

CSC

Workshop on Poverty and Development

Is it time to ditch GDP?

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“Road Map”

- 1) Stiglitz Commission and precedents;
- 2) The search for an alternative and the “technical shortcomings”;
- 3) Conceptual background and problems;

Conclusion

Stiglitz Commission

January 8, 2008:

Nicolas Sarkozy:

« To examine the limitations of GDP as a measure of economic performance and well-being ».

April 2008:

Commission on the Measurement of

Economic Performance and Social Progress

27 members and 1+7 technical staff

First meeting: 22 April 2008

Conclusions expected: Spring 2009.

Stiglitz Commission: 11 USA researchers

Joseph Stiglitz, **Chair** (Columbia), Nobel 2001

Amartya Sen, **Chair Adviser**, (Harvard) Nobel 1998

- Kenneth Arrow (Stanford), Nobel 1972
- James Heckman (Chicago) Nobel 2000
- Daniel Kahneman (Princeton) Nobel 2002
- Cass Sunstein (Chicago), Law
- Angus Deaton (Princeton), Microeconomics
- Alan B. Krueger (Princeton), Labour economics
- Robert Putnam (Harvard), Political science
- Geoffrey Heal (Columbia), Environmental economics
- Nancy Folbre (Massachussets), Feminist economist

Stiglitz Commission: 10 EU researchers

UK:

Sir Nicholas Stern (LSE), Environment

Anthony B. Atkinson (Oxford), Inequality

Andrew J. Oswald (Warwick), Happiness

FR:

Jean-Paul Fitoussi, **Coordinator** (OFCE, Sc-Po)

Philippe Weil (Sc-Po), macroeconomist

Claude Henry (Sc-Po), Innovation/sustainability

Roger Guesnerie (PSE & Collège de France), Econometrics

François Bourguignon (PSE, ex-World Bank), Growth

Marc Fleurbaey (Paris-5), Social ethics & distributive justice

Jean Gadrey (Lille), New indicators of wealth

Stiglitz Commission: 1 from the South

BINA AGARWAL (Delhi)

Stiglitz Commission: important organizations

- Enrico Giovannini, **OECD** Statistics-chief
- Kemal Dervis, **UNDP** Administrator
- Heiner Flassbeck, **UNCTAD** Director
- Justin Lin, **World Bank** chief-economist
- Jean-Philippe Cotis, **INSEE** Director.
- Jean-Étienne **Chapron**: *General Rapporteur*
(+ 7 from OECD, OFCE, and INSEE)

Stiglitz Commission: 3 working groups

- 1) The « classic » GDP problems;**
- 2) Sustainable development and the environment;**
- 3) The quality of life.**

Important precedents - 1

2007-Nov.: OECD & EU - *Brussels*

Conference **“Beyond GDP: Measuring progress, true wealth, and the well-being of nations”**.

2007-June: OECD - *Istanbul*

The 2nd World Forum on **“Statistics, Knowledge, and Policy”**.

2006-June: OECD & EU - *Milan*

Workshop **“Measuring Well-being and Societal Progress”**

2004-Nov.: OECD - *Palermo*

The 1st World Forum on **“Statistics, Knowledge, and Policy”**.

Important precedents - 2

“ABOLISHING GDP” – Jeroen van der Bergh (Feb. 2007)
Review of 17 critiques:

Kuznets (1941)

Galbraith (1958)

Samuelson (1961)

Mishan (1967)

Nordhaus & Tobin (1972)

Hueting (1974)

Hirsch (1976)

Sen (1976)

Scitovsky (1976)

Daly (1977)

.....

Hartwick (1990)

Tinbergen & Hueting (1992)

Arrow et. al. (1995)

Vellinga & Withagen (1996)

Weitzman & Löfgren (1997)

Dasgupta & Mäler (2000)

Dasgupta (2001)

“ABOLISHING GDP”

Jeroen van der Bergh (Feb. 2007)

8 categories:

- **1) Principles of proper accounting;**
- **2) Intertemporal considerations;**
- **3) Lexicographic preferences;**
- **4) Empirical analysis of individual happiness and social welfare;**
- **5) Income distribution, relative welfare and rivalry;**
- **6) Formal versus informal economy;**
- **7) Environmental externalities and depletion of natural resources;**
- **8) Agregation of information.**

The search for an alternative

Net

Domestic Product

- (or “green”, or “sustainable” **GDP**)

“Genuine Savings”
(GS)

“Genuine Progress Indicator” (GPI)
(ISEW & SNBI)

NET Domestic Product (NDP)

+	GDP (Gross Domestic Product)
-	defensive & rehabilitative expenditures;
-	depreciation of human-made K (goods + labour);
-	depletion of natural K.
=	NDP (Net Domestic Product)

+	INVESTMENT
-	Net foreign borrowing;
-	depreciation of human-made K (goods + labour);
-	depletion of ecosphere's source and sink functions.
+	Value of ecosphere's <u>variation</u> of life support functions.

= Genuine Savings (GS)

+

Private consumption expenditure;
Index of distributional inequality;
Weighted personal consumption expend

Services yielded by:

consumer durables, roads and highways;

Services provided by:

volunteer work, unpaid household work;

Public expend. on health & education;

Net capital investment;

Net foreign lending/borrowing;

-

Cost of:

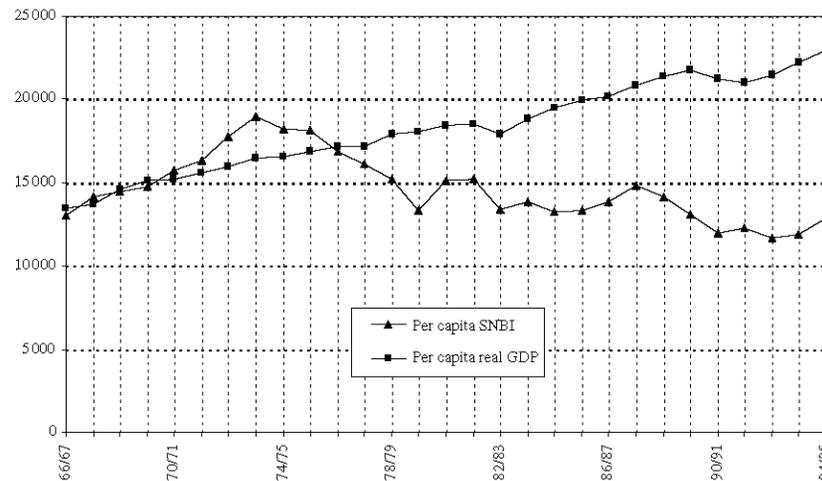
*consumer durables, noise
 pollution, commuting, crime,
 underemployment, lost leisure
 time, household pollution
 abatement, vehicle accidents,
 family breakdown;*

Loss of:

*Farmland, resource depletion,
 ozone depletion, air pollution,
 water pollution, wetlands, old-
 growth forests, long-term
 environmental damage.*

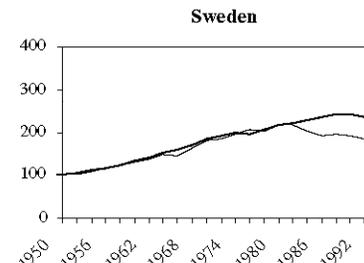
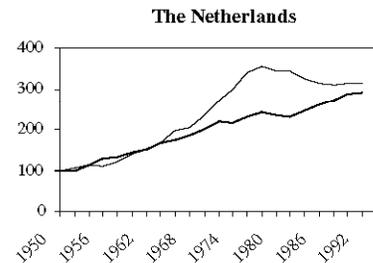
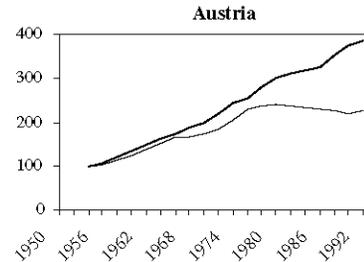
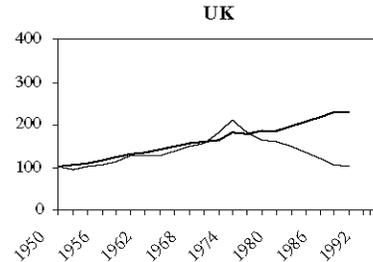
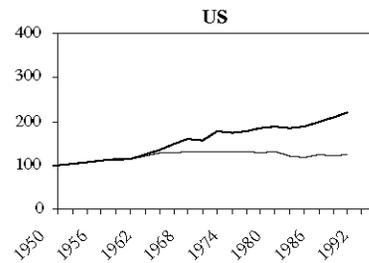
“Sustainable Net Benefit Index” – SNBI – (a third version), has been recently developed for Australia by Lawn & Sanders (1999).

ISEW and GPI differ in name only - the latter name adopted in the mid 1990s to increase the indicator’s appeal – (Although there are slight variations in some of the valuation methods used to estimate the benefit and cost indexes that make up the indexes).



Notes: Measured in \$ at 1989/90 prices.

Figure 6.1 Per capita SNBI and per capita real GDP for Australia, 1966/67 to 1994/95



— GDP
- - ISEW

A “threshold level of GDP”

Max-Neef (1995)

>>> *“steady-state economy”*

Three “*technical*” shortcomings

1) Both: **monetary estimations;**

2) Both: Discount rate (DR):

- For example:

A non-renewable resource
with a mine life of 30 years.

Table >>>

3) GS: Natural K substitution.

<i>DR</i>	Cost	Income
2%	54%	46%
7%	12%	88%

Conceptual background - 1

- Sir John **HICKS (1946)** defined income as the *maximum amount that can be produced and consumed in the present without compromising the ability to do likewise in the future.*
- For **NDP**: “sustainable development” is a case of *increasing Hicksian income.*
- For **GS**: a case of *non-declining income-generating capital.*

Conceptual background - 2

- Irving **Fisher (1906)** argued that the annual national dividend does not consist of the physical goods produced over a particular year, but the services enjoyed by the ultimate consumers of physical goods.
- Any durable producer or consumer good manufactured during the current year is not part of this year's income. Only the services rendered by them.
- A "net 'psy' income", after subtracting the 'psy' costs of annoying activities.
- *GPI (ISEW & SNBI): a case of **increasing Fisherian economic welfare.***

Conceptual problems - 1

GS: Despite the logical desirability of a constant or rising stock of capital (*or natural capital*), one is still left asking:

Is the total quality of life improving?

GPI: Would the final index figures indicate whether the **economic welfare** being enjoyed *is sustainable in the long run?*

Conceptual problems - 2

Environmental costs, whether reflected by the market or estimated by way of shadow prices, do not automatically become infinite once the macroeconomy exceeds the maximum sustainable scale.

Thus, it is difficult to tell what a declining index figure really means:

- a) Is a nation just operating inefficiently?**
- b) Has a nation surpassed its optimal scale?**
- c) ?**

CONCLUSION: Philip Lawn (2006: 45)

- “No single indicator can adequately reflect both sides of the sustainable development coin”.
- “The policy guiding value of sustainable development indicators can be further increased by examining them collectively rather than individually”.
- For ex: ***GPI + Ecological Footprint.***

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