

1-1-2022

## Should India Lend to GDH the Same Weight as to GDP?

Sudhavna Char

Follow this and additional works at: <https://digitalcommons.du.edu/irbe>



Part of the [Business Commons](#), and the [Economics Commons](#)

---

### Recommended Citation

Char, Sudhavna (2022) "Should India Lend to GDH the Same Weight as to GDP?," *International Review of Business and Economics*: Vol. 6: Iss. 1, Article 19.

Available at: <https://digitalcommons.du.edu/irbe/vol6/iss1/19>

This Article is brought to you for free and open access by Digital Commons @ DU. It has been accepted for inclusion in International Review of Business and Economics by an authorized editor of Digital Commons @ DU. For more information, please contact [jennifer.cox@du.edu](mailto:jennifer.cox@du.edu), [dig-commons@du.edu](mailto:dig-commons@du.edu).

## Should India Lend to GDH the Same Weight as to GDP?

Sudhanva Char, Life University

### Abstract

Growth for growth's sake goes against the grain of sustainable economics. It is not maintainable on the basis of full-cost pricing. The billing should include health and environmental costs, including charges for the exhaustion of natural resources, egregious disparities in wealth distribution, and increases in mental and physical sickness. Today's material growth model transmutes many economic endeavors into preying on current and future generations. Unwittingly, the single-minded pursuit of growth without a global perspective has been resulting in loss of life and property, besides undermining prospects of life's basics for upcoming generations. This is myopic, ignoring catastrophes hitting home. In this dystopian scenario, it is judicious to shift attention to non-economic vistas such as well-being. This is doable, at least after the basics of life, including education and health care, have been reached to the poor. A holistic growth atlas can then be mapped within the peripheries of sustainable growth. Such mapping would be in qualitative terms as well, factoring in local beliefs, besides in quantitative terms. Policymakers could then hold back jockeying for GDP growth and adopt a serviceable tactic policy to Gross National Happiness.

### Introduction: Moderating Growth Exuberance

1967's "Costs of Economic Growth" by Ezra J. Mishan challenged the "religion of growth". Economists have been focused on the material aspects of societal growth without a holistic assessment of the consequences of such a preoccupation. It is myopic to believe that it is not the economist's onus if affluence leads to a deterioration in ethics and mental and physical health. Such "progress" tends to enhance the consumption of unsafe and unhealthy foods. A single-minded focus on material affluence leads to market failures, one of which is rapidly accelerating, man-made climate change. Another sad outcome is widening inequalities of every kind, including non-availability of essential items, such as vaccines, for the not-so-well-off countries, for the purpose of impeding the spread of the COVID pandemic. The preoccupation with material growth squanders scarce resources. Due to these drawbacks of economic progress, we have been leaving a scorched earth for future generations. No one would call it "sustainable economic development". In 2015, the UN drew up 17 g17 goals for sustainable growth to be achieved by 2030, in affirmation of the evolving gloomy situation.<sup>1</sup>

There is no Planet B to migrate to, at least not for the next few decades. This brazen attitude of self-gratification of current cohorts towards future generations is worse than beggar thy neighbor policy, because it leads to begging for future global populations other than the privileged and the well off. Metaphorically it is 'd'evil take the hindmost' attitude, normal during war times. Triggering these thoughts are catastrophic events like a) deadly flooding in America, Europe, Asia and other locations, b) draughts in states like Arizona, California, Colorado, Nevada, Utah, Oregon, Nebraska, North Dakota, Wyoming and in about 21% of land area in India, more specifically in Northern Maharashtra, Gujarat, Rajasthan, Nagaland, Odisha, Chhattisgarh, and others, c) dramatic changes in world temperature melting the glaciers due to human-caused climate change, d) raising sea-water levels drowning inhabited land areas, and such other dreadful factors that have made it a pressing obligation to temper the objective of material growth per se. Even otherwise, the logic of growth-for-growth's-sake, is the same weird logic of cancer cells that, without a purpose, multiply fast in all grotesque ways.

### The GDP-GDH Nexus

A feasible alternative to growth for growth's sake would call for a more holistic measure of wellness that considers happiness or overall well-being. In 1972 the King of Bhutan Jigme Wangchuck

advocated that Gross National Happiness (GNH) was more important than Gross Domestic Product.<sup>2</sup>

**Table 1** Comparisons of Per-capita GDP and GNH Scores

	Per Capita GDP in \$ 2020	Gross National Happiness Score	GNH Rank
Bangladesh	1969	5.025	101
Bhutan	3122	5.088	95
Brazil	6797	6.330	35
China	10500	5.339	84
Cambodia	1513	4.830	114
Costa Rica	12077	7.069	16
Finland	49041	7.842	1
Hong Kong	46324	5.477	87
India	1901	3.819	139
Liberia	583	4.625	120
Libya	3699	5.410	80
Mexico	8347	6.317	36
Mongolia	4007	5.677	70
Myanmar	1400	4.426	126
Nepal	1155	5.269	87
Nicaragua	1905	5.972	55
Pakistan	1194	4.934	105
Philippines	3299	5.880	61
Russia	10127	5.147	76
Switzerland	86601	7.571	3
Taiwan	33402	6.584	24
UK	40285	7.064	17
USA	63544	6.951	19
Singapore	59798	6.377	32
Israel	43611	7.157	12

Source: Compiled by the author from <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD> for Per Capita GDP and <https://happiness-report.s3.amazonaws.com/2021/Appendix1WHR2021C2.pdf> for Happiness and Rank data.

The term GNH picked up traction only recently, thanks to the prevalence of dire poverty all over, including in some developed nations. Ironically, it is also of interest that Bhutan's own Happiness score is an unenviable 95 below that of a country like Libya, racked by civil armed conflicts, thanks partly to Libyan oil revenue. There are happiness scores in Table 1 for 25 randomly picked countries. The data in Fig. 1 is confounding to even well-informed experts. Here are a few striking examples in Table 1 giving per capita GDP, Happiness scores, and related data. The Happiness Index stirs interest about the components of the Index. The factors are listed below in Table 2.

**Table 2.** Components of GDH matrix

Summary statistics for country-year observations with valid happiness scores - 2018 to 2020

	Mean	Std. Dev.	Min.	Max.	N
Life Ladder	5.61	1.08	2.38	7.89	381
Positive affect	0.71	0.10	0.32	0.89	377
Negative affect	0.29	0.09	0.08	0.54	377
Log GDP per capita	9.52	1.11	6.64	11.65	362
Social support	0.82	0.11	0.42	0.98	381

Healthy life expectancy at birth	65.36	6.56	48.20	77.10	369
Freedom to make life choices	0.80	0.11	0.37	0.97	378
Generosity	-0.02	0.15	-0.34	0.56	361
Perceptions of corruption	0.72	0.19	0.07	0.96	359

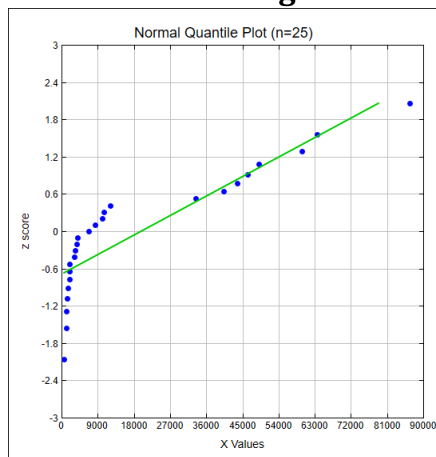
Source: <https://happiness-report.s3.amazonaws.com/2021/Appendix1WHR2021C2.pdf>

### GDH Constituents

Briefly, the first component life ladder refers to people’s response to the Gallop Poll question ‘How is life?’ The best possible quality of life rates at 10 (tenth rung in the Cantrill ladder) and the worst rates a zero. Of course, this is possibly the most personal and one-sided response going into the GDH Matrix. The second term, positive affect, refers to the biologically correlated factors that prevent ill-health and risk of disease. This neurobiology data relates mainly to people in middle-age who are repeatedly asked to rate their happiness over a working day.<sup>3</sup> Analysis of this data shows that happiness is increased by lower salivary cortisol, reduced fibrinogen stress, and lower ambulatory heart rate in men. The effects are said to be independent of age, socioeconomic status, smoking, body mass, and psychological distress. The third factor of negative affect with a value of between zero and 1, is associated with the frequency of negative emotions of worry, sadness, and anger on the previous day.<sup>4</sup> The fourth item, ‘Log GDP per-capita’, uses the natural log of GDP data in the happiness model instead of the raw GDP data, as in Table 1, which is just for 25 selected countries. The other components 5 to 9 are self-explanatory, and further elucidation is available in the World Happiness Report (2021) accessible at <https://happiness-report.s3.amazonaws.com/2021/Appendix1WHR2021C2.pdf>.

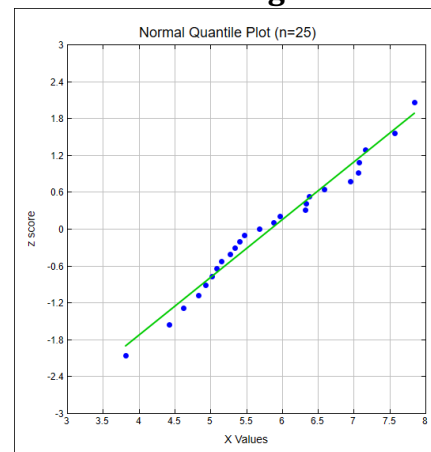
Analysis of the data in Table 1 is circumscribed by the fact that the Ryan-Joiner test shows that when Z scores are graphed against the per capita GDP the resulting plot brings out the non-normality of the data in Column 1 both at the 0.05 and 0.01 levels of significance. Just the opposite is true of the Happiness scores in column 2. We fail to reject the normality of Happiness scores. Some of the ironies and contradictions being mentioned below are possibly further aggravated by the non-normality of per capita GDP data as shown in Figures 1 and 2. Nevertheless, the surprises in the correlation between the two variables are given here. Discussion about them has therefore be tempered by the non-normality of one of the variables. Time prevented using Z scores of per-capita GDP data and for happiness scores.

**Fig. 1**



Note: X values are Happiness scores

**Fig. 2**



Note: X values are per capita GDP

### Confounding GDH Facts

For those with a 360-degree view of current world affairs, including socio-economic and political facts, the happiness rankings derived with the help of nine factors listed in Table 2 seem weird, but in the case of some other countries, rather instructive. India, Bangladesh, and Nicaragua have almost the same per-capita GDP, but Nicaragua has a happiness score of 5.97, Bangladesh 5.025, and India 3.819. This is the weird part. The instructive aspect of the Happiness scores are the data for China, Hong Kong, and Taiwan below.

	Per capita GDP	Happiness Index	Rank
China	10500	5.339	84
Hong Kong	46324	5.477	87
Taiwan	33402	6.584	24

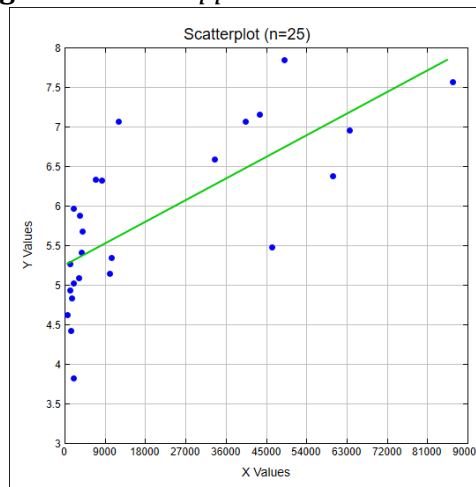
Both per-capita GDP and freedoms seem to explain the vastly varied data in each column, particularly the conspicuous difference in the ranking for Taiwan. With its \$22 trillion GDP, and a per capita income of \$63,544, America ranks number one in the world. But, in terms of Gross Domestic Happiness, it ranks 18<sup>th</sup>, with a GDH score of 6.951, much below Finland with a GDH score of 7.842. Nordic countries enjoy a GDH of 7 or more. China, with its second largest GDP of \$13.4 T (per capita \$10,500), has a GDH score of 5.399 and ranks 87<sup>th</sup>. This country's regimented socio-economic life is too well-known to require further comments. So, should one assume that people who were polled in China like their somewhat restrained life, and those polled in India loath the freedom they have in abundance? Or is the corruption in public life at the state and local governments in India so disgusting that those polled choose the lowest rung in the Cantrill ladder? It is also possible that the sample was not truly randomized and representative of the very diverse population, and/or too small in relation to the size of the population, thereby lessening the power of the statistical test.

India's GDP ranks 5<sup>th</sup> largest (per capita \$ 1901), and more significantly, in terms of PPP, it is the third-largest economy. However, in terms of GDH India ranks way below other developing countries with a score of 3.819 and a rank of 139 out of a total of 149 countries. Ironically, Bhutan (per capita \$ 3122), the country that started the world on Gross National Happiness in 1998, had a somewhat miserable ranking of 97. There is also much critiquing of Bhutan's 1990s summary eviction from Bhutan of about one-sixth of its population who were not Buddhist but were ethnic Nepali Hindus who lived in Bhutan even as early as 1620s.<sup>5</sup> The expulsion created about 100,000 refugees who had to be settled the world over. Upheavals such as this do not create happiness.

This paper urges exploration of some interesting correlations between material growth and happiness, the composition of the GDH, and whether the criteria can be tweaked. More critically, it raises the question of whether it is time that India paid attention to it, at least after ensuring the basics including education and health care to all its citizens. It explores if high standards of living are possible at modest income levels, as becomes evident in Table 1. As noted earlier, in the case of countries like Bangladesh and Nicaragua which have almost the same per capita income as India, but have Happiness scores of 5.025 and 5.972 respectively, compared to 3.819 for India. Similar examples are Brazil and the Philippines, both scoring much higher than India, but with per capita incomes not very much more than India's. The world average Happiness score is 5.51. Nicaragua has chronic poverty; there is a virtual absence of democratic freedoms; it has ceaseless conflicts; there is much inequality; it has more than its share of natural disasters and much corruption and drug trafficking. Some of these negatives are common to India as well, but on a very much smaller scale. If that is happiness in Nicaragua, what is misery? Even a high (Arthur) Okun Misery Index

(Unemployment rate + Inflation rate), which is not relevant here, could then be really snug and cozy. Subjectivity is a contentious issue most people would avoid. They would rather reconcile with a prevalent view.

**Figure 3.** GDP-Happiness Score Correlation



Source: S. Char (2021)

As Fig. 3 shows, GDP correlates significantly with Happiness scores, with a correlation coefficient of 0.73 (P-value: 0.00004). When log values of GDP are used in the model, the GDP influence on GDH seems to come down. It is a moot point if assigning such a critical weight to GDP beyond creature comforts together with universal health care and education, is defensible. For two reasons this is the crux of the matter. First, with incomes of about \$2000, which is much more in terms of purchasing power parity (PPP) in countries like India, almost all the population would not only be above poverty levels, but also be able to obtain education and health care. This is at a sustainable level of growth. Second, what is arguable is, whether from the perspective of sustainable growth, 'growth for growth's sake' can ever be rationalized. A disproportionate focus on GDP, derived from herd instinct both at the micro and macro-economic level, has resulted in a global GDP competitive struggle for power and influence. This is vitiating ecological and sociological factors with global warming, inhuman living conditions, and resort to unethical means to improve material well-being. Suggestions have been made by the UN and other institutions on how to deal with GDH, and over time, how to pitch more emphasis on GDH, instead of a complete focus on GDP. Such a shift of emphasis would require more exploration of factors that could create a healthy ambiance for happiness. These include the 8 items other than GDP shown in Table 2.

### The Parvenu Mind

With an increase in affluence, there is a larger likelihood of indulgences among the parvenus, which is about everyone. Prosperity makes it possible to buy antidotes to the weaknesses and morbidities that normally visit the prosperous, such as a craving for alcoholic beverages and addiction to drugs. This is a broad-brush picture. There is evidence to validate the hypothesis. Let's assume that increased screen time either with one's laptop or with one's smartphone is a direct consequence of prosperity. Studies show that elevated screen time is an addictive behavior that comes with steady (white-collar) jobs. Protracted screen time is no less an addiction than alcohol, sugar, or smoking. With increased screen time comes a preference for social isolation and even insensitive behavior for interruptions in screen time. Some of these conclusions are based on a study of a sample of 1897 adults (58 percent of whom were women) from whom information was collected about screen time such as television, cell phone, and computers during the COVID

pandemic.<sup>6</sup> They were also asked about consumption of alcohol, smoking, and sweetened foods. Some of the covariates were educational level, age, sex, a feeling of stress, anxiety, depression, and use of a screen device for physical activity. To adjust for covariates, binary logistic regression was used.

The results of this study were as follows:

- a) Increased TV time was associated with increased desire to drink (OR = 1.46, 95% CI: 1.12; 1.89) and increased sweetened food consumption (OR = 1.53, 95% CI: 1.18; 1.99)
- b) Increase in computer use was negatively associated with consumption of alcohol (OR = 0.68, 95% CI: 0.53; 0.86) and sweetened foods (OR = 0.78, 95% CI: 0.62; 0.98).
- c) Increased cell phone time was associated with increased sweetened food consumption during the pandemic (OR = 1.78, 95% CI: 1.18; 2.67).
- d) Participants with increased time in the three devices were less likely to consume sweetened foods for  $\geq 5$  days per week (OR = 0.63, 95% CI: 0.39; 0.99) but were twice as likely to have sweetened food consumption increased during pandemic (OR = 2.04, 95% CI: 1.07; 3.88).

Skid-row lifestyles are prevalent not only in Los Angeles, but in places like Kensington Avenue, Philadelphia, and in many streets of Mumbai and worldwide in mainly urban areas. This weakness for soft options in life shows the frustration of some sections of people with a lack of a driving purpose in life, besides the rat race in most walks of life. This could pressure them to choose a lower rung on the Cantrill ladder.

Happiness as per professional perceptions is a correlation of material consumption as a ratio or proportion of desire, the denominator. Within this proportion there could be gradations such as, for instance, whether one desires a Mercedes Benz A Class at \$33,750 or the Red 2011 Mercedes Gold Dream priced \$10 million.

$$H = MC/D$$

H stands for happiness, MC for material consumption, and D for desire. There is happiness or balance in life if the numerator is one. But when D is much larger than the consumption, there is less happiness. If D is for Mercedes Gold Dream and the actual accomplishment is Mercedes Benz A-Class, happiness is just one-third or 33.78 percent. It is time not to let any mind be swayed by this archaic Happiness equation.

This paper is not an espousal for toning down the significance of GDP as a measure of the value of goods and services produced in a given geographical area during a point in time such as a year, month, or quarter. GDP and per capita income are ballpark markers of standards of living. While economists acknowledge it is not a perfect measure, they also know that there is no substitute to it despite weaknesses such as omitting the value of goods and services generated in homes as well as the production of goods injurious or hazardous to human health. It cannot account for goods and services produced in the tax-evading underground world or the informal economy that contributed to detracting the efficacy of rupee demonetization in 2016. Despite such drawbacks and despite being arcane, like Samuelson-Nordhaus advice in their "Economics" text, it has served as a marker of the comparative economic status of a state or nation, and as a gauge of the outcomes of fiscal, monetary, or other economic measures. GDP is a key economic parameter. The profession needs to continue to employ GDP data, and its expenditure or income break up for economic data analysis. Concurrently refined happiness scores also need to emerge.

It is inevitable that for times to come there will be dependence on GDP as a measure of the current level of economic activity. However, of late there are several reasons for coming up with a measure that captures some of the non-economic factors that talk about the well-being of nationals. It is well established that well-being or happiness is not a derivative of GDP or material progress though it undeniably contributes to it. This fact adds weight to the argument that soon after a government has ensured the basics of life, it should withdraw active involvement in the economy and focus on just the macro variables like economic stability, inflation, fiscal and monetary policy, social justice, law and order, national defense and security, collective well-being and the like. There

could be differences in the degree of involvement between those believing in limited government and those in socialist welfare.

### Summary and Conclusions

It is time to take a good critical look at GDP, which has been serving as a somewhat coarse indicator of economic progress. It ignores market failures and institutional failures. There is a real need to usher in a more holistic yardstick of societal progress that considers contentment, happiness, physical and mental health, and such related factors, despite their bias. There are serious controversial issues due to the subjective nature of a measure such as GNH. The profession needs to bestow more attention to the components of GNH and reconcile. This would support a better understanding of where a nation stands in the march for civilizational progress, and not just in material attainment.

---

### Footnotes

<sup>1</sup> Biermann, Frank (2017) Global governance by goal-setting: the novel approach of the UN Sustainable development Goals, [www.sciencedirect.com](http://www.sciencedirect.com). Accessed on Sept.10, 2021 from [http://www.fsp.usp.br/pos/wp-content/uploads/2013/07/bierman-et-al\\_global-governance-by-goal-setting.pdf](http://www.fsp.usp.br/pos/wp-content/uploads/2013/07/bierman-et-al_global-governance-by-goal-setting.pdf).

<sup>2</sup> Oxford Poverty and Human Development Index (2021) Bhutan's Gross National Happiness Index accessed on August 21, 2021 from <https://ophi.org.uk/policy/gross-national-happiness-index/>

<sup>3</sup> Steptoe A. et al (2005) Positive affect and biological function in everyday life, *Neurobiology of Aging*, Volume 26, Issue 1, Supplement, December 2005, Pages 108-112, accessed from <https://www.sciencedirect.com/science/article/abs/pii/S0197458005002769>

<sup>4</sup> Helliwell JF et al (2019) WHR Ch.2 accessed from <https://worldhappiness.report/ed/2019/changing-world-happiness/>

<sup>5</sup> Wikipedia, Ethnic Cleansing in Bhutan, [https://en.wikipedia.org/wiki/Ethnic\\_cleansing\\_in\\_Bhutan](https://en.wikipedia.org/wiki/Ethnic_cleansing_in_Bhutan) accessed Sept.10, 2021

<sup>6</sup> William RT et al Increased Screen Time Is Associated With Alcohol Desire and Sweetened Foods Consumption During the COVID-19 Pandemic, *Frontiers in Nutrition* 24 March 2021, [https://www.frontiersin.org/articles/10.3389/fnut.2021.630586/full?utm\\_source=S-TWT&utm\\_medium=SNET&utm\\_campaign=ECO\\_FNUT\\_XXXXXXXX\\_auto-dlvrit](https://www.frontiersin.org/articles/10.3389/fnut.2021.630586/full?utm_source=S-TWT&utm_medium=SNET&utm_campaign=ECO_FNUT_XXXXXXXX_auto-dlvrit)



