### Finding Data (w/comments on crafting research questions) (v. 3.6)

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# Question...



**PU/DSS/OTR** 

2 <u>Go to 'useful links' page</u>

# Now...



## Topic/subject/geography...



# Planning your research...

If your advisor/professor gave you a research topic or a research question it is highly recommended to do a *literature review* focusing primarily on journal articles. See the link below for more information:

https://economics.princeton.edu/undergraduate-program/ess/#

# Using your literature research...

This is important because it can give you a sense of what others have done so you can either:

- 1. Try to replicate their work (to make sure they did it right) or
- 2. Use it as basis for your own research by defining topics, geographic coverage, and *your research question*.

A very important reason is to *find out the sources of their data*. Once you know the source or even the name of the data set go to the link below for more information:

https://economics.princeton.edu/undergraduate-program/ess/#

Bear in mind that there are lots of data sources so you may have to be **creative** with your keyword search to find the right source. This is why using the data sources suggested in journal papers or a book can save you lots of headaches.

By the way, it is OK to request data from the authors (just make sure you are not breaking any license agreement).

If you have to come up with your own research question here are some steps that may help along the way.

- It is important for you to pick a topic that you really, really, really like. You will be spending a lot of time doing research so you better enjoy it.
- 2. Once you pick your topic, it is time to brainstorm to convert the research topic into a research question. Remember that a research question is a statement of what you want to study.
- 3. Interesting research questions *do not* make papers, *feasible* research questions make papers. The research question has to be *doable*.

To see whether your research question is feasible try the following "suggested feasibility test":

- Can you answer the question with a simple descriptive statistic (like an average, median, count, percentage, etc)? If so, then it is just to narrow, not much to research. Not a good research question.
- 2. Does the answer to your question has too many angles like for example: *what best practices have solved poverty?* Here you need to be more specific: what do you mean by 'best practices'? Where? The US, the world? The question assumes that poverty has been solved somehow somewhere, does this make sense? Trying to find an answer here may take you everywhere. The question is not focused enough. Too broad.

- 3. A feasible research question is answerable on time. You need to consider deadlines, whether the data is available immediately or not (and in the format you need), whether you need Institutional Review Panel (IRP) permission to do the research (i.e. would you be interviewing people) which takes at least a month. In sum, do you have enough time and the necessary resources to answer the question?
- 4. There is no magic procedure to craft a research question. It is a back-and-forth process between you, your advisor and your subject specialist at the library. In many cases it is a frustrating process in which you are expected to bear most of the responsibility. Just remember that your advisor and your subject specialist are there to support your learning process. The earlier you start the better.

In a general sense, I can say that a good research question is feasible if...

...it is focused enough, not to narrow not to broad, clearly define the terms, may include the pros and cons of the issue and is answerable on time.

Example: Why some countries are rich while others are poor?

Answers to this question have gone from germs, geography, climate, religion, institutions, evil doers, etc.

Here are some links that may help you:

http://www.esc.edu/ESConline/Across\_ESC/WritersComplex.nsf/wholeshortlinks2/Research+Room+Menu http://globetrotter.berkeley.edu/DissPropWorkshop/nuts&bolts/question.pdf http://www.socialresearchmethods.net/kb/strucres.php

## Some things to consider...

Once you have your research question, when looking for data, you need to ask yourself:

### What is my unit of analysis?

### Here is a definition:

"...The unit of analysis is the major entity that you are analyzing in your study. For instance, any of the following could be a unit of analysis in a study:

- individuals
- groups
- artifacts (books, photos, newspapers)
- geographical units (town, census tract, state)
- social interactions (dyadic relations, divorces, arrests)

Why is it called the 'unit of analysis' and not something else (like, the unit of sampling)? Because *it is the analysis you do in your study that determines what the unit is.* For instance, if you are comparing the children in two classrooms on achievement test scores, the unit is the individual child because you have a score for each child. On the other hand, if you are comparing the two classes on classroom climate, your unit of analysis is the group, in this case the classroom, because you only have a classroom climate score for the class as a whole and not for each individual student. For different analyses in the same study you may have different units of analysis. If you decide to base an analysis on student scores, the individual is the unit. But you might decide to compare average classroom performance. In this case, since the data that goes into the analysis is the average itself (and not the individuals' scores) the unit of analysis is actually the group." [Source: http://www.socialresearchmethods.net/kb/unitanal.php]

# Type of data...

The unit of analysis define the type of data you need. If you are studying individuals, households, companies, etc. then you are dealing with micro level data.

If your unit of analysis are countries, states or some other form of aggregate data then you have macro level data.

## Final considerations...



If you are still not sure what to do, here are some tips:

1. Talk to your advisor/professor as many times as possible. Remember, he will grade your work.

2. Keep a log of your research, record all the steps, sources and procedures you followed. This will come in handy when writing the final version of your paper (in particular, the methodological part)

3. For your analysis make sure you have a sound theory behind and a clear research question. This will make easy for you to define your outcome (y) and predictor (x) variable(s) and your model.

### Roper, poll data



### Search for Datasets

Browse the Center's on-line catalog of studies. Researchers interested in secondary analysis of survey data files can determine studies relevant to their areas of interest. Opinion data are available to members using the RoperExpress service. Non-members may contact the Center to place orders.

Search		Search Reset Search Help
Date Range	to	
Country	All Countries 💙	
Survey Organization		
Type of Sample		
Γ	Search RoperExpress Studies Only	

"The Roper Center for Public Opinion Research is one of the world's leading archives of social science data, specializing in data from surveys of public opinion. The data held by the Roper Center range from the 1930s, when survey research was in its infancy"



R@PER Search here in the Search University of home page for this PUBLIC OPINION ARCHIVE Site O Datasets Connecticut Advanced Search dataset MEMBERSHIP EDUCATION RESEARCH OUICK LINKS DATA ACCESS **ABOUT THE CENTER** 

### Search Results



### You can use this search page to access data at the ICPSR (http://www.icpsr.umich.edu)

### **ICPSR**, survey data

Search

#### MyData Login/Create Account

MyData options... 🔽

Home | Find & Analyze Data | About ICPSR | Deposit Data & Findings | Digital Curation | Membership | Partners & Projects | Teaching & Learning | Help

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#### Our Mission

ICPSR provides leadership and training in data access, curation, and methods of analysis for a diverse and expanding social science research community.

#### Announcements

- ICPSR Business Meeting Presentation - Recording Now Available!
- ICPSR Receives New Technology Grants
- New Releases through 2009-09-20
- 2009 Undergraduate Research Paper Winners
- ICPSR Webinars in Early October -Register Today!
- 2009 ICPSR Web Site Navigating & Using the New Site!
- Funding opportunity for secondary data analysis of PreK-3rd data

See More Announcements...

#### Featured Site (view all) Data Documentation Initiative (DDI)

Search for Data Search Web site



The Data Documentation Initiative (DDI) is an emerging standard for social science metadata that is being developed by an international group called the DDI Alliance. Version 3.0 of the DDI documents the life cycle of research data from the start of a research project through data dissemination.

NOTE: You need to open an account to download datasets (is free)

Quick search

for data here

"Established in 1962. ICPSR is the world's largest archive of digital social science data. We acquire, preserve, and distribute original research data and provide training in its analysis. We also offer access to publications based on our data holdings. "

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### IPUMS, demographic data

### MPC Minnesota Population Center

#### Home of the IPUMS and other data projects

The MPC is one of the world's leading developers of demographic data resources. We provide population data to thousands of researchers, policymakers, teachers, and students. All MPC data are available free over the internet.

#### **Integrated Public Use Microdata Series**



#### **IPUMS-International**

Harmonized data for 1960 forward, covering 279 million people in 130 censuses from around the world

#### IPUMS-USA

Harmonized data on people in the U.S. census and American Community Survey, from 1850 to the present

# IPUMS

#### IPUMS-CPS

Harmonized data on people in the Current Population Survey, every March from 1962 to the present





#### North Atlantic Population Project

Complete-count data from 1800s censuses of Canada, Great Britain, Norway, Sweden, and the U.S.

National Historical Geographic

Tabular U.S. census data and GIS boundary files from 1790 to 2000







Information System

the U.S. National Health Interview Survey from the 1960s to the present

#### American Time Use Survey-X

Annual harmonized data from 2003 forward on how U.S. adults divide their time among activities

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### WRDS, financial data

You need to request an a	ccount (free to PU)
Wharton UNIVERSITY OF PENNISTEVANIA	Wrds wharton research data services the Global Standard for Business Research
HOME NEWS	ABOUT DEMO
$\underline{Home} \rightarrow Wharton Research Data$	Services
Sign In Sign In Register	Welcome to WRDS! What is WRDS? Wharton Research Data Services (WRDS) is a web-based business data research service from The Wharton School at the University of Pennsylvania. Developed in 1993 to support faculty research at Wharton, the service has evolved to become a common tool for research for over 250 institutions around the world.
Password Forgot your password? Sign In 2	WRDS is the de facto standard for business data, providing researchers worldwide with instant access to financial, economic, and marketing data though a uniform, web-based interface. This hosted data service has become the locus for quantitative data research and is recognized by the academic and financial research community around the world as the leading business intelligence tool. WRDS provides access to COMPUSTAT, CRSP, IBES/First Call, NYSE-TAQ, Global Insight, OptionMetrics and other important business research databases.
	For additional information, please see the About section.

### World Development Indicators database (World Bank)

### https://databank.worldbank.org/reports.aspx?source=world-development-indicators

Once you finish selecting your data, follow these steps to download the file in a format suitable for panel data analysis. The default settings will not give you the data in the proper format.

This page is in English Español Français حربی 中文 DataBank World Development Indicators 3 Preview Share Embed « 🙆 Variables ayout Clear Selection | Add Country (264) Add Series (2) Add Time (57) Database Available Selected 1 Selected 264 Country Available 264 Please click on Apply Changes to view the report. Series Available 29 Selected 2 Country Country C Series Time Available 57 Selected 57 2 C Time Orientation Apply Changes Popular Custom Δ Download options Drag to rearrange the order Row • Download format Metadata Column 🔻 Tabbed TXT CSV SDMX Row . Excel format: Export range .xlsx ▼ Entire dataset ٠ 7 Data format Table • Variable format: Both codes & names 🔻 5 NA preference Metadata Metadata Download options -Blank V No 🔻 Chart Map Excel Apply scale & precision from report? Preview CSV Add Country (264 Tabbed TXT Clear Selection 8 Data on this page only - formatted Download GDP 6 For more on panel data see here: (constant Metadata 2010 US\$ Advanced options Ð Stata - https://www.princeton.edu/~otorres/Panel101.pdf 21 1960 R - https://www.princeton.edu/~otorres/Panel101R.pdf Afghanistan

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Close

## Some useful links...

- ICPSR <u>http://www.icpsr.umich.edu/</u>
- Roper Center <u>http://www.ropercenter.uconn.edu/</u>
- IPUMS <u>http://www.ipums.org/</u>
- WRDS <u>http://wrds.wharton.upenn.edu/</u>
- Sociometrics <u>http://infotrac.galegroup.com/itweb/prin77918?</u> <u>db=SSEDL</u>
- NBER <u>http://www.nber.org/data/</u>
- IQSS Dataverse Network <u>http://dvn.iq.harvard.edu/dvn/</u>
- Vaderbilt TV news archive <u>http://tvnews.vanderbilt.edu/</u>
- CQPress Electronic Library <a href="http://library.cqpress.com/index.php">http://library.cqpress.com/index.php</a>

OTR