Introducing Economic Research

ECON 490

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Overview

In these slides, we'll talk about:

- Defining economic research and journal articles
- Three broad *categories* of economic research

Economics Research and Journal Articles

Economics research = journal articles (and working papers)

- We call them journal articles because they're published in journals
- Journals = collections of academic articles

There are economics journals covering every field of economics

- Some focus on specific subjects or topics
- Others are "general interest"

On Canvas, "Economic Research" page includes an overview of key journals

Peer Review and Working Papers

You've probably heard of peer review before

- Other scholars review papers and provide feedback
- Papers only get published if authors successfully address feedback

In some fields, papers that aren't peer-reviewed may as well not exist

Economics is somewhat different

- "Working papers" = research articles that are circulated but not published
- NBER Working Paper series is widely read

An Example – American Economic Journal: Policy

One of the most widely-read economics journals focusing on public policy

- Every 4 months, the journal releases a set of 15-20 articles
- Articles are written and peer-reviewed by economists



Market Power and Price Exposure: Learning from Changes in Renewable Energy Regulation
by Natalia Fabra and Imelda
(pp. 323-58)
The Effects of Import Competition on Unionization
by John S. Ahlquist and Mitch Downey
(pp. 359-89)
Information and Spillovers from Targeting Policy in Peru's Anchoveta Fishery
by Gabriel Englander
(pp. 390-427)

An Example

One <u>recent paper from AEJ Policy</u> looked at youth crime

Paper is 29 pages long, and includes:

- A clear research question
- A summary of existing research
- Description and results from the author's own data analysis

Juvenile Crime and Anticipated Punishment[†]

By ASHNA ARORA*

Can sanctions deter juvenile crime? Research indicates that they may not, as offending barely decreases when individuals cross the age of criminal majority and begin to face harsher sanctions. Several models of criminal behavior predict, however, that these small reactions close to the threshold may mask larger behavioral responses among individuals below the age threshold. Policy variation between 2007–2015 in the United States is used to show evidence consistent with these predictions—juvenile crime increases when the age of majority is increased. This increase is driven by younger age groups and is considerably larger than discontinuity estimates at the threshold. (JEL D91, J13, K42)

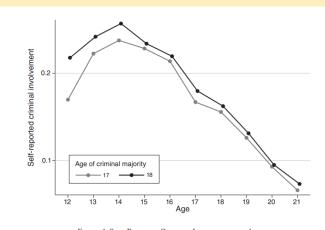


FIGURE 1. SELF-REPORTED CRIMINAL INVOLVEMENT BY AGE

Research Questions

The core of economic research is the research question

• Defines the core question that the researchers are trying to answer

What makes a good research question?

- First, it should be something you can answer objectively
- Second, it should improve our understanding of how the world works

Well-crafted answers to research questions can help economists develop better theories, policy makers make better policy, consumers make better decisions, ...

Categorizing Research Questions

Let's start by categorizing topics in economics very broadly

Think about economics classes you've taken

- Some likely focused more on theoretical models
- While others focused more on data, statistics, and current events

This general pattern carries over to economics research questions:

- Theoretical research focuses mainly on economic models with little or no data
- Empirical research (aka "applied" research) uses more data

Categorizing Research Questions

From last slide, we can distinguish between theoretical and empirical research

• Let's add another category - "What does empirical research try to accomplish?"

We can distinguish between two categories of empirical research:

- **Descriptive** describe a relationship or patterns in economic data
- Causal establish a causal relationship between economic variables

Descriptive Analysis

Descriptive analysis aims to document patterns in data

• **Describing** features of the world, economic relationships, etc.

Descriptive analysis could explore topics like:

- How do average incomes vary across counties in California?
- How does educational attainment vary across residents of Orange County?
- How do consumer spending patterns vary by income for CSUF students?

Causal Analysis

Descriptive analysis can tell us about patterns and relationships

- E.g., when X is high, Y tends to be higher as well
- But it doesn't tell us about causality is X causing an increase in Y?

Causal analysis attempts to *isolate* the specific effect of one variable on another

Examples of causal research questions include:

- How does the minimum wage affect the employment of restaurant workers?
- How do zoning restrictions affect the construction of housing in California?

A Final Note

We'll talk about causal analysis throughout this class

- That doesn't mean descriptive analysis isn't important!
- It's what you'll do for the capstone paper (and most data work in industry)

When we switch over to talking about regression and using R, we're generally thinking about exploring *descriptive* questions