

How much can money buy happiness? Is the debate over for the Easterlin Paradox?

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In April last year, *The New York Times* published an article with the title 'Maybe Money Does Buy Happiness After All' (Leonhardt, 2008). A month later, the *Times* of London followed suit with, 'If you're richer, you're happier' (Finkelstein, 2008). As suggested by their titles, these articles reported that more money equals more happiness. The source for this assertion was a recent paper by two economists, Betsey Stevenson and Justin Wolfers (2008) who purport to refute the long-standing claim, commonly attributed to Richard Easterlin, that money does not 'buy' happiness.

In this essay I consider the validity of the journalists' reports by reviewing the findings of Stevenson and Wolfers. If indeed their statements have been too bold, I offer potential explanations for the diminishing effect of national economy on happiness. I expand with a wider framework of well-being by including the economy's effects on health. This is in light of the fact that both health and happiness are affected by the economic and social environment in similar ways. Thus, an examination of the literature on health and its shared social determinants with happiness may help to settle the dispute.

The Easterlin Paradox

Easterlin observed that since the Second World War, despite getting richer, many countries had not shown improvements in average levels of happiness. This has since been termed the 'Easterlin Paradox'. Figure 1 below illustrates the paradox in the USA. From left to right the lighter line showing income per person rises steadily from 1946 to 1996. The proportion of Americans reporting that they are 'very happy' in the General Social Survey followed the trend in GDP per head up to the late 1950s, but from then on, happiness declined whilst average incomes continued to rise.

Figure 1 Income and happiness in the USA

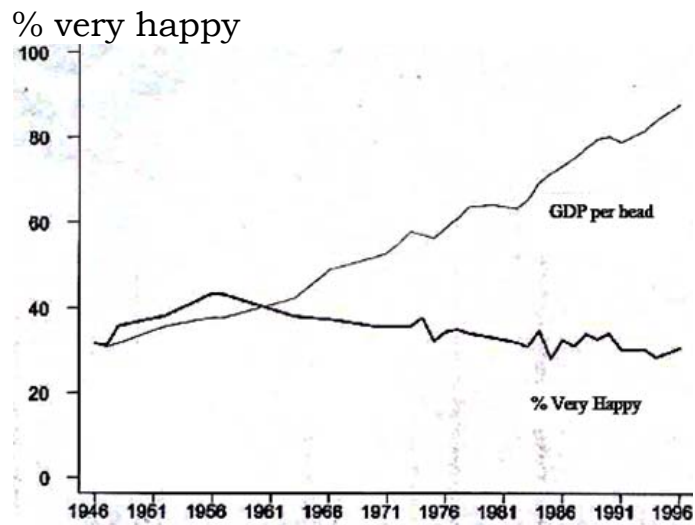


Figure taken from Layard (2005)
GDP = Gross Domestic Product, which is the total value of the annual amount of goods and services produced within a country, regardless of whether they are produced by its citizens.

Reflecting on his observations, Easterlin discussed how economists have long considered 'social welfare' and 'economic welfare' to be two separate concepts. He was unsatisfied with the early twentieth century economist, Arthur Pigou's notion that economic welfare changes in concert with social welfare (Easterlin, 1974).

If we compare average levels of happiness between countries that have different average incomes, as shown in figure 2, a linear relationship is not apparent. Instead, among poorer countries, gains in income are accompanied by dramatic increases in happiness, but among richer countries, higher incomes do not buy more happiness.

Figure 2 Across-country comparisons of happiness

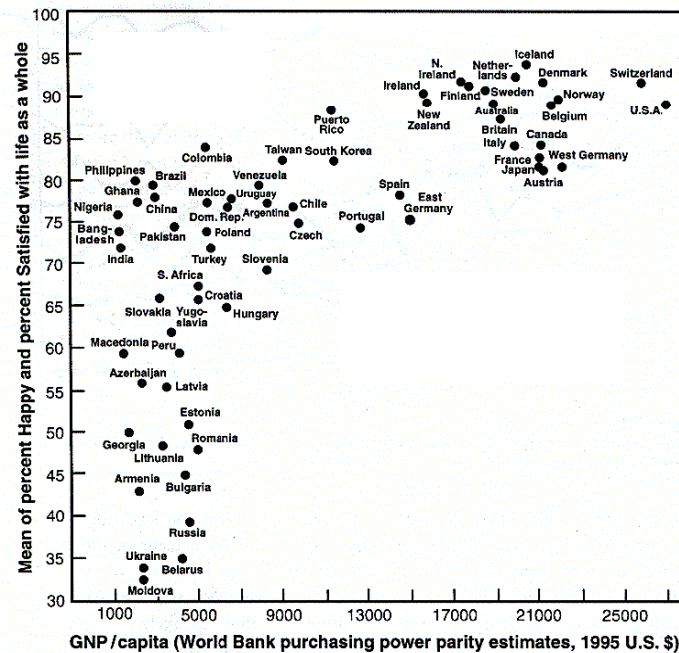


Figure taken from Inglehart and Klingemann (2000)

GNP = Gross National Product, which is the total value of the annual amount of goods and services produced by citizens of a country, regardless of whether they reside within the country.

The point at which average income no longer affects happiness has been termed the point of ‘satiation’. The constellation of points to the right of the \$15,000 mark suggest that the association between money and happiness does weaken, if not become uncoupled, thus contradicting Pigou’s notion.

In contrast, happiness *within* countries is invariably associated with people’s individual income as exemplified by the General Social Survey data in the US analysed by Stevenson and Wolfers. So the way in which individual income is related to happiness is different from the way average income affects average happiness. The two processes have commonly been conflated; it has been thought that the ‘invisible hand’ of economic growth creates happiness for the community, as well as the individual.

Happiness is a universal feeling that all human beings have the potential to experience. It works on a single dimension (Layard, 2005),

and its simplicity ought to make it easy to measure: we know whether we are happy or not. But questions about happiness in surveys have elicited subjective responses.

Interestingly, objective measures of well-being demonstrate the same paradox. The relationships of income to health within and between countries mirror the relationships of income to happiness. Figure 3 demonstrates the similarity comparing countries.

Figure 3 Across-country comparisons of life expectancy

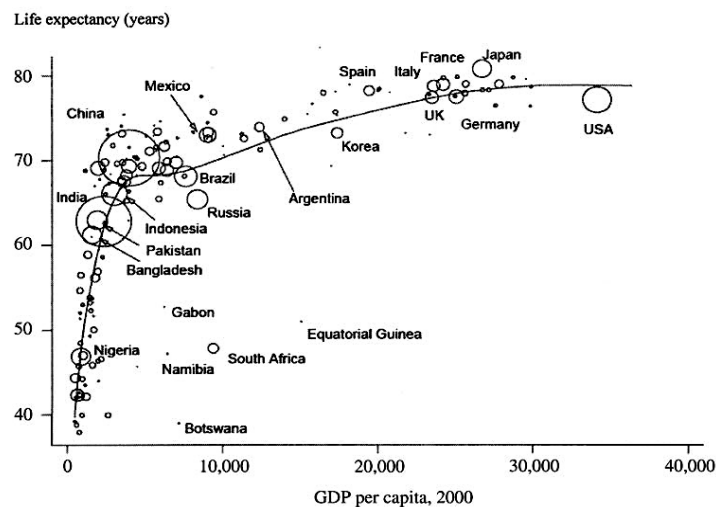


Figure taken from Deaton (2004)
The size of the circles represent the population size of the countries

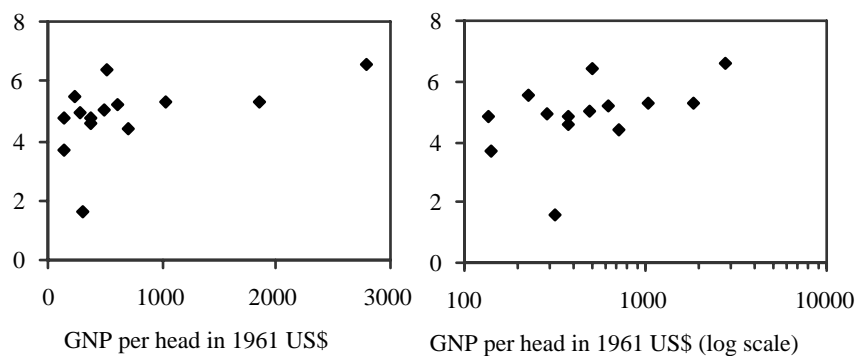
Can this line of research help to inform the debate over the Easterlin Paradox? I think it can, but first I discuss whether the relationship between money and happiness had been as clearly and conclusively characterised by the recent paper by Stevenson and Wolfers, as suggested by the newspaper articles.

Stevenson and Wolfers themselves describe their work as a ‘re-assessment of the “stylized facts”’ that were presented earlier by Easterlin (Easterlin, 1974). They repeatedly find a positive linear relationship between average incomes and average levels of happiness among different countries.

An important difference between Easterlin’s analysis and the analyses presented by Stevenson and Wolfers is the scale on which they

measure average income: Easterlin generally uses an absolute scale, Stevenson and Wolfers use the log of average income. Figure 4 below show the data that Easterlin included in his work on happiness (Easterlin, 1974). The left graph shows the data plotted on an absolute scale, whereas the right graph shows how Stevenson and Wolfers analysed the same data, with GNP transformed onto a log scale. Using the absolute scale, a curved line best fits the data, whilst using the log scale a straight line is a better fit. But whichever way you look at it, increasing average incomes brings diminishing returns of happiness.

Figure 4 Comparisons between countries' levels of happiness as affected by GNP, on an absolute and a log scale.



Data from tables in Easterlin (1974).

The question used for the rating of personal happiness is based on a visual scale from 0 to 10.

Looking at one particular time-point does not reliably allow predictions on how happiness is affected by money, so Stevenson and Wolfers looked at *changes* in both happiness and income in 101 countries from 1996 to 2000. For 67 of these countries happiness and income changed in the same direction, but in the other 34, either happiness increased whilst income decreased or happiness declined whilst income went up.

These results throw doubt upon the claims reported by the newspapers that the link between money and happiness had been finally and clearly demonstrated. There is still much to explore to find reasons why economic growth loses its influence on happiness for richer countries, and to further develop a framework which helps us understand the influence of other aspects of economy and social organisation on happiness and related constructs of well-being.

Explaining the paradox

Looking at differences in happiness *within* countries, which I mentioned is closely related to individual income, the economist Richard Layard focuses on people's natural habit of comparing themselves with others. His interest in happiness is influenced by the well-known Victorian philosopher, Jeremy Bentham. Bentham's philosophy, put simply, is that the best society is one where the citizens are happiest. Layard argues that to approach such a level of societal well-being, individuals would have to value the happiness of everyone equally - a virtue incompatible with constant peer comparison.

We each associate ourselves with a certain group of people, our 'reference group', against which we assess our own success through material resources and status. Easterlin calls this type of social comparison a 'peer group influence' (Easterlin, 1974). He suggests that peer group influences are less dispersed than income. So those at the top will be more likely to include poorer people among their reference group, and those at the bottom are more likely to compare themselves with a reference group that includes people who are richer than them. According to Layard, this is what creates the persistent income gradient of happiness within countries. Hence the incompatibility of cross-status comparison in unequal societies with placing equal value on every person's happiness.

Layard extends this idea, pointing out that for the same amount of money, happiness increases more for poorer than richer individuals. Indeed Stevenson and Wolfer's paper supports this, since their within-country analyses of the USA show log linear relationships between income and happiness. Thus, Layard suggests that, without changing national income, redistributing money from rich to poor would increase the national level of happiness. A proposal that would satisfy his moral obligation on equality of happiness, and one that according to him, would come close to Bentham's ideal of a happy society. So does inequality really have a role to play? Looking at three different measures of income inequality within the United States, the country was more unequal in 1996 compared to 1979 (Burtless, 1999). In the context of figure 1, this is a possible explanation for why the rate of happiness did not rise in that period of growth.

So within countries, individuals may be able to metaphorically 'buy' happiness, at least relative happiness to others in their country. However, especially for rich countries, happiness cannot just be 'bought' for the whole population through economic growth. To explain

this, it helps to look at other aspects of the economy, such as inequality, and extending the literature we consult outside pure happiness.

Outside the happiness surveys

Economic growth is often, but by no means always, accompanied by economic inequality. Apart from investing in smaller gains to happiness by focusing on the wealth of the rich, economic inequality also has the effect of increasing social divisions. More unequal nations not only have a wider distribution of reference groups for comparison, but also have more distinct class systems. Richard Wilkinson attributes the uncoupling of national income and national health and well-being to the effects of these divisions that are brought on by inequality's 'stretching' effect on social strata (Wilkinson, 2005).

Many of the things related to inequality that affect health are much the same as those that influence happiness. Wilkinson takes a generalised approach pointing out that 'status', pronounced by inequality, and 'connectedness' or 'social affiliation', degraded by inequality, affect health. These factors, he links to health along with a group of social epidemiologists, through pathways of chronic stress and health-related behaviours (Brunner, 1997, Wilkinson, 2004, Marmot, 2006, Brunner, 2007). Layard lists 'The Big Seven' factors that he proposes determines happiness. Health is one. 'Family relationships' and 'community and friends' are two that approximate connectedness or social affiliation. Three more, 'financial situation', 'work' and 'personal freedom' fit closely with status. The last of the seven is 'personal values'. Wilkinson's simplified determinants of health linked to inequality overlap very well with Layard's conceptualisation of the major determinants of happiness.

The detailed untangling of the broad hypothesis that inequality can have such profound effects through many intermediaries is beyond the scope of this essay, but figure 5 illustrates just how strongly associated income inequality can be on health. As you move to the right of the bottom axis countries become more unequal, as measured by the Gini coefficient. In the same direction, life expectancies show a downward trend.

Figure 5 Across-country comparisons of life expectancy

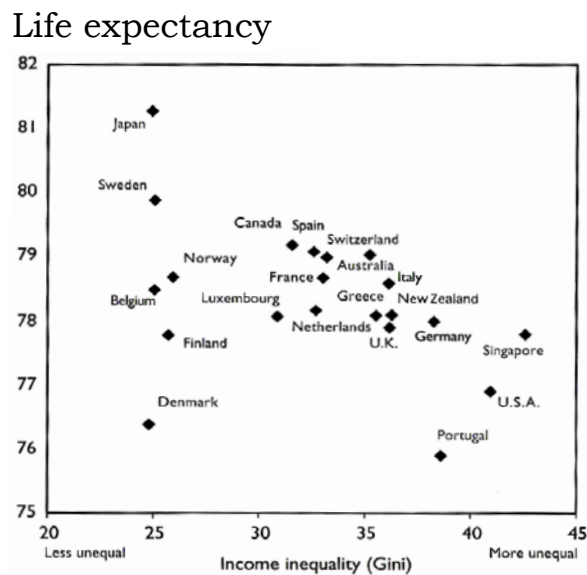


Figure taken from Wilkinson (2005)

Do social divisions created by inequality mediate this impact on health? Wilkinson and Layard agree that material divisions marked by income act as a symbol of how one is valued in society. How devalued one feels can have a direct consequence on how stressed one becomes, and therefore how the body’s physiology changes in response to chronic stress. Studies of non-human primates have shown a biological response to hierarchy. In baboons, living in hierarchical social groups, those at the bottom live with a higher load of the stress-hormone cortisol in their blood (Sapolsky, 2004). An experimental study with monkeys that artificially create hierarchy has gone so far as finding greater atherosclerosis risk in monkeys that have moved from dominance to become subordinate (Shively and Clarkson, 1994). Studies of the social hierarchy created by civil service grades in the Whitehall studies have shown a status-mediated distribution of the concentration of blood-clotting agents (Brunner and Marmot, 2006). These agents are released at higher levels in the blood as part of the stress response. More clotting agent circulating through the body has clear implications for cardiovascular health.

Chronic stress affects health in numerous ways, therefore its relationship with status is paramount. In his study of an old mining town in South Yorkshire, Simon Charlesworth et al (2004) quoted from a man of low social status on his feelings about existing at the bottom

of the social ladder. It illustrates the relationship between the psychology of stress and hierarchy.

What it is, it's a form of violence..., right, it's like a barrier sayin' "listen' low life don't even come near me! ...Wi' pay to get away from scum like you" ...stresses you, yer get exhausted... thi've got the right, the body the clothes, an' everythin', the confidence, thi' attitude, know what Ah mean... We [*sadly, voice drops*] an't got it, wi can't 'ave it. Wi' walk in like we' been beaten, ...draggin' ahr feet when we' walkin' in, ...yer like feel like yer want to hide...(Charlesworth et al., 2004)

As well as talking about stress, the man touches on Wilkinson's second concern, social interaction. There is a natural severing of social relationships that arises through defined social classing. But on top of that, the shame and humility of being devalued and feeling unimportant switches people into a state of defence. This increases people's loneliness, creates mistrust and erodes 'social capital'.

Ichiro Kawachi et al (1997) clearly demonstrate a relationship between social capital (as measured by trust) and death rates within the states of the US. The way in which mistrust leads to higher death rates is likely to be related to the processes that lead from low social status to bad health, via the stress response and health behaviours. Indeed, in non-human primates, a study that compared different social strategies adopted by the male leaders found that those that adopted more sociable behaviour had reduced cortisol levels (Sapolsky, 2004).

Wilkinson likens social status and social interaction to two sides of the same coin (Wilkinson, 2004, Wilkinson, 2005). He postulates that human societies adapt one of two strategies, depending on the social environment. In a highly divided hierarchical system, we exist with lower levels of trust and lower social connectivity. The system is dominated by competition between all individuals, and violence is more common. In an egalitarian system where class differences are negligible, we can live together with greater mutual respect and closer ties with the community. Where status dominates, social interaction dwindles, and vice-versa.

Conclusion

Observations of societies that are based solely on people's responses to surveys about happiness are limited by the subjective nature of the responses, and as Stevenson and Wolfers point out, differing interpretations of questions over time. Yet, the debate over the

Easterlin Paradox has been dominated by analyses of just these surveys. There is a wealth of data relating income to well-being beyond happiness, some of which I have discussed, but the economics literature seems to have been slower to incorporate them.

In 1974, Easterlin wrote

[E]conomic growth does not raise a society to some ultimate state of plenty. Rather, the growth process itself engenders ever-growing wants that lead it ever forward.

By 2004, his tone seems to have shifted,

[E]conomic growth is a carrier of a material culture of its own that ensures that humankind is forever ensnared in the pursuit of more and more economic goods.

(Easterlin, 2004)

The first statement almost has a sense of positive development, albeit economic. The second statement, written 30 years later, is a remark on the materialistic nature of people. It has a subtle moralistic tone. Certainly, in light of the broadly shared framework of health and happiness, and the relationship that they both have with social justice (Powers and Faden, 2006 pp. 80-87), the debate should have greater moral importance. Both people's quality of life, and their longevity are affected by the same pivot: relative rather than absolute income.

On the brighter side, economic growth and equality are not mutually exclusive states for a society. However, in order to promote both, policy-makers must be better informed about the limitations of economic growth for increasing health and happiness.

References

Brunner, E., 1997. Stress and the biology of inequality. *BMJ*, 314, 1472-6.

Brunner, E., 2007. Biology and health inequality. *PLoS Biol*, 5, e267.

- Brunner, E. & Marmot, M., 2006. Social organization, stress, and health. In R.G. Wilkinson & M.G. Marmot (eds.) *Social determinants of health*. 2nd ed. Oxford: Oxford University Press.
- Burtless, G., 1999. Effects of growing wage disparities and changing family composition on the US income distribution. *European Economic Review*, 43, 853-865.
- Charlesworth, S.J., Gilfillan, P. & Wilkinson, R., 2004. Living inferiority. *Br Med Bull*, 69, 49-60.
- Deaton, A., 2004. Health in an age of Globalization. *Bookings Trade Forum*, 83-130.
- Easterlin, R., 1974. Does Economic Growth Improve the Human Lot? Some Empirical Evidence. In P.A. David & M.W. Reder (eds.) *Nations and households in economic growth : essays in honor of Moses Abramovitz*. New York ; London: Academic Press, xv, 411 p.
- Easterlin, R.A., 2004. *The reluctant economist: perspectives on economics, economic history and demography*. Cambridge, UK; New York: Cambridge University Press.
- Finkelstein, D. 2008. If you're richer, you're happier *The Times*, May 14 2008.
- Inglehart, R. & Klingemann, H.-D., 2000. Genes, culture, democracy and happiness. In E. Diener & E.M. Suh (eds.) *Culture and subjective well-being*. Cambridge, Mass. ; London: MIT Press, [ix], 355 p.
- Kawachi, I., Kennedy, B.P., Lochner, K. & Prothrow-Stith, D., 1997. Social capital, income inequality, and mortality. *Am J Public Health*, 87, 1491-8.
- Layard, P.R.G., 2005. *Happiness: lessons from a new science*. London: Allen Lane.
- Leonhardt, D. 2008. Maybe Money Does Buy Happiness After All. *The New York Times*, April 16th 2008.
- Marmot, M., 2006. Health in an unequal world: social circumstances, biology and disease. *Clin Med*, 6, 559-72.
- Powers, M. & Faden, R., 2006. *Social justice: the moral foundations of public health and health policy*. New York; Oxford: Oxford University Press.
- Sapolsky, R.M., 2004. *Why zebras don't get ulcers*, 3rd ed. New York: Henry Holt.
- Shively, C.A. & Clarkson, T.B., 1994. Social status and coronary artery atherosclerosis in female monkeys. *Arterioscler Thromb*, 14, 721-6.

Stevenson, B. & Wolfers, J., 2008. *Economic Growth and Subjective Well-Being: Reassessing the Easterlin Paradox*. SSRN.

Wilkinson, R., 2004. Why is Violence More Common Where Inequality is Greater? *Ann N Y Acad Sci*, 1036, 1-12.

Wilkinson, R., 2005. *The impact of inequality: how to make sick societies healthier*. London: Routledge.

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