**Economic Growth and Subjective Well-Being: Reassessing the Easterlin Paradox**
Summary

Richard Easterlin's 1974 seminal paper entitled "Does Economic Growth Improve the Human Lot? Some Empirical Evidence" helped launch the economic analysis of the happiness field, which has since flourished into hundreds of papers. The most cited finding from the emerging economics of happiness literature is the Easterlin Paradox, which is the juxtaposition of three separate observations:

1. Within a society, rich people tend to be much happier than poor people.
2. But, rich societies tend not to be happier than poor societies (or not by much).
3. As countries get richer, they do not get happier.

In our (Stevenson/Wolfers) paper, "Economic Growth and Subjective Well-Being: Reassessing the Easterlin Paradox", we reassess the relationship between income and happiness. Why is this topic worth revisiting? A major theoretical implication of the paradox comes through the distinction of relative versus absolute income. The ensuing policy implication is that, according to Easterlin, the paradox "on balance undermine[s] the view that a focus on economic growth is in the best interests of society" Easterlin (2005). This controversial policy implication in itself makes the topic worth revisiting.

A second reason for our reassessment is the accumulation of new data on individual happiness in the years since the Easterlin Paradox was identified. Early researchers were forced to make comparisons based on a handful of moderately-rich and very-rich countries. This scarcity of data did not foster strong conclusions about the relationship between happiness and income. Now, however, we have three decades of new time series evidence as well as data from larger cross-national surveys that cover a greater spread of rich and poor countries.

And there is another issue with the past scarcity of data. The resulting difficulty of identifying a robust income-happiness link led some to confound the absence of evidence for such a link with evidence of its absence.

In our analysis of the happiness-income data, we look at three types of comparisons: within country, between country and national time series. And we find, in contrast to earlier literature, that the estimated relationship between income and happiness is not only significant, but also remarkably robust across countries, within countries, and somewhat over time.

**Within Country Estimates**
We will first consider within country estimates, which aim to see whether rich people are happier than poor people at a single point in time. On this question there is a consensus in the past literature that our results also support: rich people are indeed much happier than poor people, in a given country at a given point in time.

**Between Country Estimates**

Next, we examine the magnitude of the happiness-income relationship between countries, particularly by comparing rich versus poor countries. Previous research has claimed that the within country gradient is much larger than the between country gradient.

Early cross-national surveys suffered from sample size and selection issues, as mentioned before. They primarily compared developed countries to other developed countries, rather than comparing rich to poor countries, and frequently included only a handful of countries.

We use several datasets to approach this question. We can then compare the happiness-income gradient *between* countries to that seen *within* countries (see Figure 1). The arrows in this figure show the slope of the well-being-income gradient within each country, while the dots show the average level of happiness and GDP for each country. The dashed line shows the best fit through these dots, in other words the between country happiness-income gradient.

Importantly, these results stand at direct odds to the Easterlin Paradox, which finds that rich countries are not much happier than poor countries. Here we estimate the between country happiness-income gradient to have almost exactly the same magnitude as the within country gradient.

**National Time Series Estimates**

We finally turn to national time series estimates, which look at the same country over time as it becomes richer (or poorer). These estimates in theory should help address the question of whether raising the incomes of all would raise the happiness of all.

The central difficulty with this question is that only a few regions have good enough time series data for us to examine. Easterlin studied the evolution of happiness in the United States, Japan, and Europe in his 1995 paper, and concluded that increased wealth over time did *not* yield increased happiness over time. We similarly focus on time series data for these three regions and find that evidence for this third observation of the Easterlin Paradox is not so clear.

For Europe, the Eurobarometer Survey allows us to track average levels of life satisfaction in the same nine nations Easterlin analyzed (see Figure 2). In eight of the nine nations, satisfaction grew as GDP grew, and in six of these cases, the relationship is statistically significant. In most cases, the data suggest an income-satisfaction gradient of about 0.2, consistent with our within- and between-country estimates. Nonetheless, there are some anomalies. For instance, happiness has apparently fallen in Belgium even as GDP has grown.

Japan is an interesting case because it has grown from a quite poor country post-war to become one of the world's economic powerhouses. The Japanese government has collected life satisfaction data since 1958, which past researchers have interpreted as providing no evidence for gains in happiness in Japan. We had the Japanese survey questions retranslated, and found that they were actually four separate questions asked in four separate periods of time. And, during each of the first three periods – when economic growth was rapid – it was matched by

commensurate growth in life satisfaction. The fourth period, beginning in 1992, has yielded a puzzling decline in satisfaction despite income growth.

The United States is another anomaly: happiness data from the General Social Survey shows almost no trend from 1972 to 2006 despite the doubling of GDP over this period. We thus conclude that the time series evidence from the three regions is weakly supportive of a happiness-income link but also fragile.

**Conclusion**

Our task here was to reassess and revise the Easterlin Paradox. Comparisons between rich and poor members of the same society, between rich and poor countries, and within countries through time as they become richer or poorer all yield similar estimates of the well-being-income gradient. Our findings put to rest the earlier claim that economic development does not raise subjective well-being.

Figure 1

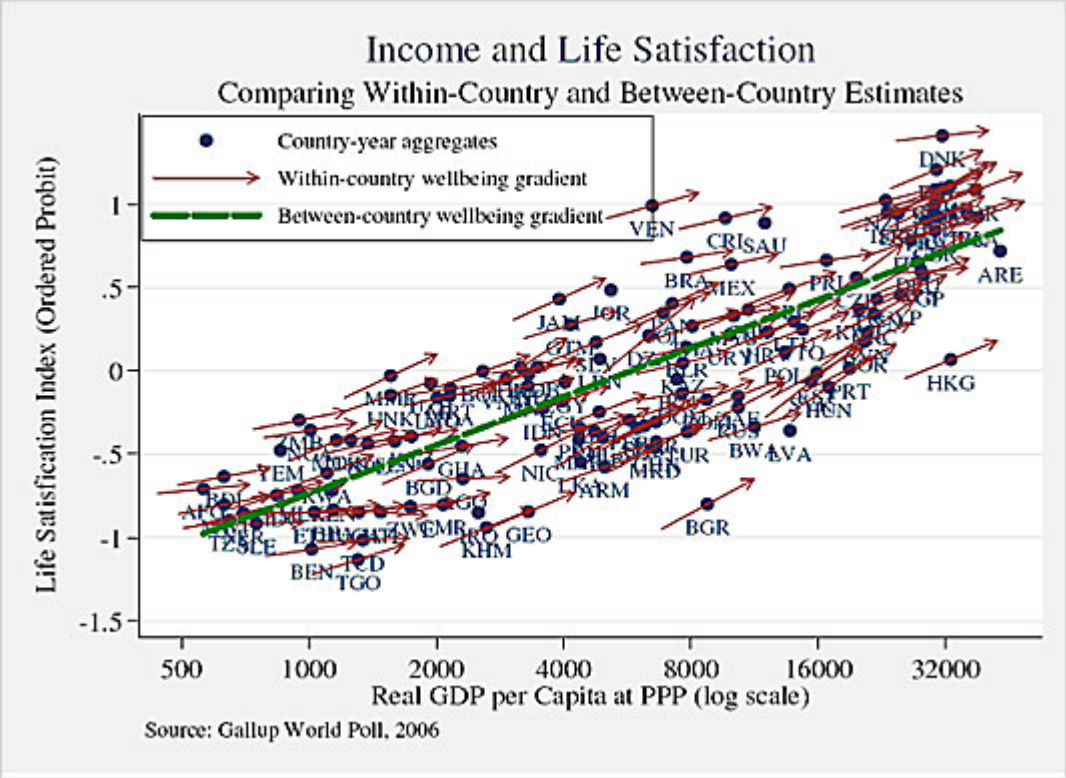
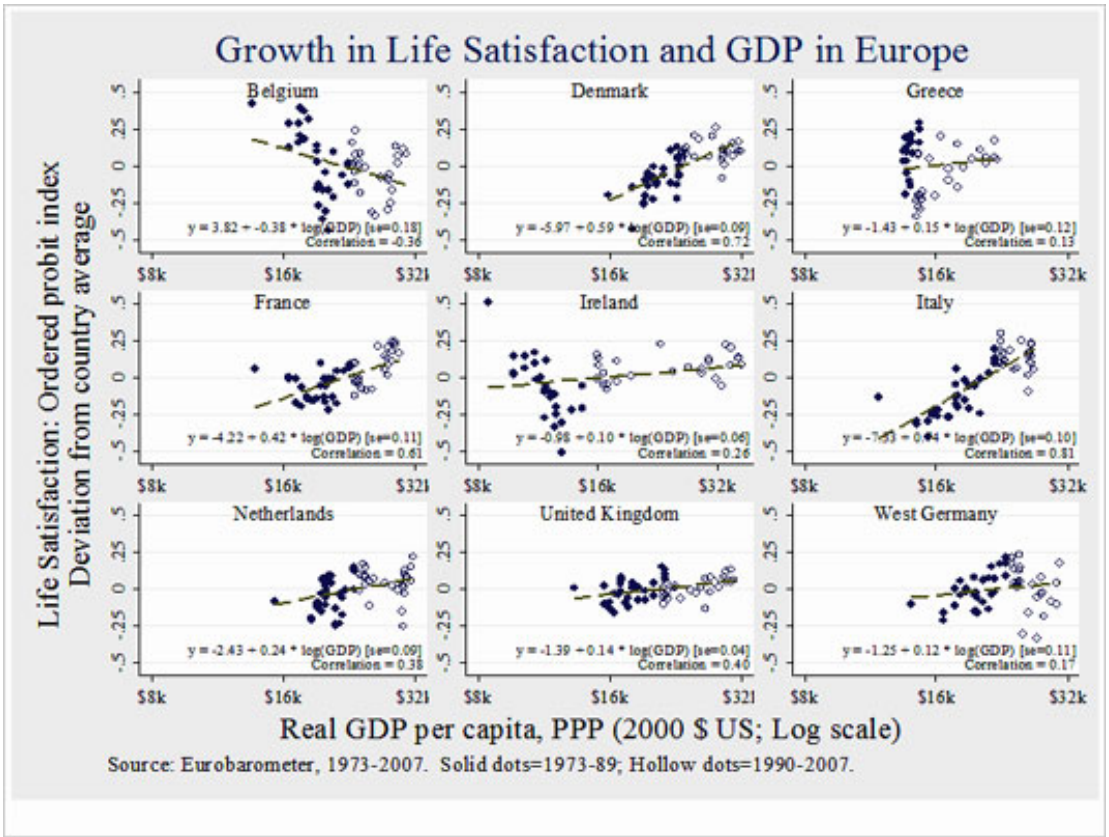


Figure 2


Growth in Life Satisfaction and GDP in Europe
Life Satisfaction: Ordered probit index
Deviation from country average
Belgium
Denmark
Greece
France
Ireland
Italy
Netherlands
United Kingdom
West Germany
$8k
$16k
$32k
Real GDP per capita, PPP (2000 $ US; Log scale)
Source: Eurobarometer, 1973-2007. Solid dots=1973-89; Hollow dots=1990-2007.