



Institute of Food and Resource Economics



New directions for Economics

Sustainability, generations' well-being,
and present generations' responsibility
-An economic perspective

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June, 2011



What does "sustainability" mean in an economic setting? Or is it just a buzzword?

Two definitions:

- Development that meets the needs of present generations without compromising the ability of future generations to meet their own needs (*Our Common Future/The Bruntland Commission, 1987*)
- A requirement to our generation to manage the resource base such that the average quality of life we ensure ourselves can potentially be shared by all future generations (*Asheim, 1994*)

The two definitions (and many others) focus on present generation's responsibility as to future generations' well-being – focus on equality among generations

So the focus is SAVING – how much is "optimal" to save for future generations OR how much shall present generations suffer to improve future generations well-being?



Different components: A broader view on sustainability

- Environmental sustainability
- Economic sustainability
- Social sustainability

The key question is: Does overall sustainability permit any trade-offs among the three goals

And a second key question: Will technical progress/economic growth "solve" the sustainability challenge?

The answer is strongly related to the degree of substitutability between natural resources and man-made capital/weak versus strong sustainability



Some facts about economists – often a surprise to non-economists

Economists do not believe that DGP (Domistic Gross Product), national account measures for consumption or alike measure wealth/happiness/well-being – and economists know a good measure is difficult to find

Economists do not in general support the “free market” and they recommend regulation to correct for market failures (pollution, imperfect information, market power etc.)

Economists do care about the future – and for that reason discounting plays a major role in economic analyses. (high discounting means low values on future gains and loses)



The fundamental problems

Due to market failures and “bad” regulation, mankind (most likely) is facing:

- Too much pollution – causing health problems, global warming, etc.
 - The polluter does not pay the cost
- Too fast extraction of non-renewable and renewable resources
 - The owners’ time horizon is too short
- Too much pressure on wild stocks and nature – causing low yield of the stocks (overfishing) and low biodiversity
 - Lack of property rights/the tragedy of the commons
- Do we know for sure in all 3 cases? NO!!
 - LACK of sufficient empirical analyses (but we have some indicators), including estimates of net saving (genuine savings)
 - uncertainties about future technical progress.
 - Future generations’ preferences are unknown
 - AND who is in charge to formulate the objectives? (present generation ?)



Do we have the tools/instruments to save the future? YES

Economic instruments are very powerful

- taxes, user fees, transferable quotas...

Direct demand and control are alternatives – and some times better than economic instruments

- normally not cost efficient but in some cases less risky

Subsidies to research and development – research results are most often a public good

Problems:

International coordination is difficult – no international institution to take the lead (prisoner dilemma)

Common property of natural resources (the global warming problem) – the free rider problem



The dilemma – one more time

We do not know, given no policy change, how future generations' standard of living/wealth/well-being will be

Do we have others objectives than mankind's well-being?

- the value of nature in itself ? and if, how do we trade nature well-being versus mankind's well-being

Therefore:

What is the optimal saving?

THAT IS THE QUESTION – nothing but that!!

A sustainable policy is a question of how much WE leave for future generations – useful or not for the generations to come

