

Review of MacKerron, G. *Happiness Economics from 35,000 feet*.

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This survey on happiness economics by George MacKerron is certainly one of the most complete surveys on this topic. The author touches aspects that I feel previous surveys do not develop with the same depth. In what follows I will discuss four of these aspects, by focussing on the challenges ahead and new avenues for research.

Measurement of well-being

A lot can be done to improve the way happiness, well-being and life satisfaction are measured. George MacKerron's survey refers to the Day Reconstruction Method (DRM) and the Experience Sampling Method (ESM) as being less prone to bias, such as retrospective reporting bias. The employment of these new survey methods is more than welcome as most of what we know about well-being is coming from household surveys (such as the US General Social Survey, the German Socio-Economic Panel, the British Household Panel Survey, the Eurobarometer, etc.) where biases, such as question ordering effects, could be pervasive.

Ordering effects can be huge, as documented for example in Deaton (2011), who shows that the inclusion of questions regarding politics have the largest (negative) impact on stress in the daily Gallup survey. This is very impressive since the period analysed by Deaton includes, for example, the Great Recession and the election of Obama as US President! Papers using subjective well-being data from the surveys mentioned above, rarely account for order effects (and other survey bias)¹. This should invite us all, on one hand, to be more cautious when interpreting our findings, and on the other, to adopt and receive with favour new approaches based on DRM and ESM.

On a positive note, I would like to stress that it is very reassuring that some basic results of the literature are robust across different surveys and countries (e.g., the negative effect of unemployment or pollution, to name just two).

Measuring well-being includes comparing subjective measures with objective and biological measures, such as heart rate. More can be done in this area and much of this will improve our

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¹ Notable exceptions are two papers by Stevenson and Wolfers (2008 and 2009) who attempt to account for order effects in the US General Social Survey.

understanding of well-being. For example, Daly et al. (2010) found that (objective) cardiovascular activity in day-to-day settings is related to negative affect as assessed using the DRM.²

It is also very important the distinction between different concepts of well-being. I believe that MacKerron's survey correctly identifies some relevant points. How interchangeably are concepts such as happiness and life satisfaction? Maybe separate analysis of these might shed light on some paradoxes and findings, including the most famous one: the Easterlin Paradox. For example, in a recent paper, Kahneman and Deaton analyse 450,000 responses and show that income buys people's life evaluations (i.e., their broad view of life)³, while it does not buy their daily emotional well-being, after a threshold (Kahneman and Deaton, 2010).⁴

Interpersonal comparability

The issue of measurement is very much linked to interpersonal comparability of self reports of happiness or life satisfaction. Some evidences exist that subjective well-being measures are valid in general but we have to recognise that there is no empirical test that will prove that comparability is assured when using the most popular surveys. As discussed in the paper, this is a much bigger problem in cross-country cross-sectional studies. Obviously, it is less of a problem in a panel dataset, but only under the assumption that scale bias or reporting styles are time invariant. How much time invariant are these measures? We just do not know enough. The longer the time series component is and the less comparable subjective measures are over time, even within the same country. This is an aspect that will be more relevant for the future as the number of time periods increases.

Interpersonal comparability could be enhanced including anchoring vignettes, as it is emphasised in the paper. Anchoring vignettes are not proposed as a panacea here. But it is certainly fruitful to compare the results with and without vignettes. The real issue is that anchoring vignettes are not used in any of the common happiness surveys.⁵ A number of studies using self reported measures, including happiness, satisfaction with income, work disability and health show unambiguously that results can change considerably!⁶

Causality, endogeneity, sorting

Most of the literature on happiness economics does not make causal claims, acknowledging endogeneity problems inherent in the nature of the data. This is well discussed in this survey. The endogeneity issue is more pronounced for some sub-areas of research, such as environment and happiness. As people choose where to live, sorting models and/or better data are needed to better disentangle that relationship (see e.g., Luechinger, 2009; Levinson, 2009). The environment and happiness literature uses the ratio between the marginal effect of income and the marginal effect on environmental variable to compute trade-offs that can be thought as willingness to pay measures. MacKerron surveys this in his paper too. Evidently, the challenges ahead consist of improving these

² This result confirms Blanchflower and Oswald (2008) who found a correlation between self-reported hypertension and happiness in a cross-country analysis.

³ The same percentage increase in income has the same effect on life evaluation for rich and poor.

⁴ They also find that evaluation of life and emotional well-being correlates differently with a number of other variables: education is more closely related with life evaluation, while health is more strongly associated with daily emotions.

⁵ To my knowledge only SHARE (Survey of Health, Ageing and Retirement in Europe) includes vignettes on happiness, but only for the 2006 wave.

⁶ In addition to the work cited by MacKerron in his survey, Angelini et al. (2011), I would add as particularly interesting Kapteyn et al. (2011), Kapteyn et al. (2007), Angelini et al. (2011a) on work disabilities and Angelini et al. (2011b) on the life satisfaction of the elderly.

welfare measurements by attenuating the biases coming from both the coefficient on income and environmental variable.

I share the view of the author of the survey that natural experiments are difficult to identify, especially for some research questions, such as the income-happiness relationship.⁷ However, policy changes could be more easily identified and their effects on subjective well-being could be analysed using diff-and-diff type of analysis *a lá* Metcalfe et al (2011). I feel that this line of research deserves more attention.

New Avenues for Research

In this report I have highlighted some ideas and challenges that I think will be useful for the future research agenda in this area. I hope that some of these ideas add to MacKerron's survey. These ideas include better measurements, better surveys and better identification strategies.

Other avenues for future research include bridging happiness research with other literatures, for example, behavioural economics and behavioural finance.

Happiness economics (and the subjective well-being literature in general) uses life evaluation or emotional well-being as dependent variable, assuming that these are utility proxies. This causality is reversed in behavioural finance, which investigates the effects of emotions on investment decision, i.e., self reported mood-like variables are thought as independent variables.

Think about the relationship between stock returns and mood/happiness/subjective well-being.

A happiness economist would write the equation as:

$$h = \alpha + \beta(\text{stock returns}) + \text{controls} + \varepsilon,$$

where h is a self reported measure of well-being, and he would investigate the impact of stock returns (wealth?) on happiness.

A behavioural economist would rather write the equation the other way around:

$$\text{Stock returns} = \alpha + \beta(h) + \text{controls} + \varepsilon$$

Preliminary results of a paper I am co-authoring with Alberto Montagnoli at the University of Stirling suggest that self-reported daily mood in US affects stock returns, and not the other way around, confirming the behavioural finance view (Montagnoli and Moro, 2011).⁸ This line of research challenge us to better understand reverse causality issues as well.

⁷ A recent paper uses the instrumental variable approach to identify the causal relationship between income and happiness and concludes that most of the association between income and happiness is causal (Pischke, 2011). Which is very good news!

⁸ Evidently, this research questions may tie with the above discussion of different concepts of well-being.

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