

ELS 112 Section 10

**Happiness as a Province of Economics:
How reliable are studies of subjective well-being?**

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Happiness as a Province of Economics: How reliable are studies of subjective well-being?

In this paper, I shall discuss the measures of subjective well-being in macroeconomics and the reliability of them in reflecting the happiness which people really feel. I shall also indicate in which aspects measuring happiness may help economists.

Before I start, I would like to describe a system quantifying happiness, which was proposed by Bentham: Hedonistic Calculus. In this system, seven aspects of a feeling are taken into account in order to assess this feeling. These aspects are intensity (the intrinsic strength of the pleasurable or painful feelings produced), duration (how long they last), certainty (how likely it is these sensations will be produced by a given account), propinquity (how soon they will be felt), fecundity (whether these feelings will lead to future pleasures) and the number of people affected. The strength of this system is its emphasis on details, which must exist in a reliable quantification of happiness, but does not exist in current surveys that we will study.

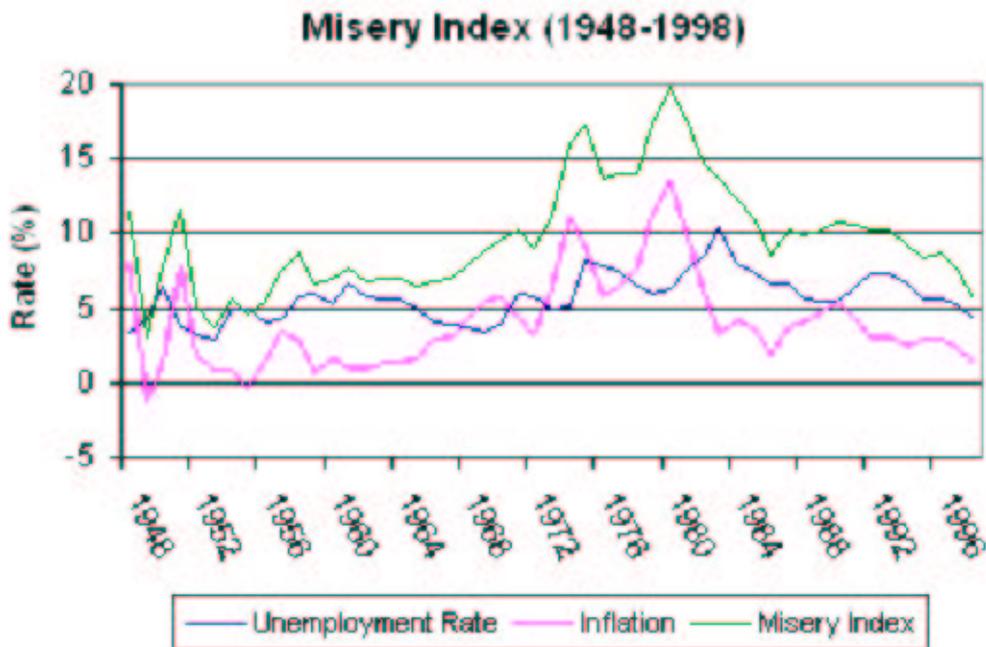
Although happiness was a province of philosophy and psychology in the past, nowadays it can also be regarded as a province of economics. However, economists are not interested in the meaning of this term but in its quantification. This quantification is expected to show the success of the economic policies in terms of the happiness people feel. According to these data, governors decide to carry out a policy which will make the governed “happier”, and consequently increase their votes: “GDP per capita, unemployment & inflation are not exogenous. These variables are influenced by politicians’ choices; their choices are shaped by re-election probabilities; those probabilities in turn can depend on the feeling of contentment among a country’s citizens” (Di Tella, Mac Culloch, Oswald, 1998:3). This approach is so pragmatic that a lack of emphasis on the theoretical side may result in incomplete and even incorrect information. “Unless economists believe they know more about human psychology than psychologists, there is a case for considering how much survey information can inform the discipline of economics” (Di Tella, Mac Culloch, Oswald, 1998:7). This argument explains the situation well: How can you use the quantification of a variable to inform you if you do not know its origin, its definition and its observation methods sufficiently? We must admit that these measures may give us some rough ideas as we will see, but when we are analyzing the data, we must be careful about what they indicate and what they cannot indicate.

These measures are not only used for determining economic policy but also understanding the formation of well-being. People try to understand under which conditions happiness increases or decreases. Although some economic factors are claimed to have some effects on happiness, we cannot conclude happiness is a function of these economic variables. Money was created in order to provide comfort and it is meaningless to imply well-being is a result of any economic policy: “We do not want them (job security, power, money) for themselves but rather to give us the possibility of making ourselves happier” (Frey&Stutzer, 2002:4)

In order to understand why data from happiness research in economics are superficial and not reliable enough, we shall firstly see how happiness is measured.

1 How do we measure happiness?

Happiness is mostly measured with the help of the surveys in macroeconomics. These surveys are usually conducted in a few minutes' time and in random places. Before we see the details of these surveys, I would like to mention the Misery Index, which is not preferred because of its superficial method. According to this index, happiness of a society is determined by the sum of inflation rate and unemployment rate:



Source: Bureau of Labor Statistics

(www.economics.about.com/library/weekly/aa051498.htm)

Since it is obvious that happiness (or misery) is more than two macroeconomic variables, surveys are conducted instead of this the Misery Index, which has been used for a long time period. However, it is debatable how far these surveys are reliable in measuring well-being.

There are 2 major different types of “happiness” surveys:

1. US General Social Survey
2. Euro-Barameter Survey

The Euro-Barameter Survey uses the following questions:

- “Taking all things together, how would you say things are these days—Would you say you are happy, fairly happy or not happy these days?”

- “On the whole, are you very satisfied, fairly satisfied, not very satisfied or not at all satisfied with the life you lead?”

As we see, there are two different types of questions measuring two different concepts in this survey. However, when we look at the US General Social Survey, we only see one question: “Taken all together, how would you say things are these days—Would you say that you are happy, pretty happy or not happy?”

These questions are too superficial to measure a complex state of mind. “A single individual’s answer on a well-being questionnaire are unlikely to be reliable: There is no natural scaling to allow cross-person comparison of terms like ‘happy’ or ‘satisfied’ “ (Di Tella, Mac Culloch, Oswald, 1998:7). If a single individual’s answers are not reliable, the whole survey, which is composed of individuals’ answers, will be unlikely to be reliable. It may help us to see a pattern of “relative” happiness, but in that sense we cannot reach a conclusion which has validity for more than a few days, since this “relative happiness” can change very quickly: “People with higher income are, on average, happier but raising everybody’s income does not increase everybody’s happiness, because in comparison to others income has not been improved” (Easterlin, 2001:477). This argument implies that there will always be happy people as well as unhappy people because relativity requires this. People become happy by making comparisons with another person’s state, so it is not possible to increase everybody’s happiness by manipulating macroeconomic variables.

2 Defining happiness

Another problem about measuring happiness is the difference in the use of words. Many people use the word “happiness” to express some other concepts like utility, satisfaction or welfare. At this point, we should distinguish between these concepts:

Satisfaction: The action of gratifying (an appetite or desire) to the full, or of contenting (a person) by the complete fulfillment of a desire or supply of a want; the fact of having been gratified to the full or of having one’s desire fulfilled (*Oxford English Dictionary*).

Happiness: The state of pleasurable content of mind, which results from success or the attainment of what is considered good (*Oxford English Dictionary*).

According to this definition, a person should have the power to evaluate the “good”. In our daily lives, we may feel happy in situations which are, in fact, not so good for our future, or vice versa. To illustrate, someone may feel “unhappy” because of his unemployment, but this unemployment may lead him to better job opportunities. This is called “frictional unemployment” in macroeconomics, and it is regarded as a “must” of a healthy economy. When all these points are taken into account, how far can the “happiness” of this frictionally-unemployed person inform a politician and make him

revise his policies? Can someone state that he would be happier with lower job security, but a lower rate of inflation and higher purchasing power?

Moreover, there is not only one definition of happiness. Aristotle (in Segal, 1991:289) stated that happiness is a kind of life that involves expending effort in the pursuit of excellence and virtue ; it is almost impossible to measure the “happiness” of Aristotle, since no one can have knowledge about the elements of virtue or the pursuit of excellence in the “happiness” of the respondent. As we see, there is no universal definition of happiness and the greater the number of definitions we have, the further we move from the reliability of measuring subjective well-being in a macroeconomic context.

Utility: The benefit or satisfaction that a person gets from the consumption of a good or service.

It can also be defined as the weight assigned to an outcome of a decision (decision utility) or the hedonic experience of an outcome (experienced utility). Bentham, who first developed the concept of utility, used this concept as a metaphysical property of objects that produces pleasure or pain. However, this concept can only be used for material goods in economy, such as the utility you have when you drink a can of coca-cola, so it is only useful in comparing two kinds of material goods on a personal basis (there is no universal measure of utility). In determining utility, it is assumed that the person is completely informed about the choices he has, and he is completely aware of the possible outcomes of his actions. Since the situation is much more confused than this assumption, it is debatable how accurately “utility” can be measured.

Welfare: A general concept used to indicate the health, comfort and prosperity of a person or society.

This concept is not used in surveys, since it is usually determined by actions, not by individuals’ thoughts.

3 Evaluating the data

In the light of these concepts, we shall now see how the surveys which we have studied, are evaluated.

The data which have been acquired by the surveys are assessed by the help of these equations:

$$HAPPY_{jit} = \alpha GDP_n + \Sigma Personal + \varepsilon_1 + \lambda_1 + N_{jit}$$

$\Sigma Personal$: Vector of personal characteristics of the respondents, which include income quartile, gender, marital status, education, whether employed or unemployed, age and number of children (in some conditions, other macroeconomic variables, such as unemployment benefit system, can take place in this equation).

j : Well-being reported by individual

i: Country

t: Year

ε_1 : Country fixed effect

λ_1 : Year fixed effect

$$LIFESATISFACTION = \alpha Inflation_{it} + \beta Unemployment_{it} + \varepsilon_1 + \lambda_1 + N_{jit}$$

As we see, the only difference between life satisfaction and happiness equations is the “ Σ Personal”. However, this implies life satisfaction does not change from one person to another. “Young people often report lower life satisfaction scores than old people” (Frey & Stutzer, 2002:9). This argument shows that even one variable (age) has affect on the answers to satisfaction questions. In the same equation, a year or country is expected to have a fixed effect on every individual. It is debatable whether a year or country has a “fixed” effect on everybody.

Moreover, life satisfaction has a transitory nature, such that the surveys based on this concept cannot be valid for a long time: “Satisfaction depends on change and disappears with continued consumption” (Frey & Stutzer, 2002:18). This argument implies that if you count on the figures based on life satisfaction, you will surely be disappointed because life satisfaction is not a concept which is directly related to economic stability.

Another point worth considering is that these equations and assessments based on happiness put emphasis on external factors. “The things that make one happy—friends, family, achievement, health—depend largely on virtue and luck; they are not available on a willingness-to-pay basis” (Sagoff, 1994:137). If it is really happiness we measure, how can we understand the effect of virtue, luck and even personal beliefs on the reported happiness? People who have a strong belief in the “other world” can be satisfied regardless of conditions: “Religious people report high levels of satisfaction compared with persons of low spiritual commitment, highly spiritual people are twice as likely to say they were very happy” (Myers&Diener, 1995:16). People who become happy for any non-material reason will affect the results in a negative way because the change in their levels of happiness will have almost nothing to do with the economic situation. “People, whose goals are intrinsic, i.e. those who define their values by themselves, tend to be happier than those with extrinsic goals, i.e. those oriented towards some external reward, such as financial success or social approval” (Kasser&Ryan, 2001:122).

In addition, the data based on happiness and satisfaction reflect the past status and the expectations of the people concerned, and it is difficult to determine the effect of the past and the future on current state. Becker states that concepts like satisfaction are related with one’s past consumption level or expected future income (1974:93), and, according to Easterlin, “most people think that they felt less happy in the past but expect to be more happy in the future” (2001:480). When all these factors are taken into account, it is not difficult to understand that happiness cannot be measured with a couple of questions or simplified to an equation. It is satisfaction, not happiness, these surveys measure because people usually use “satisfaction” instead of the word “happiness”. Questions and surveys can only give us an idea about the overall satisfaction of people, but even at this point, these surveys should be conducted carefully.

So far, we have mostly stated the problems about surveys. However, we cannot neglect the fact that there are some correlations, which were found with the help of these surveys.

Happy?	Unemployed	Poor <--- Income ---> Rich			
		Lowest Quartile	2nd Quar- tile	3rd Quar- tile	Highest Quartile
Very	17.8	24.0	29.5	34.8	40.8
Pretty	52.7	56.04	58.0	56.2	53.1
Not too	29.6	19.9	12.5	9.0	6.1

(www.economics.about.com/library/weekly/aa051498.htm)

“People’s happiness answers are strongly correlated with movements in GDP per capita” (Di Tella, Mac Culloch, Oswald, 1998:40). It is true that external factors like GDP per capita, unemployment or inflation have effects on happiness to an extent. If a person does not have enough money for his fundamental needs, like food or housing, it is meaningless to question the happiness he feels. However, when he has enough money for these needs, the effect of GDP per capita on his happiness decreases. “In the United States, between 1946-1991, per capita real income rose by a factor of 2.5, but over the same period of time, happiness on average, remained constant” (Frey&Stutzer, 2002:3). This argument describes untrended nature of happiness. In other words, although GDP has an effect on happiness, they are not directly correlated; happiness is constant after a point regardless of GDP or any other macroeconomic factor. This fact and the data we have in the table can also be explained by relativity, which we have mentioned before. Furthermore, we must keep in mind that a “job” or a high income is not an aim itself.

A problem about these correlations is the possibility of reversed correlation. In other words, it is possible to say “happier people earn higher income” as well as “high income makes people happy”. We may think that both of them are, to an extent, true. Then how far will it be correct to say that high income makes people happy? Even the respondents of the survey may not be aware of this relation. A survey, in which even the sources are not sure of their positions, cannot be a guide for professionals.

In conclusion, happiness cannot be measured accurately by surveys, since it is not a concept with one universal definition, and terms like GDP do not reflect happiness well. It is satisfaction that surveys try to measure. Even measuring satisfaction requires careful scrutiny. Surveys must be conducted often, and the questions should be chosen carefully with the help of psychologists. Results of surveys may give us an idea about the link between macroeconomic variables and happiness, but happiness cannot be regarded as a function of macroeconomic variables. It should not be forgotten that differences in peoples’ use of words could lead to an inaccurate evaluation. When evaluating the data, untrended nature of happiness and the possibility of reversed correlation should be taken into account.

Finally, happiness, as a complex term itself, cannot be simplified to an equation. Every individual has his own perception of happiness which is based on different values (virtue, luck, external factors...) and it is impossible to show these values in an equation. Therefore, it is more appropriate to

use the phrase “current satisfaction” instead of “happiness” in these surveys.

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