

# The Measurement of Economic Performance and Social Progress

Joseph E. Stiglitz

International Economic Association World Congress

Mexico City

June 19, 2017

# Outline of talk

- Motivation—the importance of better metrics
- Some examples of recent work of the High Level Expert Group on the Measurement of Economic Performance and Economic Progress (HLEG)
- A brief review of the work of the Commission on the Measurement of Economic Performance and Economic Progress
- Some description of how the ideas have become widely disseminated
- And how the work of HLEG has evolved from the earlier work of the Commission

# I. Goals

- **Commission on the Measurement of Economic Performance and Social Progress** was founded to address obvious deficiencies in metric systems that had been developed to monitor market economy and assess well-being
  - Part of objective was to clarify distinction between monitoring market and assessing well-being
  - In developing metric, one has to have an objective in mind
- Identified **multiple problems with prevailing metrics**—many already recognized—evaluated their significance, and set out program for mitigating defects and providing alternative metrics
  - Many other efforts focusing on different aspects of question
    - Measurement of multi-dimensional poverty
    - HDI

# Goals

- Incorporate advances in technology and economics and social sciences
  - Measurement of subjective well-being, trust, social connectedness
  - Access of administrative data
  - Computing technology
- New foci of concern in measurement
- **High Level Expert Group on Measurement of Economic Performance and Social Progress** has continued with same goals, incorporating continuing advances in technology and social sciences and changes in societal concerns

# Problems well recognized

- Simon Kuznets, “father of modern GDP metrics”

"The welfare of a nation can scarcely be inferred from a measurement of national income".

- Simon Kuznets on GDP and well-being in 1934.

- Robert Kennedy: On GDP

“It measures everything, in short, except that which makes life worthwhile.”

- University of Kansas, March 18, 1968.

# Important

- What you measure affects what you do
- If you don't measure it, you are likely not to do much
  - Reagan proposals to discontinue data on poverty
  - Failure to measure noise pollution suggests that it is not a problem
  - Failure to measure inequality suggested it was not a serious problem
- Wrong measures provide guidance to do wrong thing (though these measures still may be useful for some purposes)
  - Reading scores correlated but not full measure of students' performance; limited indicator of later life performance
- Poor measures may lead to loss of confidence in government
  - In early days of recovery, most Americans saw no increase in standard of living, even though GDP was increasing

# Emphasized by French president Nicolas Sarkozy at the unveiling of the Stiglitz Report in Paris on 14 September 2009

- **"Nothing is more destructive than the gap between people's perceptions of their own day-to-day economic well-being and what politicians and statisticians are telling them about the economy"**

# Why we need good metrics

- To monitor and diagnose what is going on—what is happening to well-being in all of its dimensions, and how different groups within society are being impacted
- To assess the source of the changes
- To motivate civic action

**Paul Samuelson: "Without measures of economic aggregates like GDP, policymakers would be adrift in a sea of unorganized data. The GDP and related data are like beacons that help policymakers steer the economy toward the key economic objectives"**

# II. Many examples of inadequate indicators

Will focus on three areas

- I. Measurement of wealth
- II. Measurement of equality of opportunity
- III. Measurement of economic security

# A. Measurement of wealth

Important for assessment of economic and environmental sustainability and consequences of short run macro-policies for long run growth

- Decrease in growth potential in the aftermath of Great Recession
- Result in part of large unmeasured loss of human capital
  - Reductions in quality of education as governments cut back on funding
  - Reduced access to health care and nutrition can have life-long effects
  - Long run effects from lack of health care, nutrition, migration of talented young people, early retirement of skilled workers
  - loss of on-the-job training (doesn't occur when there are no jobs)
- Change in knowledge capital may also not be well measured—including organizational learning by doing

# Consequences of inadequate wealth measures

- If you focus just on the liability side of just the government, one may take actions that result in the liability side of private sector increasing, and asset side of the entire economy decreasing—undermining sustainability
  - Important in the design of debt restructuring
- **Better metrics would have shown that the cost of the austerity policies are even greater than many critics claim**
  - **In balancing costs and benefits of greater expenditure, would have tilted balance towards greater expenditure**

# Recognition of importance of environmental sustainability

- Measurement matters: Coal producers resistance to Green GDP
  - Taking into account environmental degradation and resource depletion
- Central role of wealth in the assessment of **sustainability**
  - While noting that there might be significant problems in the valuation of assets
    - Bubble prices
  - Need to include physical metrics

# But standard measures of “wealth” may not adequately reflect sustainability and growth potential

- **Some increases in wealth (as conventionally measured) reflect increased economic rents, unrelated to the productive capacity of the economy**
  - Land rents, Monopoly Rents, Capitalized value of rent extraction from the public sector
  - These redistributive rents may decrease economic efficiency
  - And tend to decrease capital accumulation, lowering long run growth
- Some decreases in wealth—associated with human, social, physical and natural capital—may not be captured in our wealth metrics
  - Physical capital per worker may be going down even as wealth per capita is going up
- Overall, recent changes in measured wealth overstate true “capital” accumulation
  - Evidence of decrease in effective capital per unit of effective labor (Stiglitz, 2014)

# B. Inequalities of Opportunity

- Working group headed by Bourguignon
  - Objective: to understand better **The inequality of economic outcomes (earnings, income) arising from parental background and its share in total inequality of outcome**
- There is even a “lack of knowledge today in many countries of whether intergenerational mobility is increasing or decreasing”
  - symptomatic of the data deficit
- Understanding two-way link between inequality of outcomes and opportunities
- Key areas of further work
  - i) Variance analysis of scores in PISA and analogous surveys at earlier ages**
  - ii) Gender inequality and analogous gaps in employment and earnings**
  - iii) Retrospective information on parental characteristics in surveys**

# C. Measurement of Economic Security

- Working group headed by Hacker
- Begins by clarifying conceptual issues, alternative concepts
- Metrics: reliable and informative
  - Relation of metrics to subjective well-being and other aspects of economic performance
  - Relation to policy
  - Sources of data
  - How improved sources of data can be used to develop better metrics
- Key conceptual foundation: economic security involves the interplay of **shocks, losses, and buffers**
  - panel data measuring income losses incurred by people over a period of time
  - subjective measures on people's own sense of economic insecurity

# Policy implications

- The undermining of systems of social protection have weakened security especially in the bottom and middle.
- People care about security, so well-being is weakened.
  - implying that the increase in true inequality may be greater than reflected in standard metrics
- But our metrics have not captured this
  - One of many examples of where we do not measure well is value of government services

# III. Work of the Commission and HLEG

Commission (CMEPSP) Organized around three themes + cross cutting theme—inequality

- Standard issues—profession had been well aware of limitations
  - Measurement of productivity in public sector
- Sustainability—in all of its dimensions
- Measurement of subjective well being

# Recommendations of Commission

- 1: When evaluating material well-being, look at income and **consumption** rather than production.
- 2: Emphasize the **household perspective**.
- 3: Consider income and consumption jointly with wealth.
- 4: Give more prominence to the **distribution** of income, consumption and wealth.
- 5: Broaden income measures to **non-market activities**.
- 6: Quality of life depends on people's objective conditions and capabilities. Steps should be taken to **improve measures of people's health, education, personal activities and environmental conditions**. In particular, substantial effort should be devoted to developing and implementing robust, reliable measures of **social connections, political voice, and insecurity that can be shown to predict life satisfaction**.
- 7: Quality-of-life indicators in all the dimensions covered should assess inequalities in a comprehensive way.

# Recommendations

8: Surveys should be designed to assess the links between various quality of life domains for each person, and this information should be used when designing policies in various fields.

9: Statistical offices should provide the information needed to aggregate across quality-of-life dimensions, allowing the construction of different indexes.

10: Measures of both objective and subjective well-being provide key information about people's quality of life. Statistical offices should incorporate questions to capture people's life evaluations, hedonic experiences and priorities in their own survey.

11: Sustainability assessment requires a well-identified **dashboard of indicators**. The distinctive feature of the components of this dashboard should be that they are interpretable as variations of some underlying "stocks". A monetary index of sustainability has its place in such a dashboard, but under the current state of the art, it should remain essentially focused on economic aspects of sustainability.

12: The **environmental aspects of sustainability** deserve a separate follow up based on a well-chosen set of **physical indicators**. In particular there is a need for a clear indicator of our proximity to dangerous levels of environmental damage (such as associated with climate change or the depletion of fishing stocks).

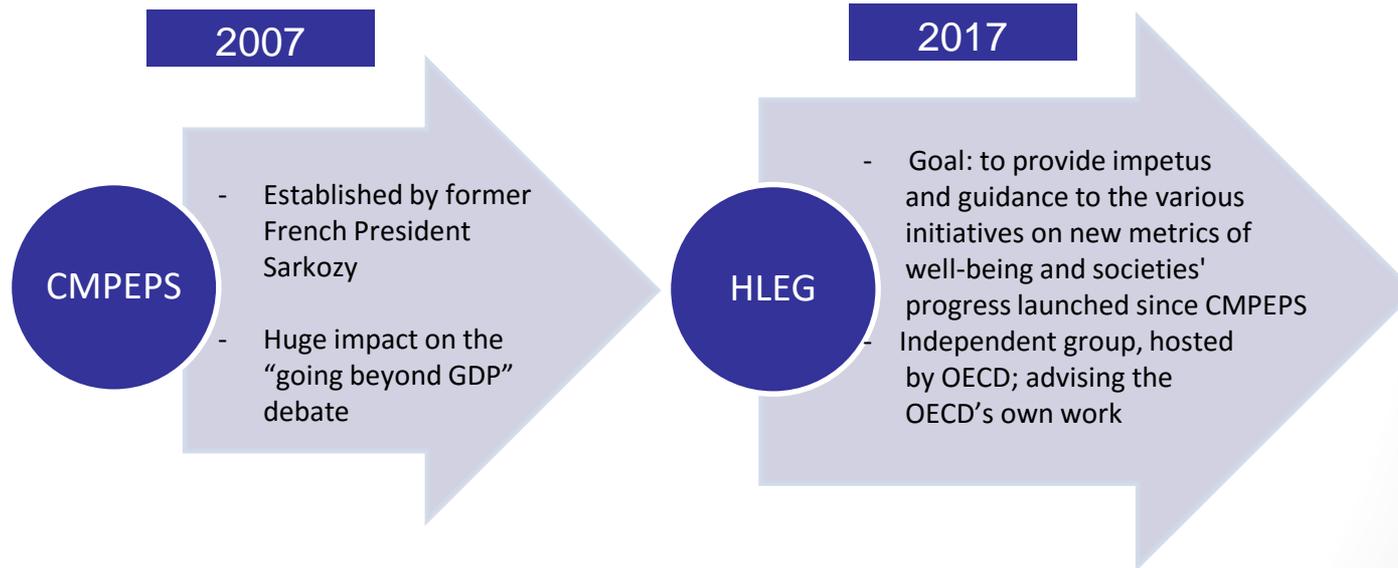
# Overall Approach of Commission and HLEG

- Society is **too complicated to be summarized in a single number**: need a **dashboard**, small enough to be easily digested, large enough to include monitors of key issues
  - Adaptability: Different dashboards when focusing on different issues, countries in different situations
- **Household and well-being of its members** need to be at center of analysis
- Advances in **subjective well-being** sufficiently advanced to be incorporated
- Need to expand what is measured (non-market production)
- Sustainability needs to be assessed; wealth is best indicator; but problems in devising “correct” prices required for wealth measurement means we may have to rely on physical indicators
- Key importance of **assessment of inequalities** in each of the key variables

Much more research is needed. Recommended continuation of work, working closely with national statistical offices

# Context

From the Commission on the Measurement of Economic Performance and Social Progress (CMPEPS)  
to the High Level Expert Group on the Measurement of Economic Performance and Social Progress (HLEG)



High Level Expert Group on the Measurement of Economic Performance and Social Progress



# HLEG membership

## 19 Members

### Chairs

- [Joseph Stiglitz](#), *Professor of Economics, Business and International Affairs, Columbia University*
- [Jean-Paul Fitoussi](#), *Professor of Economics at Sciences Po (Paris) and Luiss (Rome)*
- [Martine Durand](#), *Chief Statistician and Director of Statistics, OECD*

### Members

- [Yann Algan](#), *Professor of Economics, Sciences-Po, Paris*
- [Timothy Besley](#), *Professor of Economics and Political Science, London School of Economics*
- [Francois Bourguignon](#), *Director, Paris School of Economics*
- [Angus Deaton](#), *Dwight D. Eisenhower Professor of Economics and International Affairs, Woodrow Wilson School of Public and International Affairs and Economics Department, Princeton University*
- [Jacob Hacker](#), *Director of the Institution for Social and Policy Studies, and Stanley B. Resor Professor of Political Science at Yale University*
- [Geoffrey Heal](#), *Garrett Professor of Public Policy and Corporate Responsibility, Professor of Economics and Finance, Columbia University - Director of the Earth Institute's Center for Economy, Environment, and Society*
- [Ravi Kanbur](#), *T.H. Lee Professor of World Affairs, International Professor of Applied Economics and Management and Professor of Economics, Cornell University*
- [Alan Krueger](#), *Bendheim Professor of Economics and Public Affairs, Princeton University*
- [Nora Lustig](#), *Samuel Z. Stone Professor of Latin American Economics, Tulane University*
- [Jil Matheson](#), *UK National Statistician*
- [Thomas Piketty](#), *Director of Studies, Paris School of Economics*
- [Walter Radermacher](#), *Director-General, Eurostat*
- [Chiara Saraceno](#), *Honorary fellow at the Collegio Carlo Alberto, Torino*
- [Pronab Sen](#), *Chairman, National Statistical Commission, India*
- [Arthur Stone](#), *Professor and Vice Chairman, Department of Psychiatry and Behavioral Science, Stony Brook University*
- [Professor Yang Yao](#), *Director of CCER and dean of National School of Development at Peking University.*

High Level Expert Group on the Measurement  
of Economic Performance and Social Progress



# From the Commission to HLEG: HLEG 3-year work plan

## Themes

### Income and wealth inequality

- Measurement issues on the distribution of income and wealth (top and bottom)
- Relation between distributions of income and wealth
- Inequality in consumption possibilities

*Coordinator:*  
Nora Lustig

### Multi-dimensional and global inequalities

- Measurement issues related to other types of inequalities (health, education)
- Inequalities at global level
- Inequalities across generations and opportunities

*Coordinator:*  
F. Bourguignon  
Joe Stiglitz

### The effects of deprivation on people's well-being

- Measures of multi dimensional deprivation and impact on subjective well-being
- Focus on specific groups (children, women)

*Coordinator:*  
Arthur Stone

### Sustainability

Measurement issues regarding:

- Public debt/financial sustainability
- Environment and other types of capital : efficient use and distribution
- Intergenerational equity

*Coordinators:*  
Martine Durand  
Jean-Paul Fitoussi

# Other themes

- **Insecurity**
  - Coordinator: Jacob Hacker
- **Trust**
  - Coordinator: Yann Algan
- **SDGs and New Metrics**
  - Coordinator: Ravi Kanbur
- **Resilience**—discussed within context of sustainability

# Major Changes since Report of Commission— themes chosen to reflect these changes

HLEG will not so much provide a broad overview, but rather a “deep dive” into a set of topics have achieved increased relevance

- Global Financial Crisis: Our statistics did not adequately reflect economic sustainability, risk/resilience, extent to which economies exposed to risk, their capabilities in responding, and abilities of individuals/institutions to cope
- Increased recognition of importance of Climate Change: Our statistics did not adequately reflect environmental sustainability
- Political traumas of recent years: Our statistics did not adequately reflect social sustainability
  - Highlights importance of improving measures of distribution of income, wealth, health, and opportunity; assessment of insecurity

# The global institutional, analytical and statistical terrain has also evolved in the past decade

- SDGs and the associated measurement challenges
- Advances in the analysis of subjective wellbeing at the conceptual and empirical levels
- Advances in statistical measurement, data collection and dissemination
  - Including wider access to administrative data and big data
  - Posing challenge of integrating survey and administrative data (one of central topics discussed by one of the working groups)
- Advances in conceptual tools and models (and economic research more generally) has enabled a better understanding of many of key issues—e.g. links between inequalities in opportunity and inequalities in outcome; consequences of highly-non-linear relationships in complex systems
- Report of HLEG will consist of Chairmen's Summary, Authored Chapters on each of the topics covered, and a set of recommendations

# Research on different topics at different stages of development

- In case of Inequality of Opportunity, good idea of what needs to be done
  - Though still some important conceptual issues
- Economic insecurity at earlier stage of development
  - Though there has been significant progress in recent years
  - Bigger issues in best ways to measure it

# IV. Various initiatives on well-being and progress

The CMPEPS had much resonance at international level...

## The OECD Better Life Initiative

OECD mission « Better Policies for Better Lives »

## EU 2020

EU Communication on  
“GDP and beyond”

Eurostat/INSEE sponsorship

## Rio+20

“The Future We Want”  
Resolution 38 - June 2012

## UN Resolution

“Happiness: Towards a Holistic  
approach to Development”, 2012

## UN 2030 agenda

Sustainable Development  
goals and targets

High Level Expert Group on the Measurement  
of Economic Performance and Social Progress



# Several initiatives on well-being and progress

...at national level...



...and in the research and academic community

High Level Expert Group on the Measurement  
of Economic Performance and Social Progress



# Globalization of initiatives—with adaptation to circumstances of different countries, focusing on different issues

- Australia and New Zealand: well-being framework used by Treasury to inform its policy advice to sectoral Ministries
- Scotland: to help measure performance in process of devolution, including devolution down to more local levels
- Important initiatives in Canada and Mexico
- Multi-dimensional poverty measures
- Bhutan—which in a sense “fathered” whole movement with *Gross National Happiness (GNH)*
  - Now devising framework to assess the well-being impacts of enterprises

# V. Concluding remarks

- The objective of the OECD High Level Expert Group on the Measurement of Economic Performance and Social Progress is to help identify lacunae in existing metrics and in existing systems of data collection, to help understand relative merits of different data sources, and to help develop these better metrics and encourage governments to provide better data and better access to existing data
- Part of a global movement that is already having impacts, both in the construction, use, and understandings of metrics
  - Metrics need to be as closely linked to social objectives as possible
  - Better metrics can better assess what is going on, and provide better information, on the basis of which we can formulate better policies to enhance societal well-being and ensure shared prosperity

Special acknowledgments in preparation of talk:

Ravi Kanbur, Martine Zaida, Martine Durand, Jean Paul Fitoussi,  
Elizabeth Beasley, and Marco Mira