# Government institutions II

MPA 612: Public Management Economics

March 14, 2018



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# Plan for today

Addressing external effects

Public goods, market failures, and market limits

Regulations and government involvement

### Current events

# Addressing external effects

# External effects (or externalities)

A cost or benefit to someone who did not choose that cost or benefit

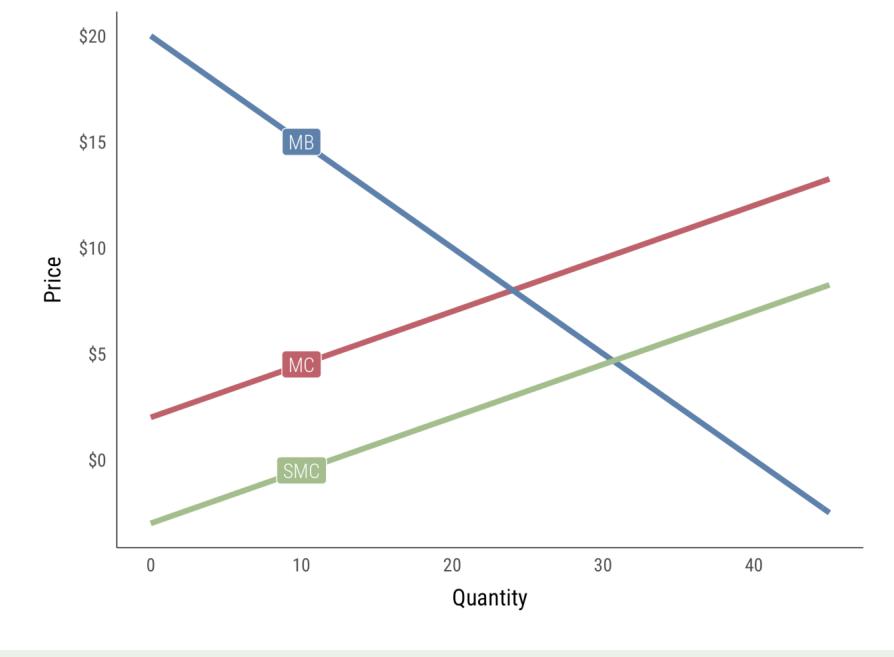
Social marginal cost/benefit

# Positive production effects

SMC below MC

Basic research

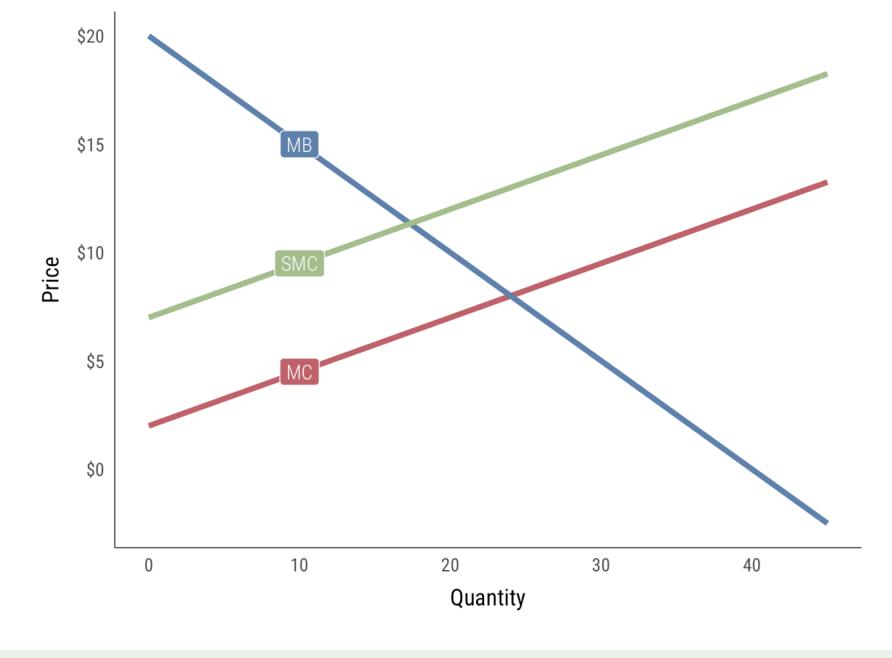
NSF, NIH, NEA



# Negative production effects

SMC above MC

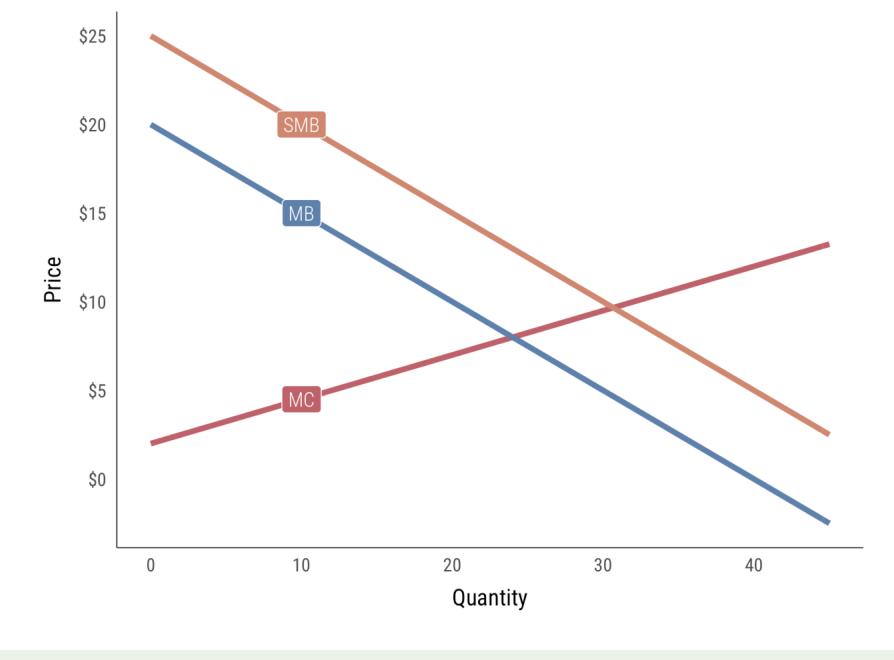
**Pollution** 



# Positive consumption effects

SMB above MB

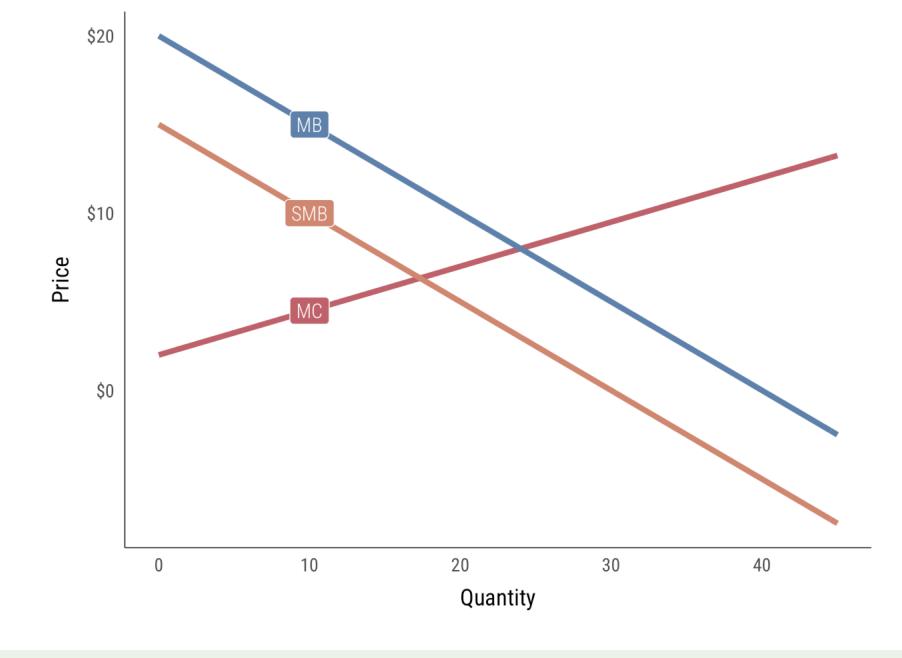
Car alarms



# Negative consumption effects

SMB below MB

International airline travel



# Internalize the externality

General solution to all externality problems

Make SMC/SMB part of the equation so that the price fully reflects the external costs and benefits of a party's actions

### Private sector solutions

Public sector solutions

### Private sector solutions

Merging and acquiring

Natural governance

Coasian bargaining

# Merging and acquiring

The polluting firm buys the downstream firm

What gets internalized?

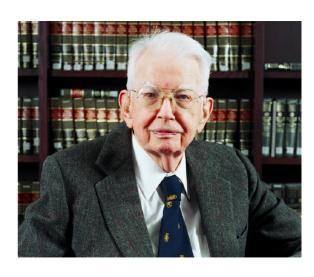
# Natural governance of common pool resources

Buyers or producers fix and govern externality on their own

What gets internalized?

# Coasian bargaining

Ronald Coase: use private property and negotiations to fix everything



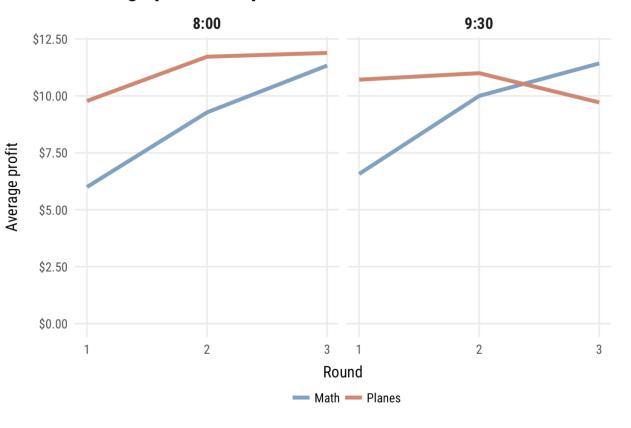
Coase theorem part 1

# Property rights + bargaining = everything is fixed

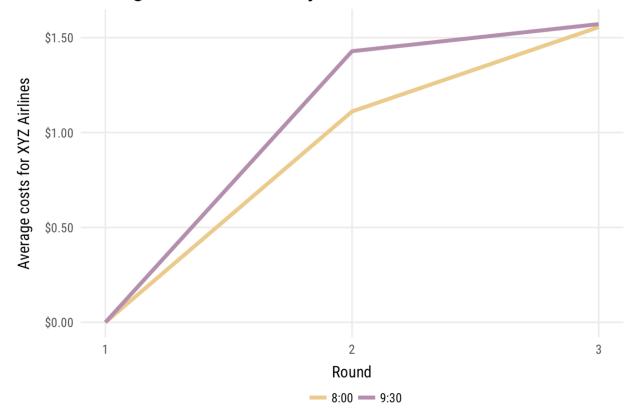
Coase theorem part 2

It doesn't matter who has the property rights

#### Average profit for upstream and downstream firms



#### Average costs taken on by downstream firms



### But there are problems...

### Assignment

Who gets blamed and who pays?

#### Holdouts

One person can veto

#### Free riders

Individuals will underinvest

#### **Transaction costs**

Negotiations are hard and costly

# Coasian bargaining

Great for small-scale, localized externalities

Good luck fixing global climate change or curing cancer though

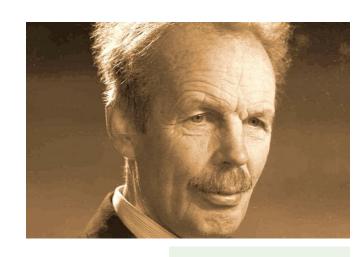
### Public sector solutions

Pigouvian taxation

Subsidies

Regulations

Market-ish solutions



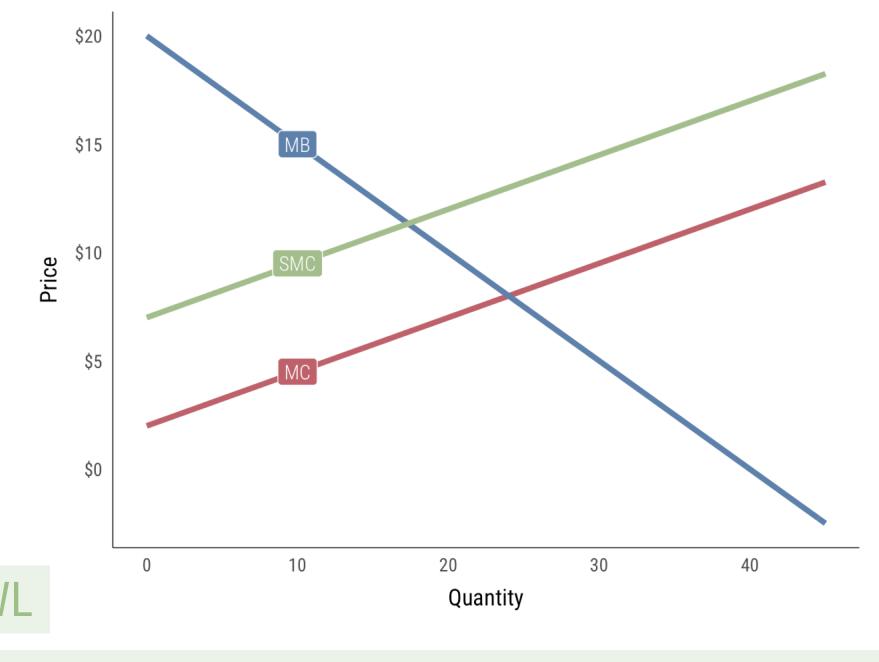
Arthur Pigou

# Pigouvian taxation

Government taxes the amount of damage

Shifts MC up to SMC

Reduces Q and DWL

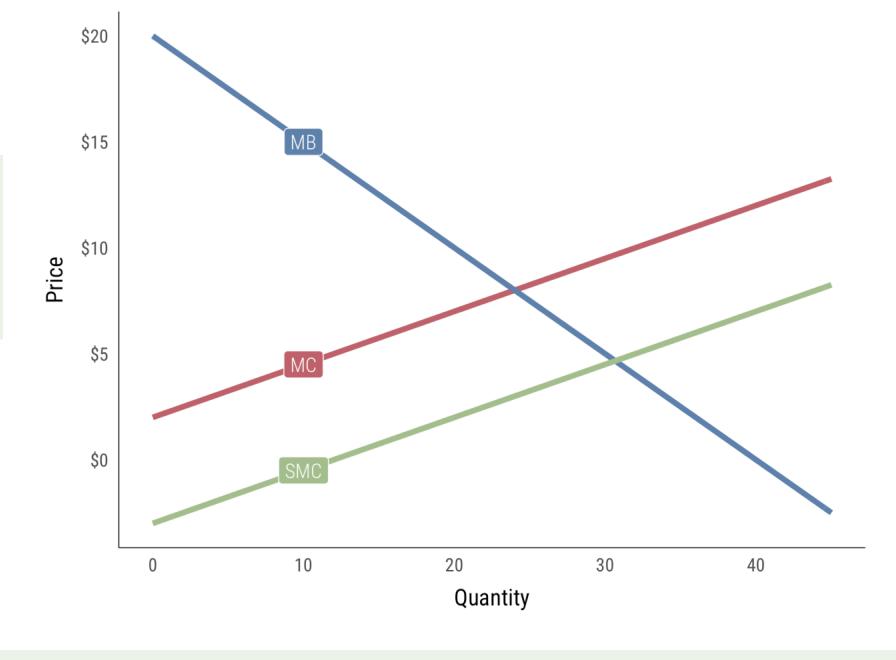


### Subsidies

Government pays the amount of social benefit

Shifts MC down to SMC

Increases Q and social surplus

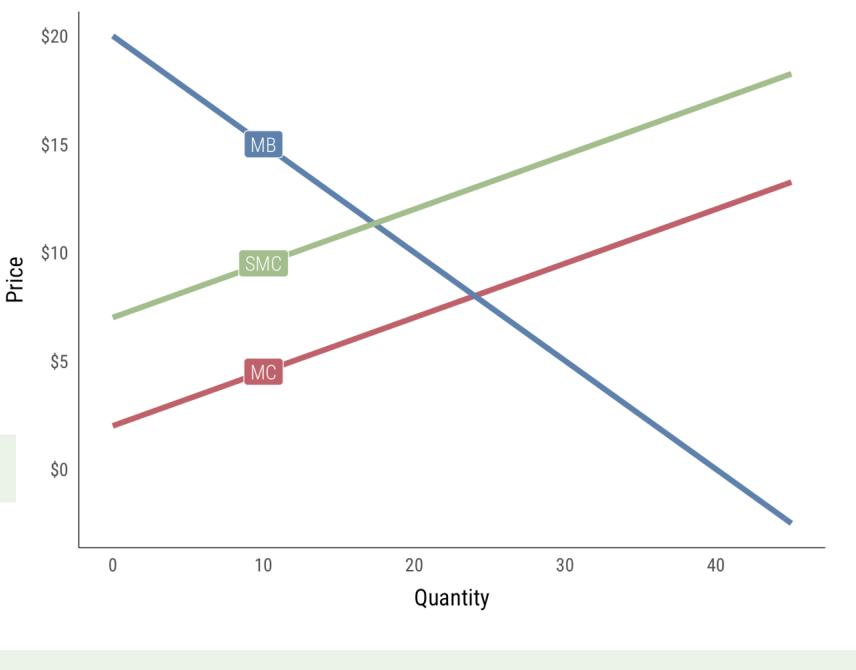


### Regulation

Government uses laws to limit Q

Shifts MC up to SMC

Reduces Q and DWL



# Market-ish solutions

Caps + tradable permits

Government issues 200 permits to allow for 1 unit of pollution

Plants A and B each get 100 permits

It's cheaper for A to abate pollution, so they don't need as many permits

B will buy permits from A until they have 150 and 50 each

Pollution goes down while maintaining flexibility

### But again, there are problems...

Reduce damage now, consequences be damned vs. minimize costs

Quantity regulations get the right level of reduction, but it can be way expensive and can distort markets

Cap and trade keeps costs down, but doesn't guarantee level of abatement

Public goods, market failures, and market limits

# When prices do not capture the effects of individual actions, markets fail

Public goods

Externalities

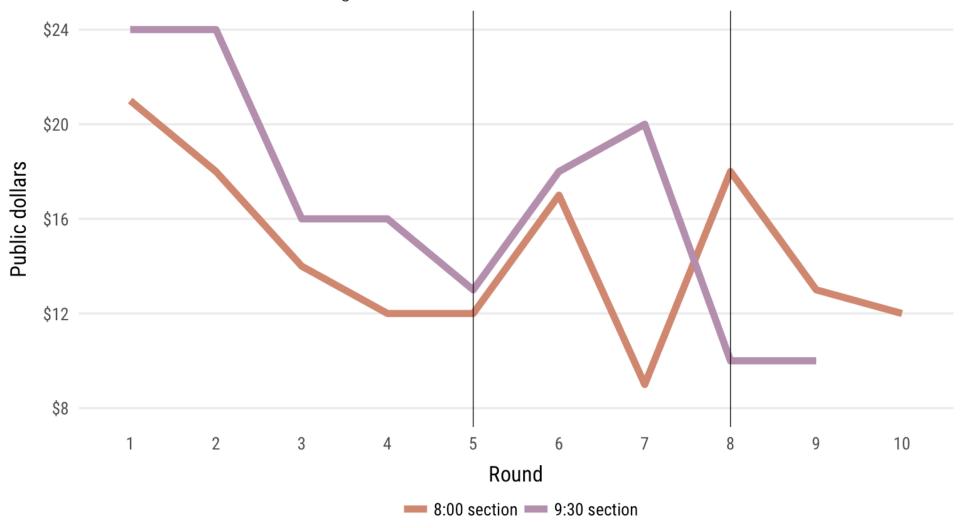
Monopolies

Missing markets

Asymmetric information

#### **Dollars contributed to public pool**

Vertical lines indicate rule changes



### Excludable

You can stop people from using it

# Rival

You using it makes it so others can't use it

	Excludable	Not excludable
Rival	Private goods/bads	Common Pool Resources
Not rival	Club goods	Public goods/bads

## Rivalry and excludability

A free public lecture held at a university

Noise produced by aircraft around an airport

A forest used by the community to collect firewood

A public park

Hamilton tickets

Bicycles available to the public to hire to travel around a city

# Problems with public goods

Public goods are positive externalities

Public goods are underprovided

Public goods are a multi-party game theory dilemma

Free riding and hare hunting

# Not everything should be a market

### Repugnant markets

Stuff that shouldn't be exchanged in a market because it violates norms

Organs

Babies

People

Votes

Cadavers Horse meat Dwarf tossing

# Merit goods

Stuff that everyone should get automatically outside of markets because of norms

Education

Security Healthcare

Transportation

Culture

# Regulations and government involvement

# Government regulation is hard

**Economic reasons**: try not to distort and destroy markets too much

Political reasons: interest groups, politicians, political trends



