

# The Economics of Happiness

Insights on globalization from a novel approach

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## Introduction

The economics of happiness is an approach to assessing welfare which combines the techniques typically used by economists with those more commonly used by psychologists. It relies on surveys of the reported well-being of hundreds of thousands of individuals across countries and continents. It also relies on more expansive notions of utility than does conventional economics, highlighting the role of non-income factors that affect well-being. It is well suited to informing questions in areas where revealed preferences provide limited information, such as the welfare effects of inequality and of macroeconomic policies such as inflation and unemployment. One such question is the gap between economists' assessments of the aggregate benefits of the globalization process and the more pessimistic assessments that are typical of the general public (see Rodrik, 1997; O'Rourke and Sinott, 2002; and Graham and Pettinato, 2002).<sup>1</sup>

Standard analyses based on aggregate, income-based measures provide important benchmarks for assessing the impact of globalization on poverty

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<sup>1</sup> There is some evidence that attitudes about globalization are more negative among the publics in developed than in most developing countries. (Rodrik, 1997). O'Rourke and Sinott (2002) find that public support for free trade is higher among skilled than unskilled labor in the developed economies; Graham and Pettinato (2002) find a similar trend for respondents in Latin America. The Pew Global Attitudes survey (2002), meanwhile, which surveyed 38,000 people in 44 nations (both developing and developed), found that the majority of respondents in the poll thought highly of international organizations, such as the WTO, and multinational corporations, while anti-globalization protestors were held in low esteem. At the same time, the majority of the public felt that many of the problems that the protestors highlight, such as the availability of jobs and the gap between the rich and the poor, are worsening.

and inequality. This paper highlights the extent to which a novel approach—the economics of happiness—provides alternative measures of well-being, which in turn highlight aspects of the process that also matter to welfare. These include the insecurity caused by short-term movements in and out of poverty; the welfare effects of effects of changes in the distribution over the life or earnings cycle and/or distributional shifts at the sector, cohort, and neighborhood level; and changes in reported well-being that are driven by the widespread increase of global information and its effects on local reference norms.

### **The economics of happiness—the approach**

While psychologists have been using surveys of reported well-being to study happiness for years, economists only recently ventured into this arena. Early economists and philosophers, ranging from Aristotle to Bentham, Mill, and Smith, incorporated the pursuit of happiness in their work. Yet as economics grew more rigorous and quantitative, more parsimonious definitions of welfare took hold. Utility was taken to depend only on income as mediated by individual choices or preferences within a rational individual's monetary budget constraint.

Even within a more orthodox framework, focusing purely on income can miss key elements of welfare—as numerous economists have noted over time. People have different preferences for material and non-material goods. They may choose a lower paying but more personally rewarding job, for example. They are nonetheless acting to maximize utility in a classically Walrasian sense.

The study of happiness or subjective well-being is part of a more general move in economics that challenges these narrow assumptions. The introduction of bounded rationality and the establishment of behavioral economics, for example, have opened new lines of research. Happiness economics—which represents one new direction—relies on more expansive notions of utility and welfare, including interdependent utility functions, procedural utility, and the interaction between rational and non-rational influences in determining economic behavior.

Richard Easterlin was the first modern economist to re-visit the concept of happiness, beginning in the early 1970s. More generalized interest took hold in the late 1990s (see, among others, Easterlin, 1974, 2003;

Blanchflower and Oswald, 2004; Clark and Oswald, 1994; Frey and Stutzer, 2002a; Graham and Pettinato, 2002; Layard, 2005).

The economics of happiness does not purport to replace income-based measures of welfare, but instead to complement them with broader measures of well-being. These measures are based on the results of large-scale surveys, across countries and over time, of hundreds of thousands of individuals who are asked to assess their own welfare. The surveys provide information about the importance of a range of factors which affect well-being, including income but also others such as health, marital and employment status, and civic trust.

The approach, which relies on expressed preferences rather than on revealed choices, is particularly well suited to answering questions in areas where a revealed preferences approach provides limited information. Indeed, it often uncovers discrepancies between expressed and revealed preferences. The latter cannot fully gauge the welfare effects of particular policies or institutional arrangements which individuals are powerless to change. Examples of these include the welfare effects of inequality, environmental degradation, and macroeconomic policies such as inflation and unemployment. Sen's capabilities-based approach to poverty, for example, highlights the lack of capacity of the poor to make choices or to take certain actions. In many of his writings, he criticizes economists' excessive focus on choice as a sole indicator of human behavior (Sen, 1995).

Understanding the limits to choice approaches—and willingness to use the information contained in preferences expressed in surveys—may help us better understand the divergence between economists' generally positive assessments of the globalization process and those of the typical layman or woman experiencing the process. While the former are based on standard measures of the aggregate benefits of the process, the latter tend to be based on individual experiences. These are influenced by changes in opportunity sets and reward structures, which in turn vary across cohorts and can bring new vulnerabilities and dislocation for many individuals. As these changes are driven by forces which individuals are powerless to influence, a choice approach has limits in capturing their welfare effects.

Another area where a choice approach is limited and happiness surveys can shed light is the welfare effects of addictive behaviors such as smoking and drug abuse. It can broaden our understanding of excessive consumption and/or variance in response to public health information across

age and income cohorts, for example (as in the case of obesity, which is increasingly recognized as a major public health problem in the U.S.).

Happiness surveys are based on questions in which the individual is asked “generally speaking, how happy are you with your life?” or “how satisfied are you with your life?”, with possible answers on a four to seven point scale.<sup>2</sup> This approach presents several methodological challenges. Critics used to defining welfare or utility in material or income terms bemoan the lack of precise definition in these questions (for a fuller description of these, see Bertrand and Mullanaithan, 2001; Frey and Stutzer, 2002b). To minimize order bias, for example, happiness questions must be placed at the beginning of surveys. As with all economic measurements, the answer of any specific individual may be biased by idiosyncratic, unobserved events. Bias in answers to happiness surveys can also result from unobserved personality traits and correlated measurement errors (which can be corrected via individual fixed effects if and when panel data are available). Other concerns about correlated unobserved variables are common to all economic disciplines.

Accuracy in reporting is another issue in using perceptions data. Responses can be very biased by the phrasing or the placement of questions in the survey. Another problem in reporting is bias introduced by different or changing reference norms. If you ask people how much income would they need to make ends meet, and/or to be happy, they usually base their answers on their existing income and increase it by some proportion, regardless of the absolute level.<sup>3</sup>

Despite the potential pitfalls, cross sections of large samples across countries and over time find remarkably consistent patterns in the determinants of happiness. Many errors are uncorrelated with the observed variables, and do not systematically bias the results. Psychologists, meanwhile, find validation in the way that people answer these surveys based in physiological measures of happiness, such as the frontal movements in the brain and in the number of “genuine”—Duchenne—smiles (Diener and Seligman, 2004).

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<sup>2</sup> Psychologists have a preference for life satisfaction questions. Yet answers to happiness and life satisfaction questions correlate quite closely. For British data for 1975–1992, where both questions are available, Blanchflower and Oswald (2004) get a correlation coefficient of .56; for Latin American data for 2000–2001, in which alternative phrasing was used in different years, Graham and Pettinato (2002) find it is .50.

<sup>3</sup> A survey conducted by Richard Webb and Cuanto and Lima in the 1980s, for example, found that workers of all income levels consistently doubled their current income when asked how much income would be “enough”.

Microeconomic happiness equations have the standard form:  $W_{it} = \alpha + \beta x_{it} + \varepsilon_{it}$ , where  $W$  is the reported well-being of individual  $i$  at time  $t$ ,  $X$  is a vector of known variables including sociodemographic and socioeconomic characteristics. Unobserved characteristics and measurement errors are captured in the error term. Because the answers to happiness surveys are ordinal rather than cardinal, they are best analyzed via ordered logit or probit equations. These regressions typically yield lower R-squares than economists are used to, reflecting the extent to which emotions and other components of true well-being are driving the results, as opposed to the variables that we are able to measure, such as income, education, and marital and employment status.<sup>4</sup>

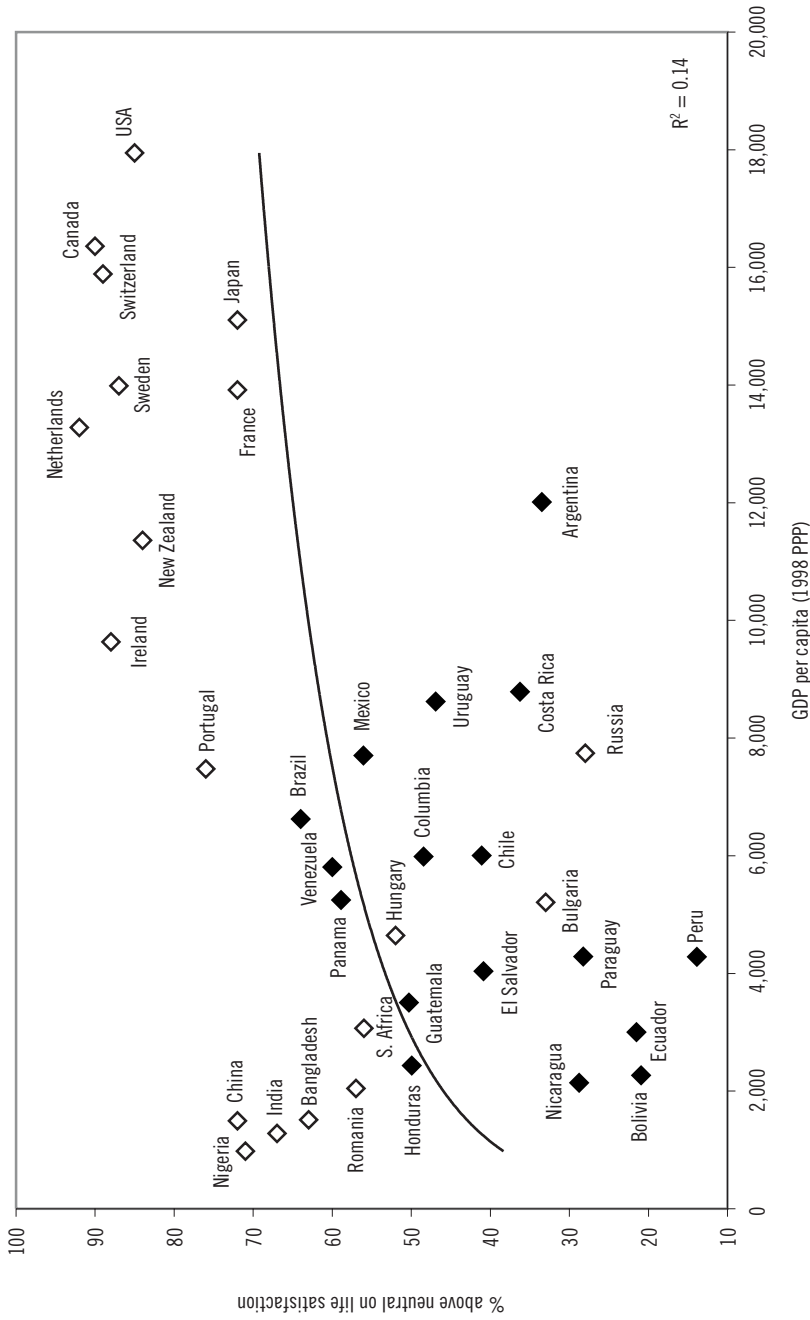
The availability of panel data in some instances, as well as advances in econometric techniques, are increasingly allowing for sounder analysis (Van Praag and Ferrer-i-Carbonell, 2004). The coefficients produced from ordered probit or logistic regressions are remarkably similar to those from OLS regressions based on the same equations. While it is impossible to measure the precise effects of independent variables on true well-being, happiness researchers have used the OLS coefficients as a basis for assigning relative weights to them. They can estimate how much income a typical individual in the United States or Britain would need to produce the same change in stated happiness that comes from the well-being loss resulting from divorce (\$100,000), or from job loss (\$60,000), for example (Blanchflower and Oswald, 2004).

### The Easterlin paradox

Easterlin, in his original study, revealed a paradox that sparked interest in the topic but is, as of yet, unresolved. While most happiness studies find that *within* countries wealthier people are, on average, happier than poor ones, studies across countries and over time find very little, if any, relationship between increases in per capita income and average happiness levels. On average, wealthier countries (as a group) are happier than poor ones (as a group); happiness seems to rise with income up to a point, but not beyond it. Yet even among the less happy, poorer countries, there is not a clear relationship between average income and average happiness levels, suggesting that many other factors—including cultural traits—are at play (Figure 1).

<sup>4</sup> Cross section work also typically yields low R-squares.

**Figure 1: Happiness and income per capita, 1990s**



Source: Graham and Pettinato, 2002; Veenhoven, World Happiness Data Set, 2002

Within countries, income matters to happiness (Oswald, 1997; Diener et al., 2003; among others). Deprivation and abject poverty in particular are very bad for happiness. Yet after basic needs are met, other factors such as rising aspirations, relative income differences, and the security of gains become increasingly important, in addition to income. Long before the economics of happiness was established, James Duesenberry noted the role of changing aspirations on income satisfaction, and its potential effects on consumption and savings rates (Duesenberry, 1949). Any number of happiness studies has since confirmed the effects of rising aspirations, and have also noted their potential role in driving excessive consumption and other perverse economic behaviors (Frank, 1999).

Once again, this is useful in interpreting divergent assessments of welfare in the globalization process. While many people are making income gains and are exposed to new opportunities, aspirations are also rising, both among those making gains and also those who are falling behind. The technological revolution and the widespread increase of global information, for example, have increased the awareness of millions of individuals, even in remote areas in poor countries. Thus in the instance of globalization, aspirations may be driven by new global reference norms, while opportunities are constrained by local conditions (for a summary of research on the topic, with evidence from Peru and Russia, see Graham, forthcoming).

A common interpretation of the Easterlin paradox is that humans are on a “hedonic treadmill”: aspirations increase along with income, and after basic needs are met, relative rather than absolute levels of income matter to well-being. Another interpretation of the paradox is the psychologists’ “set point” theory of happiness, in which every individual is presumed to have a happiness level that he or she goes back to over time, even after major events such as winning the lottery or getting divorced (Easterlin, 2003). In this case, the implications for policy are that nothing much can be done to increase happiness.

Individuals are remarkably adaptable, no doubt, and in the end can get used to most things, and in particular to income gains. The behavioral economics literature, for example, shows that individuals value losses disproportionately to gains (see Kahneman, Diener, and Schwarz, 1999, among others). Easterlin argues that individuals adapt more in the pecuniary arena than in the non-pecuniary arena, while life changing events, such as

bereavement, have lasting effects on happiness. Yet because most policy is based on pecuniary measures of well-being, it over-emphasizes the importance of income gains to well-being, and underestimates that of other factors, such as health, family, and stable employment.

There is no consensus about which interpretation is most accurate. Yet numerous studies, which demonstrate that happiness levels can change significantly in response to a variety of factors, suggest that the research can yield insights into human well-being which provide important, if complementary, information for policymakers. Even under the rubric of set point theory, happiness levels can fall significantly in the aftermath of events like illness or unemployment. Even if levels eventually adapt upwards to a longer term equilibrium, mitigating or preventing the unhappiness and disruption that individuals experience for months, or even years, in the interim certainly seems like a worthwhile objective for policy.

## **Selected applications of happiness economics**

Happiness research has been applied to a range of questions. This chapter cannot undertake a comprehensive review. Instead, it provides a selection of some of the questions the surveys can inform. These include the relationship between income and happiness; inequality and poverty—and their relation to the globalization process; the effects of macro-policies on individual welfare; and those of public policies aimed at controlling addictive substances.

Some studies have attempted to isolate the effects of income from those of other endogenous factors, such as satisfaction in the work place. Studies of unexpected lottery gains find that these isolated gains have positive effects on happiness, although it is not clear that they are of a lasting nature (Gardner and Oswald, 2001). Other studies have explored the reverse direction of causality, and find that people with higher happiness levels tend to perform better in the labor market and to earn more income in the future (Diener et al., 2003; and Graham, Eggers, and Sukhtankar, 2004).

A related question, and one which is still debated in economics, is how income inequality affects individual welfare. Interestingly, the results differ between developed and developing economies. Most studies of the U.S. and Europe find that inequality has modest or insignificant effects on happiness. The mixed results may reflect the fact that inequality can be a



signal of future opportunity and mobility as much as it can be a sign of injustice (Alesina, DiTella, and MacCulloch, 2004). In contrast, recent research on Latin America finds that inequality is negative for the well-being of the poor and positive for the rich. In a region where inequality is much higher and where public institutions and labor markets are notoriously inefficient, inequality signals persistent disadvantage or advantage, rather than opportunity and mobility (Graham and Felton, 2005).

Happiness surveys also facilitate the measurement of the effects of broader, non-income components of inequality, such as race, gender, and status, all of which seem to be highly significant (Graham and Felton, 2005). These results find support in work in the health arena—which finds that relative social standing has significant effects on health outcomes (Marmot, 2004).

Happiness research can deepen our understanding of poverty. The set point theory suggests that a destitute peasant can be very happy. While this contradicts a standard finding in the literature—poor people are less happy than wealthier people within countries—it is suggestive of the role that low expectations play in explaining persistent poverty in some cases. The procedural utilities and capabilities approaches, meanwhile, emphasize the constraints on the choices of the poor.

What is perceived to be poverty in one context may not be in another. People who are high up the income ladder can identify themselves as poor, while many of those who are below the objective poverty line do not, because of different expectations (Rojas, 2004). In addition, the well-being of those who have escaped poverty is often undermined by insecurity and the risk of falling back into poverty. Income data do not reveal the vulnerability of these individuals, yet happiness data show that it has strong negative effects on their welfare. Indeed, their reported well-being is often lower than that of the poor (Graham and Pettinato, 2002).

The globalization process, meanwhile, mediates the effects of inequality and poverty on well-being. Globalization is a major engine of growth, at least in the aggregate, and therefore plays a major role in reducing poverty. But globalization also introduces or exacerbates other factors that affect people's well-being as much if not more than income growth. Happiness research can help us assess the extent of these effects (for detail, see Graham, forthcoming). An important such trend is the increasing flow of information about the living standards of others, both within

and beyond country borders, which can result in changing reference norms and increased frustration with relative income differences, even among respondents whose own income is increasing. It also includes increased volatility and insecurity for many cohorts, particularly those that are not the best positioned to take advantage of new opportunities created by the opening of trade and capital markets. This insecurity, not surprisingly, contributes to negative perceptions of the globalization process, particularly in countries where there are very weak social insurance systems or where existing systems are eroding.

Happiness research also shows that the same psychological factors that affect subjective evaluations of well-being also explain individuals' ability to adapt to tremendous adversity and/or negative shocks and often even to return to previous levels of happiness. This process of adaptation—to either negative shocks or to the disruptions and changes that often accompany economic progress and development—is very much influenced by peoples' norms about equity and perceptions of fairness. This helps to explain why there is often unexpected social stability in very poor societies, and at the same time unexpected outbreaks of violence and social unrest in societies where there is a great deal of economic progress—but differential rewards to different cohorts.

Tolerance of inequality seems to be much higher in contexts where there are perceived (even if not real) prospects for upward mobility. Downward mobility, or the threat thereof, is more likely to cause frustration and social unrest than is persistent poverty (Graham and Pettinato, 2002; Graham, forthcoming). Relying on income measures of well-being alone can mask a tremendous amount of latent social unrest.

Happiness surveys can also be used to examine the effects of different macro-policy arrangements on well-being. Most studies find that inflation and unemployment have negative effects on happiness. The effects of unemployment are stronger than inflation, and hold above and beyond those of foregone income (DiTella, MacCulloch, and Oswald, 2001). The standard “misery index”, which assigns equal weight to inflation and unemployment, may be underestimating the effects of the latter on well-being (Frey and Stutzer, 2002b).

Political arrangements also matter. Much of the literature finds that both trust and freedom have positive effects on happiness (Helliwell, 2003; Layard, 2005). Research based on variance in voting rights across

cantons in Switzerland finds that there are positive effects from *participating* in direct democracy. Research in Latin America finds a strong positive correlation between happiness and preference for democracy (Graham and Sukhtankar, 2004).

Happiness surveys can also be utilized to gauge the welfare effects of various public policies. How does a tax on addictive substances, such as tobacco and alcohol, for example, affect well-being? A recent study on cigarette taxes suggests that the negative financial effects may be outweighed by positive self-control effects (Gruber and Mullainathan, 2002). Recent research on obesity, meanwhile, uses happiness surveys to explore the role of norms and expectations in explaining the variance in obesity incidence across socioeconomic cohorts and across countries (Graham and Felton, 2005a). This research finds large differences in the well-being costs of obesity across cohorts, which are in turn linked to variance in incidence rates and in receptivity to public health messages.

## Policy implications

Richard Layard (2005) makes a bold statement about the potential of happiness research to improve people's lives directly via changes in public policy. He highlights the extent to which people's happiness is affected by status—resulting in a rat race approach to work and to income gains, which in the end reduces well-being. He also notes the strong positive role of security in the workplace and in the home; and of the quality of social relationships and trust. He identifies direct implications for fiscal and labor market policy—in the form of taxation on excessive income gains and via re-evaluating the merits of performance-based pay.

While many economists would not agree with Layard's specific recommendations, there is nascent consensus that happiness surveys can serve as an important complementary tool for public policy. Scholars such as Diener and Seligman (2004) and Kahneman, Krueger, and colleagues (2004) advocate the creation of national well-being accounts to complement national income accounts. The nation of Bhutan, meanwhile, has introduced the concept of "gross national happiness" to replace gross national product as a measure of national progress.

Happiness research in countries in the process of integrating into the world economy, meanwhile, suggests that more emphasis should be

placed on the negative effects of volatility and inequality, and on the vulnerability of the near poor (Graham, forthcoming). The findings highlight the broader point that growth is a necessary but not sufficient condition for poverty reduction. Other key factors—such as public investments in health; institutions that can ensure adherence to basic norms of equity and fairness; and collective investments in social insurance to protect workers from the volatility that often accompanies integration into global markets—are essential to sustaining the development gains that globalization helps bring about. While this policy conclusion is hardly a novel one, what is novel is the strong backing in individual welfare assessments rather than in a more general political or public policy debate.

Despite the potential contributions that happiness research can make to policy, a sound note of caution is necessary in directly applying the findings, both because of the potential biases in survey data, and because of the difficulties associated with analyzing these kinds of data in the absence of controls for unobservable personality traits. In addition, happiness surveys at times yield anomalous results which provide novel insights into human psychology—such as adaptation and coping during economic crises—but do not translate into viable policy recommendations.

One example is the finding that unemployed respondents are happier (or less unhappy) in contexts with higher unemployment rates. The positive effect that reduced stigma has on the well-being of the unemployed seems to outweigh the negative effects of a lower probability of future employment (Clark and Oswald, 1994; Stutzer and Lalive, 2004; and Eggers, Gaddy, and Graham, forthcoming).<sup>5</sup> One interpretation of these results for policy—raising unemployment rates—would obviously be a mistake. At the same time, the research suggests a new focus on the effects of stigma on the welfare of the unemployed.

Happiness economics also opens a field of research questions which still need to be addressed. These include the implications of well-being findings for national indicators and economic growth patterns; the effects of happiness on behavior such as work effort, consumption, and investment; and the effects on political behavior. In the case of the latter, surveys of unhappiness or frustration may be useful for gauging the potential for

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<sup>5</sup> Indeed, in Russia even *employed* respondents prefer higher regional unemployment rates. Given the dramatic nature of the late 1990s crisis, respondents may adapt their expectations downwards and are less critical of their own situation when others around them are unemployed.

social unrest—and their links to the globalization process—in various contexts.

In order to answer many of these questions, researchers need more and better quality well-being data, particularly panel data, which allow for the correction of unobserved personality traits and correlated measurement errors, as well as for better determining the direction of causality (e.g. from contextual variables like income or health to happiness versus the other way around). These are major challenges in most happiness studies. Hopefully, the combination of better data and increased sophistication in econometric techniques will allow economists to better address these questions in the future.

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