CM20: THE ECONOMICS OF HAPPINESS[1] (5/10/21)

MOST, BUT NOT ALL, OF WHAT YOU SHOULD KNOW

1. In what sense does economics implicitly emphasize the consumption of private goods and services over publicly provided goods and services?

2. Economists assume that our tastes are given and constant. Why is this not likely to be true?

3. We are using Happiness as shorthand for what?

4. How is Happiness measured?

5. What are the two reasons that have made economists reluctant to use survey data?

6. What are the two types of data used to collect data on Happiness?

7. What are the two sorts of Happiness that researchers attempt to measure? Which one is of primary interest to economists?

8. What is meant by the phrase "The Easterlin Paradox"?

9. What are the two main findings of the economics of Happiness? Are they consistent with or do they refute the "Paradox"?

10. What does a Happiness curve look like?

11. What sort of Happiness curve do Stevenson and Wolfers find? Does their data refute the argument that the curve gets flatter as we increase income?

12. What is an ordinal number? Are the Happiness numbers ordinal or cardinal?

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[1] If you are looking for just one article to read on Happiness then I would recommend:
https://80000hours.org/articles/money-and-happiness/

13. If Happiness is an ordinal measure then what does that imply about our ability to measure the shape of the Happiness curve?

14. What does "habituation" refer to?

15. Is Happiness determined by absolute or relative income?

16. Why is GDH not likely to be an improvement on GDPpc as a measure of AEW?

17. Is it possible to increase Happiness while reducing disposable income?

"In a community where public services have failed to keep abreast of private consumption … in an atmosphere of private affluence and public squalor, the private goods have all sway. Schools do not compete with television and movies …"

"A community decision to have a new school means that the individual surrenders the necessary amount, willy-nilly, in his taxes. But if he is left with that income, he is a free man. He can decide between a better car or a television set. The difficulty is that this argument leaves the community with no way of preferring the school."

John Kenneth Galbraith, *The Affluent Society* (Mariner Books, 1998, 40th Anniversary Edition, pages 191 and 198 respectively.)

1. CONSUMERISM.

1. Although most economists would deny the fact, economics emphasizes consumption. Utility– what economic theory assumes you are maximizing – depends on the goods and services you choose to consume (among other things). The standard theory of consumer behavior assumes that more is always preferred to less and so more goods and services, that is, more consumption is always preferred to less consumption. Economists would immediately counter that it is possible to treat leisure and environmental improvements as goods and that economists often do so. But that is not what dominates the teaching of economics at all levels where the examples are invariably in terms of choices between different consumption goods and services – for example, ice cream and pizza, a visit to the cinema or a concert.[2]

As I noted in CM1 "goods" are things that we want more of, as opposed to "bads" - pollution is a bad but economists discuss pollution abatement which is

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[2] In labor economics the choice is between work, which we engage in to earn money to buy goods and services, and leisure.

a good. I have no right to criticize how you spend your income and economics cannot claim that one type of consumption is better than another.

2. Advertisers and marketers spend their working lives devising ways in which to persuade us to buy goods and services, many of which end up occupying our third garage. Our tastes and preferences are not given – known and fixed immutably – as economists assume, but are molded by our experience, the behavior of persons in our peer groups, and by marketing.

3. Expenditure in most developed economies is strongly influenced by what is advertised online, on TV, in magazines and on the radio. Firms, who naturally want to encourage us to purchase the consumer goods and services that they produce, pay for these advertisements. But public goods – roads and other infrastructure, public health, improvements in environmental quality, natural resource conservation, improvements in safety (police and fire services), public education at all levels – are not advertised. Therefore, advertising biases our conception of what our "true" preferences are.

4. The $197,630 saucepan[3] is an example of what the American economist, Thorstein Veblen, in "*The Theory of the Leisure Class*" (1899), called "conspicuous consumption". In the last thirty years conspicuous consumption has become more and more acceptable in Western society, as it was in the "Gilded Age". (Martin Scorsese's fine adaptation of Edith Wharton's novel *"The Age of Innocence"* provides a wonderful evocation of the life of the upper class in that period.)

Here are links to more current examples of conspicuous consumption:

https://ritholtz.com/2019/03/bugatti-la-voiture-noire/https://aztag.net/9-outrageously-expensive-things-that-prove-vanity-is-immortal.html

https://taionn.blogspot.com/2014/06/the-most-outrageously-expensive-items.html

https://www.therichest.com/luxury/most-expensive/18-of-the-most-expensive-and-luxurious-items-in-the-world/

https://www.trendhunter.com/slideshow/expensive-everyday-items

http://opishposh.com/10-of-the-most-expensive-items-in-the-world/

http://opishposh.com/10-most-expensive-yachts-in-the-world/

https://www.topteny.com/top-10-expensive-hotels-world-2018/

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[3] I particularly like the $630!

2. HAPPINESS

1. Economists prefer to talk about "*subjective measures of self-reported life satisfaction*" rather than happiness but I will use the term Happiness (capitalized so that you will know that I am really referring to "subjective … etc.").

2. *The data on Happiness is obtained by asking people to rate their Happiness on a scale* of 1-10, 1-7 or 1-5, 1-4 etc. with 1 = suicidal and 10 = a state of extreme bliss – your first heroin high. (The options are phrased more prosaically than this!) Economists have traditionally been wary of asking peoples' opinions about their subjective states (how they feel) because: (1) *people may lie* (they may tell you that they are happy because they do not wish to admit that they are unhappy – unhappiness appears to be a sin in our society), or (2) *they may not understand the question* (what do you mean by happiness?). Economists prefer to observe how people behave rather than asking them how they might behave.

However, *Happiness research has been shown to be reasonably reliable by social psychologists* who have been studying this sort of data for seventy years and more. (Happy people smile and laugh a lot and their friends and family members say that the person really does seem to be happy.) However, you must treat the data with extreme skepticism.

 a. The Happiness scales are ordinal *rankings.*[4] The scales say that A is ranked higher than B if the score for A is larger than the score for B. But if A is rated a 2 and B a 4 then we can only say that B is higher ranked than A, we cannot say that B gives us is twice as much Happiness as A. When you do student evaluations of courses you are ranking your instructor and those rankings cannot be added and averaged as they are by the WWU administrators. In Happiness research averaging over different surveys may be meaningless.

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[4] A *cardinal* number is used to count things, to determine the quantity of something. (Your score on an exam is a cardinal number, which is why I can add your scores but not your letter grades). A cardinal number has a natural zero value (corresponding to when there is nothing there) and it changes in constant increments. An *ordinal* number is simply a way of ordering or ranking things, which comes first in some sense and which comes second, etc. *Ordinal* numbers do not indicate magnitudes only rankings (more or less) and they cannot be added or averaged and the increment or difference between one ordinal number and another only tells us which one is larger, *not by how much* it is larger. (I can't do arithmetic on your letter grades). Indeed, it is incorrect to average ordinal numbers, something that is done all the time in the Happiness literature. (But you can average medians of Happiness. But this is not done because the Happiness data sets do not include medians.)

b. Is a 2.5 on a 1-5 scale the same as a 2.5 on a 1-7 scale or even the same as a 5 on a 1-10 scale?

c. If you are looking at a diagram, how is the vertical – Happiness – scale calibrated? In practice very low scores (2 or 3) will seldom be given on a 1-7 or 1-10 scale. If the diagram is supposed to show a difference how big is that difference, is it a 20% difference or a 4% difference? (The research may claim that the results are statistically significant – at what level. Statistical significance is not the same as substantive difference so a statistically insignificant result may be very important from a policy point of view.)

d. Non-economists, and economists doing Happiness research, tend to ignore the vital *other things held constant* (*ceteris paribus* in econ speak) requirement of good empirical research. *Other things held constant* is the equivalent of holding everything else constant when doing an experiment in the physical sciences.

e. Economists are also concerned with the fact that the questions are posed in different ways in different surveys, which makes adding results from different surveys problematic.

f. Even if the question is the same is my 3 the same as your 3 or your best friend's 3 or your father's 3?

g. Are the data from students or "real people"? Are the respondents volunteers? Are the respondents paid?

h. How big is the sample size? 36 students or 360,000 people? Five industrial countries or 120 mixed counties?

j. Has the study been replicated? (Have other researchers arrived at the same conclusions using different data sets?)

And don't forget the economists' problems with asking people their opinions. (In the 2016 and 2020 elections the polls were badly off. Perhaps because some voters deliberately lied to the pollsters, either because they were embarrassed to state their actual political preferences, or because they maliciously wanted to skew the polls.)

3. Happiness researchers collect two sorts of data: (1) *Time Series* (inter-temporal) data, observations collected over a number of years (for example, 1980-2019) either from the same individuals' responses in surveys taken each year or average responses for countries in annual surveys, or (2) *Cross Section*

data, observations collected at a specific point of time (January 3rd 2020) either from individuals with different incomes or countries with different GDPs per capita. *The fact that questions change over time is particularly important when attempting to make inter-temporal comparisons of Happiness.*

4. It is important to distinguish between two sorts of questions and responses, **emotional wellbeing** – how I feel today (lousy because I have toothache), and **life evaluation/satisfaction** – my overall assessment of how happy my life has been despite my toothache. *Economists are interested in life evaluation.*

https://ourworldindata.org/happiness-and-life-satisfaction/

http://www.federalreserve.gov/newsevents/speech/bernanke20100508a.htm

https://www.brookings.edu/wp-content/uploads/2016/06/200509.pdf5.

Economists since the 1870s have assumed that individuals maximize "utility", the satisfaction from consuming a bundle of goods and services, that might, for example, include the amount of leisure they enjoy. Utility is a much more restrictive concept than happiness – utility implicitly assumes that many "non-economic" factors, such as your health and whether you are in a good relationship with someone that you love, are held constant.

http://www.becker-posner-blog.com/2010/01/happiness-and-wellbeing--becker.html

3. THE EASTERLIN "PARADOX"

1. Easterlin (1974) observed that *real GDPpc in the US had been rising over time but that reported Happiness was flat or even declining, depending on the survey. But it was assumed that Happiness was positively correlated with income and so there was an apparent "paradox"*. GDPpc (in 2001 dollars) more than doubled between 1946 and 1996 but the percentage of people who said they were "Very Happy" started at about 30% in 1946, peaked in 1956 at 45%, and fell back to 30% by 1996. However, Easterlin's data was not very good or complete.

2. We now have extensive time series and cross section data, which show two important findings:

(1) *Happiness is positively correlated with income*, that is, if income increases then Happiness increases. This is only a correlation and income is only one of many factors that influence Happiness.
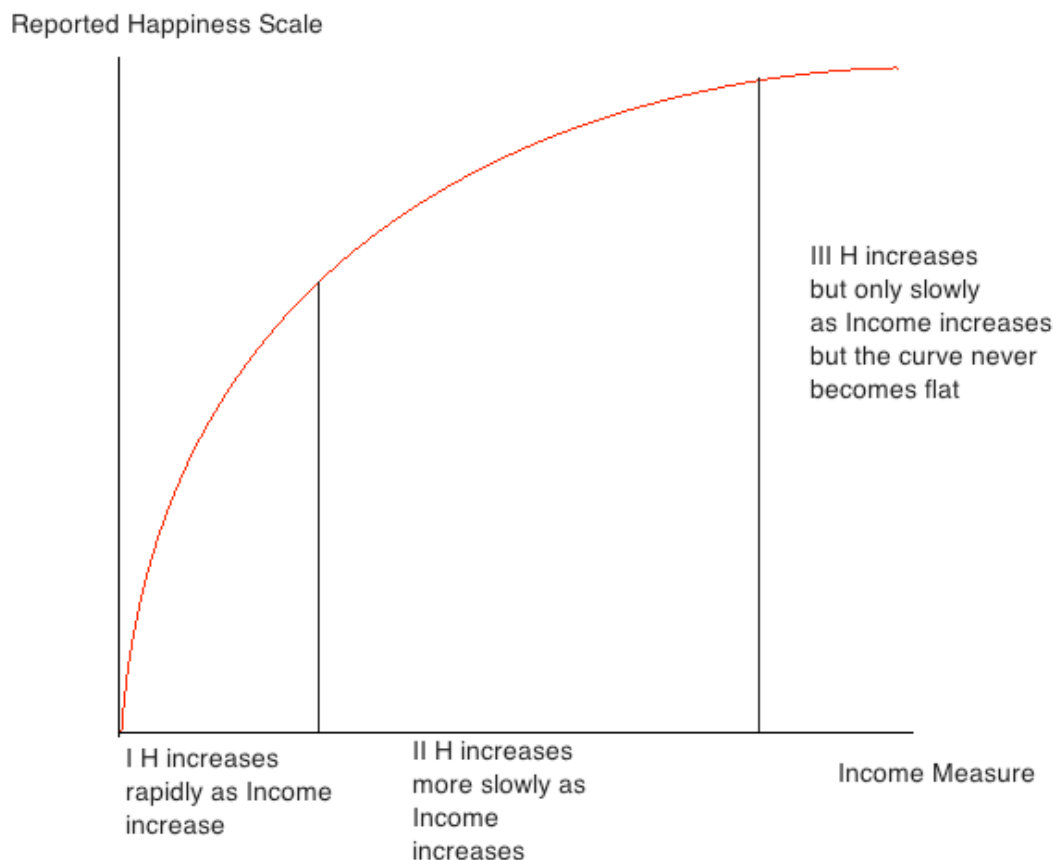
(2) *Both time series and cross section plots of Happiness against income show curves that initially increase rapidly as income increases but then becomes flatter and flatter as income continues to rise*; the Happiness curve is *increasing at a decreasing rate* although it **never** becomes ***completely*** flat.

We should be careful when extrapolating outside of our sample data, especially because there are so few observations at the top end of the income and GDPpc scales. I am not aware of any surveys of the Happiness of persons earning tens of millions of dollars per year.[5]

http://www.economist.com/node/17578888

http://www.nytimes.com/2012/02/12/business/economics-of-family-life-as-taught-by-a-power-couple.html?pagewanted=all&_r=0

http://www.slowdownfast.com/the-science-of-happiness-freakonomics-style-can-money-buy-happiness/

Reported Happiness Scale

III H increases
but only slowly
as Income increases
but the curve never
becomes flat

I H increases
rapidly as Income
increase

II H increases
more slowly as
Income
increases

Income Measure

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[5] The best data on Happiness is available at: http://worlddatabaseofhappiness.eur.nl/

3. Kahneman and Deaton (2010) using 250,000 responses to a Gallup survey of 1,000 individuals who reported daily emotional well-being and life evaluations concluded that *life evaluation* Happiness increases steadily against (the log of) income but that *emotional well-being* Happiness is "almost" flat once you get to $75,000 using their logarithmically transformed data.

4. Betsy Stevenson and Justin Wolfers – who published the most elaborate recent study of the Easterlin Paradox – dispute the flattening result. However, their results show that Happiness is linearly increasing against the *logarithm* of income, that is the plot of Happiness against the logarithm of income or GDPpc is *a straight line*, and therefore has a constant slope; Happiness is increasing at a constant rate against the *logarithm* of income.

What this means is that the increase in Happiness that results from an increase in income from $1,000 to $10,000 or from $100,000 to $1,000,000 is the same as the increase in Happiness from an increase in income from $1,000,000 to $10,000,000. In each case there is an increase in Happiness equal to, say, 0.3 points on the Happiness index scale. However, in the first case the increase in Happiness of 0.3 points required an increase in income of $9,000, in the second case income had to increase by $900,000, and in the last case income had to increase by $9,000,000. Their results therefore show that the Happiness curve when plotted against *income*, as opposed to the logarithm of income, increases at a decreasing rate.

[You don't need to remember the details just the basic idea. **Logarithms.** Y is the logarithm (log) of X (to the base 10) if 10 raised to the power Y gives X. So log10 = 1 because 10 raised to the power 1 is 10, log100 = 2 because 10 raised to the power 2 (ten squared = 10x10) = 100, and log (1m) = 6 because ten raised to the power 6 (ten multiplied by itself six times) is equal to 1 million, and log 23 = 1.36172 (approximately) because ten raised to the power 1.36172 gives 23 (approximately). Note that taking logs of income maps $10 to1, $23 to 1.362, $100 to 2, $1000 to 3, $1,000,000 to 6 thus compressing the horizontal scale of the diagram. This type of diagram is called a semi-logarithmic plot because only the data on the horizontal axis is converted to logarithmic equivalents.]

The decreasing curvature of the Happiness curve is extremely difficult to interpret.

4. HABITUATION

1. There is a third widely observed empirical finding concerning reported levels of Happiness. Within about three to five years *we become habituated to changes in our circumstances* – economic or otherwise – that affect our levels of Happiness. (Sometimes even less time is needed; if I don't re-position the pictures on the wall from time to time then they become less noticeable and tend to fade into the background.) If you became a paraplegic because of an accident or if you suddenly became blind then your Happiness score would drop dramatically but after about a year it would probably have risen and it probably would continue to rise until after about three/five years your score might be much closer to where you started. Psychologists sometimes explain this phenomenon by claiming that we are all born with a Happiness "set point" – that some of us are innately happier than others, and others are innately more miserable – Pollyannas versus miserable SOBs. If circumstances shift us away from that set point then we have a propensity to return to it over time.

2. I believe that habituation may be partly evolutionary – if you will forgive the term. Humans are very conscious of change but tend to ignore situations that remain the same – there are obvious survival advantages to being acutely aware of sudden changes in your environment. (Why is the grass moving over there? Is it something I can eat or something that will eat me?)

3. Perhaps we will adjust to climate change just as our forebears (as opposed to our three bears) learned to survive through the last great ice age.

4. One dismal implication of all this is that if we adjust to change then there is little point in doing anything to improve our lot. I don't personally believe this but you can form your own opinion.

5. RELATIVE OR ABSOLUTE INCOME?

1. What determines our Happiness: absolute or relative income? *Is your Happiness determined by how much income you take home each year or by how much you take home relative to what other people take home*? The other people are likely to be people in your peer group; I have never been on a super expensive yacht or moved in circles where people pay $197,300 for a saucepan or $2.6m for a car and so their incomes don't affect my Happiness. This may be why so few people seem to be really concerned with the recent increases in

income inequality. My choice would be relative income but note that Stephenson and Wolpers argue that it is absolute income that is important to us.

2. What we call "Consumption Arms Races" and "keeping up with the Joneses", that is, buying things because other people buy them or because they don't have them (yet!), may be self-defeating.

6. GROSS DOMESTIC HAPPINESS

1. Bhutan, a very small country in the Himalayas, is famous for its ruler's interest in calculating Gross Domestic Happiness (GDH) rather than GDP. In recent years some European governments, the UK, and Canada have started to explore or have even constructed measures that are analogous to GDH. However, GDH is not a simple additive measure like GDP, by which I mean that we know how to add together the components of GDP (we can add money expenditures on cars and gas but it does not make sense to add the numbers of cars and the numbers of gallons) but GDH would be a number that reflects a (somewhat suspect) addition of many subjective views on how well people feel about their current life circumstance or how they evaluate their overall life experience. The GDH number would be obtained by converting all of the components to index numbers (converting them to numbers between 0 and 100) and then weighting each item and then adding them together to get GDH. This is the same idea as the UN HDI.

2. Most of the new initiatives to replace GDP or GDPpc are subject to the criticisms that I made in CM19 – they have arbitrarily chosen inputs and weights. I am skeptical that such a GDH measure would be a useful policy tool. Say that the index of GDH falls, then we would need to know which component(s) of GDH has/have changed (and some might go up while others fell) and it is not obvious what would be the appropriate policy action. We already monitor such things as medical expenditures and outcomes, environmental pollution, and crime, but politicians seldom mention them except before audiences with known views on the subject. When GDP falls, we know that fiscal and monetary stimulus are the obvious policies to implement. What would we do differently than now if the health index fell while an environmental index rose?

3. GDP is relatively volatile and when it changes it rapidly causes unemployment or inflation, but many things that affect our well-being, such as health and crime and environmental quality, change much less rapidly. It is therefore much more difficult to change Happiness than GDP.

Just scan these quickly if at all.

http://www.stiglitz-sen-fitoussi.fr/en/index.htmhttp://www.beyond-gdp.eu

http://www.bbc.co.uk/news/uk-politics-11756049

http://hdr.undp.org/en/2013-report

http://unsdsn.org/resources/publications/world-happiness-report-2013/

http://www.oecdbetterlifeindex.org/

http://worlddatabaseofhappiness.eur.nl/

http://www.happyplanetindex.org/countries/united-states-of-america/

http://www.neweconomics.org/publications/entry/national-accounts-of-well-being

You will notice that different indices give different rankings to different countries.

7. POLICY IMPLICATIONS

1. If Happiness economics is correct then it *might* be possible to raise taxes – and thus reduce after tax income available for private consumption – and use the proceeds of the taxes to buy improvements in the environment, infrastructure, etc. (see CM19) so that our Happiness increases even though our disposable income, which determines how many goods and services we can acquire, decreases. In other words, the increase in taxes reduces the (disposable) income available to purchase goods and services (Income1 to income2 in the diagram) and moves us down the original Happiness curve so that the Happiness index drops from H1 to H2.

2. It is possible that the extra government income could be used to purchase public goods such as improvements in the infrastructure, a better environment, and better health outcomes. But these types of public expenditure make us better off and so *the Happiness curve shifts upwards* since Happiness depends not only on (disposable) income – access to goods and services – but also on those things that we discussed in CM16 that were omissions from GDPpc. Therefore, it is *possible* that the upwards shift in the Happiness curve would be sufficiently large to swamp the movement down the Happiness curve so that we end up with a lower income but with a higher Happiness index (because we are on a new *higher* curve). In my diagram we can end up at Income2 with H3 above

both H1 and H2 if the shift in the Happiness curve is sufficiently large. In this case households are better off consuming fewer private goods (cars) and more publicly provided goods (highways). This is the point that Galbraith emphasized in *The Affluent Society.*
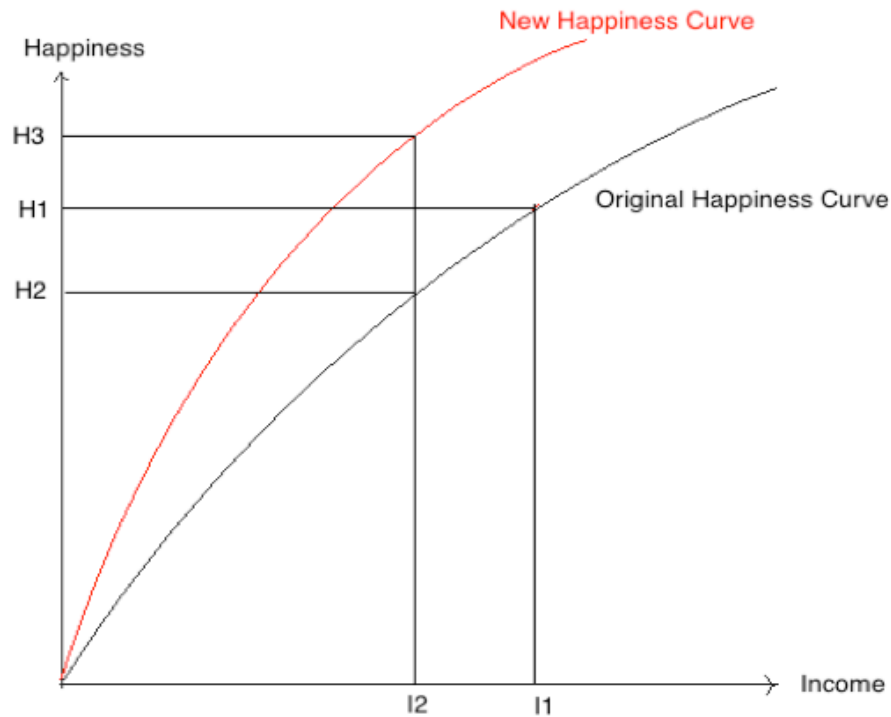
3. Of course, *this argument assumes that politicians can be trusted to spend the tax revenues wisely*, a very questionable assumption in the US where members of Congress are notorious for spending on pet projects that get them votes in their own districts and states – the infamous bridge to nowhere, requiring the armed forces buy equipment that they do not want, and research centers that are of doubtful utility. In Norway and Sweden there may be more hope for this sort of policy. The Swedes threw out a conservative government that cut taxes six times in eight years because it also cut social programs, education, and help for the unemployed. Both the Swedes and the Norwegians express satisfaction with tax rates that are much higher than those in the US because they believe that they get a good return on those taxes.

4. Although there is now a very large literature on Happiness very little of it is concerned with measuring the trade-offs between income and environmental quality or improvements in the infrastructure, etc., that would make the Happiness index a useful tool for policy makers.

We need more and better empirical work on these trade-offs and also on the relative importance of the determinants of Happiness. The empirical study of the determinants of Happiness suggests that unemployment – especially for men – is a major cause of decreases in Happiness. Andrew Oswald has estimated that losing a spouse is equivalent to a loss of income of $270,000 holding everything else constant. (3,708)