Summer 2016
Philosophy & Public Policy
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Lecture 3
Philosophy and Public Policy of Climate Change

Basic facts of climate change

- Depending on where you stand empirically, climate change will have **negative** consequences (migration, political conflict, lower growth), **severely negative** effects (floods, droughts, storms), or **catastrophic results** (end of the world as we know it).
- Human activity is **responsible** and we keep fuelling it.
- We are dealing with **uncertainty** on many levels and **long time horizons**.
- The phenomenon raises scientific, economic, political and **moral questions**.
- It is a **perfect moral storm** (Stephen Gardiner): Many individually challenging problems intersect and overlap, leaving us in a deep mess.

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The global storm [The spatial dimension of the problem]

The threefold basic problem

(1) Dispersion of cause and effect: The benefits of emissions at one place, its costs occur elsewhere or globally.

(2) Fragmentation of Agency: The existence of multiple actors (individuals and institutions) without a clear structure of agency threatens the ability to respond (prisoners' dilemma/tragedy of the commons).

(3) Institutional Inadequacy: The international political system lacks the type of institutional enforcer required to solve collective action problems.

Aggravating factors

- **Scientific uncertainty** makes agreement on measures harder.
- **Deep roots** in our economy and vested interests obstruct solutions.
- **Skewed vulnerabilities** leave those least powerful most vulnerable.

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The intergenerational storm [The temporal dimension of the problem]

The threefold basic problem

(1) Dispersion of cause and effect: The costs are backloaded, undermining motivation and democratic ability to act.

(2) Fragmentation of Agency: Because present generations have power over future generations, there is the danger of overconsumption and intergenerational buckpassing.

(3) Institutional Inadequacy: Standard solutions to collective actions problems (repetition/reciprocity) do not work in temporal cases.

Aggravating factors

- The problem gets **worse over time** and with buck passing.
- Continued business as usual increases **transition costs**.
- We may force **tragic choices** on future generations

The theoretical storm

Climate change raises questions we are not well equipped to answer:

(1) How shall we trade off future costs and benefits against present ones?*

(2) How shall we deal with risk and uncertainty?

(3) What is status of future people whose identity we affect by our decisions?

(4) What requirements apply to our relationship to nature and animals?

(5) What type of international institutions could help survive the storm?

(6) How should the burdens of climate change be allocated?*

The aggravating factor of moral corruption

In light of the moral storm, we are tempted to avoid dealing with the problem, engage in self-serving behaviour and subvert genuine moral argument: Distract, delude, encourage doubt, etc. > Is Paris different?*

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Cost-benefit analysis and responses to climate change (1/5)

The first big question

How much action is required now? What costs to prevent climate change?

[In policy terms: Reduce emissions by how much by 2020 etc.?]

Related questions

What are adequate policy responses to the phenomenon of climate change?

How do we choose between them?

How do we allocate the costs of climate change across generations?

Two basic response strategies

(1) Mitigate the magnitude of climate change, e.g. by cutting emissions.

(2) Adapt to the effects of climate change, e.g. by building dams.

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Cost-benefit analysis and responses to climate change (2/5)

The standard framework of cost-benefit analysis (CBA)

Key idea: A policy should be pursued if its benefits over time are greater than the costs over time.

Example:

$$NPV = \sum_{t=0}^{T} \frac{benefits_t - costs_t}{(1+r)^t}$$

Philosophy PhD: Buy a taxi now for $100 to earn $120 next year:

$$NPV = 0 - 100 + \frac{120 - 0}{(1+.05)} = 14.3$$

If a policy has an NPV > 0, go ahead.

If we have a choice between multiple policies, choose highest NPV.

Cost-benefit analysis and its limits (3/5)

Costs in the context of climate change

Costs of mitigation: Costs of reducing emissions now.

Costs of adaptation: Costs of coping with consequences in future.

Fundamental objections to CBA in context of climate change*

CBA does not lend itself to the question of climate change because:

- It assumes **perfect substitutability**, which we cannot assume
- It is inappropriate for **low probability catastrophic** events
- It is difficult/impossible to **value non-monetary** benefits.

Cost-benefit analysis and its limits (4/5)

The significance of a social discount rate

The choice of discount rate matters for how we assess climate change, for what we do now and for which option we choose. The higher the discount rate, the less urgent the problem (Nordhaus vs. Stern).

Internal objections

What social discount rate shall we choose? Why have a positive discount rate?

The argument from growth

Claim: We have to discount because we could have earned a return.

Objection: Circularity > Decision-makers determine return

Context > Has market return (cost of capital, interest) a place here?

Do market participants try to answer the moral question of inter-generational distributions?

Cost-benefit analysis and its limits (5/5)

The argument from time preference

Claim: People just have a preference for present consumption

Objection: Even if that reason would allow discounting within the life of one individual, it would not justify discounting across generations (separateness of persons).

The priority argument

Claim: Because it is more important to improve the situation of those who are worse off, while we are economically worse off than future people, future people should bear the burdens of climate change.

Objection: What about our responsibility?

What about future poor people? At least, also redistribute now.

The second big question

How shall we distribute the costs of coping with climate change?

[In policy terms: Who should reduce emissions by how much?]

Two basic approaches*

(1) Polluter pays (Historical, backward looking)

a) First argument: You broke it, you fix it

b) Second argument: Compensation for overuse of common resource

> From 1850 to 2003: USA 29%, EU 26%, China 8%, India 2%.

(2) Fair emissions (forward looking, fairness)

Idea: We should share the remaining emissions according to standards of fairness and equality, based on current and forward looking considerations.

The Polluter pays principle

Question

Whom does the principle apply to: individuals, states, corporations?

Objections

(1) Past generations: Most of the emission are by people not alive anymore. Does the principle remain plausible if we pay for our ancestors?

(2) Ignorance: Until recently, people were unaware of the negative consequences of greenhouse gas emissions. Can we still hold them responsible?

(3) The impoverishment argument: Some of the historical emitters may today be impoverished. To have them bear the highest burden seems odd.

> But shall we give up on historical accountability?

Fair emissions approaches (1/2)

First Proposal: Equal per capita emissions

As a matter of fairness (veil of ignorance/arbitrariness of circumstances) every citizen gets an equal share of what we think the right amount of emission is

Feasibility objections

(1) Radical implications: A 20% emission cut would mean an 80% cut for the US.

(2) Redistribution: To avoid inefficiency and to account for different energy needs you may allow for trade in emission rights. That would entail massive redistribution from rich to poor? Value of an approach that won't be taken?

Principled objections

(1) If we want fair equality, we would have to look at effects of climate change.

(2) A principled concern: emissions rights only have an instrumental, not an intrinsic value. What matters is that humans have access to basic goods

Fair emissions approaches (2/2)

Second Proposal: Equal burden approach

Every nation should take an equal burden and reduce emissions by same %.

Attempt to motivate: Lockean Proviso Justification > Absorptive capacity.

Objections

(1) Historical accountability: Ignores historical emissions. Some nations have emitted more than others and still benefit.

(2) Arbitrariness: Why take the status quo as starting point? Using current emissions as a baseline is morally arbitrary.

(3) Inequality: Is not sensitive to inequalities in wealth between emitters. Shouldn't those better off and hence in a position to shoulder a larger share pay more?

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Does the Paris Agreement with its pledge and review mechanism give us reason to be more optimistic?

What if countries do not live up to their fair share?

Distributing responsibilities under conditions of non-compliance

There are three basic options of dealing with the situation:

Option (1): Just do your fair share.

Pro: For after all, the failure of others is their responsibility.

Con: Reasons grounding duty may support strong remedial responsibility.

Option (2): Do more than your fair share (pick up the slack).

Pro: There is a new moral situation, in light of which we determine share.

Con: Responsibility does not simply shift.

Option (3): Do less than your fair share (grouch).

Pro: Fairness > You should not be disadvantaged as result of failure of others.

Con: Reasons grounding duty are stronger than horizontal equity.

Relevant Factors: (a) Costs?, (b) rights?, (c) difference?, (d) reversible?