



THE LONDON SCHOOL
OF ECONOMICS AND
POLITICAL SCIENCE ■

Wellbeing for Policy

USING WELLBYS IN POLICY APPRAISAL
AND MAXIMISING WELLBEING IN SOCIETY

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“ Create all the happiness you are able to create. Remove all the misery you are able to remove.

”

JEREMY BENTHAM (1830)



Agenda

1. Definition
2. The UK Experience
 - Policy Appraisal
 - WELLBYs
3. Maximising Wellbeing



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Wellbeing for Policy

1. Definition of Wellbeing

“ Subjective wellbeing (also referred to as ‘wellbeing’ or ‘happiness’ in short) is defined as a person’s affective experiences and cognitive evaluations of his or her life.

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DIENER ET AL. (2002), ADAPTED

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Life Satisfaction

- Preferred cognitive evaluation
- Exemplary survey question on individual life satisfaction measured on 0-to-10 Likert scale

Please answer according to the following scale:

0 means "completely dissatisfied", 10 means "completely satisfied".

How satisfied are you with your life, all things considered?

A horizontal Likert scale consisting of 11 empty square boxes connected by a double horizontal line. Below each box is a number from 0 to 10. Below the number 0 is the text "completely dissatisfied" and below the number 10 is the text "completely satisfied".

0 1 2 3 4 5 6 7 8 9 10

completely dissatisfied completely satisfied

Source: German Socio-Economic Panel Study (SOEP)

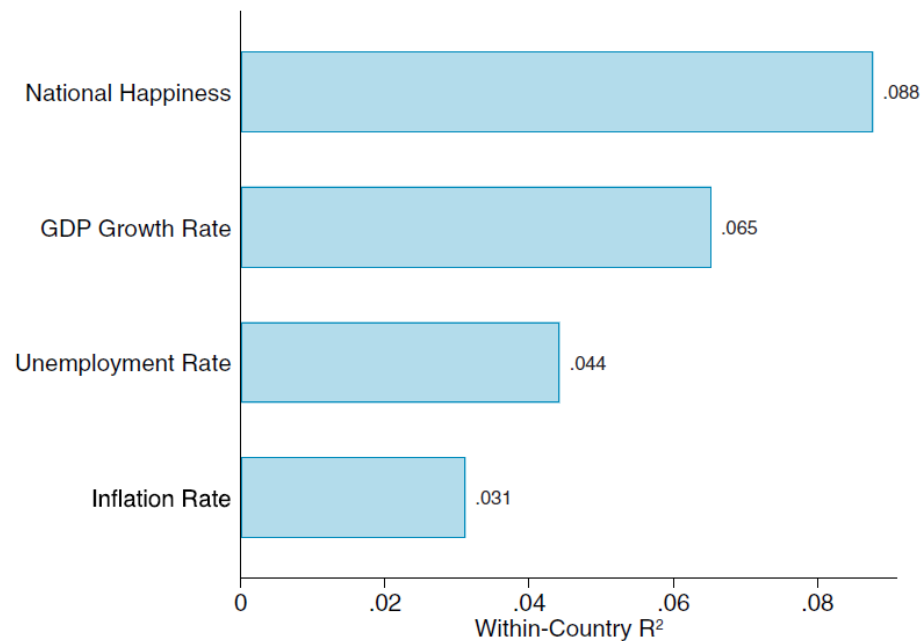
Life Satisfaction

- We are mainly looking at individuals' self-reported life satisfaction, for various reasons:
 - Can be seen as democratic, vote on one's life, one person one vote
 - Seen as key life outcome, comprehensive without 'inner' aggregation
 - Correlates with objective outcomes (e.g. longevity)
 - Predicts individual behaviour (e.g. voting)
 - Uniquely captures behavioural scientific phenomena such as anticipation and misprediction, adaptation, relative comparisons (jealousy), spillovers, and things like being treated fairly or with dignity ('procedural utility').

Life Satisfaction

- Predicts voting for incumbent government

FIGURE 1 What Best Explains the Variance in Incumbent Government Vote Share?



Source: Ward (2020)

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 - Predicts individual behaviour (e.g. voting)
 - Uniquely captures behavioural scientific phenomena such as anticipation and misprediction, adaptation, relative comparisons (jealousy), spillovers, and things like being treated fairly or with dignity ('procedural utility').
- Importantly, data on life satisfaction are cheap and easy to collect, interpret, and straightforward to analyse. There exists large and readily usable evidence base on what matters (or not) to people's life satisfaction, in the UK and elsewhere.



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2. The UK Experience

“

[to devise] a new way of measuring wellbeing in Britain... [to measure] progress as a country, not just by how our economy is growing but by how our lives are improving.

”

DAVID CAMERON, UK PRIME MINISTER, 2010 TO 2016



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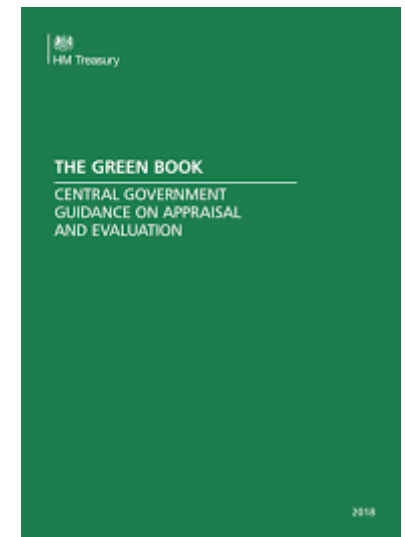


DAVID CAMERON, UK PRIME MINISTER, 2010 TO 2016

- UK Government “Levelling Up” White Paper (2022):
“[...] overarching ambition to improve *wellbeing* in every area of the UK.”
- UK National Infrastructure Commission:
“[...] growth, competitiveness, *quality of life*, net-zero.”

The Green Book

- The Green Book is the official guidance for policy analysis (i.e. policy appraisal and evaluation) published by HM Treasury.
- It now permits (soon mandates?) policy appraisal based on wellbeing data, which is detailed in its Supplementary Guidance on Wellbeing, namely:
 - Social cost-benefit analysis
 - Social cost-effectiveness analysis



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 - Social cost-benefit analysis
 - Social cost-effectiveness analysis
- Both types of policy analysis are based on life satisfaction.
- They are actual decision-making tools that help policy-makers across all sectors (i.e. government, business, and NGOs) make the case that a policy is worth funding.

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Social Cost-Effectiveness Analysis (CEA)

- Informally, select policy option which yields lowest unit cost:

$$\textit{Unit Cost} = \frac{\textit{Costs}}{\textit{Benefits}}$$

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- Informally, select policy option which yields lowest unit cost:

$$SUC = \frac{\sum_{t=0}^T \frac{1}{(1-r)^t} \sum_{i=1}^N (C_{it}^1 - C_{it}^0)}{\sum_{t=0}^T \frac{1}{(1-\rho)^t} \sum_{i=1}^N (W_{it}^1 - W_{it}^0)}$$

where

- SUC: Social Unit Cost
- W: Wellbeing (i.e. WELLBYs)
- C: Net financial costs to public sector (i.e. costs less savings)
- t, T: Year, number of years of policy
- i, N: Individual, number of individuals affected by policy
- r: Financial discount rate (i.e. 3.5%, or long-term Treasury bond rate)
- ρ: Wellbeing discount rate (i.e. 1.5%, health discount rate)

Not that superscripts 1 and 0 mean treatment and control group, respectively, i.e. in theory, we look at (causal and robust) changes relative to status quo.

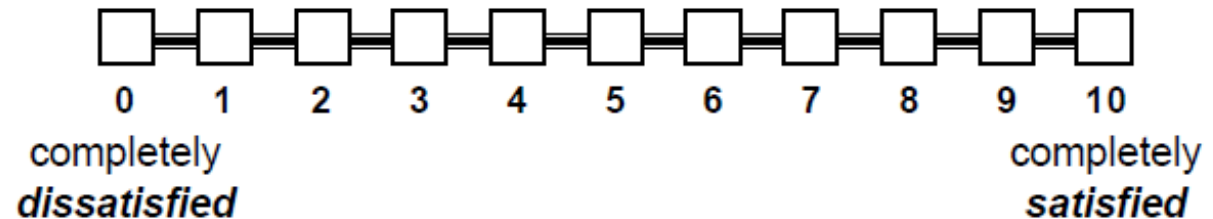
WELLBYs

- Wellbeing-Years: our measure of wellbeing benefits
 - 1 point of life satisfaction (on 0-to-10 Likert scale) for 1 person for 1 year

Please answer according to the following scale:

0 means "completely dissatisfied", 10 means "completely satisfied".

How satisfied are you with your life, all things considered?



Source: German Socio-Economic Panel Study (SOEP)

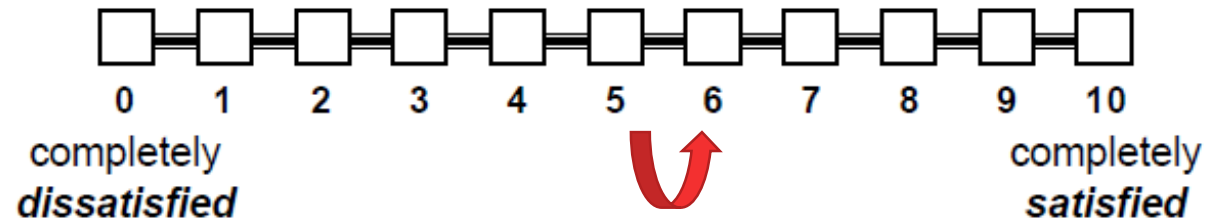
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WELLBYs

- How much money is 1.0 WELLBYs worth?
 - GBP 10,000 as lower bound (*10,867 in 2022 prices*)
 - GBP 13,000 as midpoint (i.e. proposed value) (*14,127 in 2022 prices*)
 - GBP 16,000 as upper bound (*17,386 in 2022 prices*)

Note: $WELLBY\ 2022 = WELLBY\ 2019 \times (GDP\ Deflator\ 2022 / GDP\ Deflator\ 2019) \times (GDP\ Per\ Capita\ 2022 / GDP\ Per\ Capita\ 2019)^{1.3}$.
GDP Deflator Growth from ONS Series MNF2. Real GDP Per Capita Growth from ONS Series IHW. 1.3 is MU of income elasticity.
Source: Green Book Supplementary Guidance on Wellbeing (2021)

WELLBYs

- We propose WELLBYs as primary measure of societal progress.
- In society, wellbeing (i.e. total WELLBYs) is increased by
 - increasing life satisfaction (i.e. quality of life), and/or
 - increasing life years (i.e. length of life).
- As social planner, our aim is to maximise total WELLBYs in society subject to constraints (e.g. budget).

Source: Frijters et al. (2020), De Neve et al. (2020), Frijters and Krekel (2021)

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Note

- On average, UK resident generates 615 WELLBYs over lifetime, i.e. mean life satisfaction of 7.5 times mean life years of 82 years yields 615 WELLBYs per resident.
- With 67 million residents, 41.2 billion WELLBYs in UK in 2022. WELLBY year-on-year change is new measure of ‘growth’.

Source: Frijters et al. (2020), De Neve et al. (2020), Frijters and Krekel (2021)



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3. Maximising Wellbeing

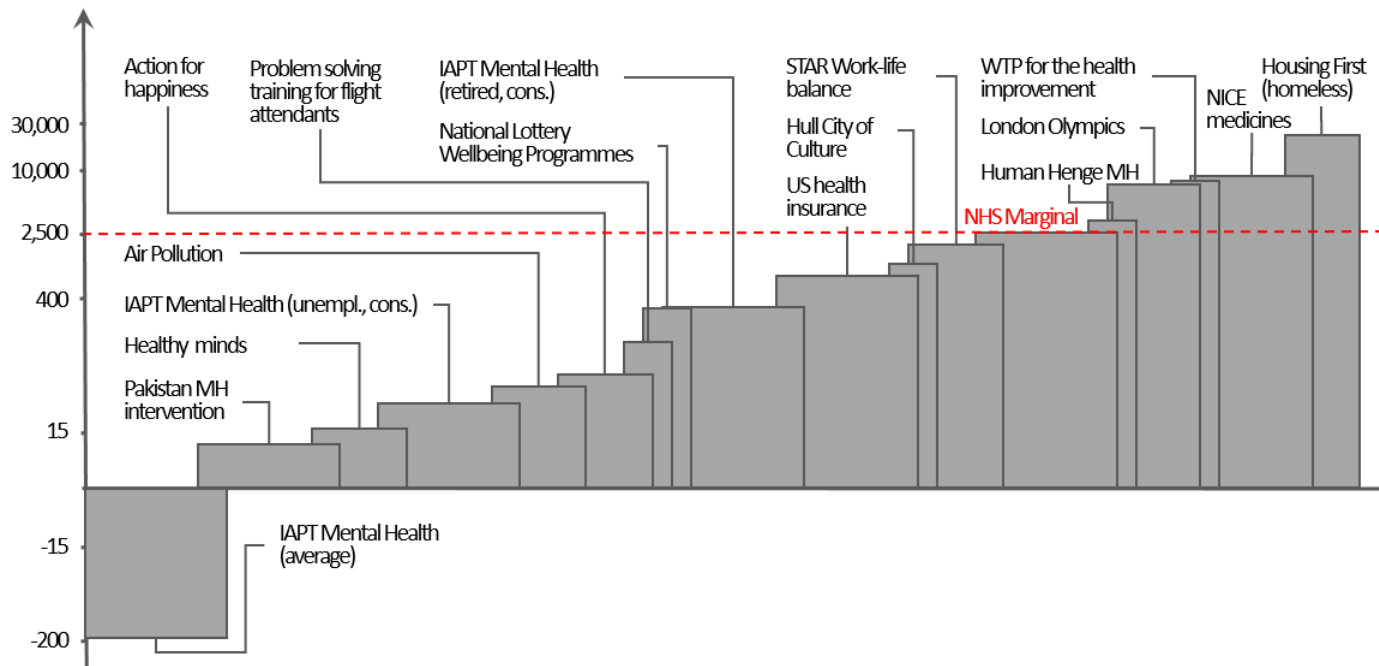
The Social Planner

- As social planner, our aim is to maximise total WELLBYs in society subject to constraints (e.g. budget).
- As it turns out, this is no utopian dream but feasible reality:
 - Rank all selected policies from lowest SUC to highest.
 - Implement all policies until budget runs out.

Source: Frijters and Krekel (2021)

Cost Per WELLBY of Various Policies

■ Note: GBP 2,500 is outdated, GBP 13,000 is new threshold.



Source: Frijters and Krekel (2021)



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Thank you.

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