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# **Well-Being Metrics and Policy: Towards an Economy of Well-being**

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# A new science?

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- Until five or so years ago, I was one of a very small number of economists using happiness surveys; since then joined by more than 100 others
- Now there are panels on happiness right and left: AEA, Davos, Aspen; Jeffrey Sachs calling for happiness as the ninth UN-MDG: UN Resolution July 2011; UN General Assembly to consider this in April 2012
- In France in 2008, the Sarkozy Commission, chaired by two Nobel Prize-winning economists, called for a worldwide effort to develop measures of well-being that went beyond those based on income.
- Commission criticized by conservatives in the US as a left-wing attempt to make our economy “sclerotic” like France’s. Yet most recent high level effort to add well-being indicators to national statistics has come from the conservative Cameron regime in UK.
- New National Academy of Sciences panel to consider which well-being metrics are most relevant for U.S. statistical agencies
- Why all the hoopla?

# A new science? The metrics

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- The “science” of studying and measuring well-being has gone from a nascent collaboration between economists and psychologists to an entire new approach in the social sciences
- Can answer questions as diverse as the effects of commuting time on well-being, why cigarette taxes make smokers happier, and why the unemployed are less unhappy when there are more unemployed people around them.
- Survey method is particularly well-suited to answering questions that standard revealed preference-based approaches – which are based on observed consumption choices - do not answer; such as when individuals do not have the agency to make choices and/or when consumption choices are not optimal. *These include:*
  - a) the welfare effects of macro- and institutional arrangements that individuals are powerless to change (macro-economic volatility, inequality)
  - b) the explanation of behaviors that are driven by norms, addiction or self-control problems, such as lack of choice by the poor or obesity, smoking, and other public health challenges

# A new science? From metrics to policy?

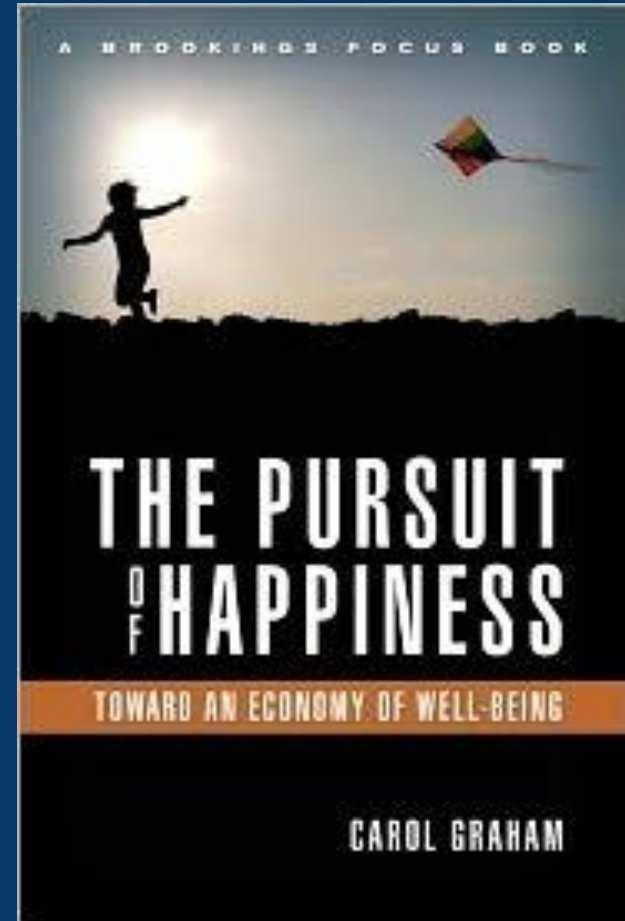
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- Discussions have moved from a focus on empirical studies that aim to deepen our understanding of human well-being to whether or not happiness is an appropriate policy objective.
- Opens the door to a much wider research agenda, for collaboration with a much broader set of academics, and for influence extending into the policy arena. Yet the leap into policy also raises a number of unresolved questions.
- What do we mean by “happiness”? Do we care about happiness or about the pursuit of happiness? Should policymakers be in the business of telling people what will make them happy? Whose happiness do we care about? Do we care about the happiness of isolated individuals, of nations, or in some broader global sense?

## A new science? (4)

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- The most important questions, in my view are:
  - » What definition of happiness is most relevant and appropriate for policy?
  - » How does that definition vary across societies?
  - » How do people's capabilities or agency mediate the dimension of well-being that they emphasize when they answer happiness surveys
- The central focus of my new book, *The Pursuit of Happiness: An Economy of Well-Being* (Brookings, 2011).



# Terminology

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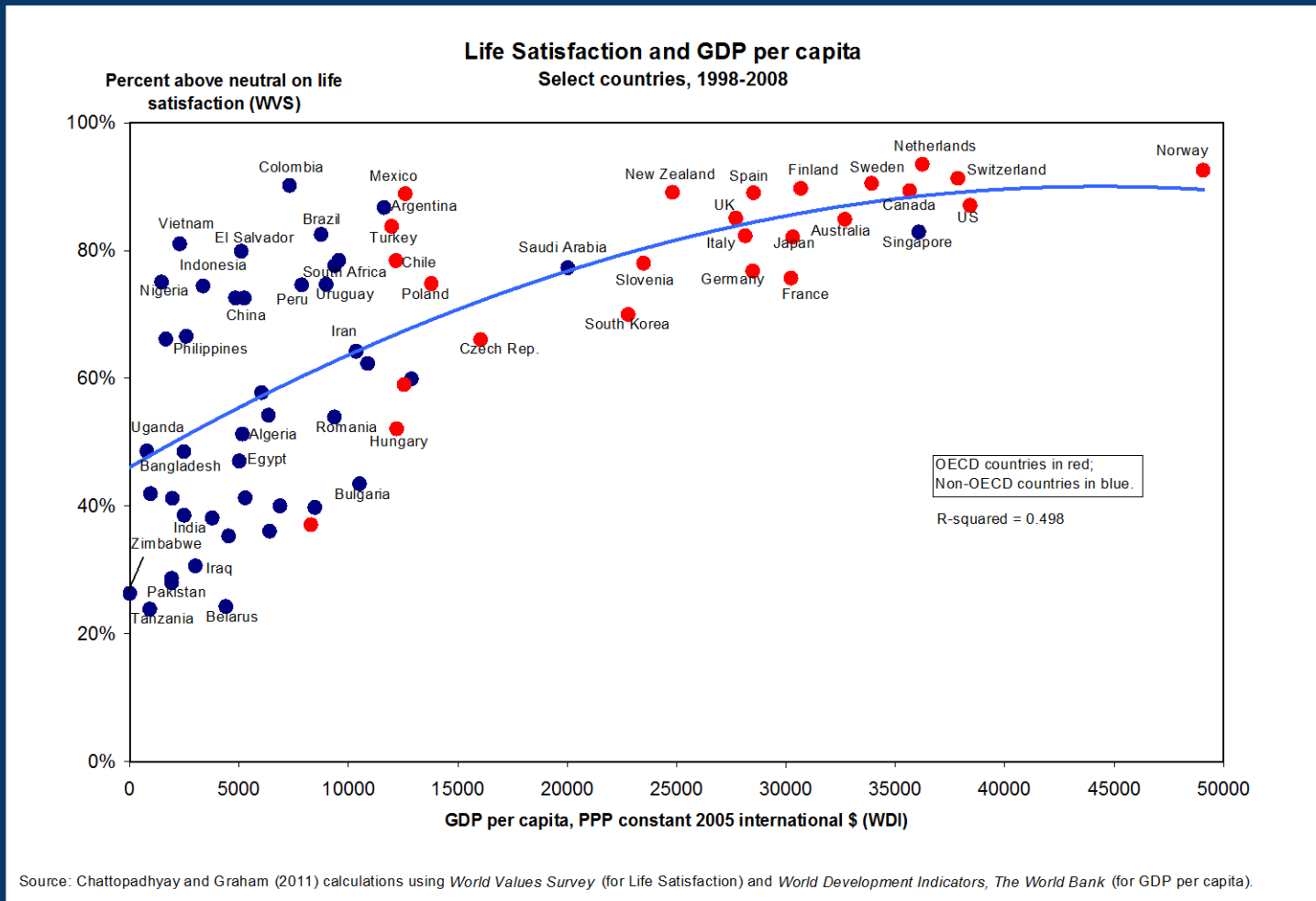
- The terms “happiness,” “well-being”, “subjective well-being”, and “life satisfaction” often used inter-changeably in the economics literature; psychologists take much more care in distinguishing the nuances between them. The differences in the meaning could have vastly different policy implications.
- **Happiness:** Most open-ended and least well-defined of the terms, although attracts the most public attention. In the U.S. Declaration of Independence. Attempts to gauge how happy feel about their life in general. From an empirical research perspective, it does not impose a definition of happiness on respondents.
- **Life satisfaction** – correlates very closely with happiness questions, yet slightly more framed and correlates a bit more closely with income. When asked about satisfaction with their lives, people more likely to evaluate their life circumstances as a whole, in addition to happiness at the moment.

## Terminology (3)

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- **Ladder of life question** – an integral part of the Gallup World Poll – is often used interchangeably with happiness. Yet introduces a relative component. Asks respondents to compare their lives to the best possible life they can imagine. Responses to the ladder of life question correlate even more closely with income than life satisfaction questions; most respondents compare their lives to a national/international reference norm (Afghanistan example).
- **Subjective well-being:** encompasses all of the ways in which people report their well-being, from open-ended happiness to satisfaction with different domains, such as work, health, and education, among others. Psychologists conduct separate analysis in each of these domains, comparing the results of each of them with particular variables of interest.
- **Well-being:** the most encompassing of all of these terms and implies an evaluation of human welfare that extends beyond the components that income can accurately capture or measure.

# Happiness and Income per Capita

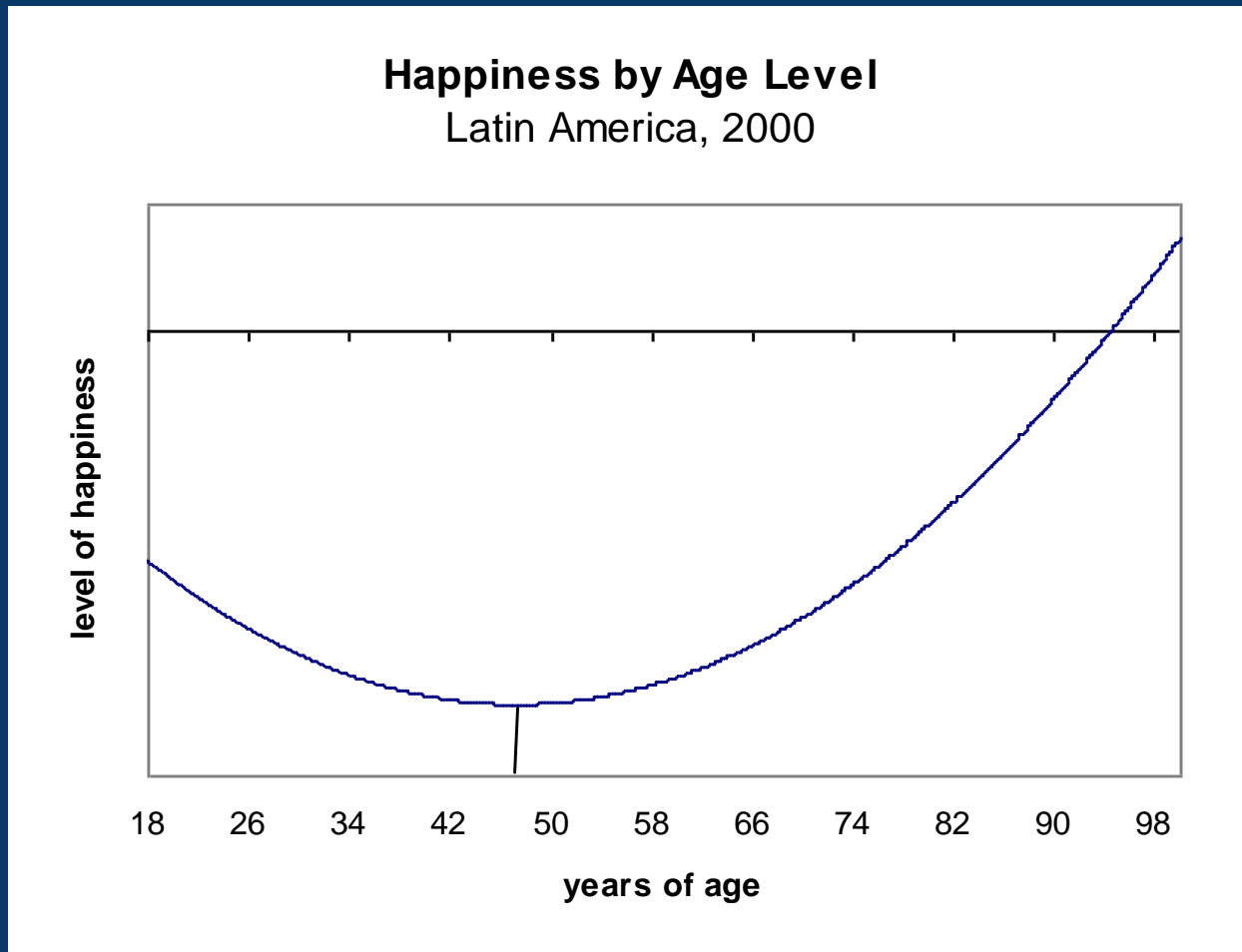


Source: Chattopadhyay and Graham (2011) calculations using *World Values Survey* (for Life Satisfaction) and *World Development Indicators, The World Bank* (for GDP per capita).



# Happiness in Latin America: Age-pattern conforms!

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# Happiness patterns across the world

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- Happiness and age (figure)
- Income
- Health
- Employment
- Friendships
- Gender (less clear)
- Because of these consistent patterns, we can then explore the “happiness” effects of things that vary, such as commuting time, environmental quality, the inflation or unemployment rate, the nature of governance, obesity rates, crime and corruption rates, cigarette smoking, exercise, and more
- To some extent, the world is our oyster!

# Why the Definition of Happiness Matters

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- Relationship between the standard variables and open-ended happiness questions is remarkably consistent across respondents worldwide, including in countries of different development levels.
- Consistency allows us to test for the effects of other variables, such as living under different levels of inflation and/or kinds of governance and environmental regimes. Do not ask respondents if phenomena such as inflation, pollution, commuting time, and/or the nature of their government (for example) make them unhappy. Compare the variance in happiness scores that is explained by these additional variables, controlling for effects of standard socioeconomic/demographic variables.
- Works clearly and simply from a research perspective. Yet policy perspective more complicated. Policy driven by factors ranging from ethical norms to aggregate welfare objectives to cultural differences. Those, in turn, influence the definition of happiness across individuals and countries.

# Bentham or Aristotle at the Census Bureau?

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- **Jeremy Bentham's** concept of welfare was maximizing the contentment and pleasure of the greatest number of individuals as they experienced their lives – that is, people feeling happy on a day-to-day basis.
- **Aristotle** thought of happiness as *eudaimonia*, a Greek word that combined two concepts: “*eu*” meaning well-being or abundance, and “*daimon*” meaning the power controlling an individual's destiny. In the broader life-evaluation sense: the opportunity to lead a purposeful or meaningful life.

## Bentham versus Aristotle (2)

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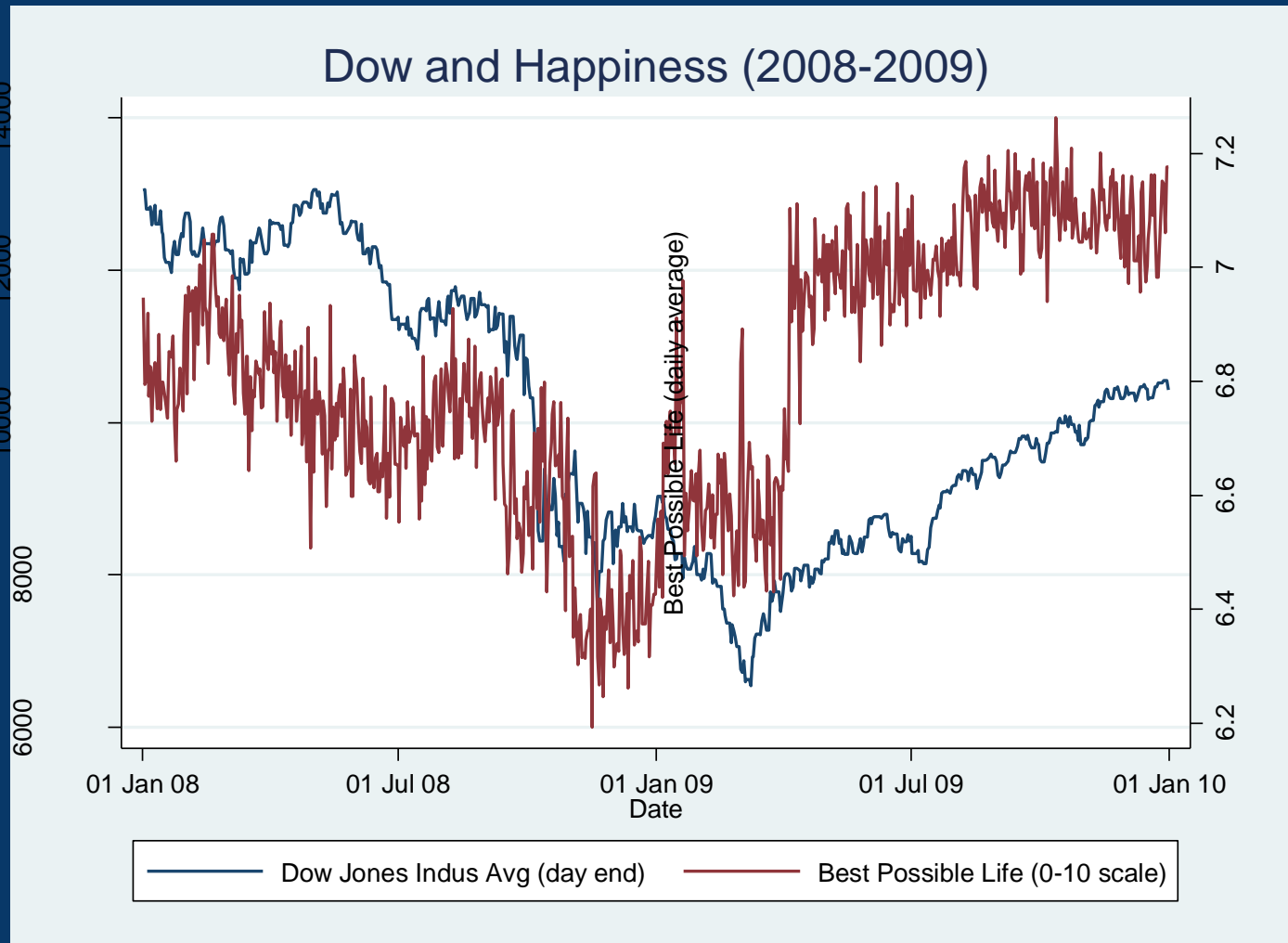
- Research suggests that which dimension matters to a particular person is in part determined by his/her capacity to pursue a meaningful life.
- Lacking capacity – for instance, due to government restrictions or a lack of wealth or education – people may place more value on simple, day-to-day experiences, such as friendship and religion.
- Those with more capacity less time and interest in day-to-day experiences, particularly if they are very focused on some overarching objective or achievement. (For example: A scientist trying to cure cancer who sacrifices leisure time and personal relationships) (*Kahneman and Deaton, Diener, Graham and Lora*)
- We have the tools and metrics to measure each of these dimensions (e.g. experience versus evaluative). What is less clear and the subject of current deliberations (NAS panel etc) is which dimension is most relevant to policy

## Bentham versus Aristotle (3)

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- **Adaptation Conundrum:**
- Adaptations are psychological defense mechanisms; there are positive ones - humor and sublimation; negative ones - paranoia
- A lot of my research suggests that those with limited means emphasize the daily experience dimension of well-being over life evaluation; is this adaptation – e.g. a way to preserve psychological well-being in the face of adverse conditions and low expectations?
- Answering this will help us better understand human well-being or human tolerance for ill-being.
  - » My research shows that individuals are better able to adapt to unpleasant certainty – poverty, high levels of crime and corruption (DC vs Peru example) – than they are to uncertainty – pain and anxiety, rapid or volatile economic growth, and rapid changes in crime rates;
  - » Afghanistan findings (smiling/happiness versus BPL)
  - » Paradox of unhappy growth
  - » U.S. pre and post crisis

# Best Possible Life (BPL) & Dow Jones Industrial Average Trend (Jan. 2008 – Dec. 2009)



## Bentham versus Aristotle (4)

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- Some uncertainty is often necessary to achieve progress; still, information highlights why the nature of growth/policy matters.
- Does frustration/unhappiness underlie the search for progress? Ongoing research explores these questions: unhappiness and intent to migrate; job satisfaction/meaningful work/productivity; well-being trends pre- and post- the Arab Spring rebellions
- Some societies are comfortable emphasizing happiness as day-to-day-contentment as a policy objective. The US has traditionally emphasized the importance of equal opportunities over that of equal outcomes; its citizens would likely opt for a definition of happiness based on the opportunity to pursue life fulfillment.
- Promising that requires providing citizens with the tools and agency to do so. Worst kind of (and unhappiest) society promises life fulfillment but does not provide the opportunities to achieve it. Arab Spring again?



# GNP versus GNH

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- GNP: Composite measure which has served well for many years, and will continue to do so. We are constantly adapting GNP and its adjustors, such as PPP. No serious suggestion to abandon the metric. Develop new complementary metrics with a broader picture of well-being and quality of life.

Example 1: High GNP man versus low GNP man.

- High GNP man lives in a McMansion, uses a ton of gas and electricity, commutes long hours to work in an SUV, runs a tobacco company, makes \$12 million a year, has no time for friends, family, or exercise. Reported happiness score is low.
- Low GNP man lives in a Washington DC townhouse, bicycles to work at a near-by think-tank, researches education in inner-city public schools and earns \$100,000 per year. Despite working long hours, he has time to visit friends, walk his daughter to school, run in his neighborhood park. Reported happiness score is high.

## GNP versus GNH (2)

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- Low GNP man's contribution to GNP is a fraction of High GNP man – both because of the way his productive time and outputs are valued, AND because he uses less resources, such as gasoline, heating oil, electricity, and automotive services. High GNP man's social welfare reducing activities – including the production of cigarettes – raises GNP.

### Example 2

- \$397 million worth of oil spilled into the Gulf Coast, the UK£3 million in salary and bonus paid to BP CEO Tony Hayward in 2009, and the \$18/hour paid to the 4500 workers hired by BP to clean-up the beaches.
- All enhanced GNP although it was a disaster on the quality of life in the Gulf Coast and the environment. Well-being harming spill contributed orders of magnitude more to GNP than the well-being enhancing cleanup.

## GDP versus GNH (3)

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- Examples illustrate the extent to which standard income-based measures of economic progress or production fail to capture important elements of quality of life.
- No “correct” or “single” metric for valuing the activities of High GNP man versus Low GNP man. GDP (GNP) are good measures for valuing economic activity within and across economies. Yet if one considers quality of life of the individuals producing them and society at large, not a huge stretch of imagination to see a role for complementary metrics and indicators.
- Happiness, unlike the products in GDP, exhibits some traits of public goods. One person’s gain in happiness is not exclusive of another person also gaining in happiness
- There is some evidence that happiness has positive externalities: people are happier when surrounded by other happy people; in contrast, many studies show that equivalently wealthy people are LESS happy when they are around wealthier people

## GDP versus GNH (4)

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- Indicators based on responses to subjective well-being questions allow us to identify and quantify differences in the welfare assessments made by objective and subjective instruments.
- Income-based accounts would likely score High GDP man's well-being as much better than Low GDP man's well-being. SWB indicators would paint a very different picture.
- Not clear that one picture is better than the other, but surely having both to look at paints a more comprehensive and composite picture of the drivers of well-being.
- Lots of debate on question whether the metrics should be combined in the form of a single Gross National Happiness indicator, or utilized as separate indicators which capture various components of quality of life
- Yet that question is, in my view, less fundamental than the decisions underlying *what* to measure and how to use the data that is generated; great potential of these metrics to contribute to policy. At the same time, they could easily be misused, misinterpreted, and manipulated by politicians and pundits.

# What to measure

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- In order to utilize happiness research for policy purposes, we need metrics that are publically acceptable, understandable and measurable (*Layard*).
- Statisticians worry about measures being comparable – across individuals and countries, and over time.
- Scholars are interested in as many measures as possible, both to understand the various dimensions of well-being, and the variance in how different people and countries value those dimensions.
- If scholars of well-being were in control of census bureau and statistical agencies, all agencies would include questions on:

## What to measure (2)

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- » Life satisfaction in general terms (happiness or life satisfaction)
  - » Happiness in relative terms (best possible life question)
  - » Life as experienced on a daily basis, via positive and negative affect questions, such as smiling yesterday, worrying yesterday, and time spent with friends
  - » Happiness in the Aristotelian or life purpose sense
  - » Job satisfaction: open-ended job satisfaction on the one hand, and doing meaningful work on the other
  - » Satisfaction with health and education
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- Data on this range of questions would allow us to understand multiple dimensions of well-being and evaluate what dimensions of well-being – contentment versus life purpose – the majority of people value the most and in which sectors.
  
  - The metrics can be used to (and already have in the UK): monitor policy progress, inform policy design, and policy appraisal

# Policy implications

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- Much to resolve before agreeing on a single measure of national well-being. Low risk first step: adding a few robust questions to our statistics. Would require us to think deeply about our benchmarks and whether we value
  - » Opportunity or outcomes more
  - » Achievements or process (e.g., life evaluation versus day-to-day experiences)
  - » Emphasis on health, leisure and friendships vs. productivity OR can these things complement each other?
- We can compare income across people with clarity on what it seeks to measure. With happiness, many questions remain:
- a) Cardinality versus ordinality – e.g. reducing misery or raising aggregate levels of well-being? Reducing poverty is only one objective of macro-economic policy, for example, and requires targeted resources; similar choices for well-being policies?
- b) Inter-temporal issues: happiness today versus the happiness of our children? Policies may not be the same...

# Concluding Thoughts

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- Happiness is, in the end, a much more complicated concept than is income. It is also a more ambitious and laudable policy objective. The fact that it is seriously on the table reflects what a parameter-shifting moment it is in economics and in policy debates more generally.
- When so many of our public debates are divided and contentious, exploring new parameters and metrics that provide tools for evaluating the well-being of our citizens rather than emphasizing the roots of their divide is a welcome change.
- For those of us studying the topic, this change provides great impetus to get the nascent science right.