



New Findings on Scottish Happiness and Well-being

David Bell

School of Management

University of Stirling

“The time is ripe for our measurement system to shift emphasis from measuring economic production to measuring people’s well-being”

“Measures of both objective and subjective well-being provide key information about people’s quality of life. Statistical offices should incorporate questions to capture people’s life evaluations, hedonic experiences and priorities in their own survey”

“Commission on the Measurement of Economic Performance and Social Progress”

Authors: Joseph Stiglitz, Amartya Sen for President Sarkozy



- “Wellbeing” now prominent in discussions of health improvement
- Seems to vaguely reference satisfaction with life
- Or specifically references *mental* well-being. This is a specifically health-related aspect of well-being that only references the lower tail of the distribution of well-being.
- Health and Wellbeing in Schools project
 - The project puts the emphasis on prevention of ill health, through promoting physical and *mental* wellbeing.
 - Health and Wellbeing Profiles
 - Objective indicators of communal welfare – labour market performance, crime, health
 - These do not directly relate to individual perception of their own life circumstances

- Classic survey question on subjective wellbeing (SWB)
 - How dissatisfied or satisfied are you with.....your life overall?
 - Scored 1-10, 1-7 etc
- Domains of subjective wellbeing:
 - Health, income of household, house/flat, spouse/partner, job, social life, amount of leisure time, use of leisure time
- Subjective wellbeing from GHQ Score:
 - concentration, loss of sleep, playing a useful role, capable of making decisions, unhappy or depressed
 - Summarised with Likert scale



Measurement of SWB

- Those who say they are happy:
 - are more likely to smile more
 - are more likely to be described as happy by their friends
- Measures of subjective wellbeing are good predictors of
 - Length of life
 - Coronary heart disease
 - Quitting a job
 - Absenteeism
 - Duration of unemployment
- These measures have been shown to be strongly related to:
 - Economic activity
 - Age (U-shape)
 - Marital status
 - Health status



Calibrating the “Costs” of Life Events

- Thought experiment
- What is the “cost” of ill-health?
- The change in income necessary to keep the individual at the same level of subjective well-being
- Can be calculated with the help of a little mathematics
- Clark and Oswald (International Journal of Epidemiology 2002)

- Using BHPS 1991-97
 - Employment to unemployment -£23,000
 - Married to widowed -£7000
 - Health excellent to health fair -£41,000



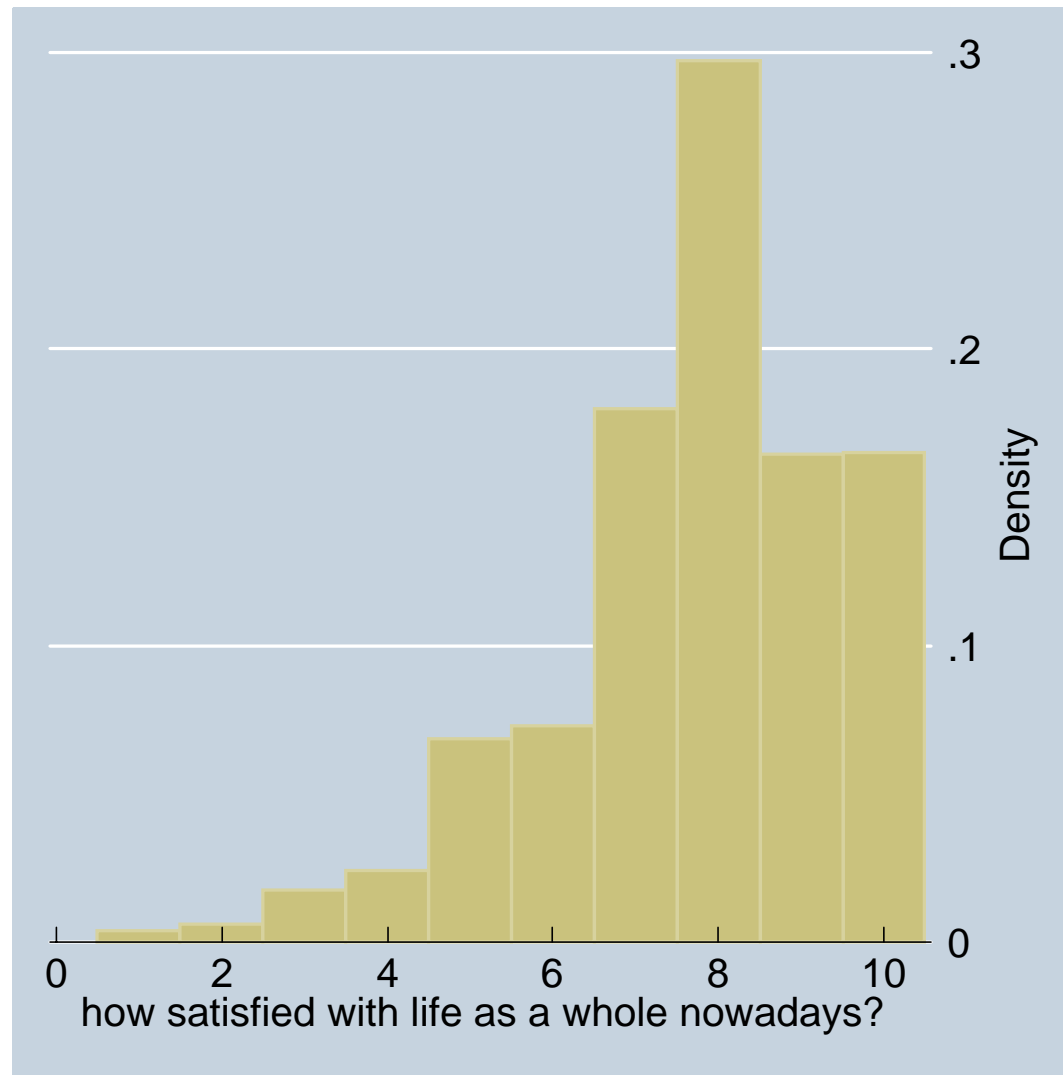
- Use the Scottish Health Survey (2008) to analyse well-being effects of living in deprived areas of Scotland
- Rather than using objective measures, the focus here is on individual's subjective evaluation of wellbeing, given the type of locality in which they live
- Can condition on other variables such as unemployment, income, health and marital status.
- Is there a further negative effect on wellbeing from living in a deprived area after controlling for these other influences?
- What is the approximate value of these negative effects?



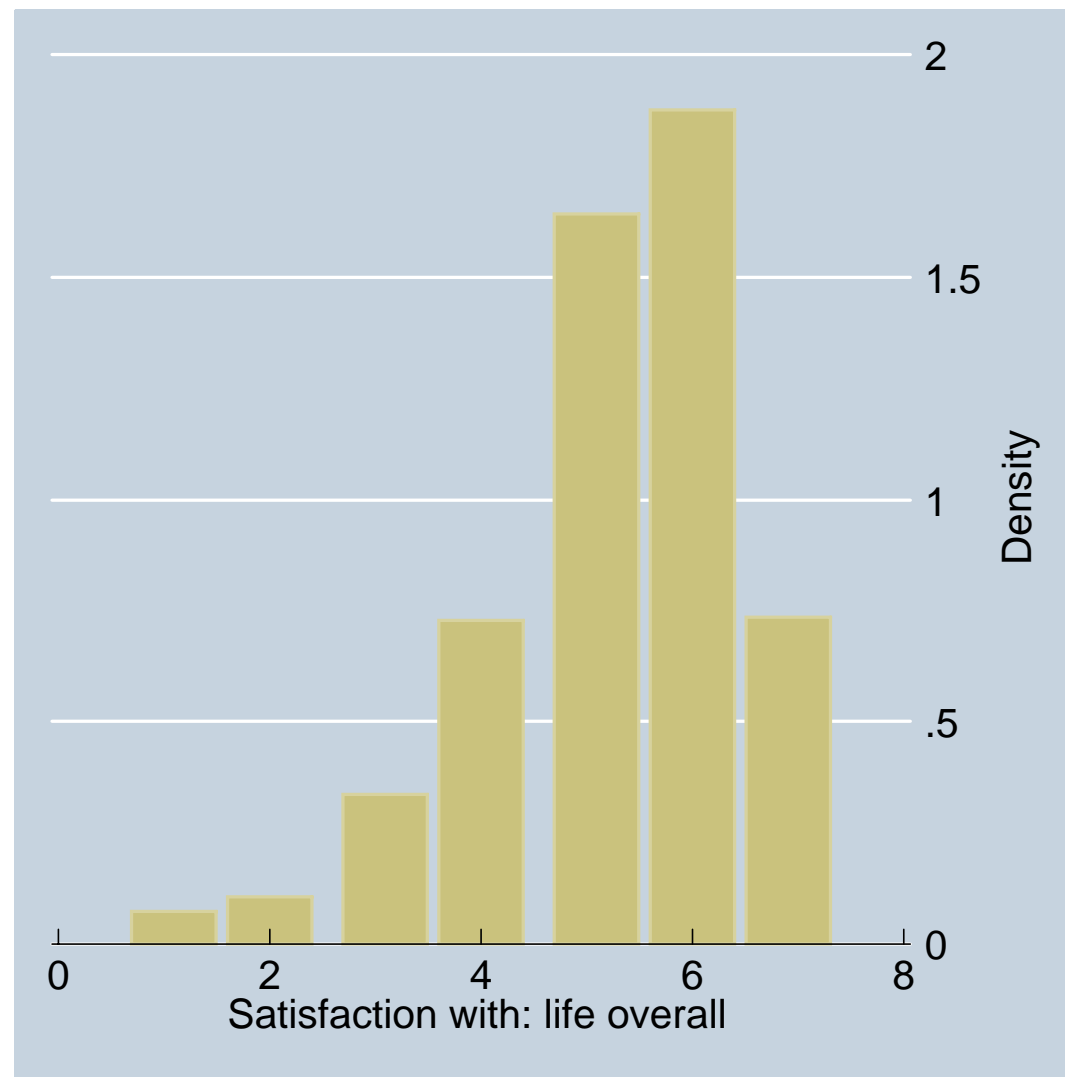
Scottish Health Survey 2008

- 5470 adults sampled between age 16 and age 93
- Questions on wellbeing and GHQ
- GHQ and SWB outcomes strongly positively related (t=19.7)
- More observations on SWB
- Also:
 - Income, marital status and economic activity
 - Large number of health measurements
 - Multiple deprivation (SIMD), rurality and health board

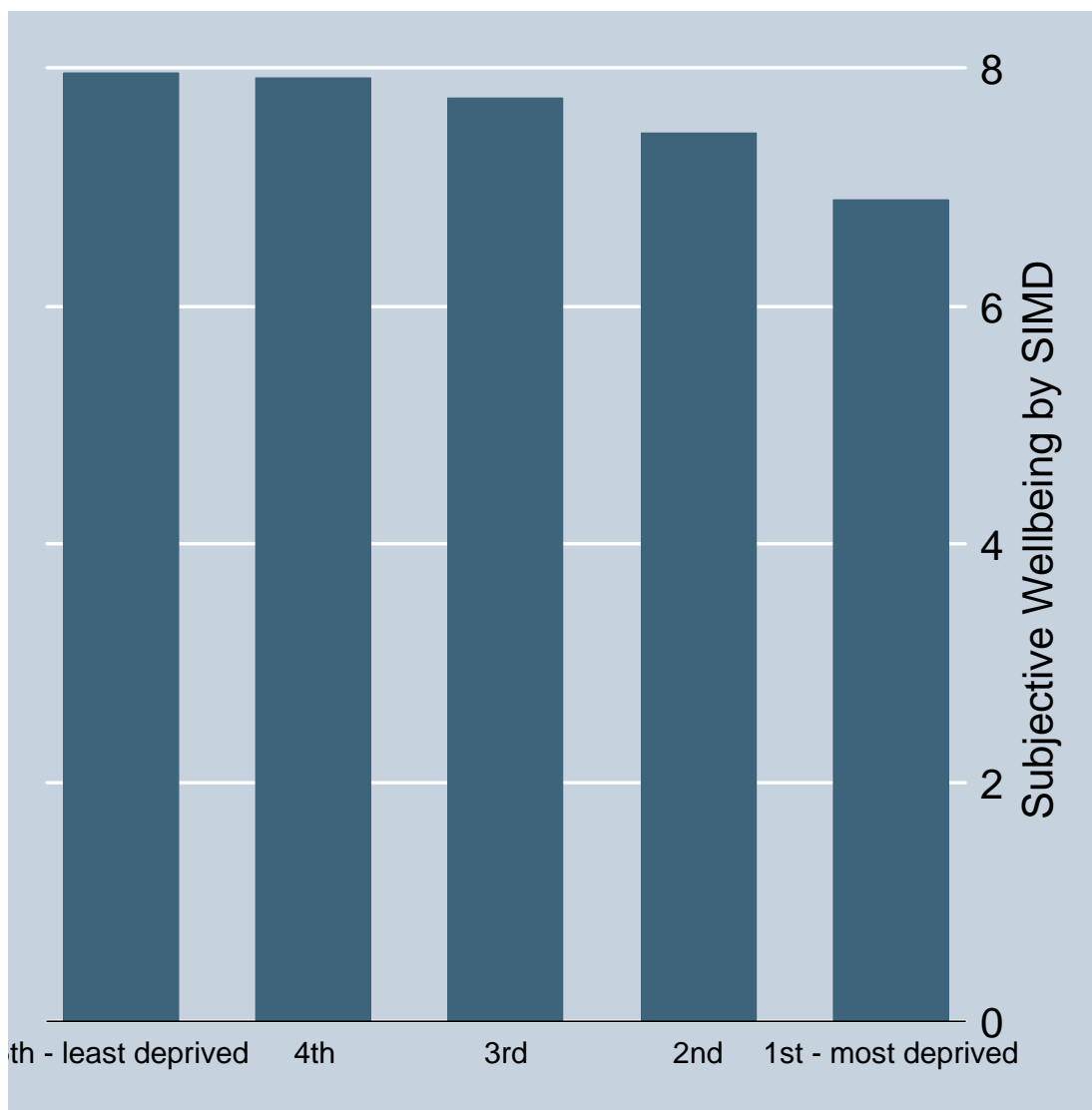
Distribution of SWB in Scotland SHS 2008



Distribution of SWB in Scotland BHPS 2008

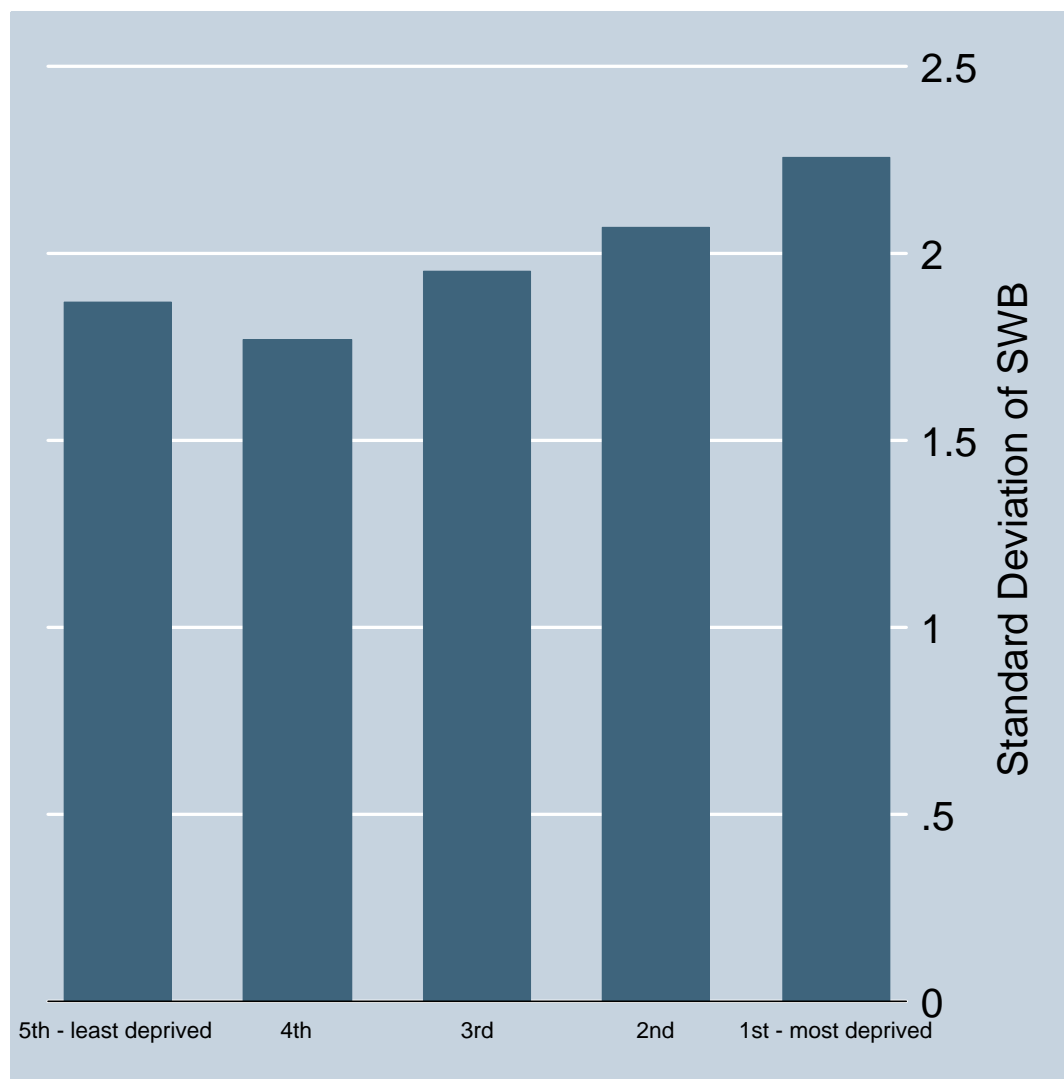


Mean SWB Score (out of 10), by SIMD Quintiles



Source SHS 2008

Spread of SWB Greater By SIMD Quintile



Determinants of SWB

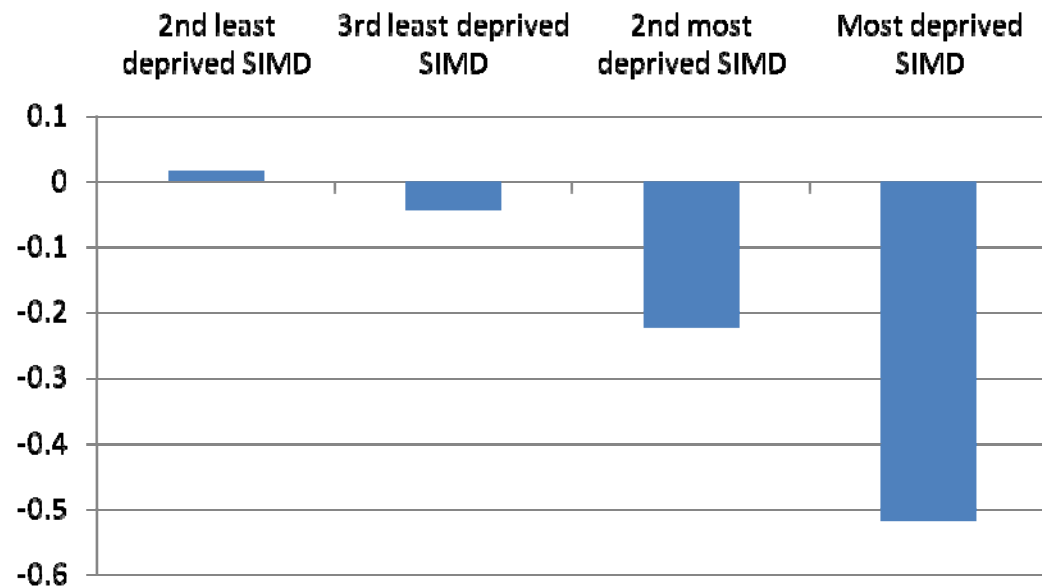


	No Locational Vars		SIMD added	
	b	t	b	t
age last birthday	-0.051***	(-5.90)	-0.049***	(-5.71)
agesq	0.001***	(6.66)	0.001***	(6.33)
Married	0.528***	(7.67)	0.459***	(6.65)
Separated/Divorced	0.010	(0.11)	0.002	(0.02)
Widowed	-0.160	(-1.47)	-0.158	(-1.46)
whether has longstanding illness	-0.528***	(-10.81)	-0.507***	(-10.42)
(d) equivalised income	0.000***	(5.62)	0.000***	(4.24)
2nd least deprived SIMD			0.014	(0.21)
3rd least deprived SIMD			-0.043	(-0.59)
2nd most deprived SIMD			-0.221**	(-2.98)
Most deprived SIMD			-0.516***	(-6.57)
Observations	5419		5419	
BIC	2.1e+04		2.1e+04	
F	75.196		61.369	
df_m	12.000		16.000	
df_r	5406.000		5402.000	

plus economic activity dummies

Source SHS 2008

SWB “Cost” of living in more deprived SIMD quintiles



Implied income cost of moving
from best to worst types of area
= £120,000

Living in a more deprived area has a wellbeing “cost” over and above the costs associated with poor health, more marital breakdown and poor labour market outcomes

Conclusion: wellbeing has a subjective aspect which links with objective measures of outcomes in various life domains and brings a different perspective to the policy debate

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$$u = \beta_0 + \beta_1 Age + \beta_2 EcAct + \beta_3 MarStat + \beta_4 IllHealth + \gamma Income$$

- u is a measure of SWB
- Thought experiment
- What is the “cost” of ill-health?
- The change in income necessary to keep the individual at the same level of subjective well-being
- This is given by $-\beta_4/\gamma$