# What is a Steady State Economy? Why do we need one? How do we achieve it?

#### Daniel W. O'Neill





Growth in Transition, Vienna January 27–29, 2010

### The Problem

Economic growth is a primary policy goal of most governments

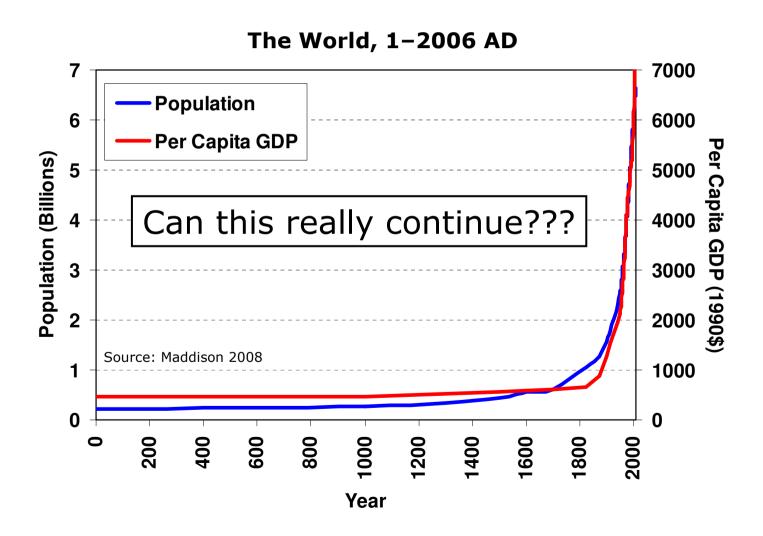
There is a fundamental conflict between economic growth and environmental protection

Economic growth is no longer improving people's lives in the developed world

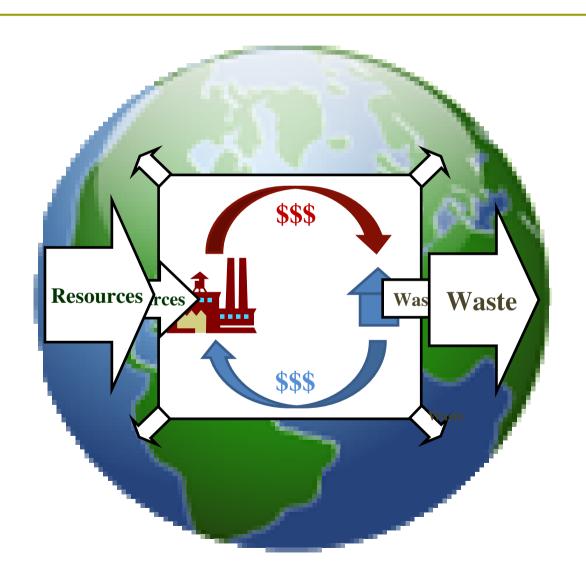
## What is Economic Growth?

- Increase in the production and consumption of goods and services
  - Occurs when either population or per capita consumption increases
- Typically measured using GDP
  - Total expenditure on all goods and services produced within a country

## The History of Economic Growth



## The Economy and the Environment



## The Limits to Growth











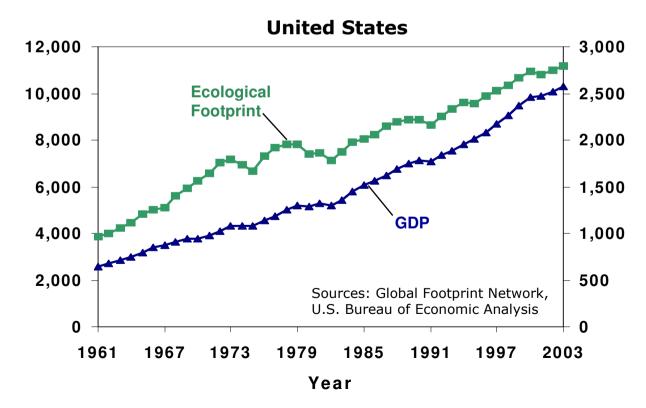




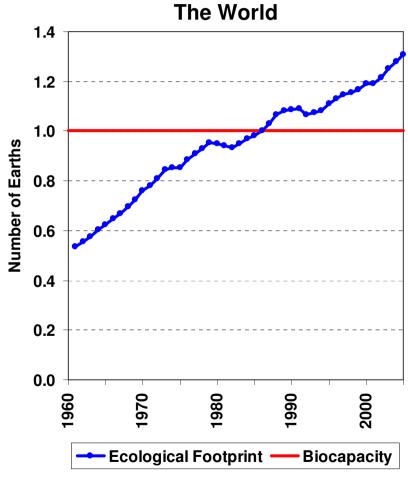


## The Ecological Footprint

- Measures how much land society needs to:
  - Produce the resources it consumes
  - Assimilate the wastes it generates



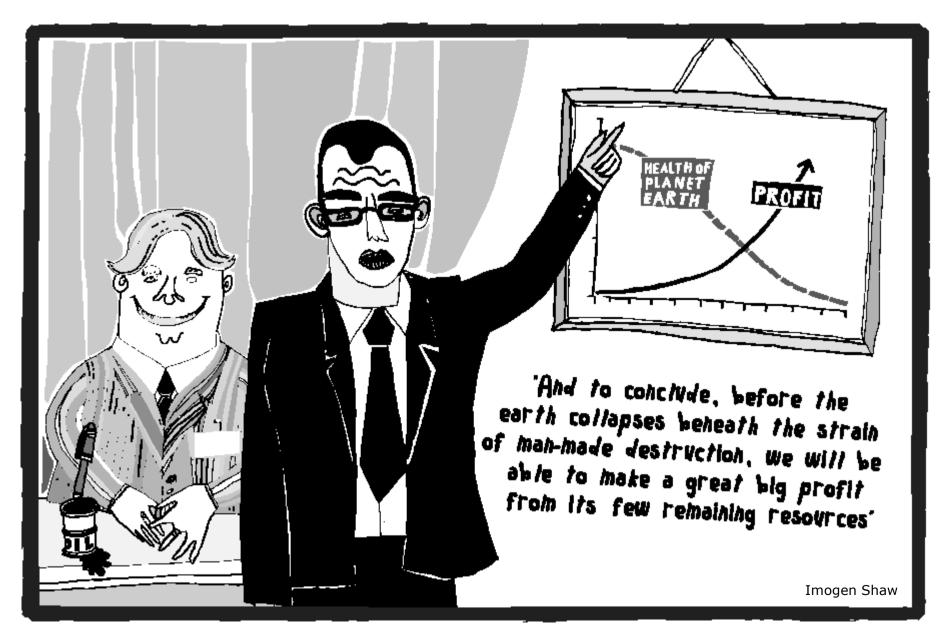
## Global Ecological Overshoot



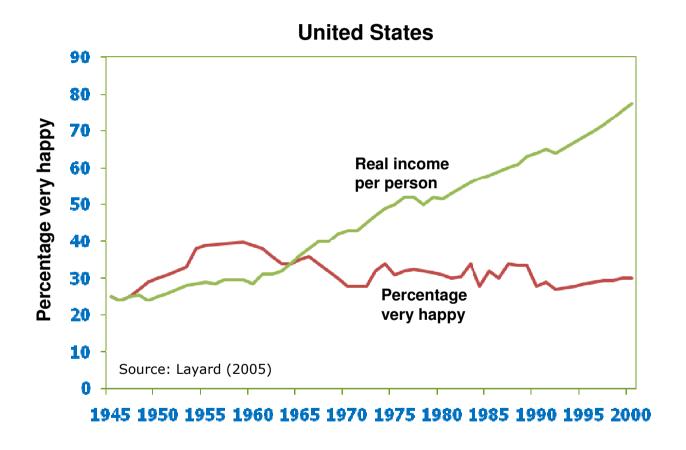
Source: Global Footprint Network

- Global ecological footprint is greater than available biocapacity!
- We are in a state of overshoot
  - Resources are being used faster than they can be regenerated
  - Wastes are being produced faster than they can be assimilated

## Has It All Been Worth It?

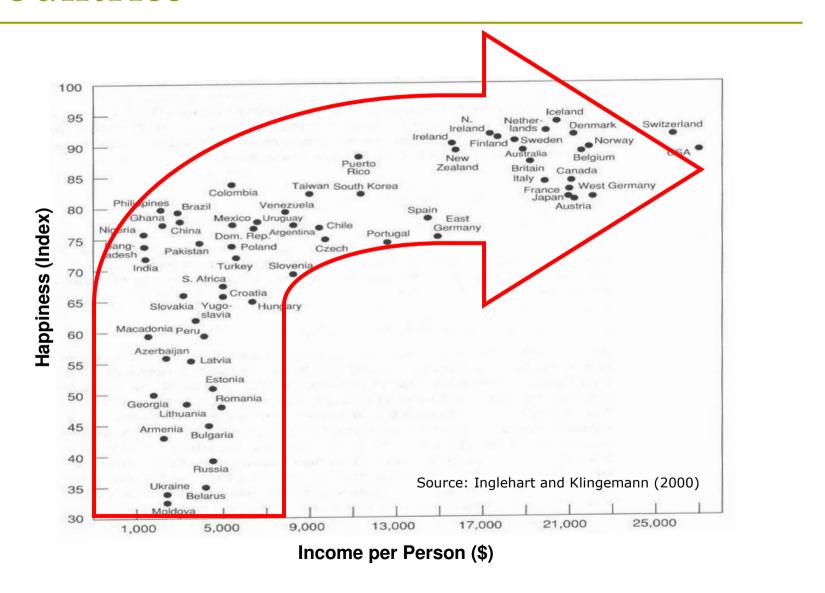


## Happiness and GDP



<sup>&</sup>quot;Americans have been more successful decoupling GDP from happiness than in decoupling it from material and energy" —Peter Victor

## Happiness and GDP Across Countries



## What Are We Actually Measuring?

#### GDP

Total expenditure on all goods and services produced within a country

Adds to GDP:







Also adds to GDP:

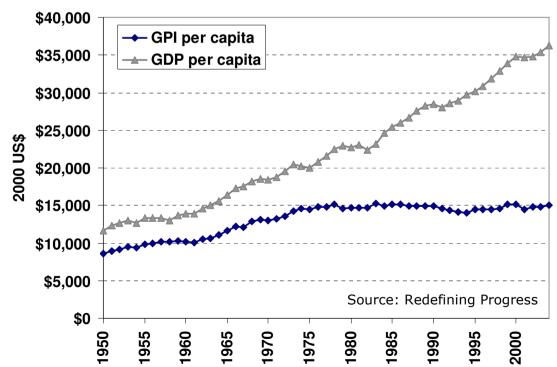




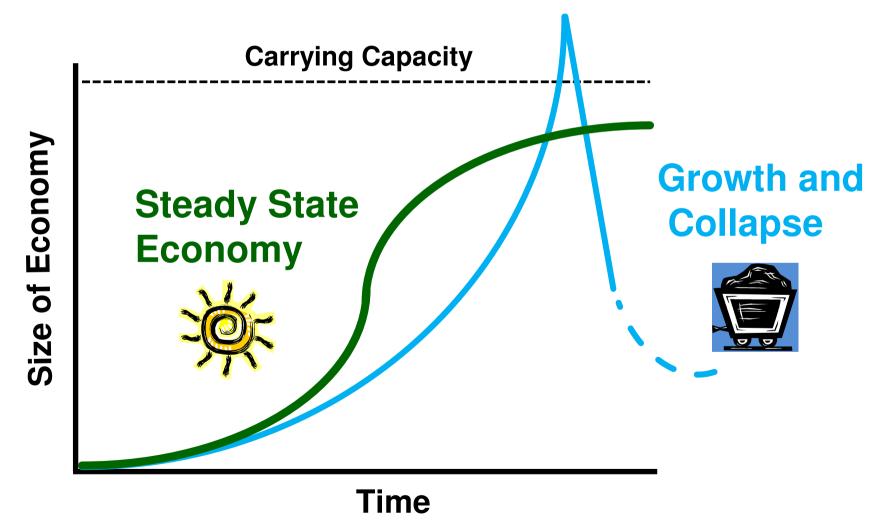
## Genuine Progress Indicator (GPI)

- Same accounting framework as GDP, but
  - Adds value of household and volunteer work
  - Subtracts cost of crime, pollution, and family breakdown





## The Alternatives



## What is a Steady State Economy (SSE)

- Stable population
- Stable per capita consumption
- Energy and material flows that are minimised and within ecological limits
- Constant stocks of natural and humanbuilt capital

## Characteristics of a SSE

- Sustainable Scale
- Just Distribution
- Efficient Allocation
- High Quality of Life



Health, time, prosperity, and community

### How Do We Achieve a SSE?

Adopt the right macro-economic goal: the Steady State Economy

Gradually change existing policies from growth towards a steady state

## The CASSE Position



- Position statement on economic growth
  - Recognises the conflict between growth and environmental protection
  - Calls for the transition to a SSE
- Purpose
  - Demonstrate the level of support for a SSE
  - Advance the SSE in policy discussions
- Endorsements
  - >4300 people, >110 organisations

steadystate.org/act/sign-the-position/

## How Do We Achieve a SSE?

Adopt the right macro-economic goal: the Steady State Economy

Gradually change existing **policies** from growth towards a steady state

### 1. Limit Resource Use

#### Currently:

- Few controls on use of resources and emission of pollutants
  - Montreal Protocol: limits ozone-depleting substances
  - EU Emissions Trading Scheme: limits CO<sub>2</sub> emissions

- Impose strict resource and emission caps
- Employ a cap-auction-trade system
  - Caps set based on ecological criteria
  - Permits auctioned by government
  - Trade between industries to allow efficient allocation

## 2. Stabilise Population

#### Currently:

- Natural increase is low in many developed countries
- Many developed countries encourage population growth via immigration, for "economic reasons"

- Births plus immigration must equal deaths plus emigration
  - In rich countries:
    - Balance immigration with emigration
  - In poorer countries:
    - Provide education, access to birth control, and equal rights for women

## 3. Limit Inequality

#### Currently:

- Economic growth is used as an excuse to avoid dealing with poverty
  - "A rising tide lifts all boats"

- No growth, so no excuses!
- Finite resource use = Finite amount of wealth
- Must deal with distribution explicitly
  - Need a minimum and maximum income

## 4. Reduce Working Hours

#### Currently:

- Technological progress is used to increase production of goods and services
  - A better widget machine = more widgets!

- We cannot increase production if it results in higher resource use
- Instead, shorten the working day, week, & year
  - Same salaries but more leisure time!

## 5. Reform the Monetary System

#### Currently:

- Fractional reserve banking
  - Most money is created by private banks in the form of debt
- Increasing debt drives economic growth

- All money would be created and spent into existence by the government
- Banks would be prohibited from creating money, but would instead have to borrow existing money to lend it

### 6. Reform National Accounts

#### Currently:

- Rely on GDP, which doesn't distinguish between:
  - Benefits and costs
  - Quality and quantity

- What happens to GDP is not important
- Replace GDP with two sets of accounts:
  - Well-being
    - To be maximised
  - Resource use
    - To be minimised and kept within ecological limits

### Conclusion

- There is a conflict between economic growth and environmental protection
- Economic growth is no longer improving people's lives in the developed world
- We need to make the transition to a SSE
  - Adopt the right macroeconomic goal
  - Restrict resource use, stabilise population, limit inequality, reduce working hours, eliminate fractional reserve banking, and change the way we measure progress

## Thank you!

## Dan O'Neill d.oneill@leeds.ac.uk

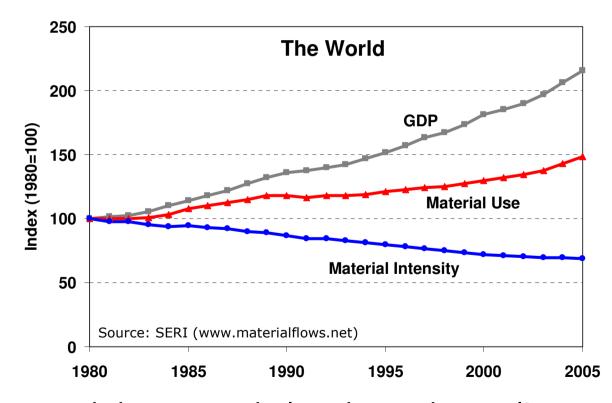




steadystate.org

## Can Technology Save Us?

- Can we **decouple** economic growth from resource use?
  - Technological progress
  - Switch from goods to services



GDP growth has overwhelmed any decoupling