Time to leave GDP behind

Gross domestic product is a misleading measure of national success. Countries should act now to embrace new metrics, urge Robert Costanza and colleagues.
<table>
<thead>
<tr>
<th>SDG1 No Poverty</th>
<th>Target 1.1</th>
<th>Target 1.2</th>
<th>Target 1.5</th>
<th>Target 2.1</th>
<th>Target 2.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDG2 Zero Hunger</td>
<td>Target 2.3</td>
<td>Target 2.4</td>
<td>Target 2.5</td>
<td>Target 3.3</td>
<td>Target 3.4</td>
</tr>
<tr>
<td>SDG3 Good Health</td>
<td>Target 3.9</td>
<td>Target 6.1</td>
<td>Target 6.4</td>
<td>Target 6.6</td>
<td>Target 6.7</td>
</tr>
<tr>
<td>SDG6 Clean Water</td>
<td>Target 7.1</td>
<td>Target 7.2</td>
<td>Target 8.2</td>
<td>Target 8.4</td>
<td>Target 9.1</td>
</tr>
<tr>
<td>SDG7 Clean Energy</td>
<td>Target 9.3</td>
<td>Target 9.4</td>
<td>Target 11.5</td>
<td>Target 11.6</td>
<td>Target 11.7</td>
</tr>
<tr>
<td>SDG8 Economic Growth</td>
<td>Target 11.A</td>
<td>Target 11.C</td>
<td>Target 12.2</td>
<td>Target 12.3</td>
<td>Target 12.4</td>
</tr>
<tr>
<td>SDG9 Indus, Innov &amp; Infra</td>
<td>Target 12.5</td>
<td>Target 13.1</td>
<td>Target 14.1</td>
<td>Target 14.2</td>
<td>Target 14.3</td>
</tr>
<tr>
<td>SDG11 Sustainable Cities</td>
<td>Target 14.4</td>
<td>Target 14.5</td>
<td>Target 14.B</td>
<td>Target 15.1</td>
<td>Target 15.2</td>
</tr>
<tr>
<td>SDG12 Resp. Consum &amp; Prod</td>
<td>Target 15.3</td>
<td>Target 15.4</td>
<td>Target 15.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SDG13 Climate Action</th>
<th>Target 14.7</th>
<th>Target 14.8</th>
<th>Target 14.9</th>
<th>Target 14.10</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDG15 Life on Land</td>
<td>Target 14.15</td>
<td>Target 14.16</td>
<td>Target 14.17</td>
<td>Target 14.18</td>
</tr>
</tbody>
</table>

**Level of Support for a Contribution**
- Not Assessed
- Uncertain
- Weak
- Strong

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Units</th>
<th>Indicators</th>
<th>Explanation</th>
<th>Area coverage</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genuine Progress Indicator (GPI)</td>
<td>$</td>
<td>26</td>
<td>Personal Consumption Expenditures weighted by income distribution, with volunteer and household work added and environmental and social costs subtracted.</td>
<td>17 countries +</td>
<td>1950-present</td>
</tr>
<tr>
<td>Genuine Savings</td>
<td>$</td>
<td>5</td>
<td>Level of saving after depreciation of produced capital; investments in human capital; depletion of minerals/energy/forests; and damages from air pollutants are accounted for.</td>
<td>140 countries</td>
<td>1970-2008</td>
</tr>
<tr>
<td>Inclusive Wealth</td>
<td>$</td>
<td>8</td>
<td>Asset wealth including, built, human, and natural resources</td>
<td>20 countries</td>
<td>1990-2008</td>
</tr>
<tr>
<td>Australian Unity Well-Being Index</td>
<td>Index #</td>
<td>14</td>
<td>Annual survey of various aspects of well-being and quality of life</td>
<td>Australia</td>
<td>2001-present</td>
</tr>
<tr>
<td>World Values Survey</td>
<td>Index #</td>
<td>100's</td>
<td>Periodic (5 so far) survey of a broad range of social, environmental, and economic variables</td>
<td>73 countries</td>
<td>1981-2008</td>
</tr>
<tr>
<td>Gallup-Healthways Well-Being Index</td>
<td>Index #</td>
<td>39</td>
<td>Annual survey in six domains: live evaluation, physical health, emotional health, healthy behavior, work environment, and basic assets</td>
<td>50 states in US</td>
<td>2008-present</td>
</tr>
<tr>
<td>Gross National Happiness</td>
<td>Index #</td>
<td>33</td>
<td>In-person survey in nine domains: psychological well-being, standard of living, governance, health, education, community vitality, cultural diversity, time use, ecological diversity</td>
<td>Bhutan</td>
<td>2010</td>
</tr>
<tr>
<td>Human Development Index (HDI)</td>
<td>Index #</td>
<td>4</td>
<td>Index of GDP/person, spending on health and education, and life expectancy</td>
<td>177 countries</td>
<td>1980-present</td>
</tr>
<tr>
<td>Happy Planet Index</td>
<td>Index #</td>
<td>3</td>
<td>HPI = subjective well being * life expectancy / ecological footprint</td>
<td>153 countries</td>
<td>3 yrs</td>
</tr>
<tr>
<td>Canadian Index of Well-Being</td>
<td>Index #</td>
<td>80</td>
<td>Includes community vitality, democratic engagement, education, environment, population, leisure, living standards, and time use</td>
<td>Canada</td>
<td>1994-present</td>
</tr>
<tr>
<td>National Well-Being Index</td>
<td>Index #</td>
<td>5</td>
<td>proxies for built, human, natural and social capital with weights based on regression with subjective well-being</td>
<td>56 countries</td>
<td>1 yr</td>
</tr>
<tr>
<td>OECD Better Life Index</td>
<td>Index #</td>
<td>25</td>
<td>Includes housing, income, jobs community education, environment, civic engagement, health, life satisfaction, safety, and work-life balance</td>
<td>36 OECD countries</td>
<td>1 yr</td>
</tr>
<tr>
<td>Well-Being of Nations</td>
<td>Index #</td>
<td>63</td>
<td>63 indicators in 20 domains weighted and ranked</td>
<td>180 countries</td>
<td>1990-2000</td>
</tr>
<tr>
<td>Sustainable Society Index</td>
<td>Index #</td>
<td>22</td>
<td>22 indicators in 5 domains ranked with various weightings</td>
<td>150 countries</td>
<td>2 yrs</td>
</tr>
<tr>
<td>Ecological Footprint</td>
<td>global hc/person</td>
<td>5</td>
<td>Area of productive land and water required to support current lifestyle</td>
<td>153 countries</td>
<td>1960-present</td>
</tr>
</tbody>
</table>
How’s life?

There is more to life than the cold numbers of GDP and economic statistics – This Index allows you to compare well-being across countries, based on 11 topics the OECD has identified as essential, in the areas of material living conditions and quality of life.
Figure 2.2: Ranking of Happiness 2014-2016 (Part 1)  

Top 30

1. Norway (7.537)
2. Denmark (7.522)
3. Iceland (7.504)
4. Switzerland (7.494)
5. Finland (7.469)
6. Netherlands (7.377)
7. Canada (7.316)
8. New Zealand (7.314)
9. Australia (7.284)
10. Sweden (7.284)
11. Israel (7.213)
12. Costa Rica (7.079)
13. Austria (7.006)

- Explained by: GDP per capita
- Explained by: social support
- Explained by: healthy life expectancy
- Explained by: freedom to make life choices

25. Mexico (6.578)
26. Singapore (6.572)
27. Malta (6.527)
28. Uruguay (6.454)
29. Guatemala (6.454)
30. Panama (6.452)

- Explained by: generosity
- Explained by: perceptions of corruption
- Dystopia (1.85) + residual
- 95% confidence interval
Genuine Progress Indicator (or ISEW) by Component

Additions
- Personal Consumption Expenditure
- Income Distribution
- Personal Consumption Adjusted for Income Inequality
- Services of Household Capital
- Services Highways and Street
- Value of Household Labor
- **Value of Volunteer Work**
- Cost of Consumer Durables
- Loss of Leisure Time
- Cost of Commuting
- Cost of Automobile Accidents
- Cost of Crime
- Cost of Family Breakdown
- Cost of Underemployment
- Cost of Household Pollution Abatement
- Cost of Water Pollution
- Cost of Air Pollution
- Cost of Noise Pollution
- Loss of Wetlands
- Lost of Farmland
- Depletion of Nonrenewable Resources
- Long-Term Environmental Damage
- Cost of Ozone Depletion
- Loss of Forest Cover

Subtractions
- Net Capital Investment
- Net Foreign Lending and Borrowing
GPI /capita for the 17 countries for which it has been estimated

Global GPI/capita & GDP/capita

Economic growth  Un-Economic growth
Wealth vs. Well-Being: How Do We Measure Prosperity?

Maryland developed its Genuine Progress Indicator to measure how development activities impact long-term prosperity, both positively and negatively. Here in Maryland and across the globe, people are continually challenged by the need to find a balance between advancing economic gain and ensuring social well-being.

Traditional indicators like the Gross Domestic/State Products address only economic transactions. They do not include the environmental and social costs of what we buy, the quality of life impacts of how we live, or fully appreciate the significant contributions of our natural systems.

We invite you to learn how we developed our GPI, find out how Maryland is doing in 26 different indicators, and explore a model to see how policy decisions made today may affect future generations.
Welcome to the Vermont Genuine Progress Indicator, a project led by the Gund Institute for Ecological Economics of the University of Vermont in coordination with a Data Advisory Group.

VT-GPI is a multi-dimensional measure of the benefits and costs of the Vermont economy. Enacted into law with Act 113, the VT-GPI includes yearly estimates of the economic, environmental, and social performance of the Vermont economy.

Explore this website to learn about the composition of VT-GPI, long-term trends of the overall estimate and 25 sub-indicators, the application of GPI to policy and management, and ties to a growing group of state and national GPI studies.
Figure 4: Life satisfaction is an inverted 'U' shape in relation to distance to urban park

Natural Capital

Built Capital

- Homeownership
- Household income

Human Capital

- Nationality
- Employment
- Education
- Physical activity
- Health

Social Capital


- # of kids
- In a long-term relationship
- Hours volunteering
Thank You

The PDFs of all papers mentioned here can be found at: Idakub.com