

**Institution: University of Warwick** 

Unit of Assessment: 18 – Economics and Econometrics

Title of case study: The Economics of Happiness and Well-Being

# 1. Summary of the impact (indicative maximum 100 words)

Professor Andrew Oswald is a pioneer in the study of the economics of happiness and well-being, demonstrating that employment, gender, age, and bereavement have a significant impact on happiness and giving form and substance to measures that many consider to have been lacking in modern governance. Oswald's research has shaped public attitudes and understanding about how both personal and aggregate economic outcomes influence individual happiness and has driven policy makers to consider happiness and well-being as legitimate policy goals in the UK and abroad.

# 2. Underpinning research (indicative maximum 500 words)

Oswald broke with convention by showing that there is an alternative to income as a blunt measure of utility, well-being, and life satisfaction. With his innovative and sometimes provocative research, Oswald turned economists' attention to people's happiness, correlating it with personal characteristics (e.g. age, absolute income, relative income), macroeconomic variables (e.g. inflation and unemployment), and observable measures of quality of life. In so doing, he established himself as one of the world's leading researchers on the economics of happiness and well-being, and highlighted the shortcomings of Gross Domestic Product (GDP) as a measure of economic and social well-being.

Clark and Oswald (1996, *JPubE*) produced the first microeconometric evidence that people's well-being depends on their *relative* rather than absolute income. Data from a sample of 5,000 British employees showed that their satisfaction was weakly correlated with their absolute pay but strongly correlated with their relative pay.

Oswald (1997, *EJ*) established Oswald as a leading scholar on the measurement of happiness and its correlation with more conventional measures of economic well-being. In this thought-provoking paper, he described the patterns in modern happiness data and challenged the assumption that rising productivity and GDP necessarily imply that society is better off. He found that happiness appeared to be increasing much more slowly over time than income in both the US and Europe, and that happiness correlated positively with income and marriage, and with being a woman, white, well-educated, self-employed, retired, or a homemaker. It also established for the first time that an individual's happiness over a lifetime is U-shaped and that happiness shows a powerful negative correlation with unemployment.

Di Tella, MacCulloch, and Oswald (2001, *AER*; 2003, *REStat*) established the sub-field of the macroeconomics of happiness. This was the first research into the link between people's self-reports of perceived happiness and macroeconomic variables such as unemployment and inflation. These articles took data on approximately 300,000 randomly sampled workers and showed that – after controlling for individual characteristics, country fixed effects, and year dummies – the misery index (equal to inflation plus unemployment) underweights the well-being costs of unemployment: when times are bad, people are typically unhappier than one would expect. The work also demonstrated the link between unemployment-benefit generosity and national happiness, an issue that continues to resonate in the aftermath of the 2008 financial crisis.

Blanchflower and Oswald (2004, *JPubE*) examined historical annual data on a range of well-being indicators for Great Britain and the USA and showed that the structure of life satisfaction equations is almost identical across the countries. It also suggested a method to place a dollar value on the happiness consequences of life events like the death of a spouse.



A final article, by Oswald and Wu (2010, *Science*), is notable for two reasons. First, using data on more than one million Americans, it demonstrated that subjective measures of well-being correlate well with objective measures of quality of life based on the longstanding economic theory of compensating differentials and spatial arbitrage. Second and unusually for economics research, it appeared in *Science* and thus crossed the boundary from economics research (narrowly conceived) into the broader scientific community.

# 3. References to the research (indicative maximum of six references)

#### The research:

- 1. Satisfaction and Comparison Income (with A. E. Clark), *Journal of Public Economics*, 1996, 61, pp 359-381, DOI: http://dx.doi.org/10.1016/0047-2727(95)01564-7.
- 2. Happiness and Economic Performance, *Economic Journal*, 1997, 107, pp 1815-1831, DOI: http://dx.doi.org/ 10.1111/j.1468-0297.1997.tb00085.x.
- 3. Preferences over Inflation and Unemployment: Evidence from Surveys of Happiness (with R. Di Tella and R. MacCulloch), *American Economic Review*, March 2001, 91, pp 335-341, DOI: <a href="http://dx.doi.org/10.1257/aer.91.1.335">http://dx.doi.org/10.1257/aer.91.1.335</a>.
- 4. The Macroeconomics of Happiness (with R. Di Tella and R. MacCulloch), *Review of Economics and Statistics*, 2003, v85, pp 809-827, DOI: <a href="http://dx.doi.org/10.1162/003465303772815745">http://dx.doi.org/10.1162/003465303772815745</a>.
- 5. Well-being over Time in Britain and the USA (with D. Blanchflower), *Journal of Public Economics*, 2004, v88, pp 1359-1386, DOI: <a href="http://dx.doi.org/10.1016/S0047-2727(02)00168-8">http://dx.doi.org/10.1016/S0047-2727(02)00168-8</a>.
- 6. Objective Confirmation of Subjective Measures of Human Well-being: Evidence from the USA (with S. Wu), *Science*, 2010, v327, pp 576-579, DOI: <a href="http://dx.doi.org/10.1126/science.1180606">http://dx.doi.org/10.1126/science.1180606</a>.

Evidence of research quality: These papers were published in some of the most highly ranked journals in economics and beyond. The *AER* is widely recognised as one of the top general-interest journals in economics and *Science* is widely recognised as one of the world's two top scientific journals. Each of the other journals (EJ, JPubE, and REStat) are viewed as 4\* journals within the economics discipline. Many of these articles are also among the most highly cited articles ever published within the journal. Articles (1) and (5) are the third-most and fifth-most-cited papers of all time in the *Journal of Public Economics* according to the Social Science Citation Index, Article (2) is the fifth-most-cited article published in the *Economic Journal* since 1990, and Articles (3) and (4) are also highly cited.

# **4. Details of the impact** (indicative maximum 750 words)

Professor Oswald's research has had impacts on both public policy and on public understanding, both in the UK and abroad.

Oswald's public policy impact was reflected in the Office of National Statistics' (ONS) 2010 launch of the Measuring National Well-being Programme. Oswald was active in this initiative, presenting to ONS staff and serving on the ONS National Well-being Advisory Forum. Lord Gus O'Donnell, UK Cabinet Secretary from 2005-2011, reflected, "Oswald's research into happiness helped show that serious and important policy conclusions flowed from understanding the level and determinants of people's subjective well-being. It helped me directly in arguing the case for getting the ONS to start measuring well-being. Now that we have leaders from David Cameron to Ben Bernanke arguing that well-being is the ultimate goal of policy, it is clear that the pioneers like Andrew have been very effective in getting across the implications of their research" (O'Donnell (2013)).

Ewen McKinnon, from the Analysis and Insights team at the Cabinet Office, stated "I work on national well-being policy across government... We very much value [Oswald's] work, ...



particularly his approach analysing well-being against bio-markers..., his academic leadership in this area, and the way he translates this for policy makers" (McKinnon (2013)). Stephen Aldridge, Director for Analysis and Innovation in the Department of Communities and Local Government (DCLG), added "Professor Oswald's work has been crucial ... in explaining the key drivers of happiness and well-being, both in general and for particular groups, such as the elderly, in both the UK and other countries" (Aldridge (2013)).

Internationally, an early and prominent effort to better measure social welfare was the Stiglitz Commission on the Measurement of Social and Economic Progress (Stiglitz, Sen, Fitoussi (2009), or SSF), initiated by President Nicholas Sarkozy. Oswald was a member of the Commission, which concluded that both objective and subjective measures of well-being are important and should be analysed. Oswald's journal articles are referenced as early, fundamental research throughout the Stiglitz Commission report.

Dr Marco Mira d'Ercole, OECD economist and rapporteur of the SSF quality of life chapters, concluded, "The... SSF Commission proved to be extremely influential in policy discussions, moving the issue of measuring performance beyond GDP from academic circles to the policy field. ... There is today an established international agenda on measuring performance beyond GDP that simply did not exist in 2008. Andrew played an important role in articulating the implications of [his and other subjective well-being] research for policy and statistical work" (Mira d'Ercole (2013)).

Dr Mira d'Ercole continued, "Beyond his role in the SSF Commission, Andrew is today one of the most prominent researchers using [subjective well-being] measures to value non-market outcomes." Oswald commented upon and is cited heavily in a number of OECD publications on measuring well-being (OECD (2011), OECD (2013)). "It would not be an overstatement to say that Andrew's work on valuing non-market outcomes is one of the most important contributions to this area in the last decade or so... It is also an area that has received significant attention from the UK Cabinet Strategy Office and other OECD government agencies" (Mira d'Ercole (2013)).

The UN has joined the movement with a 2011 declaration, a 2012 High Level Meeting on "Happiness and Well Being: Defining a New Economic Paradigm" at the United Nations headquarters in New York (UN (2012)), and the first "World Happiness Report" (Helliwell, Layard, and Sachs (2012)), a commissioned report published by the Earth Institute at the University of Columbia. Twelve of Oswald's papers were cited in the report, including articles (3), (4), and (5) above.

Second, Oswald's research has shaped public attitudes and understanding about how to augment measures of social progress beyond income to include individuals' happiness and self-reported wellbeing. Oswald's research has featured prominently and extensively in economics and mainstream media. The 2010 Christmas edition of The Economist, which sells more than one million copies worldwide, featured Oswald's well-being research on its cover (The Economist (2010a), The Economist (2010b), reporting especially on (5) above). For many years his work has also been reported in the New York Times, the Wall Street Journal, BBC's Today Programme and BBC Television News, and in leading foreign language publications. The newspaper database Factiva lists 1,047 newspaper articles in over 100 outlets across five continents referencing Professor Oswald's research on happiness and/or well-being (accessed 29 May, 2013), 478 since January 1, 2008 (Factiva (2012)).

Oswald's dissemination and advocacy of this research as well as his willingness to engage with media helped to generate and later sustain public interest in the impact of life events like unemployment, age, or divorce on happiness and the appropriate measure of social welfare Unlike much economic research, Oswald's work is particularly salient to people's individual circumstances. Millions have read, heard, or viewed media reports that allow them to relate their own happiness and/or well-being to that experienced by others like (or unlike) themselves. Aldridge (2013), agreed, "Oswald's research has been crucial in raising the profile of the happiness and wellbeing agenda."



## 5. Sources to corroborate the impact (indicative maximum of 10 references)

Director for Analysis and Innovation, Department for Communities and Local Government, email to Professor Gregory Crawford, Director of Research Impact, Department of Economics, University of Warwick, received 30 May 2013.

The Economist (2010a), Cover, URL: <a href="http://www.economist.com/printedition/2010-12-18">http://www.economist.com/printedition/2010-12-18</a>.

The Economist (2010b), "The U-bend of life", Dec 16th, 2010, URL: http://www.economist.com/node/17722567

Factiva (2012), URL: <a href="http://www.factiva.com">http://www.factiva.com</a> (subscription required). Search terms: "'andrew oswald' and happiness"

Helliwell, Layard, and Sachs, 2012, "World Happiness Report", pp 79-83, 98-101, 105, 139. URL: <a href="http://www.earthinstitute.columbia.edu/sitefiles/file/Sachs%20Writing/2012/World%20Happiness%2">http://www.earthinstitute.columbia.edu/sitefiles/file/Sachs%20Writing/2012/World%20Happiness%2</a> OReport.pdf.

Economist, Organisation for Economic Cooperation and Development and "rapporteur" for the Stiglitz, Sen, and Fitoussi (2009) Report, email to Professor Gregory Crawford, Director of Research Impact, Department of Economics, University of Warwick, received 23 May, 2013.

OECD (2011), How's Life? Measuring well-being, Organisation for Economic Cooperation and Development, URL: <a href="http://www.keepeek.com/Digital-Asset-Management/oecd/economics/how-s-life-2013">http://www.keepeek.com/Digital-Asset-Management/oecd/economics/how-s-life-2013</a> 9789264201392-en#page1

OECD (2013), OECD Guidelines on Measuring Subjective Well-being, Organisation for Economic Cooperation and Development, URL:

http://www.oecd.org/statistics/Guidelines%20on%20Measuring%20Subjective%20Well-being.pdf.

Analysis and Insights Team, Wellbeing and Civil Society Policy, Cabinet Office, email to Professor Gregory Crawford, Director of Research Impact, Department of Economics, University of Warwick, received 15 July 2013.

Former UK Cabinet Secretary, email to Professor Abhinay Muthoo, Head of Department, Department of Economics, University of Warwick, received 17 February, 2013.

Self, A., J. Thomas, and C. Randall, 2012, "Measuring National Well-being: Life in the UK, 2012," at p4, part of The Office of National Statistics (ONS), 2012, "Measuring National Well-being, First Annual Report on Measuring National Well-being." URL: <a href="http://www.ons.gov.uk/ons/rel/well-being/measuring-national-well-being/first-annual-report-on-measuring-national-well-being/index.html">http://www.ons.gov.uk/ons/rel/well-being/first-annual-report-on-measuring-national-well-being/index.html</a>

Stiglitz, Sen, Fitoussi (2009), "Report by the Commission on the Measurement of Economic Performance and Social Progress", pp 148, 150, 162, 198, 219-220, 224-25 URL: <a href="http://www.stiglitz-sen-fitoussi.fr/documents/rapport\_anglais.pdf">http://www.stiglitz-sen-fitoussi.fr/documents/rapport\_anglais.pdf</a>.

UK National Statistics, Societal Well-being, URL: <a href="http://www.statistics.gov.uk/hub/people-places/communities/societal-well-being/index.html">http://www.statistics.gov.uk/hub/people-places/communities/societal-well-being/index.html</a> (accessed 29 April, 2012).

UN (2012), Well-Being and Happiness: Defining a new economic paradigm, URL: http://www.2apr.gov.bt/.