What Makes People Happy?

In the eighteenth century, Jeremy Bentham (1748–1832) became the leading philosopher of utilitarianism, a view holding that an individual's prime concern should be their own happiness.[1] The philosophy also urged that the objective of public policy should be the maximization of the sum of all people's happiness. Bentham's implicit view was that happiness could be measured and that it could also be compared across different individuals. That no obvious ways then existed to measure happiness was recognized as a challenge, but was not seen to undermine the basic philosophy.

[1] See the "Timeline of Great Economists" at the back of the textbook for brief descriptions of the life and work of several great economists as well as notable historical events of the time.

In the early twentieth century, however, a new breed of economists (then called "political economists") argued that a measurable concept of happiness (or utility) was not necessary in order to derive unambiguous predictions about individual behaviour. It was only necessary that individuals had a stable set of preferences—that is, they could always specify whether bundle A was preferred to bundle B, bundle B was preferred to bundle A, or that the individual was indifferent between the two bundles. For the next several decades, economists built models based on the idea that individuals strive to maximize their utility, even though it was also recognized that utility could be neither observed nor measured. In addition, in most economic models individual utility was assumed to be a function of the individual's level of real income, or perhaps real consumption. Economists were usually quick to admit (when the question arose) that other things also matter for an individual's utility, but their models continued to emphasize the market-based, easily quantifiable variables such as real income or real consumption.

In recent years, however, economists have been asking whether it might, after all, be possible to measure individual happiness and, if so, what is it that actually makes people happy? In this research program, economists rely heavily on progress made by psychologists and others in the social sciences. Here we offer a brief introduction to some of the results from this research. As you will see, the results contrast with a few standard assumptions in economic theory, and also lead to some unusual policy implications.[2]

[2] This topic draws heavily on Richard Layard, *Happiness: Has Social Science Got a Clue?,* the Lionel Robbins Memorial Lectures, 2002–2003, London School of Economics. See also the more recent book by the same author, *Happiness: Lessons from a New Science,* Penguin Press, 2005.

Happiness: Definition and Trends

Richard Layard, one of the leading current scholars on the economics of happiness, defines the concept as "feeling good" and "enjoying life," and bases his research on survey responses in which individuals rate their happiness on a numeric scale. Some studies ask people to reconstruct their activities in the previous day and report how happy they were during each activity. Perhaps not surprisingly, the highest rated activity was having sex while the lowest-rated activity was the morning commute to work or school. Though this ranking may give us some comfort that the survey responses are indeed accurately indicating people's happiness, there is a general concern that what people *say* about their happiness may not accurately reflect their *genuine* happiness.

At this point some neuroscience can shed light on the situation. Layard reports medical studies showing that the spatial pattern of an individual's brain activity depends significantly on what they are thinking. Specifically, when viewing an image of a positive event, the activity is located in the left side of the brain. At the same time, the individuals tend to respond that the image is one that makes them happy. On the other hand, when viewing an image of a negative event, the right side of the brain is activated and the individual tends to reports that the image makes them less happy. These types of results from neuroscience strongly suggest that when people report that they are happy or unhappy, there really is something genuine happening.

If survey-based measures of happiness actually measure an individual's happiness, then economists should be able to determine the validity of a long-standing assumption in economics—that individuals are happier when their income is higher. Is this assumption supported by the evidence?

There are three striking empirical findings that relate to happiness and real income. The first is that despite a doubling (or more) of average real per capita income over the past 50 years, there has been almost no change in the average level of happiness reported in the population. The second result, somewhat paradoxically, is that at any time within a given country, the highest income earners report themselves to be significantly happier than the lowest income earners. Both results not only apply to the United States, but also to Europe and Japan.

A third result is about the relationship across countries between average per capita income and average happiness. In the group of countries with average income less than U.S.$15 000, there is a positive relationship between per capita income and average happiness. But in those countries with average income above this threshold level, there is no evidence that income and happiness move together. Some may wonder whether the concept of happiness has the same meaning in different languages and cultures, but the same results are found even when different versions of the survey questions are used.

Interpreting the Happiness/Income Results

One interpretation of these empirical results is that an individual's happiness depends on their income *relative to some "norm,"* and that the norm has been increasing broadly in line with average per capita incomes. For example, suppose that your happiness depends on your income relative to the Canadian average income. If average income in Canada has increased by 35 percent over the past decade, and your income has also increased by 35 percent, then you will be no happier now than you were a decade ago, although you will clearly have greater real income. However, if average Canadian income increased by 35 percent while your income increased by 75 percent, you would be happier now than a decade ago *because your relative income increased.*

Some evidence for the importance of relative income for individual happiness is presented in Table 1, which shows happiness in the United States across income groups in 1975 and 1998. In both income groups, real incomes increased over this 23-year period, and standard economic theory would predict that people in both groups would therefore feel happier as their real incomes rise. But the table shows that for both high-income and low-income groups, the fraction of people who are "very happy," "pretty happy," and "not too happy" was virtually unchanged between 1975 and 1998. This is consistent with the idea that people's happiness comes much more from their relative income levels than from their absolute income levels.

The importance of an individual's relative income for their happiness can explain the first two empirical results just mentioned. As real per capita incomes were growing considerably over the post–World War period, average happiness would be relatively unchanged as long as the *distribution* of income was also roughly unchanged. In addition, at any given time, people in the upper-income groups would be happier than the people in the lower-income groups for the simple reason that incomes in the first group are *higher than average* while incomes in the second group are *lower than average.*

In order to explain the third result we need to add some consideration to the role of genuine poverty. In countries with very low per capita incomes, an increase in real income may have noticeable effects in reduced hunger, disease, and mortality. The emergence from extreme poverty that higher real income allows might naturally account for an increase in happiness. In higher-income countries, however, almost everyone lives far above these subsistence levels, and increases in income will not lead to such drastic changes. In this higher-income world, it may be the *relative income* that matters more for happiness.

Habituation and Rivalry

Layard offers two possible explanations for *why* individuals may care more about their relative income than about their absolute income levels. The first is *habituation;* the second is *rivalry*. Habituation is the idea that people quickly adapt to changes in their personal situations, either negative or positive, and that the long-run effects of these changes on happiness are relatively minor. For example, individuals who win cash lotteries tend to be much happier for short periods of time, but the evidence suggests that over a year or two their level of happiness tends to return to what it was before they won the lottery. The same appears to be true for people who get promotions and salary increases in their jobs. Habituation also seems to be a powerful force when individuals experience negative events. For example, individuals who have serious accidents and lose limbs or become severely handicapped tend to report unchanged levels of happiness in the long run, even though the immediate effect of the accident is a reduction in happiness.

The strength of habituation has led researchers in this area to speak of life as a "hedonic treadmill." People strive to earn more income, get better jobs, purchase fancier cars or bigger homes, all with the hope that these changes will improve their lives and will make them happier. But the improvement in happiness tends to be short lived, and people thus find themselves continually having to "get more" just in order to continue receiving the short-run bursts of happiness.

The second explanation offered by Layard as to why individuals may care more about their relative income than their absolute income is that individuals are inherently *rivalrous.* For example, one recent survey asked graduate students at Harvard to express their preferences for two options. In the first option their own income would be $50 000 per year but everyone else would earn half that amount. In the second option their

Table 1 **Happiness by Income in the United States**

	Top 25% of Income		**Bottom 25% of Income**	
	1975	**1998**	**1975**	**1998**
Very Happy	39%	37%	19%	16%
Pretty Happy	53%	57%	51%	53%
Not Too Happy	8%	6%	30%	31%

(*Source:* Richard Layard, *Happiness: Has Social Science Got a Clue?* Based on data from the General Social Survey.)

own income would be $100 000 per year and everyone else would earn the same amount. A majority of the respondents preferred the first option: They were happy to be poorer in absolute terms as long their relative position improved.

What seems to be important is the determination of an individual's "reference group." Most of us do not feel worse off when we learn of Shania Twain's or Tom Cruise's enormous incomes, because they are outside of our reference group. Yet we may feel worse off when people that we know well—friends and neighbours—experience an increase in income. As much as we may not like to admit to having these feelings, there is evidence that such rivalry is widespread. One example is the average reported level of happiness among individuals living in East Germany. After the collapse of the Soviet Union in 1990, average real incomes increased substantially in East Germany, yet average reported happiness plunged. The explanation may be that the relevant reference group changed. When individuals were comparing themselves to others in the Soviet Bloc, they were relatively happy, but later they began to compare themselves with West Germans and, despite their own advances in real incomes, they felt distinctly worse off by comparison.

Policy Implications Layard argues that the presence of habituation and rivalry should change the way we think about public policy. The economist's standard approach for thinking about the government's role in a market economy is that aside from providing the very important institutional setting including such things as the establishment of property rights, a legal system, and law enforcement, the government should be wary of intervening in markets unless there is a clear *market failure* preventing the market from achieving an efficient allocation of resources. Layard broadly agrees with this general approach, but he sees a new market failure that economists should consider.

In Layard's view, there is a clear market failure stemming from habituation and rivalry. Because individuals care about their relative income rather than their absolute income, they are led to work too hard, earn too much income, and purchase too many "things" relative to what is socially optimal. An individual's own material success, in other words, generates costs—*negative externalities*—for other people, but they tend to ignore these costs when making their own decisions. As a result, there is an excessive drive for individual success. For example, if I work hard and increase my income above yours, my happiness increases but yours will decline. Similarly, your actions to increase your income may make you happier but they make me less happy. We are both led to work too hard; both of us would be happier if we each chose to work fewer hours and consume more leisure. In this sense, working hard may be like pollution in the sense that private incentives lead to too much activity, and there is a role for government to impose relatively high income taxes to reduce individuals' work effort and thereby improve the allocation of resources.[3]

[3] One interesting puzzle is that while people do seem to be rivalrous in terms of income, they do not appear to be rivalrous in terms of leisure. In other words, while an increase in other people's (relative) incomes may reduce my own happiness, I do not appear to suffer from an increase in other people's (relative) vacation times.

Layard is quick to recognize that such increases in income-tax rates would surely result in less work effort, less overall production, and thus less real per capita income. In other words, it would reduce what Adam Smith might have called the "wealth of the nation." But for Layard, the more important point is that happiness would be increased, and happiness—not income—is the appropriate target of public policy. In this regard, Layard echoes the views of Jeremy Bentham from nearly 200 years ago.

What Else Makes People Happy?

We have discussed the new research that explores the (weak) connection between happiness and income. There is also research exploring non-income determinants of happiness. If more income doesn't appear to make people happier, what does? Layard cites evidence drawn from his own research as well as from research by John Helliwell at the University of British Columbia.[4] The results are based on large-sample surveys covering three different years (across two decades), 90 000 people, and 46 different countries.

[4] John Helliwell (2001), "How's Life? Combining Individual and National Variables to Explain Subjective Well-Being," NBER Working Paper #9065.

Table 2 shows the effect on an individual's reported happiness from changes in many aspects of their life. The units of happiness are chosen so that a 33-percent decline in family income, relative to average income, reduces reported happiness by 1 unit. Thus, the importance of changes in the non-income elements of life can only be judged relative to the importance of changes in income. For example, being separated (rather than married) is over four times more important for causing unhappiness than suffering a 33-percent decline in income. Being unemployed (rather than employed) *even with income held constant* is three times more important than suffering a 33-percent decline in income. Belief in God appears to make people considerably happier, and quantitatively it is twice as important as the 33-percent change in income.

Summary

These results can lead to many observations (and debates!) about the conduct of public policy. It is clear that unemployment and marital breakdown are both genuine disasters

Table 2 What Else Makes People Happy?

		Change in Happiness
Income:	Family income falls by 33% relative to average	–1
Work:	Unemployed (rather than employed)	–3
	Job insecure (rather than secure)	–1.5
	Inflation rate up 10 percentage points	–0.5
Family:	Divorced (rather than married)	–2.5
	Separated (rather than married)	–4.5
	Widowed (rather than married)	–2
Health:	Subjective health down 1 point (on 5-point scale)	–3
Religion:	Agree with: "God is important in my life"	+2
Trust:	Agree with: "In general, people can be trusted"	+1

(*Source:* Richard Layard, *Happiness: Has Social Science Got a Clue*? Based on data from the World Values Survey.)

as far as personal happiness is concerned. Thus a macroeconomic policy aimed at maintaining low unemployment may be more warranted than one aimed at encouraging overall income growth. Similarly, policies that successfully discourage the breakdown of marriages may have a large payback in terms of total happiness.

Whether or not one accepts these conclusions about the objectives of public policy, it is worth emphasizing the general observation that any policy that changes income is very likely to have an effect on happiness through some non-income channels. Indeed, any policy at all—even one that leaves income unchanged—is likely to have some effect on happiness. Table 2 provides only a hint of the complexity of individual happiness. It is our responsibility as economists to broaden our minds when thinking about the determinants of happiness, and to carefully consider these complex relationships when designing and implementing public policies.