The Case for Carbon Pricing

Naomi Oreskes 21 September 2017

The basic argument:

Pay for pollution;

 Pollution is a cost, but the "free market" does not recognize that cost;

• It is "external" to the marketplace.

Internal v external costs

If I manufacture shoes, my "internal costs" are the costs of the materials, the salaries of the workers, the running of the plant, my marketing and advertising.

These are my "internal costs."

They are reflected in the price I charge for the shoes.

- But if, in the process of manufacturing shoes, I dump pollution into a local lake or river, or emit CO₂ to the atmosphere, these are "external costs."
- They do not accrue to me.
- They are not reflected in the price I charge for the shoes.
- They are passed on to someone else.

That is unfair!

Why should someone else pay those external costs?

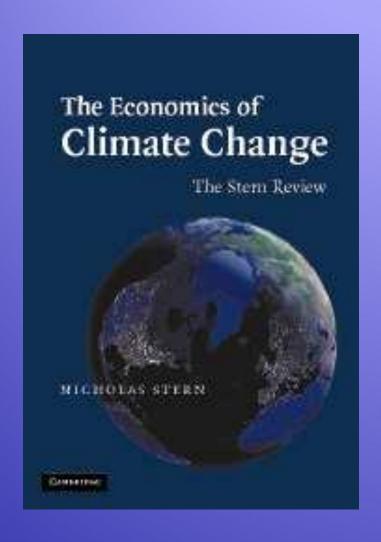
In effect, this "externalization" of costs is a subsidy to me and to my customers.

An unfair subsidy.

- Economists have long recognized this unfairness as a form of market failure.
- "External costs" are recognized as a market failure.
- Discussed in all standard textbooks.
- Pollution often used as textbook example of an external cost.
- "Negative externality"

CO₂ pollution is an unpaid, external cost.

Climate Change is a Market Failure



Economists and business leaders have acknowledged that climate change is a market failure.

Nicholas Stern, former chief economist of the World Bank, has called anthropogenic global warming "the greatest and widest-ranging market failure ever seen."

Obvious solution:

- Repair the market failure with a government intervention in the marketplace.
- Various types:
 - Ban the product
 - Regulate the product
 - Tax the product
 - Address the external cost through an emissions trading system (pay for the "right" to pollute)

These various solutions are all well known, and have all been used in other cases

Solutions are known

- Tobacco: regulate it, tax it, (ban it in some cases, e.g. on airplanes)
- Acid Rain: Emissions trading
- Air pollution in Southern CA: Emissions trading
- Ozone depletion: Ban the product that causes it (CFCs)

But... conservatives tend to have a problem with all this

Conservatives generally don't like to admit market failure.

They generally believe in the "magic of the marketplace" and are reluctant to acknowledge the need for government intervention in marketplace.

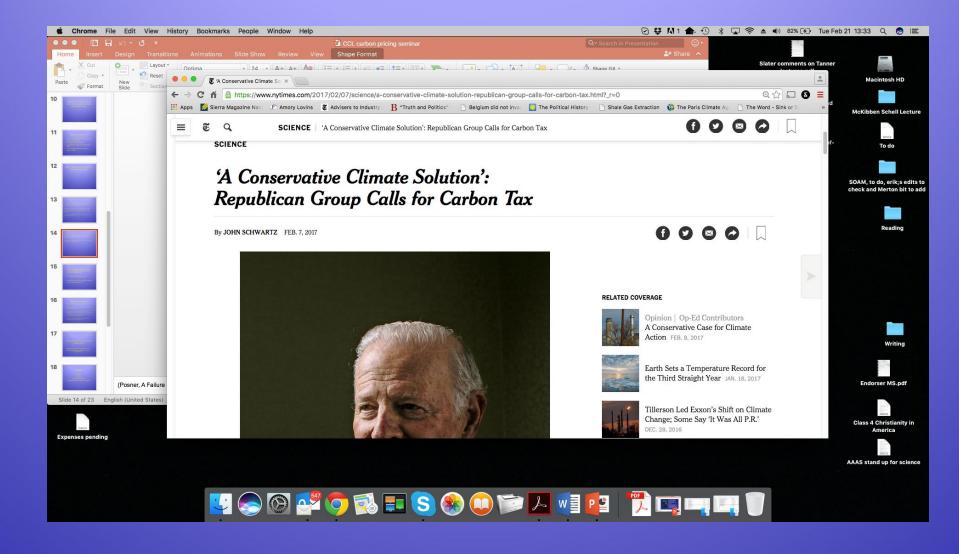
Judge Richard A. Posner: "Behavior that generates large external costs provides an apt occasion for government regulation."

Hence opponents of regulation may try to argue about the costs, even deny them.

But—this also provides an opening, because many conservatives, including Posner, do recognize that market failure is a real thing.

And in the case of climate change, many now accept the need to remedy the market failure.

Some of you may have seen this



- From an economic standpoint, the most straight forward way to remedy a market failure is a Pigouvian tax.
- To "internalize the external cost."
- In other words, to make people pay the true cost of carbon pollution.
- Simplest way to do that is a carbon tax.

Pigouvian taxation

- Named after Arthur Pigou, English economist, 1877-1959
- Argued that the existence of externalities is justification for government intervention.
- If someone is creating a negative externality, such as pollution, for instance, he is engaging in too much of the activity that generated the externality. Pigou advocated a tax on such activities to discourage them.
- You can also have a Pigouvian subsidy to encourage something you want, like wind power.

It's a variation of the idea of the "polluter pays"

Depending on how it is applied, we can end up with different definitions of who the polluter is.

Examples:

Tobacco
Alcohol
Gasoline (in Europe)
Carbon (Ireland, NZ, British Columbia)

Pigouvian taxes work

 Tobacco: Various studies show that high levels of taxation discourage young people from taking up smoking.

 If you don't take up smoking by mid 20s, it is very unlikely you will.

So the case for a carbon tax is simple

1. It's a well known instrument: a Pigouvian tax.

2. Pigouvian taxes work.

3. At least some conservatives are willing to accept it.

Two main forms of Pigouvian tax

- 1. Revenue generating
 - 2. Revenue neutral

- As a general source of revenue to government
 - Set tax just high enough just to discourage the bad thing

- As a source of revenue used specifically to address problem
 - tobacco revenues applied to tobacco control efforts, cancer research;
 - carbon tax, fund renewable energy or energy efficiency

- Revenue neutral, return to people as rebate
 - Switzerland, health care rebate

 Revenue neutral, cut others taxes (British Columbia)

- Revenue neutral, return to people as cash
 - Fee and Dividend, advocated by Citizens' Climate Lobby

Key point: Any of these strategies can work

 Some evidence that fee and dividend less effective than other forms of revenue neutrality, because of Jevons effect (rebound). But that effect likely small.

Choice is really a matter of preference

- Some liberals may prefer to generate revenue, invest in green energy, efficiency, education, job training for displaced workers, climate research.
- Other liberals may prefer fee and dividend to ensure it is not regressive.
- Conservatives may prefer revenue neutrality to ensure funds are not used to expand government.
- People of any persuasion might prefer revenue neutrality to ensure funds are not siphoned off to other purposes.

Important point: We should not get too worked up about details

Heartbreaking that progressives in Washington refused to support the carbon price there because it was revenue neutral

 We should push for carbon pricing in whatever manner is politically feasible in our state.

 And it needs to be the states, right now, because the odds of getting carbon pricing on federal level are slim to none right now.

And we need to do it soon...

Or we will be looking at a lot more drastic solutions later



"Sorry, Harold, but I'm reducing our carbon footprint."