

## Does Income Measure Happiness?

by

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Is economic well-being is accurately captured by traditional economic measures like per-capita income? This has long been a contested issue. Although everyone concedes that income is an imperfect welfare measure, conservative economists have tended to emphasize its virtues, while liberals have been more likely to stress its shortcomings.

This debate is not just of philosophical interest; it also has important policy implications. Recent research findings offer support for specific arguments made on both sides. Mounting evidence suggests, however, that per capita income becomes a much less informative index of economic welfare when income inequality has been rising rapidly, as in recent decades.

First a few words about how economists measure income. The simplest approach might seem to be just to add up everyone's income. But because one person's spending is another person's income, we can also estimate income by adding up how much everyone spends. And because spending turns out to be easier to keep track of than income, the most commonly used income metric is Gross Domestic Product (GDP), the annual market value of all final goods and services produced within a country. Per capita GDP is simply GDP divided by total population. Measured in 2000 dollars, it was \$32,833 in 1998 and \$37,832 in 2006. The real value of goods and services purchased

by Americans in 2006 was thus about fifteen percent higher than in 1998. In purely economic terms, does that mean we were roughly fifteen percent better off in 2006?

Not necessarily. To measure changes in the standard of living over time, it is necessary to adjust for inflation. But as conservatives stress, traditional inflation adjustments may overstate actual inflation because they fail to account adequately for quality improvements. For example, although the current model of Honda's lowest priced car, the Civic, is about the same size as the company's 1998 Accord and is in almost every respect far superior, it sells for only slightly more than the earlier Accord. Inflation adjustments, which are based on price changes for corresponding models, thus overstate the increase in the cost of car ownership, thereby causing per capita GDP to understate the corresponding increase in our standard of living.

Quality changes are not always positive, of course. For example, if you had a question about your health insurance in 1998, you could talk to a real person; today, you are likely to find yourself in an endless phone loop. On balance, however, most consumers would probably prefer to choose from today's overall menu of goods and services than from 1998's.

Inflation adjustments may introduce further bias if people rearrange their spending patterns when prices rise unevenly. When beef prices rise twice as fast as chicken prices, for example, people typically eat less beef and more chicken. Because traditional inflation measures fail to take such adjustments fully into account, they overestimate the amount of inflation that has actually occurred. As in the case of failure to control adequately for quality changes, the effect is to cause per capita GDP growth to understate increases in the standard of living.

Liberals, for their part, have long objected that many expenditures included in GDP reflect reductions, not increases, in our standard of living. GDP also fails to include many aspects of life that clearly contribute to well-being. In a speech delivered forty years ago this week, the late Senator Robert F. Kennedy made these points eloquently:

Too much and too long, we seem to have surrendered community excellence and community values in the mere accumulation of material things. Our gross national product ... if we should judge America by that—counts air pollution and cigarette advertising, and ambulances to clear our highways of carnage. It counts special locks for our doors and the jails for those who break them. It counts the destruction of our redwoods and the loss of our natural wonder in chaotic sprawl. It counts napalm and the cost of a nuclear warhead, and armored cars for police who fight riots in our streets. It counts Whitman's rifle and Speck's knife, and the television programs which glorify violence in order to sell toys to our children.

Yet the gross national product does not allow for the health of our children, the quality of their education, or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages; the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor our courage; neither our wisdom nor our learning; neither our compassion nor our devotion to our country; it measures everything, in short, except that which makes life worthwhile. And it tells us everything about America except why we are proud that we are Americans.

GDP suffers from another big problem, one that challenges the very foundation of the presumed link between per capita GDP and economic welfare. I refer to the assumption, traditional in economic models, that absolute income levels are the primary determinant of individual well-being.

This assumption is contradicted by consistent survey findings that when everyone's income grows at about the same rate, average happiness levels remain the same. Yet at any moment in time, the consistent pattern is that wealthy people are happier, on average, than poor people. These findings suggest that relative income is a much better predictor of well-being than absolute income.

In the three decades following World War II, the relationship between income distribution and welfare was not a big issue, because incomes were growing at about the same rate for all income groups. Since the mid-1970s, however, income growth has been confined almost entirely to top earners. Changes in per capita GDP, which track only changes in average income, are completely silent about the effects of this distributional shift.

When measuring the economic welfare of the typical family, the natural focus is on median, or 50<sup>th</sup> percentile, family earnings. Per capita GDP has grown by more than 85 percent since 1973, while median family earnings have grown by less than one-fifth that amount. Changing patterns of income growth have thus caused per capita GDP growth to vastly overstate the increase in the typical American family's standard of living during the past three decades.

Some economists have advanced an even stronger claim—that there is simply no link, in developed countries at least, between absolute spending and well-being. Recent work supports this claim with respect to expenditures in some domains—especially those in which the link between well-being and relative consumption is strongest. Beyond some point, for instance, when the rich spend more on larger mansions or more elaborate coming-of-age parties for their children, the apparent effect is merely to redefine what counts as adequate.

Top earners are not spending more because they are morally deficient. Having received not only the greatest income gains over the last three decades but also substantial tax cuts, they have been building larger houses simply because they have more money. Those houses have shifted the frame of reference for people with slightly

lower incomes, leading them to build larger as well. The resulting expenditure cascade has affected families at all income levels.

The median new house in the United States, for example, now has over 2,300 square feet, over 40 percent more than in 1979, even though real median family earnings have risen little since then. The problem is not that middle-income families are trying to “keep up with the Gateses.” Rather, these families feel pressure to spend beyond what they can comfortably afford because more expensive neighborhoods tend to have better schools. A family that spends less than its peers on housing must thus send its children to lower-quality schools. Yet no matter how intensively families bid for houses in better school districts, half of all children are destined to attend bottom-half schools. Similarly, when all spend more on interview suits, the same jobs go to the same applicants as before. For these reasons, it has become much more costly for middle-class families to achieve many basic goals.

In many other spending domains, however, greater levels of absolute income clearly promote well-being, even in the richest societies. Thus, the economist Benjamin Friedman has found that higher rates of GDP growth are associated with increased levels of social tolerance and public support for the economically disadvantaged. Richer countries also typically have cleaner environments and healthier populations than their poorer counterparts.

In sum, we have long known that per capita GDP is an imperfect index of economic welfare. But recent work suggests that it is especially uninformative when income inequality has been rising sharply, as it has been in recent decades. A society that aspires to improve needs a better measure of what counts as progress.