 344-359. [[Crossref](#)]
42. Adam Okulicz-Kozaryn. 2017. Unhappy metropolis (when American city is too big). *Cities* **61**, 144-155. [[Crossref](#)]
43. Viola Angelini, Marco Bertoni, Luca Corazzini. 2017. Unpacking the determinants of life satisfaction: a survey experiment. *Journal of the Royal Statistical Society: Series A (Statistics in Society)* **180**:1, 225-246. [[Crossref](#)]
44. Peter van der Zwan, Jolanda Hessels, Cornelius A. Rietveld. 2017. Self-employment and satisfaction with life, work, and leisure. *Journal of Economic Psychology* . [[Crossref](#)]
45. Boris Nikolaev. 2016. Does Higher Education Increase Hedonic and Eudaimonic Happiness?. *Journal of Happiness Studies* . [[Crossref](#)]
46. Yoko Niimi. 2016. What Affects Happiness Inequality? Evidence from Japan. *Journal of Happiness Studies* . [[Crossref](#)]
47. Begoña Álvarez, Daniel Miles-Touya. 2016. Time Allocation and Women's Life Satisfaction: Evidence from Spain. *Social Indicators Research* **129**:3, 1207-1230. [[Crossref](#)]
48. Mercedes Molpeceres-Abella, José Luis García-Lapresta. 2016. Quality of Life and Poverty: Measurement and Comparability. *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems* **24**:Suppl. 1, 63-85. [[Crossref](#)]
49. Milena Nikolova. 2016. Minding the happiness gap: Political institutions and perceived quality of life in transition. *European Journal of Political Economy* **45**, 129-148. [[Crossref](#)]
50. Heinz Welsch, Jan Kühling. 2016. Macroeconomic performance and institutional change: evidence from subjective well-being data. *Journal of Applied Economics* **19**:2, 193-217. [[Crossref](#)]
51. Alois Stutzer, Armando N. Meier. 2016. Limited Self-control, Obesity, and the Loss of Happiness. *Health Economics* **25**:11, 1409-1424. [[Crossref](#)]
52. Laetitia Duval, François-Charles Wolff. 2016. "I even met happy gypsies". *Economics of Transition* **24**:4, 727-764. [[Crossref](#)]
53. André van Hoorn, Esther-Mirjam Sent. 2016. Consumer Capital as the Source of Happiness: The Missing Economic Theory Underlying the Income-Happiness Paradox. *Journal of Economic Issues* **50**:4, 984-1002. [[Crossref](#)]
54. Shu Cai, Albert Park. 2016. Permanent income and subjective well-being. *Journal of Economic Behavior & Organization* **130**, 298-319. [[Crossref](#)]
55. Zheng Fang, Chris Sakellariou. 2016. Social Insurance, Income and Subjective Well-Being of Rural Migrants in China—An Application of Unconditional Quantile Regression. *Journal of Happiness Studies* **17**:4, 1635-1657. [[Crossref](#)]
56. Andrew E. Clark, Conchita D'Ambrosio, Simone Ghislandi. 2016. Adaptation to Poverty in Long-Run Panel Data. *Review of Economics and Statistics* **98**:3, 591-600. [[Crossref](#)]
57. Bahadır Dursun, Resul Cesur. 2016. Transforming lives: the impact of compulsory schooling on hope and happiness. *Journal of Population Economics* **29**:3, 911-956. [[Crossref](#)]
58. Martin Ravallion, Kristen Himelein, Kathleen Beegle. 2016. Can Subjective Questions on Economic Welfare Be Trusted?. *Economic Development and Cultural Change* **64**:4, 697-726. [[Crossref](#)]
59. Paul Dolan, Georgios Kavetsos. 2016. Happy Talk: Mode of Administration Effects on Subjective Well-Being. *Journal of Happiness Studies* **17**:3, 1273-1291. [[Crossref](#)]

60. Tufan Ekici, Selda Koydemir. 2016. Income Expectations and Happiness: Evidence from British Panel Data. *Applied Research in Quality of Life* **11**:2, 539-552. [[Crossref](#)]
61. Filka Sekulova, Jeroen C.J.M. van den Bergh. 2016. Floods and happiness: Empirical evidence from Bulgaria. *Ecological Economics* **126**, 51-57. [[Crossref](#)]
62. Adam Okulicz-Kozaryn. 2016. Happiness research for public policy and administration. *Transforming Government: People, Process and Policy* **10**:2, 196-211. [[Crossref](#)]
63. Rok Spruk, Aleskandar Kešeljević. 2016. Institutional Origins of Subjective Well-Being: Estimating the Effects of Economic Freedom on National Happiness. *Journal of Happiness Studies* **17**:2, 659-712. [[Crossref](#)]
64. Antje Mertens, Miriam Beblo. 2016. Self-Reported Satisfaction and the Economic Crisis of 2007–2010: Or How People in the UK and Germany Perceive a Severe Cyclical Downturn. *Social Indicators Research* **125**:2, 537-565. [[Crossref](#)]
65. Bogdan Dima, Ștefana Maria Dima. 2016. Policies for Happiness in the Global Village. *Journal of Heterodox Economics* **3**:1. . [[Crossref](#)]
66. Thomas Deckers, Armin Falk, Hannah Schildberg-Hörisch. 2016. Nominal or Real? The Impact of Regional Price Levels on Satisfaction with Life. *The B.E. Journal of Economic Analysis & Policy* **16**:3. . [[Crossref](#)]
67. Timothy T. Brown. 2015. The Subjective Well-Being Method of Valuation: An Application to General Health Status. *Health Services Research* **50**:6, 1996-2018. [[Crossref](#)]
68. Hannes Schwandt. 2015. Unmet Aspirations as an Explanation for the Age U-shape in Wellbeing. *Journal of Economic Behavior & Organization* . [[Crossref](#)]
69. Martin Berlin, Niklas Kaunitz. 2015. Beyond Income: The Importance for Life Satisfaction of Having Access to a Cash Margin. *Journal of Happiness Studies* **16**:6, 1557-1573. [[Crossref](#)]
70. Koen Decancq, Marc Fleurbaey, Erik Schokkaert. 2015. Happiness, Equivalent Incomes and Respect for Individual Preferences. *Economica* **82**, 1082-1106. [[Crossref](#)]
71. Gus O'Donnell, Andrew J. Oswald. 2015. National well-being policy and a weighted approach to human feelings. *Ecological Economics* **120**, 59-70. [[Crossref](#)]
72. Inmaculada García-Mainar, Víctor M. Montuenga, María Navarro-Paniagua. 2015. Workplace environmental conditions and life satisfaction in Spain. *Ecological Economics* **119**, 136-146. [[Crossref](#)]
73. Yee Ting Ngoo, Nai Peng Tey, Eu Chye Tan. 2015. Determinants of Life Satisfaction in Asia. *Social Indicators Research* **124**:1, 141-156. [[Crossref](#)]
74. Heinz Welsch, Jan Kühling. 2015. Income comparison, income formation, and subjective well-being: new evidence on envy versus signaling. *Journal of Behavioral and Experimental Economics* . [[Crossref](#)]
75. Elisabeth Sinnewe, Michael A. Kortt, Brian Dollery. 2015. Religion and Life Satisfaction: Evidence from Germany. *Social Indicators Research* **123**:3, 837-855. [[Crossref](#)]
76. Scott E. Sampson. 2015. Value Paradoxes and the Time Value of Value. *Service Science* **7**:3, 149-162. [[Crossref](#)]
77. Sean Pascoe, Toni Cannard, Eddie Jebreen, Catherine M. Dichmont, Jacki Schirmer. 2015. Satisfaction with fishing and the desire to leave. *Ambio* **44**:5, 401-411. [[Crossref](#)]
78. Andrew E. Clark, Conchita D'Ambrosio, Simone Ghislandi. Poverty Profiles and Well-Being: Panel Evidence from Germany 1-22. [[Crossref](#)]
79. Christoph Merkle, Daniel P. Egan, Greg B. Davies. 2015. Investor happiness. *Journal of Economic Psychology* **49**, 167-186. [[Crossref](#)]
80. Artjoms Ivlevs. 2015. Happy Moves? Assessing the Link between Life Satisfaction and Emigration Intentions. *Kyklos* **68**:3, 335-356. [[Crossref](#)]

81. Annie Tubadji, Brian J. Osoba, Peter Nijkamp. 2015. Culture-based development in the USA: culture as a factor for economic welfare and social well-being at a county level. *Journal of Cultural Economics* 39:3, 277-303. [[Crossref](#)]
82. Paula K. Lorgelly. 2015. Choice of Outcome Measure in an Economic Evaluation: A Potential Role for the Capability Approach. *Pharmacoeconomics* 33:8, 849-855. [[Crossref](#)]
83. Ayse Y. Evrensel. 2015. Happiness, economic freedom and culture. *Applied Economics Letters* 22:9, 683-687. [[Crossref](#)]
84. Adam Okulicz-Kozaryn, Tim Nash, Natasha O. Tursi. 2015. Luxury car owners are not happier than frugal car owners. *International Review of Economics* 62:2, 121-141. [[Crossref](#)]
85. Thomas J. Hyclak, Chad D. Meyerhoefer, Larry W. Taylor. 2015. Older Americans' health and the Great Recession. *Review of Economics of the Household* 13:2, 413-436. [[Crossref](#)]
86. Jörg Döpke, Philip Maschke. 2015. Are There Business Cycles "beyond GDP"? Alternative Measures to GDP at Business Cycle Frequencies. *Applied Economics Quarterly* 61:2, 115-139. [[Crossref](#)]
87. Carol Graham, Milena Nikolova. 2015. Bentham or Aristotle in the Development Process? An Empirical Investigation of Capabilities and Subjective Well-Being. *World Development* 68, 163-179. [[Crossref](#)]
88. Jeremy K. Nguyen, Christopher M. Fleming, Jen-Je Su. 2015. Does Income Inequality Make Us Less Happy?. *Australian Economic Review* 48:1, 15-32. [[Crossref](#)]
89. Milena Nikolova, Carol Graham. 2015. In transit: The well-being of migrants from transition and post-transition countries. *Journal of Economic Behavior & Organization* . [[Crossref](#)]
90. Gilbert Becker. Sherman Act 1-3. [[Crossref](#)]
91. Ricardo Perez-Truglia. 2015. A Samuelsonian validation test for happiness data. *Journal of Economic Psychology* 49, 74. [[Crossref](#)]
92. Boris Nikolaev. 2015. Living with Mom and Dad and Loving It...or Are You?. *Journal of Economic Psychology* . [[Crossref](#)]
93. Norbert Hirschauer, Mira Lehberger, Oliver Musshoff. 2015. Happiness and Utility in Economic Thought—Or: What Can We Learn from Happiness Research for Public Policy Analysis and Public Policy Making?. *Social Indicators Research* 121:3, 647. [[Crossref](#)]
94. Michael T. Bixter. 2015. Happiness, political orientation, and religiosity. *Personality and Individual Differences* 72, 7-11. [[Crossref](#)]
95. Andy Dickerson, Arne Risa Hole, Luke A. Munford. 2014. The relationship between well-being and commuting revisited: Does the choice of methodology matter?. *Regional Science and Urban Economics* 49, 321-329. [[Crossref](#)]
96. Paul Frijters, David W. Johnston, Michael A. Shields. 2014. Does Childhood Predict Adult Life Satisfaction? Evidence from British Cohort Surveys. *The Economic Journal* 124:580, F688-F719. [[Crossref](#)]
97. Claudia Burgard, Katja Görlitz. 2014. Continuous training, job satisfaction and gender. *Evidence-based HRM: a Global Forum for Empirical Scholarship* 2:2, 126-144. [[Crossref](#)]
98. Jan Eichhorn. 2014. The (Non-) Effect of Unemployment Benefits: Variations in the Effect of Unemployment on Life-Satisfaction Between EU Countries. *Social Indicators Research* 119:1, 389-404. [[Crossref](#)]
99. DAVID G. BLANCHFLOWER, DAVID N.F. BELL, ALBERTO MONTAGNOLI, MIRKO MORO. 2014. The Happiness Trade-Off between Unemployment and Inflation. *Journal of Money, Credit and Banking* 46:S2, 117-141. [[Crossref](#)]

100. D.P. Doessel, Ruth F. Williams. 2014. Measuring the welfare of sub-groups subject to premature mortality. *International Journal of Social Economics* 41:9, 722-746. [[Crossref](#)]
101. Mariana De Santis, Ignacio Villagra Torcomian. 2014. Condiciones económicas y capital social como determinantes de la salud y el bienestar subjetivo. El caso de Argentina durante 1995 y 2006. *Cuadernos de Economía* 33:63, 543-567. [[Crossref](#)]
102. Martyna Kobus. 2014. Polarization measurement for ordinal data. *The Journal of Economic Inequality* . [[Crossref](#)]
103. Olga Popova. 2014. Can religion insure against aggregate shocks to happiness? The case of transition countries. *Journal of Comparative Economics* 42:3, 804-818. [[Crossref](#)]
104. Nicolás De Roux, Marc Hofstetter. 2014. Do preferences shape institutions? The case of inflation aversion and inflation targeting. *Journal of Behavioral and Experimental Economics* 51, 68-78. [[Crossref](#)]
105. Alexandru Cojocaru. 2014. Fairness and inequality tolerance: Evidence from the Life in Transition Survey. *Journal of Comparative Economics* 42:3, 590-608. [[Crossref](#)]
106. Thomas de Hoop, Luuk van Kempen, Rik Linssen, Anouka van Eerdekijk. 2014. Women's Autonomy and Subjective Well-Being: How Gender Norms Shape the Impact of Self-Help Groups in Odisha, India. *Feminist Economics* 20:3, 103-135. [[Crossref](#)]
107. Naoufel Mzoughi. 2014. Do organic farmers feel happier than conventional ones? An exploratory analysis. *Ecological Economics* 103, 38-43. [[Crossref](#)]
108. Salmi Qari. 2014. Marriage, adaptation and happiness: Are there long-lasting gains to marriage?. *Journal of Behavioral and Experimental Economics* 50, 29-39. [[Crossref](#)]
109. Edsel L. Beja. 2014. Subjective Well-Being Analysis of Income Inequality: Evidence for the Industrialized and Emerging Economies. *Applied Research in Quality of Life* 9:2, 139-156. [[Crossref](#)]
110. Jessie P.H. Poon, Qingyang Shang. 2014. Are creative workers happier in Chinese cities? The influence of work, lifestyle, and amenities on urban well-being. *Urban Geography* 35:4, 567-585. [[Crossref](#)]
111. Yonas Alem, Gunnar Köhlin, Jesper Stage. 2014. The Persistence of Subjective Poverty in Urban Ethiopia. *World Development* 56, 51-61. [[Crossref](#)]
112. Chu-Chia Lin, Tsung-Chi Cheng, Shu-Chen Wang. 2014. Measuring Subjective Well-Being in Taiwan. *Social Indicators Research* 116:1, 17-45. [[Crossref](#)]
113. Jing Jian Xiao. Money and Happiness: Implications for Investor Behavior 153-169. [[Crossref](#)]
114. Chun-Hung A. Lin, Suchandra Lahiri, Ching-Po Hsu. 2014. Happiness and Regional Segmentation: Does Space Matter?. *Journal of Happiness Studies* 15:1, 57-83. [[Crossref](#)]
115. Song Gao, Xiangyi Meng, Li Zhang. 2014. Fiscal Decentralization and Life Satisfaction: Evidence from Urban China. *Social Indicators Research* . [[Crossref](#)]
116. Ramzi Mabsout. 2014. Bringing Ethics Back to Welfare Economics. *Review of Social Economy* 72:1, 1-27. [[Crossref](#)]
117. Alin I. Florea, Steven B. Caudill. 2014. Happiness, religion and economic transition. *Economics of Transition* 22:1, 1-12. [[Crossref](#)]
118. Boris Nikolaev, Ainslee Burns. 2014. Intergenerational mobility and subjective well-being—Evidence from the general social survey. *Journal of Behavioral and Experimental Economics* 53, 82. [[Crossref](#)]
119. Holger Bonin, Ulf Rinne. 2014. 'Beautiful Serbia' - objective and subjective outcomes of active labour market policy in a transition economy. *Economics of Transition* 22:1, 43-67. [[Crossref](#)]
120. Nattavudh Powdthavee, Alois Stutzer. Economic Approaches to Understanding Change in Happiness 219-244. [[Crossref](#)]

121. Jan Eichhorn. 2013. Unemployment Needs Context: How Societal Differences between Countries Moderate the Loss in Life-Satisfaction for the Unemployed. *Journal of Happiness Studies* 14:6, 1657-1680. [[Crossref](#)]
122. Garry F. Barrett, Milica Kecmanovic. 2013. Changes in subjective well-being with retirement: assessing savings adequacy. *Applied Economics* 45:35, 4883-4893. [[Crossref](#)]
123. Filka Sekulova, Jeroen C.J.M. van den Bergh. 2013. Climate change, income and happiness: An empirical study for Barcelona. *Global Environmental Change* 23:6, 1467-1475. [[Crossref](#)]
124. Livio Stracca. 2013. Financial imbalances and household welfare: Empirical evidence from the EU. *Journal of Financial Stability* . [[Crossref](#)]
125. Néstor Gandelman, Rubén Hernández-Murillo. 2013. What do happiness and health satisfaction data tell us about relative risk aversion?. *Journal of Economic Psychology* 39, 301-312. [[Crossref](#)]
126. Edsel L. Beja. 2013. Working Out the Willingness to Accept and Willingness to Pay Gap Using Economics, Psychology, and Happiness Approaches to Valuation. *Applied Research in Quality of Life* . [[Crossref](#)]
127. V. Andreoni, S. Galmarini. 2013. How to increase well-being in a context of degrowth. *Futures* . [[Crossref](#)]
128. Bruno S. Frey, Jana Gallus. 2013. Subjective Well-Being and Policy. *Topoi* 32:2, 207-212. [[Crossref](#)]
129. Martin Rode. 2013. Do Good Institutions Make Citizens Happy, or Do Happy Citizens Build Better Institutions?. *Journal of Happiness Studies* 14:5, 1479-1505. [[Crossref](#)]
130. Maarten C.M. Vendrik. 2013. Adaptation, anticipation and social interaction in happiness: An integrated error-correction approach. *Journal of Public Economics* 105, 131-149. [[Crossref](#)]
131. Carmelo J. León, Jorge E. Araña, Javier de León. 2013. Valuing the social cost of corruption using subjective well being data and the technique of vignettes. *Applied Economics* 45:27, 3863-3870. [[Crossref](#)]
132. Bruno S. Frey, Alois Stutzer. 2013. Economic Consequences of Mispredicting Utility. *Journal of Happiness Studies* . [[Crossref](#)]
133. Vicente Royuela, Jordi Suriñach. 2013. Quality of Work and Aggregate Productivity. *Social Indicators Research* 113:1, 37-66. [[Crossref](#)]
134. Rune Elvik. 2013. Paradoxes of rationality in road safety policy. *Research in Transportation Economics* 43:1, 62-70. [[Crossref](#)]
135. Juncal Cuñado, Fernando Pérez Gracia. 2013. Environment and Happiness: New Evidence for Spain. *Social Indicators Research* 112:3, 549-567. [[Crossref](#)]
136. Leonardo Becchetti, Alessandra Pelloni. 2013. What are we learning from the life satisfaction literature?. *International Review of Economics* 60:2, 113-155. [[Crossref](#)]
137. KITAE SOHN. 2013. SOURCES OF HAPPINESS IN INDONESIA. *The Singapore Economic Review* 1350014. [[Crossref](#)]
138. L. Becchetti, R. Massari, P. Naticchioni. 2013. The drivers of happiness inequality: suggestions for promoting social cohesion. *Oxford Economic Papers* . [[Crossref](#)]
139. Timothy Tyler Brown. 2013. A monetary valuation of individual religious behaviour: the case of prayer. *Applied Economics* 45:15, 2031-2037. [[Crossref](#)]
140. Hikaru Hasegawa, Kazuhiro Ueda. 2013. Self-Assessed Social Position and Poverty. *Review of Income and Wealth* n/a-n/a. [[Crossref](#)]
141. Lasse Steiner, Lucian Schneider. 2013. The happy artist: an empirical application of the work-preference model. *Journal of Cultural Economics* 37:2, 225-246. [[Crossref](#)]

142. Lisa M. Smith, Jason L. Case, Heather M. Smith, Linda C. Harwell, J.K. Summers. 2013. Relating ecosystem services to domains of human well-being: Foundation for a U.S. index. *Ecological Indicators* **28**, 79-90. [[Crossref](#)]
143. Emmanouil Mentzakis, Marc Suhrcke, Bayard Roberts, Adrianna Murphy, Martin McKee. 2013. Estimating the causal effect of alcohol consumption on well-being for a cross-section of 9 former Soviet Union countries. *Social Science & Medicine* . [[Crossref](#)]
144. Leonardo Becchetti, Pierluigi Conzo. 2013. Credit access and life satisfaction: evaluating the nonmonetary effects of micro finance. *Applied Economics* **45**:9, 1201-1217. [[Crossref](#)]
145. Edsel L. Beja. 2013. Subjective Well-Being Approach to the Valuation of International Development: Evidence for the Millennium Development Goals. *Social Indicators Research* **111**:1, 141-159. [[Crossref](#)]
146. Kitae Sohn. 2013. Monetary and Nonmonetary Returns to Education in Indonesia. *The Developing Economies* **51**:1, 34-59. [[Crossref](#)]
147. Susana Ferreira, Mirko Moro. 2013. Income and Preferences for the Environment: Evidence from Subjective Well-Being Data. *Environment and Planning A* **45**:3, 650-667. [[Crossref](#)]
148. Feng Hu. 2013. Homeownership and Subjective Wellbeing in Urban China: Does Owning a House Make You Happier?. *Social Indicators Research* **110**:3, 951-971. [[Crossref](#)]
149. Valeria Andreoni, Stefano Galmarini. 2013. On the Increase of Social Capital in Degrowth Economy. *Procedia - Social and Behavioral Sciences* **72**, 64-72. [[Crossref](#)]
150. Jan Bentzen, Valdemar Smith. Life Satisfaction and Alcohol Consumption: An Empirical Analysis of Self-Reported Life Satisfaction and Alcohol Consumption in OECD Countries 11-27. [[Crossref](#)]
151. Amy Finkelstein, Erzo F. P. Luttmer, Matthew J. Notowidigdo. 2013. WHAT GOOD IS WEALTH WITHOUT HEALTH? THE EFFECT OF HEALTH ON THE MARGINAL UTILITY OF CONSUMPTION. *Journal of the European Economic Association* **11**, 221-258. [[Crossref](#)]
152. Eva M. Berger. 2013. Happy Working Mothers? Investigating the Effect of Maternal Employment on Life Satisfaction. *Economica* **80**:317, 23-43. [[Crossref](#)]
153. Bert Van Landeghem, Johan Swinnen, Liesbet Vranken. 2013. Land and Happiness. *Eastern European Economics* **51**:1, 61-85. [[Crossref](#)]
154. Yota Xanthacou, Nektarios A. Stavrou, Thomas Babalis. 2013. Creativity—Innovative Thinking—Tolerance in Uncertainty: Views of Undergraduate Students in Greek Universities Based on the Faculty of Their Studies. *Creative Education* **04**:02, 143-148. [[Crossref](#)]
155. Amihai Glazer. 2013. Performance when misinformation increases with experience. *Journal of Theoretical Politics* **25**:1, 63-74. [[Crossref](#)]
156. Namrata Chindarkar. 2012. Is Subjective Well-Being of Concern to Potential Migrants from Latin America?. *Social Indicators Research* . [[Crossref](#)]
157. Zhiqiang Liu, Qingyan Shang. 2012. Individual well-being in urban China: The role of income expectations. *China Economic Review* **23**:4, 833-849. [[Crossref](#)]
158. Maite Blázquez Cuesta, Santiago Budría. 2012. Deprivation and Subjective Well-Being: Evidence from Panel Data. *Review of Income and Wealth* n/a-n/a. [[Crossref](#)]
159. Marc Fleurbaey. 2012. The importance of what people care about. *Politics, Philosophy & Economics* **11**:4, 415-447. [[Crossref](#)]
160. J. Eichhorn. 2012. Happiness for Believers? Contextualizing the Effects of Religiosity on Life-Satisfaction. *European Sociological Review* **28**:5, 583-593. [[Crossref](#)]
161. CHRIS DEEMING, DAVID HAYES. 2012. Worlds of Welfare Capitalism and Wellbeing: A Multilevel Analysis. *Journal of Social Policy* **41**:04, 811-829. [[Crossref](#)]



162. Paul Frijters, David W. Johnston, Michael A. Shields. 2012. The Optimality of Tax Transfers: What does Life Satisfaction Data Tell Us?. *Journal of Happiness Studies* **13**:5, 821-832. [[Crossref](#)]
163. Mohammad Niaz Asadullah, Nazmul Chaudhury. 2012. Subjective well-being and relative poverty in rural Bangladesh. *Journal of Economic Psychology* **33**:5, 940-950. [[Crossref](#)]
164. J. Ludwig, G. J. Duncan, L. A. Gennetian, L. F. Katz, R. C. Kessler, J. R. Kling, L. Sanbonmatsu. 2012. Neighborhood Effects on the Long-Term Well-Being of Low-Income Adults. *Science* **337**:6101, 1505-1510. [[Crossref](#)]
165. George MacKerron. 2012. HAPPINESS ECONOMICS FROM 35 000 FEET. *Journal of Economic Surveys* **26**:4, 705-735. [[Crossref](#)]
166. MARK ANDREAS KAYSER, MICHAEL PERESS. 2012. Benchmarking across Borders: Electoral Accountability and the Necessity of Comparison. *American Political Science Review* **106**:03, 661-684. [[Crossref](#)]
167. Ariel R. Belasen, R.W. Hafer. 2012. Well-being and economic freedom: Evidence from the States. *Intelligence* **40**:3, 306-316. [[Crossref](#)]
168. Matthew D Rablen. 2012. The promotion of local wellbeing: A primer for policymakers. *Local Economy* **27**:3, 297-314. [[Crossref](#)]
169. Juncal Cuñado, Fernando Pérez de Gracia. 2012. Does Media Consumption Make Us Happy? Evidence for Spain. *Journal of Media Economics* **25**:1, 8-34. [[Crossref](#)]
170. Bert Van Landeghem. 2012. A test for the convexity of human well-being over the life cycle: Longitudinal evidence from a 20-year panel. *Journal of Economic Behavior & Organization* **81**:2, 571-582. [[Crossref](#)]
171. Kathleen Beegle, Kristen Himelein, Martin Ravallion. 2012. Frame-of-reference bias in subjective welfare. *Journal of Economic Behavior & Organization* **81**:2, 556-570. [[Crossref](#)]
172. Cahit Guven, Claudia Senik, Holger Stichnoth. 2012. "You can't be happier than your wife. Happiness Gaps and Divorce". *Journal of Economic Behavior & Organization* . [[Crossref](#)]
173. DMITRI ROMANOV, ASAF ZUSSMAN, NOAM ZUSSMAN. 2012. Does Terrorism Demoralize? Evidence from Israel. *Economica* **79**:313, 183-198. [[Crossref](#)]
174. Penka Kovacheva, Xiaotong Niu. The Mental Cost of Pension Loss: The Experience of Russia's Pensioners during Transition 191-240. [[Crossref](#)]
175. Damiano Fiorillo. 2011. Volunteer work and domain satisfactions: evidence from Italy. *International Journal of Social Economics* **39**:1/2, 97-124. [[Crossref](#)]
176. John Cromby. 2011. The Greatest Gift? Happiness, Governance and Psychology. *Social and Personality Psychology Compass* **5**:11, 840-852. [[Crossref](#)]
177. Heinz Welsch, Jan Kühling. 2011. Are pro-environmental consumption choices utility-maximizing? Evidence from subjective well-being data. *Ecological Economics* . [[Crossref](#)]
178. Bruno S. Frey. 2011. Subjective well-being, politics and political economy. *Swiss Journal of Economics and Statistics* **147**:4, 397-415. [[Crossref](#)]
179. Brian J. L. Berry, Adam Okulicz-Kozaryn. 2011. An Urban-Rural Happiness Gradient. *Urban Geography* **32**:6, 871-883. [[Crossref](#)]
180. David Maddison, Katrin Rehdanz. 2011. The impact of climate on life satisfaction. *Ecological Economics* . [[Crossref](#)]
181. Conchita D'Ambrosio, Joachim R. Frick. 2011. Individual Wellbeing in a Dynamic Perspective. *Economica* n/a-n/a. [[Crossref](#)]
182. Francesco Sarracino. 2011. Money, Sociability and Happiness: Are Developed Countries Doomed to Social Erosion and Unhappiness?. *Social Indicators Research* . [[Crossref](#)]

183. Edsel L. Beja. 2011. Subjective Well-Being Approach to Environmental Valuation: Evidence for Greenhouse Gas Emissions. *Social Indicators Research* . [[Crossref](#)]
184. Johannes Schwarze, Rainer Winkelmann. 2011. Happiness and altruism within the extended family. *Journal of Population Economics* **24**:3, 1033-1051. [[Crossref](#)]
185. Juncal Cuñado, Fernando Pérez Gracia. 2011. Does Education Affect Happiness? Evidence for Spain. *Social Indicators Research* . [[Crossref](#)]
186. Laetitia Duval, François-Charles Wolff. 2011. Longitudinal evidence on financial expectations in Albania. *Economics of Transition* no-no. [[Crossref](#)]
187. M. Niaz Asadullah, Nazmul Chaudhury. 2011. Poisoning the mind: Arsenic contamination of drinking water wells and children's educational achievement in rural Bangladesh. *Economics of Education Review* . [[Crossref](#)]
188. Di Wang, Alistair Sutcliffe, Xiao-Jun Zeng. 2011. A trust-based multi-ego social network model to investigate emotion diffusion. *Social Network Analysis and Mining* . [[Crossref](#)]
189. Emmanouil Mentzakis. 2011. Allowing for heterogeneity in monetary subjective well-being valuations. *Health Economics* **20**:3, 331-347. [[Crossref](#)]
190. Yew-Kwang Ng. 2011. Consumption tradeoff vs. catastrophes avoidance: implications of some recent results in happiness studies on the economics of climate change. *Climatic Change* **105**:1-2, 109-127. [[Crossref](#)]
191. Georgios Kavetsos. 2011. National Pride: War Minus the Shooting. *Social Indicators Research* . [[Crossref](#)]
192. Bidisha Mandal, Padmaja Ayyagari, William T. Gallo. 2011. Job loss and depression: The role of subjective expectations. *Social Science & Medicine* **72**:4, 576-583. [[Crossref](#)]
193. Luca Stanca. 2011. Suffer the little children: Measuring the effects of parenthood on well-being worldwide. *Journal of Economic Behavior & Organization* . [[Crossref](#)]
194. Inder J. Ruprah, Pavel Luengas. 2011. Monetary policy and happiness: Preferences over inflation and unemployment in Latin America. *The Journal of Socio-Economics* **40**:1, 59-66. [[Crossref](#)]
195. Luis Angeles. 2011. A closer look at the Easterlin Paradox. *The Journal of Socio-Economics* **40**:1, 67-73. [[Crossref](#)]
196. Thomas Dietz, Eugene A. Rosa, Richard York. 2011. Environmentally efficient well-being: Is there a Kuznets curve?. *Applied Geography* . [[Crossref](#)]
197. Rebecca Weitz-Shapiro, Matthew S. Winters. 2011. The Link Between Voting and Life Satisfaction in Latin America. *Latin American Politics and Society* **53**:04, 101-126. [[Crossref](#)]
198. Peter Henry Huang. 2010. Happiness Studies and Legal Policy. *Annual Review of Law and Social Science* **6**:1, 405-432. [[Crossref](#)]
199. Linnea A. Polgreen, Nicole B. Simpson. 2010. Happiness and International Migration. *Journal of Happiness Studies* . [[Crossref](#)]
200. Tobias Menz, Heinz Welsch. 2010. Population aging and environmental preferences in OECD countries: The case of air pollution. *Ecological Economics* **69**:12, 2582-2589. [[Crossref](#)]
201. Luca Stanca. 2010. The Geography of Economics and Happiness: Spatial Patterns in the Effects of Economic Conditions on Well-Being. *Social Indicators Research* **99**:1, 115-133. [[Crossref](#)]
202. Robbert Maseland, André van Hoorn. 2010. Values and marginal preferences in international business. *Journal of International Business Studies* **41**:8, 1325-1329. [[Crossref](#)]
203. Bruno S. Frey, Simon Luechinger, Alois Stutzer. 2010. The Life Satisfaction Approach to Environmental Valuation. *Annual Review of Resource Economics* **2**:1, 139-160. [[Crossref](#)]



204. Bruno S. Frey, Alois Stutzer. 2010. Happiness and public choice. *Public Choice* 144:3-4, 557-573. [[Crossref](#)]
205. Sigit Dwiananto Arifwidodo, Ranjith Perera. 2010. Quality of Life and Compact Development Policies in Bandung, Indonesia. *Applied Research in Quality of Life* . [[Crossref](#)]
206. Ekaterina Selezneva. 2010. Surveying transitional experience and subjective well-being: Income, work, family. *Economic Systems* . [[Crossref](#)]
207. Yuanping Lu, Kezhong Zhang. Valuing the Environmental Damage or Improvement: Based on the Happiness Method 1-4. [[Crossref](#)]
208. Susana Ferreira, Mirko Moro. 2010. On the Use of Subjective Well-Being Data for Environmental Valuation. *Environmental and Resource Economics* 46:3, 249-273. [[Crossref](#)]
209. Ana Bobinac, N. Job A. van Exel, Frans F.H. Rutten, Werner B.F. Brouwer. 2010. Caring for and caring about: Disentangling the caregiver effect and the family effect. *Journal of Health Economics* 29:4, 549-556. [[Crossref](#)]
210. Thomas DeLeire, Ariel Kalil. 2010. Does consumption buy happiness? Evidence from the United States. *International Review of Economics* 57:2, 163-176. [[Crossref](#)]
211. Benedetto Gui, Luca Stanca. 2010. Happiness and relational goods: well-being and interpersonal relations in the economic sphere. *International Review of Economics* 57:2, 105-118. [[Crossref](#)]
212. Paula K. Lorgelly, Kenny D. Lawson, Elisabeth A.L. Fenwick, Andrew H. Briggs. 2010. Outcome Measurement in Economic Evaluations of Public Health Interventions: a Role for the Capability Approach?. *International Journal of Environmental Research and Public Health* 7:5, 2274-2289. [[Crossref](#)]
213. James Konow. 2010. Mixed feelings: Theories of and evidence on giving. *Journal of Public Economics* 94:3-4, 279-297. [[Crossref](#)]
214. John Knight, Li Shi, Deng Quheng. 2010. Education and the Poverty Trap in Rural China: Closing the Trap. *Oxford Development Studies* 38:1, 1-24. [[Crossref](#)]
215. John Knight, Ramani Gunatilaka. 2010. The Rural-Urban Divide in China: Income but Not Happiness?. *Journal of Development Studies* 46:3, 506-534. [[Crossref](#)]
216. Eva M. Berger. 2010. The Chernobyl Disaster, Concern about the Environment, and Life Satisfaction. *Kyklos* 63:1, 1-8. [[Crossref](#)]
217. Maya Abou-Zeid, Moshe Ben-Akiva. A Model of Travel Happiness and Mode Switching 289-305. [[Crossref](#)]
218. Tiago V. de V. Cavalcanti, Juliana Ferraz Guimarães, José Ricardo Nogueira. Is there any Difference in Well-being between American and Brazilian College Students? 273-285. [[Crossref](#)]
219. Lena Malesevic Perovic, Sivia Golem. 2010. Investigating Macroeconomic Determinants of Happiness in Transition Countries. *Eastern European Economics* 48:4, 59-75. [[Crossref](#)]
220. Winton Bates. 2009. Gross national happiness. *Asian-Pacific Economic Literature* 23:2, 1-16. [[Crossref](#)]
221. Luca Stanca. 2009. With or without you? Measuring the quality of relational life throughout the world. *The Journal of Socio-Economics* 38:5, 834-842. [[Crossref](#)]
222. Robert W. Wassmer, Edward L. Lascher, Stephan Kroll. 2009. Sub-national Fiscal Activity as a Determinant of Individual Happiness: Ideology Matters. *Journal of Happiness Studies* 10:5, 563-582. [[Crossref](#)]
223. Adrian Bruhin, Rainer Winkelmann. 2009. Happiness functions with preference interdependence and heterogeneity: the case of altruism within the family. *Journal of Population Economics* 22:4, 1063-1080. [[Crossref](#)]

224. David Penn. 2009. Financial well-being in an urban area: an application of multiple imputation. *Applied Economics* 41:23, 2955-2964. [[Crossref](#)]
225. Heinz Welsch. 2009. Implications of happiness research for environmental economics. *Ecological Economics* 68:11, 2735-2742. [[Crossref](#)]
226. Ricardo Godoy, Victoria Reyes-García, Clarence C. Gravlee, Tomás Huanca, William R. Leonard, Thomas W. McDade, Susan Tanner. 2009. Moving beyond a Snapshot to Understand Changes in the Well-Being of Native Amazonians. *Current Anthropology* 50:4, 563-573. [[Crossref](#)]
227. Simon Dietz, David J. Maddison. 2009. New Frontiers in the Economics of Climate Change. *Environmental and Resource Economics* 43:3, 295-306. [[Crossref](#)]
228. Taran Fæhn, Antonio G. Gómez-Plana, Snorre Kverndokk. 2009. Can a carbon permit system reduce Spanish unemployment?#. *Energy Economics* 31:4, 595-604. [[Crossref](#)]
229. Tony Dolphin. 2009. Progress and well-being. *Public Policy Research* 16:2, 127-132. [[Crossref](#)]
230. Mary Steffel, Daniel M. Oppenheimer. 2009. Happy by What Standard? The Role of Interpersonal and Intrapersonal Comparisons in Ratings of Happiness. *Social Indicators Research* 92:1, 69-79. [[Crossref](#)]
231. Sergei Guriev,, Ekaterina Zhuravskaya,. 2009. (Un)Happiness in Transition. *Journal of Economic Perspectives* 23:2, 143-168. [[Abstract](#)] [[View PDF article](#)] [[PDF with links](#)]
232. Heinz Welsch, Jan Kühling. 2009. USING HAPPINESS DATA FOR ENVIRONMENTAL VALUATION: ISSUES AND APPLICATIONS. *Journal of Economic Surveys* 23:2, 385-406. [[Crossref](#)]
233. Sergei Guriev, Ekaterina Zhuravskaya. 2009. (Un)Happiness in Transition. *Journal of Economic Perspectives* 23:2, 143-168. [[Crossref](#)]
234. Simon Luechinger. 2009. Valuing Air Quality Using the Life Satisfaction Approach. *The Economic Journal* 119:536, 482-515. [[Crossref](#)]
235. Philip H. Brown, Brian Tierney. 2009. Religion and subjective well-being among the elderly in China. *The Journal of Socio-Economics* 38:2, 310-319. [[Crossref](#)]
236. Bruno S. Frey, Simon Luechinger, Alois Stutzer. 2009. The life satisfaction approach to valuing public goods: The case of terrorism. *Public Choice* 138:3-4, 317-345. [[Crossref](#)]
237. Alessandro Balducci, Daniele Checchi. 2009. Happiness and Quality of City Life: The Case of Milan, the Richest Italian City. *International Planning Studies* 14:1, 25-64. [[Crossref](#)]
238. Shahid Yusuf. 2009. From creativity to innovation. *Technology in Society* 31:1, 1-8. [[Crossref](#)]
239. Emmanouil Mentzakis, Mirko Moro. 2009. The poor, the rich and the happy: Exploring the link between income and subjective well-being. *The Journal of Socio-Economics* 38:1, 147-158. [[Crossref](#)]
240. Lucie Davoine. 2009. L'économie du bonheur. *Revue économique* 60:4, 905. [[Crossref](#)]
241. Giles Atkinson, Simon Dietz, Jennifer Helgeson, Cameron Hepburn, Håkon Sælen. 2009. Siblings, Not Triplets: Social Preferences for Risk, Inequality and Time in Discounting Climate Change. *Economics: The Open-Access, Open-Assessment E-Journal* . [[Crossref](#)]
242. Matias D Cattaneo, Sebastian Galiani, Paul J Gertler, Sebastian Martinez, Rocio Titunik. 2009. Housing, Health, and Happiness. *American Economic Journal: Economic Policy* 1:1, 75-105. [[Crossref](#)]
243. Ann L. Owen, Julio Videras, Christina Willemsen. 2008. Democracy, Participation, and Life Satisfaction \*. *Social Science Quarterly* 89:4, 987-1005. [[Crossref](#)]
244. KAISA KOTAKORPI, JANI-PETRI LAAMANEN. 2008. Welfare State and Life Satisfaction: Evidence from Public Health Care. *Economica* . [[Crossref](#)]

245. Daniel Mochon, Michael I. Norton, Dan Ariely. 2008. Getting off the hedonic treadmill, one step at a time: The impact of regular religious practice and exercise on well-being. *Journal of Economic Psychology* 29:5, 632-642. [[Crossref](#)]
246. Fred Schaffner. Contributions of the Energy and Environmental Sectors to Sustainable Economic Development 307-337. [[Crossref](#)]
247. Joanna Coast, Richard D. Smith, Paula Lorgelly. 2008. Welfarism, extra-welfarism and capability: The spread of ideas in health economics. *Social Science & Medicine* 67:7, 1190-1198. [[Crossref](#)]
248. CLAUDIA SENIK. 2008. Ambition and Jealousy: Income Interactions in the âOldâ Europe versus the âNewâ Europe and the United States. *Economica* 75:299, 495-513. [[Crossref](#)]
249. Michael Demoussis, Nicholas Giannakopoulos. 2008. Analysis of domain satisfactions: Evidence from a panel of Greek women. *The Journal of Socio-Economics* 37:4, 1347-1362. [[Crossref](#)]
250. V. K. Smith. 2008. Reflections on the Literature. *Review of Environmental Economics and Policy* 2:2, 292-308. [[Crossref](#)]
251. Alois Stutzer, Bruno S. Frey. 2008. Stress that Doesn't Pay: The Commuting Paradox\*. *Scandinavian Journal of Economics* 110:2, 339-366. [[Crossref](#)]
252. YEW-KWANG NG. 2008. Happiness Studies: Ways to Improve Comparability and Some Public Policy Implications. *Economic Record* 84:265, 253-266. [[Crossref](#)]
253. Mark A. Cohen. 2008. The Effect of Crime on Life Satisfaction. *The Journal of Legal Studies* 37:S2, S325-S353. [[Crossref](#)]
254. Mirko Moro, Finbarr Brereton, Susana Ferreira, J. Peter Clinch. 2008. Ranking quality of life using subjective well-being data. *Ecological Economics* 65:3, 448-460. [[Crossref](#)]
255. Andrew E Clark, Paul Frijters, Michael A Shields. 2008. Relative Income, Happiness, and Utility: An Explanation for the Easterlin Paradox and Other Puzzles. *Journal of Economic Literature* 46:1, 95-144. [[Crossref](#)]
256. Vincenzo Scoppa, Michela Ponzo. 2008. An Empirical Study of Happiness in Italy. *The B.E. Journal of Economic Analysis & Policy* 8:1. . [[Crossref](#)]
257. Bryan Roberts. Measuring Welfare 103-138. [[Crossref](#)]
258. Thomas Wai-kee Yuen, Winnie Wan-Ling Chu. 2008. Expected Happiness in Chinese Lunar New Year, Christmas and Western New Year: A Survey Study in Hong Kong. *The Journal of Comparative Asian Development* 7:2, 309-328. [[Crossref](#)]
259. Wang-Sheng Lee, Umut Oguzoglu. 2007. Income Support and Stigma Effects for Young Australians. *Australian Economic Review* 40:4, 369-384. [[Crossref](#)]
260. Gustavo Rinaldi. 2007. The Use of Economic Tools to Develop a Consensus on Alcohol Policies within and between Jurisdictions. *Contemporary Drug Problems* 34:4, 729-751. [[Crossref](#)]
261. Yew-Kwang Ng. 2007. Environmentally Responsible Happy Nation Index: Towards an Internationally Acceptable National Success Indicator. *Social Indicators Research* 85:3, 425-446. [[Crossref](#)]
262. Erik Schokkaert. 2007. Capabilities and Satisfaction with Life. *Journal of Human Development* 8:3, 415-430. [[Crossref](#)]
263. MARK WOODEN, NICOLE WATSON. 2007. The HILDA Survey and its Contribution to Economic and Social Research (So Far). *Economic Record* 83:261, 208-231. [[Crossref](#)]
264. David A. Penn. 2007. Estimating Missing Values from the General Social Survey: An Application of Multiple Imputation. *Social Science Quarterly* 88:2, 573-584. [[Crossref](#)]
265. Angela Besana. Animal Spirits or Engaging Spirits? 223-250. [[Crossref](#)]
266. Mohamad Fazli Sabri, Nurul Farhana Zakaria. Financial Well-Being among Young Employees in Malaysia 221-235. [[Crossref](#)]