

Sustainable Development Transition as an economic problem

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Content

1. Economic problems of sustainability transition
 - a. Valuing the future – the problem of discount rate
 - b. Tension between now and tomorrow – the problem of transition time & cost
2. Conclusion: Why SD institutions are so important?

Constraints in SD policies

(Source: ESDN - European SD Network, 2013)

Weak political commitment: more words than action

Periodical financial and budget crises

Lack of champions - There is no single example where the whole SD transition was a big success

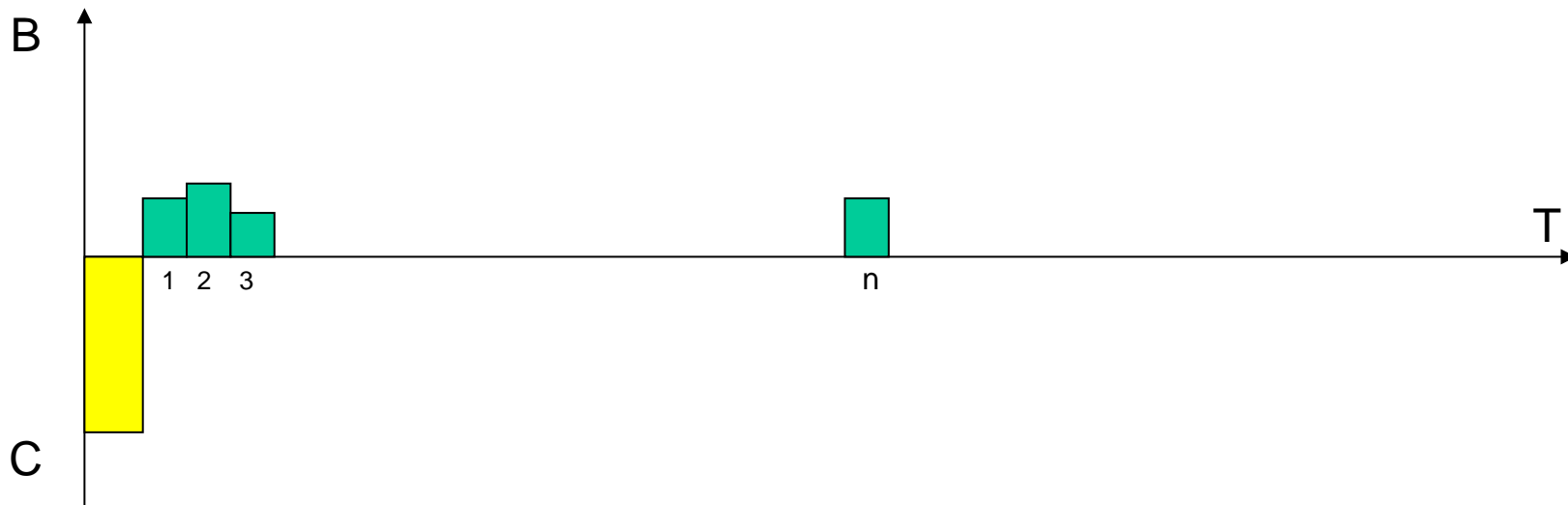
Difficult to translate into political practice and hard to understand for non-experts

Focus on win-win situations is false: there are trade-offs and losers

The benefit of economic analysis

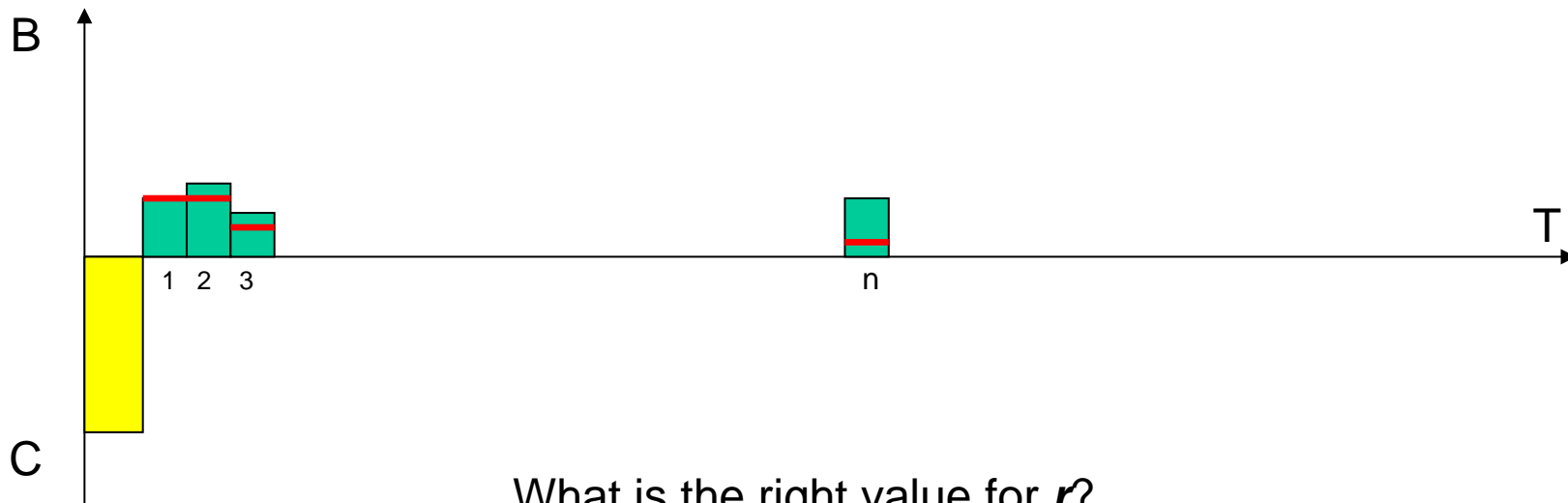
All we are economic actors because all we use to make decisions
(we have preferences between alternatives)

If the costs and benefits are spreading over a long time period



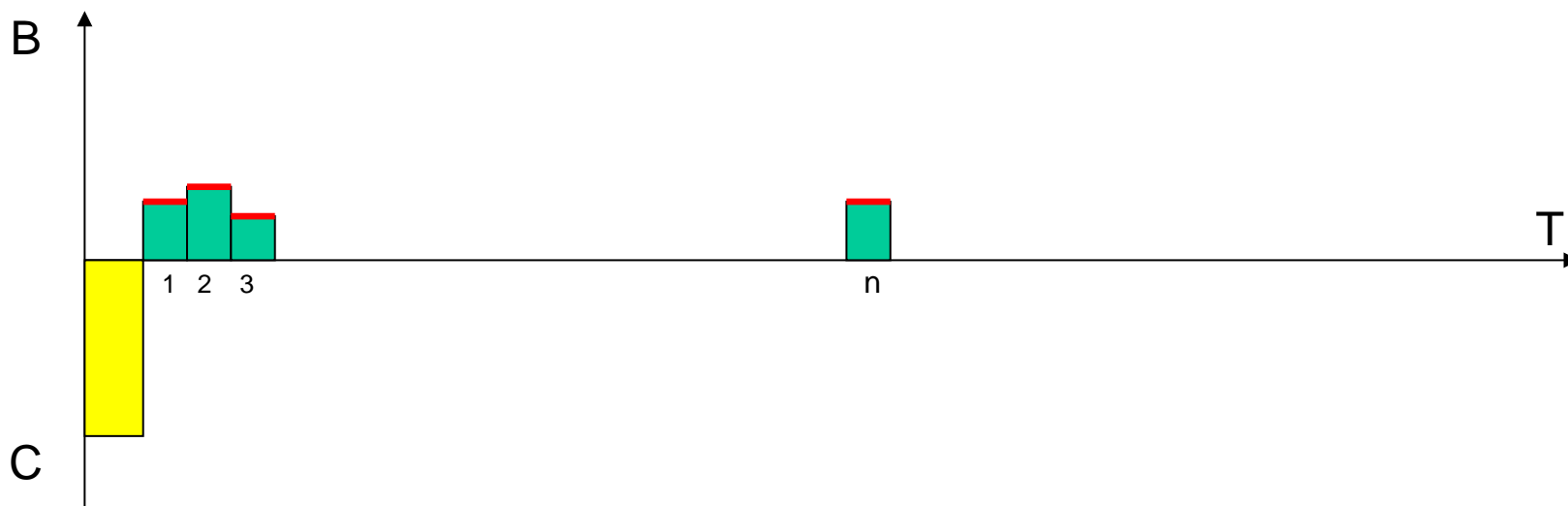
The present value of a future benefit

The present value: $B(n) = B / (1 + r)^n$



What is the right value for r ?
The figure shows a positive r

The zero discount rate



The problem of discount rate

If r is too high, all benefits from ecosystem services or other long-term social activities are diminished totally.

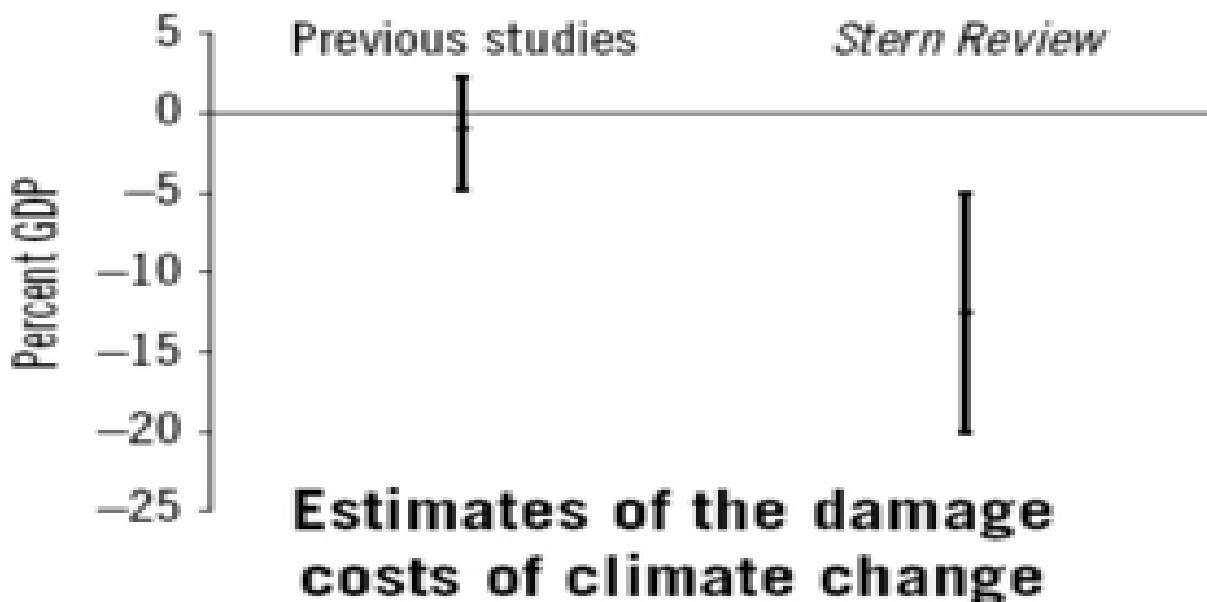
A 8% r for 100 years is equal to dividing by 2200.

If r is too low, close to zero, the value of all things occurring in the future is equal to the value of same events happening just now.

- This is contrary to common sense and to practical evidence

- This means no technical progress (inventions) at all.

Debates on discount rate

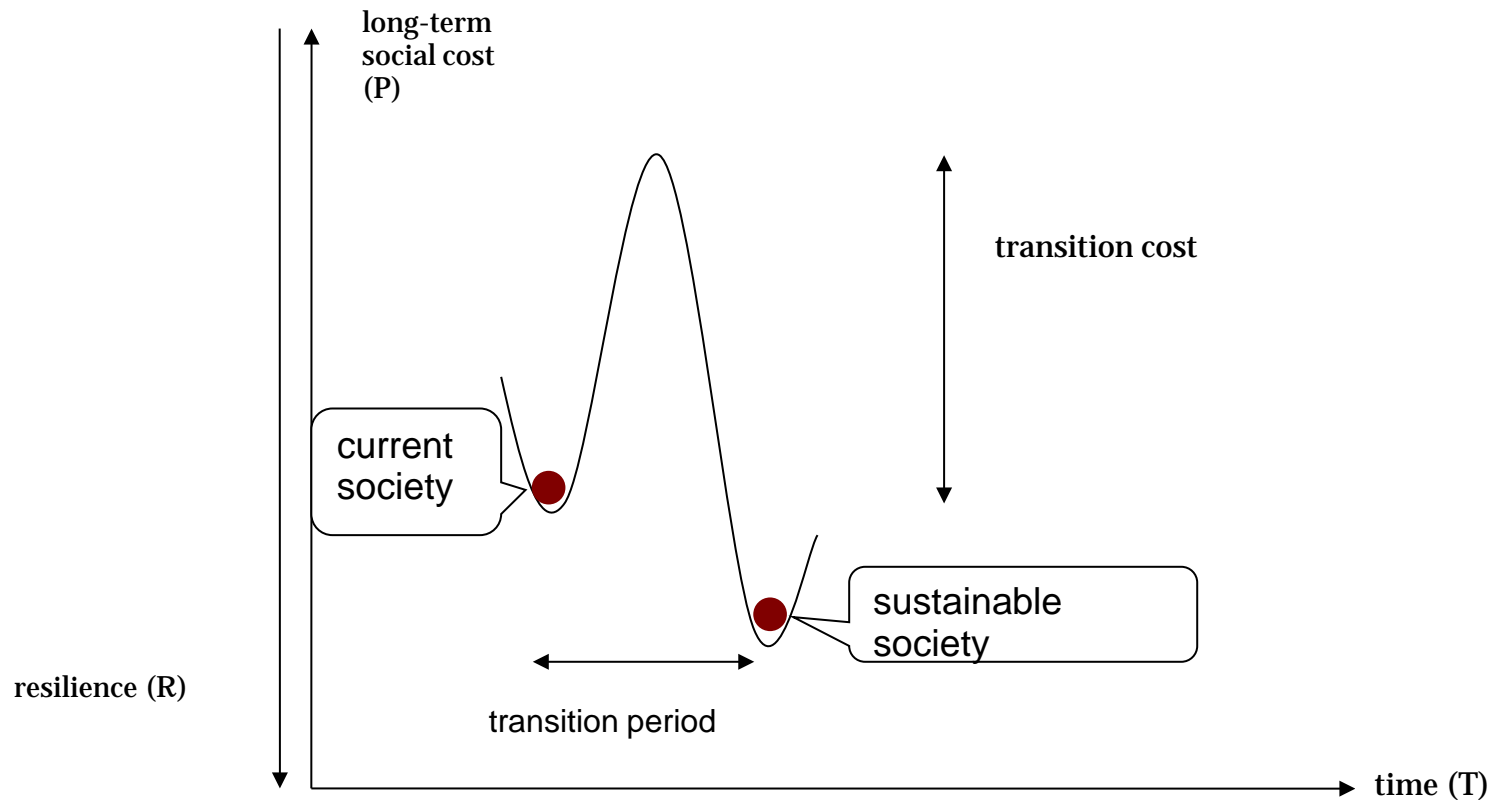


Time Period (years)	Recommended Discount Rate
1 to 5	4%
6 to 25	3%
26 to 75	2%
76 to 300	1%
more than 300	0%

The problem of SD transition

The timeframe of transition is longer than one or two political cycle

The current government has to cover the cost of transition, but the benefits will appear in the next political cycle or later



Sustainability: mission impossible?

No endogenous problem-solving in economics:

- No right answer for social discount rates
- No committed actors to cover transition cost

Exogenous constraints are needed.

Households, firms and government are endogenous actors in the economy.

Empowered non-governmental institutions may set the constraints based on agreed laws and limited empowerment.

How to solve...

1. External control mechanisms:

New institutions (new types of checks and balancies)

- constitutional rules
- independent bodies (not under control of the government)

2. Internal control mechanisms:

Enhance knowledge and commitment of citizens (voters)

- education
- NGO's
- multi-stakeholder dialogue

Main references:

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