

Policy and Measurement: Objective Quality of Life (QOL) and Subjective Wellbeing (SWB) (Away From Money, Towards Indicators of Human Flourishing)

Adam Okulicz-Kozaryn*

Rutgers - Camden

Thursday 22nd April, 2021 22:23

This article discusses objective quality of life and subjective wellbeing, focusing on their overlap and differences. The spatial focus is on urban-rural gradient. The conceptual focus is on public policy and administration: how objective and subjective measures can be used for public policy and administration. A case is made for ending the primacy of economic indicators such as GDP, and turning to qol, and especially swb to guide policy.

QUALITY OF LIFE (QOL), SUBJECTIVE WELLBEING (SWB), POLICY, CITIES, URBANISM, TODO ADD TO EBIB AS KEYWORD
PAPER-CODE-NAME AND TAG WITH EBIB KEYWORDS

Money can't buy happiness, but it can make you awfully comfortable while you're being miserable. Clare Boothe Luce, attributed

Life is a game. Money is how we keep score. Ted Turner, attributed

Capital is dead labor, which, vampire-like, lives only by sucking living labor, and lives the more, the more labor it sucks. Karl Marx

Measurement helps with progress—many would say something along the lines that if you cannot measure it, you cannot improve it. Notably Lord Kelvin put it exactly this way, “If you cannot measure it, you cannot improve it.” And elaborated, “To measure is to know.” “When you can measure what you are speaking about, and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meagre and unsatisfactory kind.”¹

Then the question is how we measure human progress? Traditionally, and unfortunately, the human progress was measured with money, either production or consumption. Still, the dollar yardstick dominates. Welfare, wellbeing, quality of life, and similar concepts are typically measured with money—salaries, housing values, and so on. But the most popular such measure at societal level is Gross Domestic Product (GDP), and its variations—per capita, and Purchasing Power Parity (PPP). GDP still dominates policy and administration, as if increase in GDP solves most problems.

A notable departure from purely monetary measures is Human Development Index (HDI), which added to GDP education and life expectancy. More recently, a co-inventor of HDI, Amartya Sen has proposed subjective wellbeing (SWB) as a measure of development (Stiglitz et al. 2009).

FOOT or MV somewhere: yet the dichotomy of objective GDP and subjective happiness is not that simple: on difficulties of measuring GDP; goog and cite

Subjective wellbeing (SWB) and quality of life (QOL) is receiving much attention recently. But so is urbanization. According to UN (<https://esa.un.org/unpd/wpp>) in 1850 only 10% of the world population lived in cities, in 1950 about a third, and in 2050 it

*EMAIL: adam.okulicz.kozaryn@gmail.com

¹See for instance <https://physicsworld.com/a/in-praise-of-lord-kelvin>.

I thank XXX. All mistakes are mine.

will be two thirds. The sheer numbers are stunning, over just several generations several billions of humans suddenly live in cities. It's a dramatic change of the environment—humans evolved as hunters gatherers over thousands of years without cities. Mass urbanization is a very recent development, and arguably the most dramatic change of human habitat.

Given enormous importance of both, urbanization, and SWB/QOL, their intersection should be of central importance to a social scientist. A recent review of the knowledge in the area is Okulicz-Kozaryn (2015).

Ruut Veenhoven's World Database of Happiness (Veenhoven 1995).

This article is organized as follows, first a need for departure from dollar amounts to better measures of progress or development is highlighted—this is after all what social indicators and this journal are about—proper indicators for measurement. Then two useful sets of such measures are discussed, their overlap and differences qol and swb. then they are applied to urban-rural spatial setting; and summary conclusions and policy implications

1 Away from money, towards indicators of human flourishing

Largely unnoticed, economics dominates policy and tries to dominate social science. Notably economic measures such as GDP have dominated measurement of development or progress and there is clearly a need for better social indicators.²

Economics clearly has reached a level of absurd: "happiness is a commodity in the utility function in the same way that owning a car and being healthy are" (Becker and Rayo 2008, p. 89). This bizarre statement comes from leading and Nobel prize winning economist Gary Becker.

Other economists follow the suit and either try to discount or discredit SWB and claim that it is not nearly as important as utility (money) (Benjamin et al. 2014, Benjamin and Heffetz 2012, Glaeser et al. 2016, Rayo and Becker 2007, Becker and Rayo 2008, Benjamin et al. 2015, Glaeser et al. 2014).³

To economist, utility equals income or consumption, not happiness, and accordingly economists advise people to maximize income and consumption, not happiness (Becker and Rayo 2008).

Economics promotes a "homo oeconomicus," an imaginary creature that is concerned only with money—economic principles clearly state that the more income and consumption, the more utility (Autor 2010, Becker and Rayo 2008):

$$money = utility \quad (1)$$

4

The point is that economics is actually failing to promote human flourishing or happiness. Skidelsky and Skidelsky (2012, p. 12), for instance, puts it well "Perhaps the chief intellectual barrier to realizing the good life for all is the discipline of economics"

²Economists think they are superior to other social sciences (Economist 2016, 2014), and are ignoring non-economic research (Naim 2016, Fourcade et al. 2015) despite economics increasingly suffering from its inadequacy and detachment from the world (Economist 2013,?, Hodgson 1993), where even Nobel prize laureates in economics acknowledge crisis of economics and advise economists to learn from other disciplines (Altman 2016, Krugman 2012, Economist 2013).

Economists' bias is not only most severe, but actually qualitatively different—only economists among social scientists believe in axioms—in some important ways economics is like religion and unlike science. Indeed, there is even a term for that: "economism," belief in the primacy of economic causes or factors (Kwak 2017). or economic imperialism (Zafirovski 1999)

³To be precise, by economists I mean mainstream neoclassical economics, e.g., Chicago school. To be fair, there are many, Adam Smith among them CITE that editor lol; and many economists truly contributed to the social indicators and happiness literature notably Andrew Oswald and Robert Frank CITE A widely cited and celebrated Stiglitz et al. (2009) is clearly a step in the right direction, and it sparked a much needed policy debate. but the point on futility of pursuit of money is really well made by Marx but still, economics is dominated by neoclassical, so my generalization in main text makes sense

⁴In classical economic theory, self-interest is the key assumption, as rational people should maximize their personal outcomes (Seuntjens et al. 2015). And by economic theory, profit maximization, not any social responsibility, should be the only concern of businesses (Friedman 1970). Economists advanced a concept of an ideal human being, so called "homo oeconomicus," a perfectly rational homo sapiens who maximizes income and consumption at all times: "1) people are self-interested utility-maximizers, 2) individuals should be unimpeded in their pursuit of their own self-interest through economic transactions, and 3) virtually all human interactions are economic transactions" (?, p. 273). Indeed, already taking economics classes may increase one's greedy behavior (Wang and Murnighan 2011).

To be sure, there was good reason for primacy of economic thinking after the second world war in order to rebuild the devastated world. Economic institutions such as world bank, interational monetary fund, and world trade organization were established and economists took charge to run the countries to maximize GDP. Yet now, if anything, there is a need for degrowth Kallis et al. (2012), Kallis (2011) as prusuit of GDP has devatated natural environamnt and the very existence of our species is endngered Pachauri et al. (2014).

50 years ago Easterlin has pointed out that the pursuit of money and the pursuit of happiness are about the same thing in the US Easterlin (1973). In one study students were asked about their feeling related to money, and “happiness” was the most frequent emotion cited (?). A recent survey found that a third of people define success by their possessions (cited in Joye et al. 2020). Greed, materialism, and consumerism became accepted and even celebrated in American society. “Conspicuous exhaustion” and “busyness” are badges of courage (Gershuny 2005). Pursuit of money gives only an illusion of pursiut of happiness.

Acquiring money beoynd neessity is actually counterproductive in many ways as neediness grows as one has more of it (Marx 1844a).⁵ “The more one has, the more one wants, since satisfactions received only stimulate instead of filling needs” (Durkheim [1895] 1950, p. 248).⁶ Money has distortive power, Marx explained it well and is worth quoting in full:

Money, then, appears as this distorting power both against the individual and against the bonds of society, etc., which claim to be entities in themselves. It transforms fidelity into infidelity, love into hate, hate into love, virtue into vice, vice into virtue, servant into master, master into servant, idiocy into intelligence, and intelligence into idiocy. Since money, as the existing and active concept of value, confounds and confuses all things, it is the general confounding and confusing of all things—the world upside-down—the confounding and confusing of all natural and human qualities.

He who can buy bravery is brave, though he be a coward. As money is not exchanged for any one specific quality, for any one specific thing, or for any particular human essential power, but for the entire objective world of man and nature, from the standpoint of its possessor it therefore serves to exchange every quality for every other, even contradictory, quality and object: it is the fraternization of impossibilities. It makes contradictions embrace.

Assume man to be man and his relationship to the world to be a human one: then you can exchange love only for love, trust for trust, etc. If you want to enjoy art, you must be an artistically cultivated person; if you want to exercise influence over other people, you must be a person with a stimulating and encouraging effect on other people. Every one of your relations to man and to nature must be a specific expression, corresponding to the object of your will, of your real individual life (Marx 1844b, cited in).

2 Objective Quality of Life (QOL) and Subjective Wellbeing (SWB)

“What do [men] demand of life and wish to achieve in it? The answer can hardly be in doubt. They strive after happiness; they want to become happy and to remain so” (Freud et al. 1930, p. 52).

Fortunately, there is an alternative to money as an end itself as advocated by economics, and as adpted by contemporary materialistic and consumerist culture and society. The alternative is objective Quality of Life (QOL) and Subjective Wellbeing (SWB) indicators.

Esentially the distniction is that there is a set of objective quality of life measures, and a set of subjective ones; the objective ones is GDP, HDI, that usc econ idiot, and eg urban livability measures eg mercer or economist that include a bunch of stuff like physicians per capita etc: enumerate here from my ealrier paper

⁵Work itself, according to Marx, is a drudgery and toil in capitalism (Marx [1867] 2010, Lyons 2007). Wage slaves are “hired slaves instead of block slaves. You have to dread the idea of being unemployed and of being compelled to support your masters” (p. 283 Goldman et al. 2003).

⁶This concept in social indictors research is called ‘hedonic treadmill’ Diener et al. (2006). The theory of happiness as a motivator (Carver and Scheier 1990) is also relevant here. People should buy time and experiences, not material goods (except bare necessities, of course) (Putnam 2001, Kasser 2016, Dittmar et al. 2014). Valuing time and experience over money, not the other way round, predicts happiness (?). One should buy time, (e.g., cut commute)—time is actually arguably the most important resource (Masuda et al. 2020, Williams et al. 2016, Whillans et al. 2017). Likewise, autonomous and flexible work schedules predict greater happiness (Okulicz-Kozaryn and Golden 2018, 2017, Farber 2016, Golden and Wiens-Tuers 2006, Golden et al. 2013).

and the Swb is notably mostly cognitive overall life satisfaction, but also sometimes momentary affective happiness, and negative and positive affect. They are subjective because we ask people how they feel, the objective ones are measures such as physicians per capita.

and there are also domain satisfactions as per classic Campbell: eg neighborhood, family, career, etc

qol can be also called livability, ie suitability for human living, habitability (Veenhoven 2000), quality of place (Burton 2014). One example is Mercer index, that mostly captures material standard or level.

but full/proper qol should be broader, should include non-material ingredients such as freedom, tolerance, self-expression, and so forth. Standard of living is a level of material comfort in terms of goods and services such as health care, clean water, education, houses, apartments, telephones, food, clothing, paved roads, computers and so forth.

Job opportunities matter for livability—even as much as 90% of people move to cities for a job (Economist 2011b,a). In contemporary materialistic and consumerist world, money defines much of human action. People move to cities for jobs and businesses move to cities for talent (?). Other components of livability include (Economist 2011b):

- cost of living
- public transport and roads
- safety and security
- culture and nightlife

Yet qol/Livability doesn't capture intangible qualities of place such as vibrancy, authenticity, and distinctiveness. Many obvious characteristics make a place livable: education, health and safety, housing, getting around (commuting), but also less obvious things like tolerance, trust, self-expression (Florida 2008, p 297).

At low levels of economic development economic gains or material goods matter – people need to satisfy their basic needs such as shelter or food. But once the basic needs are satisfied, there develop higher level needs related to life-style such as self-expression.

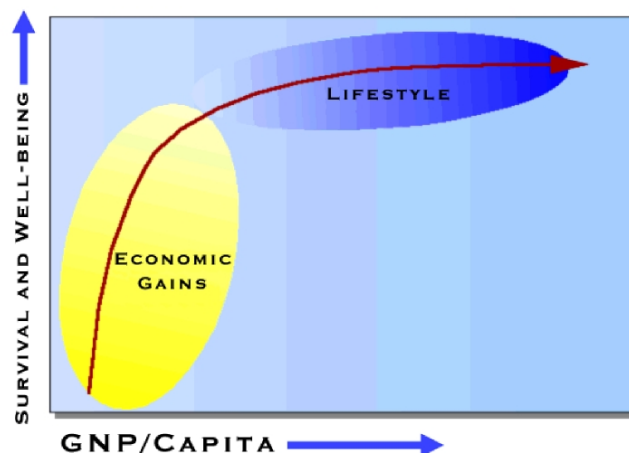


Figure 1: Well-being and income, (Inglehart 1997).

SWB, on the other hand, by definition, is the most comprehensive measure possible. swb is a person's comprehensive evaluation of her life as whole, includes "both cognitive judgments of one's life satisfaction in addition to affective evaluations of mood and emotions" (Steel et al. 2008, p. 142). Veenhoven's (2008, p. 2) definition of swb is very similar, "overall judgment of life that draws on two sources of information: cognitive comparison with standards of the good life (contentment) and affective information from how

one feels most of the time (hedonic level of affect)."⁷ SWB is typically measured with a survey item such as "On the whole, are you very satisfied, fairly satisfied, not very satisfied, or not at all satisfied with the life you lead?" and it ranges from say "1 =not at all satisfied" to "4 =very satisfied."⁸

per qol have maslow pyramid fig

Following a famous Maslow ([1954] 1987) pyramid of needs, Florida (2008) suggests a pyramid of needs in a city (figure 2).

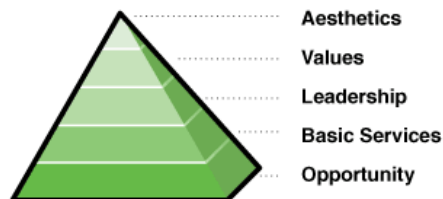


Figure 2: Place Pyramid, (Florida 2008, p 294).

qol and swb can be conceptualized using Veenhoven's four qualities of life in table 1.

	outer qualities	inner qualities
life chances	livability of environment [qol]	life-ability of the person
life results	utility of life	appreciation of life [swb]

Table 1: Veenhoven's four qualities of life (Veenhoven 2000).

what about the relationship between qol and swb?

the relationship of qol and swb is reviewed by (Veenhoven 2000, Cummins 2000, Diener and Suh 1997, Schneider 2005, Pacione 2003). qol and swb are different perspectives on human development, with its pros and cons, they should rather be used as complements than substitutes. qol is about what is out there; swb is about how it affects humans; there is world on the ground, and world on the mind. For instance, it is not only the objective qualities of transportation, but how people are satisfied with it; not only actual objective crime, but how people feel about it.⁹

The relationship between qol and swb canbe conceptualized in several ways.

First in a 2x2 matrix of hi-lo qol and swb, there can be 4 combinations of outcmes–Michalos livability-sw b theory is in table 2

	lo qol	hi qol
lo SWB	real hell [deprivation, unhappy poor]	fool's hell [dissonance, unhappy rich]
hi SWB	fool's paradise [adaptation, happy poor]	real paradise [well-being, happy rich]

Table 2: Michalos 2 variable theory: fool's paradise and fool's hell (Michalos 2014). Cummins' similar classification is shown in square brackets (Sirgy 2002, p.61).

Second, Livability contributes to satisfaction of human needs, and hence, SWB should follow (Diener et al. 1993, Veenhoven 1991, Veenhoven and Ehrhardt 1995). "Like all animals, humans have innate needs, such as for food, safety, and companionship.

⁷Some scholars make a distinction between happiness and life satisfaction–life satisfaction refers to cognition and happiness refers to affect. Life satisfaction is a cognitive aspect of happiness (Dorahy et al. 1998).

⁸The SWB measure, even though self-reported and subjective, is reliable (precision varies) and valid (Myers 2000, Di Tella and MacCulloch 2006). The survey-based life satisfaction measure is closely correlated with similar objective measures such as brain activity (Layard 2005). SWB has discriminant validity (Sandvik et al. 1993). For a thorough statement of happiness measure validity and reliability see Diener (2009) (especially ch. 5). Likewise, Diener (2009) provides a good discussion of why potential problems with happiness are not serious enough to make it unusable for public policy–see especially ch. 6. SWB, as any measure, has limitations. swb is influenced by culture, social norms, etc (Diener and Suh 2003). SWB is relative at least to some degree and it often bounces back to the so called set point (Lucas et al. 2006), even if one wins a lottery or loses a leg (Brickman et al. 1978). About half of SWB is genetically determined (Lykken and Tellegen 1996). Hence, it is important to keep in mind that not all happiness can be determined by policy or even personal choices. But these limitations are not critical, that is, policy still does influence happiness greatly–for discussion see Diener (2009), especially ch 6.

⁹Not only quality of life is connected to the perceptions, feelings, and subjective values, but fundamentally (and philosophically) quality of life is perceptions and feelings (Senlier et al. 2009). It is not the objective quality of infrastructure but how people perceive it that matters (Senlier et al. 2009). Spiritually, one could say that we do not really experience the world outside of ourselves, all experience is produced within the human <https://isha.sadhguru.org/us/en>.

Gratification of needs manifests in hedonic experience" (Veenhoven 2014, p. 3645).

Specifically Veenhoven's livability theory states that qol satisfies universal objective absolute human needs as those on Maslow's hierarchy of needs, and thus improves swb (Veenhoven and Ehrhardt 1995, Veenhoven 2000, 2014). Bottom of Maslow pyramid (Maslow [1954] 1987) are basic needs: economics and survival. Top of Maslow pyramid is about psychological and self-fulfillment needs. SWB is a function of both—basic needs first, but once they are satisfied, SWB depends on higher dimensions.

Yes, swb is subjective: self-reported evaluation, and qol is objective: actual metrics like GDP, physicians per capita etc; but The great advantage of swb is that it captures all experiences that are important to a person, not to the experts who construct livability indices. It is after all qol indices that are highly subjective in at least 2 ways: choice of metrics, and their weights. and then nonsense is produced like that usc econ idiot

Likewise, at country level—graph from Inglehart (1997), (also see discussion in Ng 1997, p. 1849), and it also illustrates affluence paradox (Pacione 2003)—the more income, economic development or affluence, the less they matter for SWB. At higher level what matters is higher dimensions Maslow's pyramid. This is similar to diminishing marginal returns from income in SWB observed at country, region, and person levels (Okulicz-Kozaryn 2012).

then Florida came up with palce pyramid TODO from swbLivability here; or maybe not see how it goes

3 qol, swb, and urbanicity

cite my stuff! qol usually increases with size of a place, and swb decreases. The larger the place, the more amenities; more freedom gemeinschaft esselschaft; more productivity, efficiency, agglomeration economies, labor specialization urb eco handbook; more innovation, income per capita BETTENCOURT, but also multiple disamenities: air, noise, light pollutions, disease spread (covid19 case in point), alienation, superficiality, crime (city.book)

Notably city is a very recent development in human evolutionary history, for tens of thousands of years as hunters gatherers humans lived without cities in small bands. Humans are more like chmip than bees or ants (that estimate by pinker i guess) and yet currently more than half of the species (and by 2050 about 2/3) will live in cities. City-living is unnatural to human species, and accordingly humans are less happy in cities than elsewhere,¹⁰ that is urban disamenities outweigh amenities; despite what economists try to argue (glaeser and burger)

some boilerplate on london nyc etc being least happy and that being a 'paradox'—everyone wants to live in chicagi, nyc, etc—from city book

definitely that part about singapore!!! clearly one f the very most livable places on earth, and yet not so happy

People flock to the very expensive cities like New York. New Yorkers are proud to live in New York, and yet they are unhappy to live in New York at the same time (Balducci and Checchi 2009).

and from city book these facial expressions! and chicken tower and these tiny square footage i guess and wholefoods lol

so the strange thing is that larger cities tend to be ranked higher on qol, but are less happy (my 2 aritciles on livability)

4 summary, discussion and Policy Use

The article started with measurment necessity and quote by lord kelvin on necessity of meaurment, and the argument here was that while complemnetray, objective qol and subjective swb, swb is better—more comprehensive than qol as it encompaes all sources and domains that matter to a person; it is more precise that it has perfect weighting by each person as opposedot some expert; Happiness can be used as a "yardstick" to aid with public policy—this is not a new idea—it was already proposed at least as early as in 1980s (Veenhoven 1988).

¹⁰except in poorest developing countries

it is agreed that qol should result in swb as per livability theory; but also attention should be paid to what aspects of qol matter for swb, if something is not important for swb, and not for other reasons (eg see my paper), then we should not spend limited resources on it; for instance if more highways don't result in more swb (perhaps positive economic externalities are traded off by negative eg pollution noise); again as in earlier Marx section if there is any obvious policy direction in social science for improving swb it is cutting money orientation cutting consumption

It is overlooked that arguably the ultimate outcome of any public policy is happiness. Only in few cases it is stated explicitly. One example is Bhutan, which officially tries to achieve the greatest happiness for the greatest number. The U.S., to some degree, does it too—its Declaration of Independence lists “pursuit of happiness.” Yet, it is difficult to imagine a government official pondering how some bill or policy enables this pursuit.

The relationship between policy making and happiness is depicted in flow chart in figure 3. Say a problem that we would like tackle with policy is income inequality. We take some action, which can be conceptualized as a subobjective, say redistribution. This in turn should result in the outcome of interest: income equality. We usually stop here. We tend to forget that the ultimate outcome of interest is happiness—after all the outcome of interest is only valuable if it results in happiness.¹¹

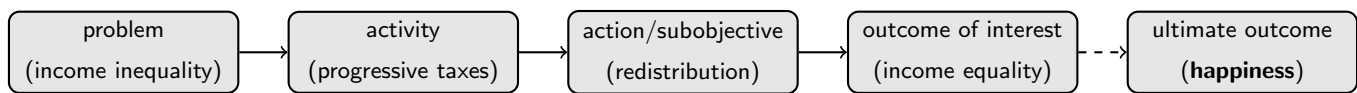


Figure 3: An outcome line. Usually we stop at outcome of interest. Yet the outcome of interest is only of value (with few exceptions as discussed later) if it results in happiness.

To improve policy making and administration we should ask and measure explicitly how much swb will a policy or administrative action bring about.

There are always limited resources and there are many competing needs—education, safety, public health, and so forth—one metric to help direct spending is happiness. The key advantage of a happiness yardstick is that it overcomes difficulty of measuring utility in social welfare. One example is housing and commute. we know that stressful commute in heavy traffic is one of the worst things one can do for one's happiness Kahneman et al. (2004). The reason for stressful heavy traffic commutes is a spatial mismatch between housing and jobs. Usually a person buys a larger and more expensive house than she needs further away from jobs in suburbs or exurbs Duany et al. (2001). But such houses, or most consumption do not result in lasting SWB Leonard (2010), Kasser (2016), Dittmar et al. (2014), Kasser (2003), Schmuck et al. (2000), Kasser and Ryan (1993).

Hence, a policy could discourage consumption and commute to promote greater SWB. Houses are typically the largest consumption item of typical persons, cars are typically the second largest item. And expensive or luxury cars do not bring about SWB either Okulicz-Kozaryn and Tursi (2015).

for instance it helps to answer a question whether we should invest limited resources in bike lanes, or waterfront?

and don't forget to mention cloutier and county level as in my initial proposal!

Mainstream started with Stiglitz et al. (2009). A useful overview is Diener (2009). *lll*

A troubling development is use by economists, e.g., United Nations (2012), Helliwell et al. (2020)

we have a happiness industry Davies (2015) peddling that more money, work, consumption, more happiness—governments and businesses embrace happiness to advance their own goals (Davies 2015).

For a historical overview of happiness—how it evolved over centuries and how different cultures approached it—see McMahon (2006).

¹¹There are exceptions to this rule, of course. Happiness is not the only outcome of interest especially in the short run, indeed, we may often need to sacrifice happiness in the short run in order to achieve it in the long run. For instance one needs to save, invest, postpone consumption, and work hard in order to be happy later. A typical example of short run swb and long run misery is over-use of pleasure inducing chemicals such as tobacco and alcohol (Linden 2011).

Perhaps, the goal of policy is to produce the greatest happiness for the greatest number (in the Benthamite spirit),¹², but definitely the goal is at least to enable the pursuit of happiness. In other words, equal opportunity (to achieve happiness) should be a human right, protected by government even in America that is relatively not unhappy about inequality (Bartels 2009, Alesina et al. 2004). Furthermore, it is arguably the government's role to prevent unhappiness or misery such as that resulting from poverty or unemployment. There are many more examples of adversities that arguably result in unhappiness and that governments should tackle—for examples see The Universal Declaration of Human Rights (Assembly 1948). In general, an important role of the government is to take care of mental health of its citizens—the World Health Organization estimates that in the decades to come depression will become the second most frequent cause of disability in the world (cited in Diener 2009, p. 66). By preventing misery such as poverty, unemployment, and depression governments can increase happiness, and importantly happiness can be used to measure the progress.

5 SOM

5.1 Other Tpologies

<http://happyplanetindex.org/>

<https://www.bcg.com/publications/interactives/seda-2019-guide>

QOLS scale (Burckhardt et al. 2003)

5.2 Best Places To Live

There are many lists called “best places to live.”

- <http://whosyourcity.com>,
- <http://www.gallup.com/poll/145913/city-wellbeing-tracking.aspx>,
- <https://wallethub.com/edu/happiest-places-to-live/32619>
- http://www.economist.com/blogs/gulliver/2011/02/liveability_ranking
- <http://www.mercer.com>
- and so forth

Mercer index appears to be most popular¹³.

5.2.1 Mercer

Mercer questioned expatriates on the importance of each of the 39 issues. The weights assigned to each category are as follows (most heavily weighted items in bold):¹⁴

23 **Political and social environment** (political stability, crime, law enforcement, etc)

4 Economic environment (currency exchange regulations, banking services, etc)

6 Socio-cultural environment (censorship, limitations on personal freedom, etc)

¹²Jeremy Bentham (1748-1832), a British philosopher, is a founder of moral utilitarianism—an idea that what makes us happy is the right thing to do. and so the governments should strive to produce “the greatest happiness for the greatest number”.

¹³“The Economist and Forbes base their rankings primarily on data from the Mercer consulting company”(http://www.livablecities.org/blog/value-rankings-and-meaning-livability).

¹⁴I obtained weights by contacting Mercer in 2011. I have contacted them again to see if there was any change and was told that it has not changed. Morais et al. (2013) reports the same weights. A full list of 39 factors is in (Okulicz-Kozaryn 2013).

- 19 **Health and sanitation** (medical supplies and services, infectious diseases, sewage, waste disposal, air pollution, etc)
- 3 Schools and education (standard and availability of international schools, etc)
- 13 **Public services and transportation** (electricity, water, public transport, traffic congestion, etc)
- 9 **Recreation** (restaurants, theaters, cinemas, sports and leisure, etc)
- 11 **Consumer goods** (availability of food/daily consumption items, cars, etc)
- 5 Housing (housing, household appliances, furniture, maintenance services, etc)
- 6 Natural environment (climate, record of natural disasters)

References

- ALESINA, A., R. DI TELLA, AND R. MACCULLOCH (2004): "Inequality and Happiness: Are Europeans and Americans Different?" *Journal of Public Economics*, 88, 2009–2042.
- ALTMAN, R. (2016): "The End of Economic Forecasting," *The Wall Street Journal*.
- ASSEMBLY, U. G. (1948): "Universal declaration of human rights," *Resolution adopted by the General Assembly*.
- AUTOR, D. (2010): "Lecture 3: Axioms of Consumer Preference and the Theory of Choice," *MIT Open Course Ware*.
- BALDUCCI, A. AND D. CHECCHI (2009): "Happiness and Quality of City Life: The Case of Milan, the Richest Italian City." *International Planning Studies*, 14, 25–64.
- BARTELS, L. M. (2009): *Unequal democracy: The political economy of the new gilded age*, Princeton University Press, Princeton NJ.
- BECKER, G. AND L. RAYO (2008): "Comment on 'Economic Growth and Subjective Well-Being: Reassessing the Easterlin Paradox' by Betsey Stevenson and Justin Wolfers," *Brookings Papers on Economic Activity*, 88–95.
- BENJAMIN, D. J., S. CUNNINGHAM, O. HEFFETZ, M. KIMBALL, AND N. SZEMBROT (2015): "Happiness and satisfaction are not everything: Toward wellbeing indices based on stated preference," .
- BENJAMIN, D. J. AND O. HEFFETZ (2012): "What do you think would make you happier? What do you think you would choose?" *The American economic review*, 102, 2083–2110.
- BENJAMIN, D. J., O. HEFFETZ, M. S. KIMBALL, AND N. SZEMBROT (2014): "Beyond happiness and satisfaction: toward well-being indices based on stated preference," *The American economic review*, 104, 2698–2735.
- BRICKMAN, P., D. COATES, AND R. JANOFF-BUMAN (1978): "Lottery winners and accident victims: Is happiness relative?" *Journal of Personality and Social Psychology*, 36, 917–927.
- BURCKHARDT, C. S., K. L. ANDERSON, ET AL. (2003): "The Quality of Life Scale (QOLS): reliability, validity, and utilization," *Health and quality of life outcomes*, 1, 60.
- BURTON, M. (2014): "Quality of Place," in *Encyclopedia of Quality of Life and Well-Being Research*, Springer, 5312–5314.
- CARVER, C. S. AND M. F. SCHEIER (1990): "Origins and functions of positive and negative affect: a control-process view." *Psychological review*, 97, 19.

- CUMMINS, R. (2000): "Objective and Subjective Quality of Life: an Interactive Model," *Social Indicators Research*, 52, 55–72.
- DAVIES, W. (2015): *The Happiness Industry: How the Government and Big Business Sold us Well-Being*, Verso Books.
- DI TELLA, R. AND R. MACCULLOCH (2006): "Some Uses of Happiness Data in Economics," *The Journal of Economic Perspectives*, 20, 25–46.
- DIENER, E. (2009): *Well-being for public policy*, Oxford University Press, New York NY.
- DIENER, E., R. E. LUCAS, AND C. N. SCOLLON (2006): "Beyond the hedonic treadmill: revising the adaptation theory of well-being," *American Psychologist*, 61, 305.
- DIENER, E., E. SANDVIK, L. SEIDLITZ, AND M. DIENER (1993): "The relationship between income and subjective well-being: relative or absolute?" *Social Indicators Research*, 28, 195–223.
- DIENER, E. AND E. SUH (1997): "Measuring quality of life: Economic, social, and subjective indicators," *Social Indicators Research*, 40, 189–216.
- DIENER, E. AND E. M. SUH, eds. (2003): *Culture and Subjective Well-Being*, MIT Press, Cambridge MA.
- DITTMAR, H., R. BOND, M. HURST, AND T. KASSER (2014): "The relationship between materialism and personal well-being: A meta-analysis." *Journal of personality and social psychology*, 107, 879.
- DORAHY, M. J., C. A. LEWIS, J. F. SCHUMAKER, R. AKUAMOA-BOATENG, M. DUZE, AND T. E. SIBIYA (1998): "A cross-cultural analysis of religion and life satisfaction." *Mental Health, Religion & Culture*, 1, 37–43.
- DUANY, A., E. PLATER-ZYBERK, AND J. SPECK (2001): *Suburban nation: The rise of sprawl and the decline of the American dream*, North Point Press, New York NY.
- DURKHEIM, E. ([1895] 1950): *The Rules of Sociological Method*, The Free Press, New York NY.
- EASTERLIN, R. A. (1973): "Does money buy happiness?" *The public interest*, 30, 3.
- ECONOMIST (2011a): "Liveable Cities Challenges and opportunities for policymakers," *Economist Intelligence Unit*.
- (2011b): "Liveanomics Urban liveability and economic growth," *Economist Intelligence Unit*.
- (2014): "The status of economists. The power of self-belief," *The Economist*.
- ECONOMIST, T. (2013): "Free exchange; The debt to pleasure; A Nobel prizewinner argues for an overhaul of the theory of consumer choice," *The Economist*.
- (2016): "Dispassionate analysis? America's economists are almost as divided as its politicians." *The Economist*.
- FARBER, S. (2016): "The Golden Clock: How One Simple Time Hack Could Increase Your Happiness at Work," *Inc.com*.
- FLORIDA, R. (2008): *Who's your city?*, Basic Books, New York NY.
- FOURCADE, M., E. OLLION, AND Y. ALGAN (2015): "The superiority of economists," *Revista de Economía Institucional*, 17, 13–43.
- FREUD, S., J. RIVIERE, AND J. STRACHEY (1930): *Civilization and its discontents*, Hogarth Press London.
- FRIEDMAN, M. (1970): "The social responsibility of business is to increase its profits," *The New York Times Magazine*.

- GERSHUNY, J. (2005): "Busyness as the badge of honor for the new superordinate working class," *Social research*, 287–314.
- GLAESER, E., J. GOTTLIEB, AND O. ZIV (2014): "Maximising happiness does not maximise welfare," *Vox*.
- GLAESER, E. L., J. D. GOTTLIEB, AND O. ZIV (2016): "Unhappy Cities," *Journal of Labor Economics*, 34, S129–S182.
- GOLDEN, L., J. R. HENLY, AND S. LAMBERT (2013): "Work Schedule Flexibility: A Contributor to Happiness?" *Journal of Social Research & Policy*, 4, 1–29.
- GOLDEN, L. AND B. WIENS-TUERS (2006): "To your happiness? Extra hours of labor supply and worker well-being)," *The Journal of Socio-Economics*, 35, 382–397.
- GOLDMAN, E., C. FALK, B. PATEMAN, AND J. M. MORAN (2003): *Emma Goldman: Made for America, 1890-1901*, vol. 1, Univ of California Press.
- HELLIWELL, J., R. LAYARD, J. SACHS, AND J. DE NEVE (2020): "World happiness report 2020," *New York: Sustainable Development Solutions Network*. Saatavilla <https://happiness-report.s3.amazonaws.com/2020/WHR20.pdf>.
- HODGSON, G. M. (1993): *Economics and Evolution: Bringing Life Back Into Economics*, University of Michigan Press.
- INGLEHART, R. (1997): *Modernization and postmodernization: Cultural, economic, and political change in 43 societies*, Princeton Univ Pr, Princeton NJ.
- JOYE, Y., J. W. BOLDERDIJK, M. A. KÖSTER, AND P. K. PIFF (2020): "A diminishment of desire: Exposure to nature relative to urban environments dampens materialism," *Urban Forestry & Urban Greening*, 54, 126783.
- KAHNEMAN, D., A. B. KRUEGER, D. A. SCHKADE, N. SCHWARZ, AND A. A. STONE (2004): "A survey method for characterizing daily life experience: The day reconstruction method," *Science*, 306, 1776–1780.
- KALLIS, G. (2011): "In defence of degrowth," *Ecological Economics*, 70, 873–880.
- KALLIS, G., C. KERSCHNER, AND J. MARTINEZ-ALIER (2012): "The economics of degrowth," *Ecological Economics*, 84, 172–180.
- KASSER, T. (2003): *The high price of materialism*, MIT press.
- (2016): "Materialistic values and goals," *Annual review of psychology*, 67, 489–514.
- KASSER, T. AND R. RYAN (1993): "A dark side of the American dream: correlates of financial success as a central life aspiration." *Journal of personality and social psychology*, 65, 410.
- KRUGMAN, P. (2012): "Economics in the Crisis," *The New York Times*.
- KWAK, J. (2017): *Economism. Bad Economics and the Rise of Inequality*, Penguin Random House.
- LAYARD, R. (2005): *Happiness. Lessons from a new science.*, The Penguin Press, New York NY.
- LEONARD, A. (2010): *The story of stuff: How our obsession with stuff is trashing the planet, our communities, and our health-and a vision for change*, Simon and Schuster.
- LINDEN, D. (2011): *The Compass of Pleasure: How Our Brains Make Fatty Foods, Orgasm, Exercise, Marijuana, Generosity, Vodka, Learning, and Gambling Feel So Good*, Viking Press.

- LUCAS, R. E., A. E. CLARK, Y. GEORGELLIS, AND E. DIENER (2006): "Unemployment Alters the Set Point for Life Satisfaction," *Psychological Science*, 15, 8–13.
- LYKKEN, D. AND A. TELLEGEN (1996): "Happiness is a Stochastic Phenomenon," *Psychological Science*, 7, 186–189.
- LYONS, R. G. (2007): "Towards a theory of work satisfaction: An examination of Karl Marx and Frederick Herzberg," *Journal of Thought*, 42, 105–113.
- MARX, K. (1844a): "Economic and Philosophical Manuscripts of 1844. Human Requirements and Division of Labour Under the Rule of Private Property," www.marxists.org.
- (1844b): "The Power Of Money," [marxists.org](http://www.marxists.org).
- ([1867] 2010): *Capital, vol. 1*, <http://www.marxists.org>.
- MASLOW, A. ([1954] 1987): *Motivation and personality*, Longman, 3 ed.
- MASUDA, Y. J., J. R. WILLIAMS, AND H. TALLIS (2020): "Does Life Satisfaction Vary with Time and Income? Investigating the Relationship Among Free Time, Income, and Life Satisfaction," *Journal of Happiness Studies*, 1–23.
- MCMAHON, D. M. (2006): *Happiness: A history*, Grove Pr.
- MICHALOS, A. C. (2014): "Quality of Life, Two-Variable Theory," in *Encyclopedia of Quality of Life and Well-Being Research*, 5307–5309.
- MORAIS, P., V. L. MIGUÉIS, AND A. S. CAMANHO (2013): "Quality of life experienced by human capital: An assessment of European cities," *Social indicators research*, 110, 187–206.
- MYERS, D. G. (2000): "The Funds, Friends, and Faith of Happy People," *American Psychologist*, 55, 56–67.
- NAIM, M. (2016): "Economists Still Think Economics Is the Best," *The Atlantic*.
- NG, Y.-K. (1997): "A case for happiness, cardinalism, and interpersonal comparability," *The Economic Journal*, 107, 1848–1858.
- OKULICZ-KOZARYN, A. (2012): "Income and Well-being Across European Provinces," *Social Indicators Research*, 1–22.
- (2013): "City Life: Rankings (Livability) Versus Perceptions (Satisfaction)," *Social Indicators Research*, 110, 433–451.
- (2015): *Happiness and Place. Why Life is Better Outside of the City*, Palgrave Macmillan, New York NY.
- OKULICZ-KOZARYN, A. AND L. GOLDEN (2017): "Happiness is flextime," *Applied Research in Quality of Life*.
- (2018): "Unhappiness is Unpredictability," *Applied Research in Quality of Life*.
- OKULICZ-KOZARYN, A. AND N. O. TURSI (2015): "Luxury Car Owners Are Not Happier Than Frugal Car Owners," *Forthcoming in International Review of Economics*.
- PACHAURI, R. K., M. ALLEN, V. BARROS, J. BROOME, W. CRAMER, R. CHRIST, J. CHURCH, L. CLARKE, Q. DAHE, P. DASGUPTA, ET AL. (2014): *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, IPCC.
- PACIONE, M. (2003): "Urban environmental quality and human wellbeing—a social geographical perspective," *Landscape and Urban Planning*, 65, 19–30.

- PUTNAM, R. D. (2001): *Bowling Alone: The Collapse and Revival of American Community*, New York, NY: Simon & Schuster.
- RAYO, L. AND G. BECKER (2007): "Evolutionary Efficiency and Happiness," *Journal of Political Economy*, 115, 302–337.
- SANDVIK, E., E. DIENER, AND L. SEIDLITZ (1993): "Subjective Well-Being: The Convergence and Stability of Self-Report and Non-Self-Report Measures." *Journal of Personality*, 61, 317–342.
- SCHMUCK, P., T. KASSER, AND R. M. RYAN (2000): "Intrinsic and extrinsic goals: Their structure and relationship to well-being in German and US college students," *Social Indicators Research*, 50, 225–241.
- SCHNEIDER, M. (2005): "The quality of life in large American cities: Objective and subjective social indicators," *Citation Classics from Social Indicators Research*, 101–115.
- SENLIER, N., R. YILDIZ, AND E. AKTA (2009): "A Perception Survey for the Evaluation of Urban Quality of Life in Kocaeli and a Comparison of the Life Satisfaction with the European Cities," *Social Indicators Research*, 94, 213–226.
- SEUNTJENS, T. G., M. ZEELLENBERG, S. M. BREUGELMANS, AND N. VAN DE VEN (2015): "Defining greed," *British Journal of Psychology*, 106, 505–525.
- SIRGY, M. J. (2002): *The psychology of quality of life*, vol. 12, Springer.
- SKIDELSKY, E. AND R. SKIDELSKY (2012): *How much is enough?: money and the good life*, Penguin UK.
- STEEL, P., J. SCHMIDT, AND J. SHULTZ (2008): "Refining the relationship between personality and subjective well-being." *Psychological bulletin*, 134, 138–161.
- STIGLITZ, J., A. SEN, AND J. FITOUSSI (2009): "Report by the Commission on the measurement of economic performance and social progress," Available at www.stiglitz-sen-fitoussi.fr.
- UNITED NATIONS (2012): "World Happiness Report," Report, United Nations.
- VEENHOVEN, R. (1988): "The utility of happiness," *Social indicators research*, 20, 333–354.
- (1991): "Is happiness relative?" *Social Indicators Research*, 24, 1–34.
- (1995): "World database of happiness," *Social Indicators Research*, 34, 299–313.
- (2000): "The four qualities of life," *Journal of happiness studies*, 1, 1–39.
- (2008): "Sociological theories of subjective well-being," in *The Science of Subjective Well-being: A tribute to Ed Diener*, ed. by M. Eid and R. Larsen, The Guilford Press, New York NY, 44–61.
- (2014): "Livability Theory," *Encyclopedia of Quality of Life and Well-Being Research*, 3645–3647.
- VEENHOVEN, R. AND J. EHRHARDT (1995): "The Cross-National Pattern of Happiness: Test of Predictions Implied in Three Theories of Happiness," *Social Indicators Research*, 34, 33–68.
- WANG, L. AND J. K. MURNIGHAN (2011): "On greed," *Academy of Management Annals*, 5, 279–316.
- WHILLANS, A. V., E. W. DUNN, P. SMEETS, R. BEKKERS, AND M. I. NORTON (2017): "Buying time promotes happiness," *Proceedings of the National Academy of Sciences*, 201706541.

- WILLIAMS, J. R., Y. J. MASUDA, AND H. TALLIS (2016): "A measure whose time has come: Formalizing time poverty," *Social Indicators Research*, 128, 265–283.
- ZAFIROVSKI, M. (1999): "What is really rational choice? Beyond the utilitarian concept of rationality," *Current Sociology*, 47, 47–113.