# PHILOSOPHY OF ECONOMICS

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#### **Historical Views**

- 14. 10. IntroductionFeatures of Economic TheorisingPopperian Approaches
- 21. 10. Lakatosian Perspectives Friedman's Instrumentalism

#### **Recent Questions**

- 28. 10. Reiss's Explanatory Trilemma Sugden: Credible Worlds
- 4.11. Economic Models, cont. Ceteris Paribus Laws Experiments in Economics

# Today's Lecture

- 1. Ceteris Paribus Laws
- 2. CP Laws in Economics
- 3. Experiments
- 4. Concluding Remarks

# CETERIS PARIBUS LAWS

## **Ceteris Paribus Laws**

- 1. Introduction
- 2. Distinctions
- 3. Implications
- 4. The Vector Case

## Introduction

- Why are laws important?
  - Laws seem central to scientific explanation
  - Laws might "carve nature at its joints"
  - All the "hard" sciences seem to focus around laws
- Ceteris Paribus Laws
  - o One kind of law
  - Many laws, esp. those in economics, are guarded by ceteris paribus clauses

#### Some Questions

- What kind of laws are CP laws?
- Can CP laws explain? (how?)

#### **Ceteris Paribus Laws**

#### "Ceteris paribus" = "other things being equal"

- "Ceteris paribus, agents prefer a larger bundle of goods over a smaller bundle of goods"
- "Ceteris paribus, an increase in the quantity of money will lead to inflation"
- "Ceteris paribus, two competitors competing in some product or geographical space will move towards each other"

CP laws are laws, not merely accidental generalisations

• Ceteris paribus, Germans aren't funny

## **Ceteris Paribus Laws**

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# Comparative versus Exclusive (SEP)

- Comparative CP-laws require that factors not mentioned in the antecedent or the consequent of the law remain unchanged. ("other things being equal")
  - Ceteris paribus, an increase of the blood alcohol level of a driver leads to an increased probability of a car accident.
- Exclusive CP-laws assert that a one factor causes another, provided disturbing factors or influences are absent. ("disturbing factors being absent")
  - Ceteris paribus, planets have elliptical orbits.
- CP laws might be both; indeed, in economics, we should expect them to be both
  - o Ceteris paribus, an increase of demand leads to an increase of prices.

# Definite versus Indefinite (SEP)

- In **Definite CP-laws** there is a specified (or specifiable) list of the disturbing factors
  - If A, B, C factors remain equal, and D, E, F are absent, then G will lead to an increase in H ... = Ceteris paribus, G will lead to an increase in H
- For Indefinite CP-laws there is no such list
- Definite CP-laws are a form of lazily stating something we know
- Economic CP-laws tend to be indefinite, though there might be some implicit laziness

# **CP** laws in Economics

"Ceteris paribus, rising prices lower demand" might be a lazy formulation of

> "If (1) preferences remain unchanged, (2) prices of substitutes and other goods remain unchanged, and (3) the budgets of consumers remain unchanged, then rising prices lower demand"

but usually, CP-laws in economics tend to be open-ended

"Ceteris paribus, two competitors will move towards each other in a product or geographical space" (Hotelling's Law)

is a lazy formulation of ... ?

## **Ceteris Paribus Laws**

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## CP-laws are everywhere

- **Cartwright**: All laws in physics are implicitly restricted by CP clauses
- There are no universal laws which cover everything
- CP laws reveal causal capacities

# J. S. Mill

[...] in any tolerably advanced science there is properly no such thing as an exception. What is thought to be an exception to a principle is always some other and distinct principle cutting into the former: some other force which impinges against the first force, and deflects it from its direction. There are not a law and an *exception* to that law—the law acting in ninety-nine cases, and the exception in one. [...] Thus if it were stated to be a law of nature, that all heavy bodies fall to the ground, it would probably be said that the resistance of the atmosphere, which prevents a balloon from falling, constitutes the balloon as an exception to that pretended law of nature. But the real law is that all heavy bodies *tend* to fall [...].

# Falsificationist Challenge

- 1. Ceteris paribus, X causes Y (indefinite CP clause: we do not know what in principle goes into the CP)
- 2. We observe X
- **3**. We observe the opposite of Y
- 4. But that does not contradict our law—not all things were equal!

Falsificationist Worry: the CP law is unfalsifiable or trivial (sometimes X causes Y, sometimes it doesn't)

**Upshot**: we need some principled way to decide when the CP clause applies

## **Ceteris Paribus Laws**

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#### The Vector Case

"Ceteris paribus, F1 pushes X towards the east"



### Interactions

In the Vector Case,

- 1. each causal factor is **independent**. F1 has the same effect on X no matter what and how many other forces are at work
- 2. each causal factor is **homogenous**. F1 and F2 can be understood in the same way—differences are merely quantitative
- **3**. each causal factor is **actually causally effective**. Each force is exerting energy on X.
- 4. there are known laws of composition/interaction. We know how changes in other factors will change the overall effect on X

## **Reasons for Optimism**

- The Vector Case is the "best case" for a CP explanation
- The Vector Case promises to overcome the falsificationist and explanatory challenges against CP laws
- Question: are CP explanations in economics similar to this ideal case?

# CP LAWS IN ECONOMICS

## Mäki: Models as Isolation

- One interpretation of the Vector Case: we identify a true causal mechanisms (a "tendency", a "capacity")
- "In an isolation, something ... is 'sealed off' from the involvement or influence of everything else, a set Y of entities [...]" (p. 321)
- We achieve isolation by idealisation
  - Just as real experiments isolate one causal factor, so thought experiments isolate one causal mechanism
  - This is common in the natural sciences

# Reiss's Trilemma (again)

#### 1. Economic models are false

**No**: while economic models contain false assumptions, they identify (isolate) true causal mechanisms which operate in reality

- 2. Economic models are explanatory
- 3. Only true accounts can explain

# Problems

Hotelling's Law: Ceteris Paribus, two competitors competing in a product or geographical space will move towards each other. Some Assumptions:

- Individuals move on a one-dimensional line
- Individuals have perfect information
- Individuals are utility-maximizers
- Do these assumptions really isolate?
- Do they work at all like in the Vector Case?

# EXPERIMENTS IN ECONOMICS

# **Types of Experiments**

- Lab experiments
  - e.g., in behavioural economics
- Field experiments
- Natural experiments and Instrumental Variables (IV)
  - e.g., Acemoglu et al., "The Colonial Origins of Comparative Development"

# LOOKING BACK

### Overview



# Some Concluding Remarks

#### 1. Questions I Did Not Tackle

- Value-Neutrality of Economics
- Economics as a Social Science
- Methodological Individualism
- Nature of Utility



# Some Concluding Remarks

#### 2. Different Foci

- Economics as a Unitary Discipline vs Economics as Various Separate Endeavours vs Individual Approaches and Papers
- We can criticise (or praise) economics on these different levels
- Philosophers tend to go for (global) criticism
  - o because it's more interesting
  - o because it requires less specific knowledge
- But the levels are independent to a degree

# Some Concluding Remarks

#### 3. Philosophy vs Practice

- The General Problem: what we do seems philosophically problematic (or at least unexplained), but we do it nonetheless
- Two (Extreme) Strategies
  - *Listen to the Philosophers* Strategy: philosophical worries express difficult problems for economics, and should be given priority attention
  - *Trust the Practicioners* Strategy: philosophical worries are interesting, but economists usually know what they're doing

Thanks!