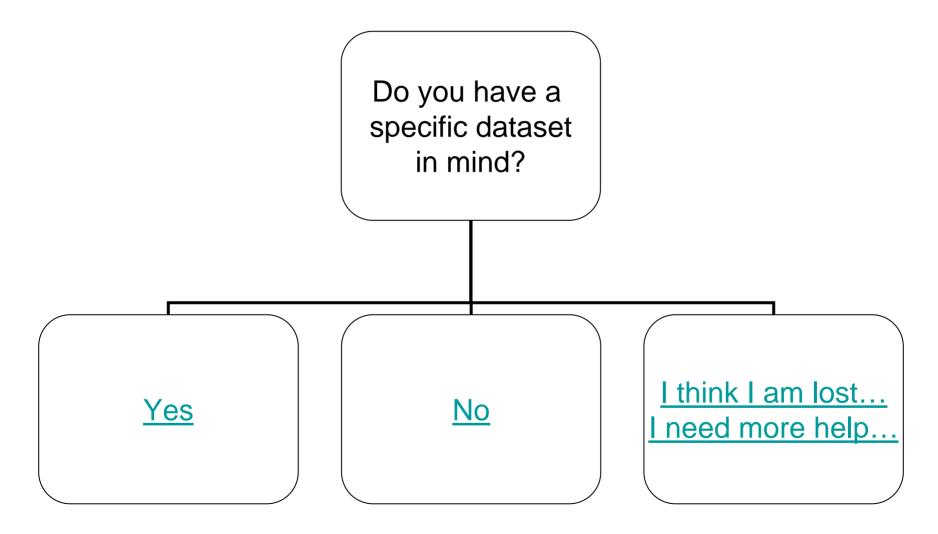
# First question...



### Now...

What kind of data do you need?

### **Micro**

(individual data, i.e. people, companies)

### Macro

(aggregate data,i.e. countries,states, counties)

## Very well...

You think you are lost because...?

I need to organize and analyze my data

do not know how to define my research topic and/or how to find data

## Second question...

Do you know the topic/subject or geographic area for your work? Yes

# Preparing data...

Your data should have the following structure:

- Variables in columns
- Cases/individuals in rows

Where 'id' could be 'country name', 'persons', 'households', 'states', 'counties', etc.

You need this format to run regressions, frequencies, crosstabulations, summary statistics, and all kinds of statistical analysis you may need.

Click here for definitions of different type of data

id	var1	var2	var3	
1	7.30	32.27	0.10	
2	8.28	40.68	0.56	
3	3.35	5.62	0.55	
4	4.08	62.80	0.83	
5	9.09	22.76	0.26	
6	8.15	90.85	0.23	
7	7.59	54.94	0.42	

id	year	var1	var2	var3
1	2000	7	74.03	0.55
1	2001	2	4.60	0.44
1	2002	2	25.56	0.77
2	2000	7	59.52	0.05
2	2001	2	16.95	0.94
2	2002	9	1.20	0.08
3	2000	9	85.85	0.50
3	2001	3	98.85	0.32
3 ,	2002	, 3	69.20	0.76

## Cleaning your variables...

Before doing any serious data analysis but right after you explore your data, you need to prepare your variables for analysis, this is particularly important when dealing with public opinion data or any <u>categorical</u> data (i.e. non-response) or in the case of continuous data with outliers.

In the example below responses go from 'very well' to 'refused', with code 1 to 6. Lets assume you want to use this variable in a regression. You need to do two things: get rid of non-responses and reorder their valence (from positive-to-negative TO negative-to-positive) to ease the interpretation of the coefficients. This second step is optional but highly recommended for interpretation purposes

. tab ecostatu					. tab ecostatu	, nol abel		
Status of Nat'l Eco	Freq.	Percent	Cum.		Status of   Nat'l Eco	Freq.	Percent	Cum.
Very well Fairly well Fairly badly Very badly Not sure Refused	149 670 348 191 12 3	10. 85 48. 80 25. 35 13. 91 0. 87 0. 22	10. 85 59. 65 85. 00 98. 91 99. 78 100. 00	=	1 2 3 4 5 6	149 670 348 191 12 3	10. 85 48. 80 25. 35 13. 91 0. 87 0. 22	10. 85 59. 65 85. 00 98. 91 99. 78 100. 00
Total	1, 373	100.00			Total	1, 373	100.00	

## Cleaning your variables...

Lets clean the variable ecostatu. First, never work on the original variable, always keep originals original.

The command recode in Stata lets you create a new variable without modifying the original variable. You could also make a copy of the variable (by typing clonevar ecostatu\_copy=ecostatu) and work on the copy.

Lets use recode in this case:

```
recode ecostatu (1=4 "Very well") (2=3 "Fairly well") (3=2 "Fairly badly") (4=1
"Very badly") (else=.), gen(ecostatu_rec) label(ecostatu_rec)
```

Get frequencies of both variables: ecostatu and ecostatu\_rec to verify:

. tab ecostatu				. tab ecostatu_r	rec		
Status of Nat'l Eco	Freq.	Percent	Cum.	RECODE of ecostatu (Status of			
Very well	149	10. 85	10. 85	Nat'l Eco)	Freq.	Percent	Cum.
Fairly well Fairly badly Very badly Not sure Refused	670 348 191— 12 3	48. 80 25. 35 13. 91 0. 87 0. 22	59. 65 85. 00 98. 91 99. 78 100. 00	Fairly badly Fairly well Very well	191 348 670 149	14. 06 25. 63 49. 34 10. 97	14. 06 39. 69 89. 03 100. 00
Total	1, 373	100. 00	<del></del>	Total	1, 358	100.00	

Now you can use ecostatu\_rec in a regression since it is a ordinal variable where higher values mean positive opinions.

For additional help on data management, analysis and presentation please check:

http://dss.princeton.edu/training/

http://dss.princeton.edu/

# Defining your research...

It is highly recommended to do a *literature research* focusing primarily on journal articles (obviously mostly quantitative).

For an extensive literature research you can use the "Subject List of Databases" (available in "Articles & Databases" at the library website) and check the **abstracts** for the subject area of interest (i.e. economics, politics, sociology, history, etc.). Here is the full link:

http://library.princeton.edu/catalogs/articles.php?f=subjects

## 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 you can go <u>here</u> to find it.

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 headaches.

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

## Some things to consider...

Data comes in different flavors and shapes. So, 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. Even though you had data at the student level, you use aggregates in the analysis. In many areas of social research these hierarchies of analysis units have become particularly important and have spawned a whole area of statistical analysis sometimes referred to as *hierarchical modeling*. This is true in education, for instance, where we often compare classroom performance but collected achievement data at the individual student level." [Source: http://www.socialresearchmethods.net/kb/unitanal.php]

The unit of analysis define...

# 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. (click here for some sources for this kind of data)

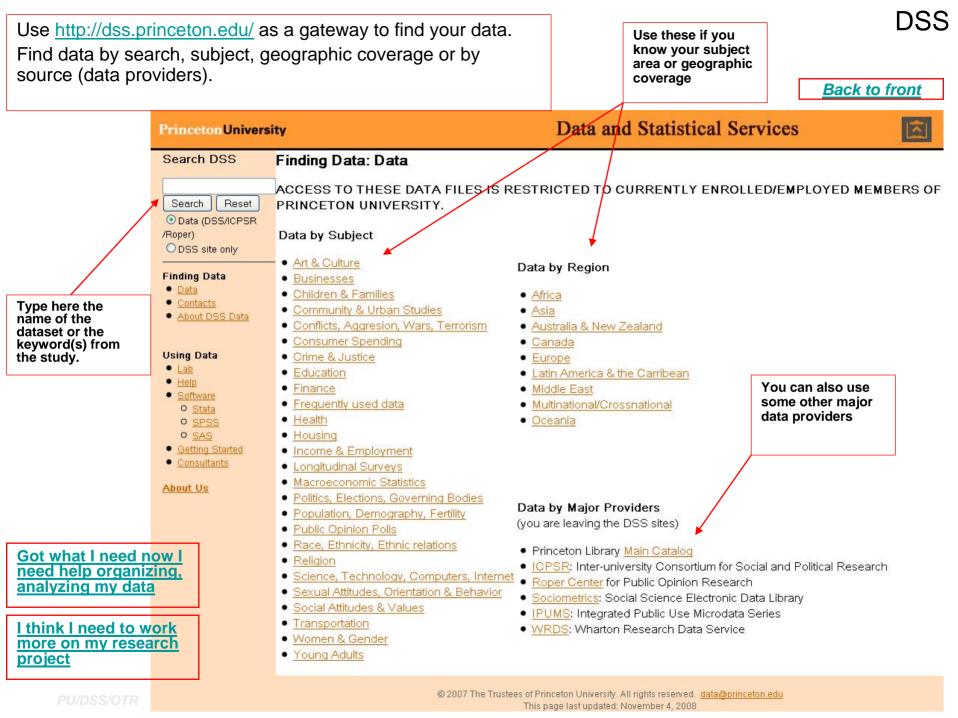
If your unit of analysis are countries, states or some other form of aggregate data then you have macro level data. (click here for some sources of this kind of data).

The sources of data are different from one type to the other. At DSS we offer mostly micro level but we also provide links to some 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. Talk to your subject librarian (click here to find him/her)
- 3. Once you fine tuned your research but have not been able to find what you need, contact DSS at <a href="mailto:data@princeton.edu">data@princeton.edu</a>
- 4. If you found what you need but need assistance downloading, reading or analyzing it, contact DSS at <a href="mailto:data@princeton.edu">data@princeton.edu</a>
- 5. 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)
- 6. 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 dependent and independent variable(s) and your model.



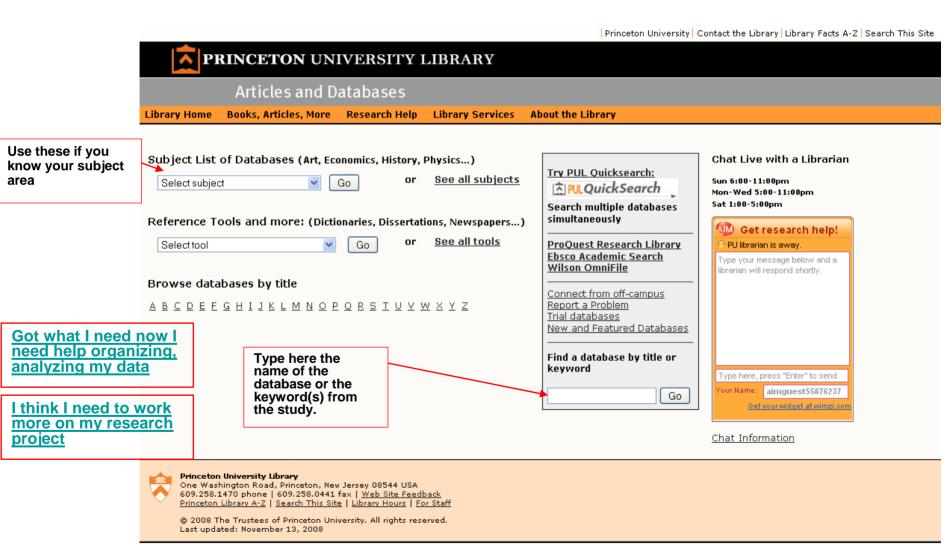
Use <a href="http://library.princeton.edu/catalogs/articles.php">http://library.princeton.edu/catalogs/articles.php</a> as a gateway to find macro level data.

Find data by search, or subject.

**NOTE**: This link gives you also access to articles, journals and some other text databases.

#### **Articles & Databases**

Back to front



#### Roper, downloading data

You can use this search page to access public opinion data at the Roper Center (click here to access it)





#### **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		
	Search Roper <i>Express</i> Studies Only	

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#### Roper, downloading data

Search here in the home page for this dataset





#### Search Results

Title Time Magazine/Abt SRBI Poll # 2008-4567: America by the Numbers

[Study# USSRBI2008-4567]

**Survey Firm** Abt SRBI, Inc. (Schulman, Ronca, & Bucuvalas, Inc.)

Survey Sponsor Time Magazine October 3-6, 2008 Field Dates Reaistered likely voters Sample

Sample Size 1.053

Sample Notes Respondents were interviewed via landlines and cellular telephones.

Variables 136

Major Topics Covered

Voter history/intent (3); 2008 presidential election (1); Obama/Biden vs. McCain/Palin (4); rating political leaders/people (10); Sarah Palin vs. Joe Biden (5); Barack Obama vs. John McCain (3); source of news (15); George W. Bush job performance (1); direction of country (1); economy (2); social contract (2); comparing now and then (1); mortgage recovery plan (1); opinion on certain statements (10); war in Iraq (1); people in the news (5).

Codebook in two formats

Metadata

Documentation Download

ocumentation files are available for free download.

The following files are available only to RoperExpress Users and Members.

86kb) (440kb)

RoperExpress

Datasets, two formats: ACII and SPSS

Marginals

ASCII (385kb) SPSS portable (496

Study File Listing and Other Notes

ata tables/Frequencies PDF (94kb)

Text (3kb)

**NOTE**: When data is not available in Stata, you can download the SPSS portable (\*.por), open it using SPSS (available at the DSS lab) and saving it as Stata.

# You can use this search page to access data at the ICPSR (click here to access it)

### ICPSR, downloading data



MyData Login/Create Account

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Our

Click here to browse data by subject or region

Uncheck the option "Web Site"

**NOTE**: To download datasets you will need to open an account (which is free)

#### **SEARCH**

Data



Courses &

#### QUICK LINKS

Select a link

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.

#### ANNOUNCEMENTS

Membership

2008.11.30 New data releases...

2008.11.24 ICPSR undergraduate research paper competition...

2008.11.24

ICPSR undergraduate internship...

2008.11.21

<u>Digital preservation management workshop</u> hosted by ICPSR...

2008.11.20

New strategic plan and mission statement...

2008.11.19

Webinar recording and slides available...

2008.11.13

Site unvailable on Dec. 3...

2008.10.06

ICPSR Online Learning Center - opening doors to quantitative literacy...

A partner in social science research

Feature:

About

<u>Data Preservation</u> <u>Alliance for the Social</u> <u>Sciences</u> (Data-PASS)



Funded by the Library of Congress, Data-PASS acquires and preserves data from opinion polls, voting records, large-scale surveys, and other social science studies, many of which are considered at risk of being lost.

view all ICPSR sites

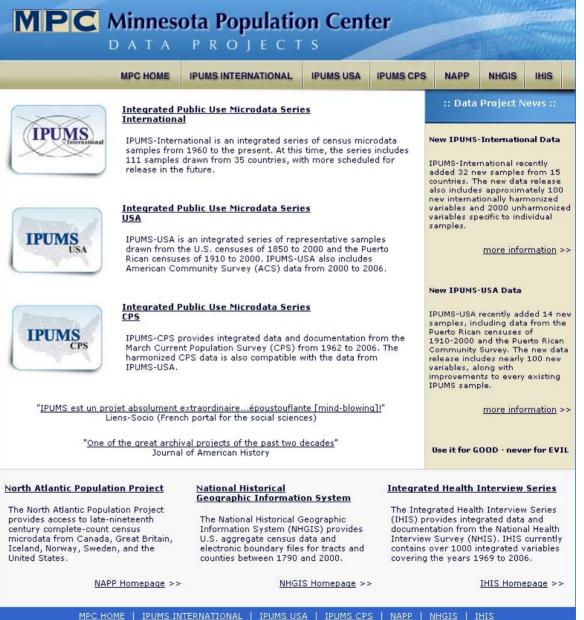
more >>

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#### IPUMS, downloading data

You can use this page to access data at IPUMS (click here to access it)



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#### WRDS, downloading data

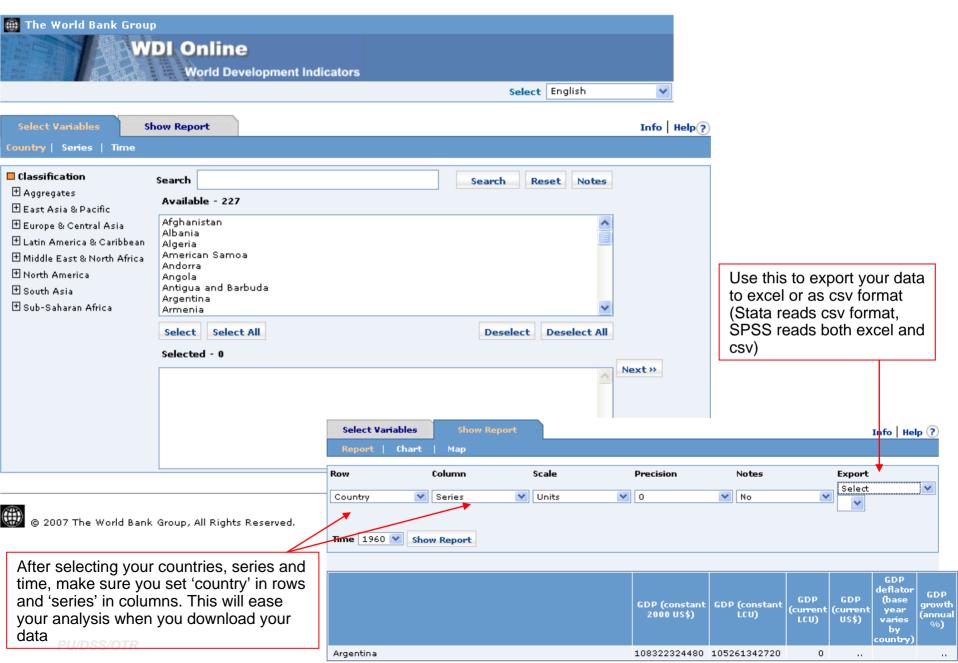
You can use this page to access data at WRDS (click here to access it)

Click here for more info on data available at WRDS



World Development Indicators is available through PU library homepage in "Articles & Databases". You can use this link for other macro level data sources.

#### WDI, downloading data



### Some useful links...

- DSS <a href="http://dss.princeton.edu">http://dss.princeton.edu</a>
- Articles & Databases (PU) http://library.princeton.edu/catalogs/articles.php
- Libguides at PU <a href="http://libguides.princeton.edu/">http://libguides.princeton.edu/</a>
- ICPSR <a href="http://www.icpsr.umich.edu/">http://www.icpsr.umich.edu/</a>
- Roper Center <a href="http://www.ropercenter.uconn.edu/">http://www.ropercenter.uconn.edu/</a>
- IPUMS <a href="http://www.ipums.org/">http://www.ipums.org/</a>
- WRDS <a href="http://wrds.wharton.upenn.edu/">http://wrds.wharton.upenn.edu/</a>
- Sociometrics http://infotrac.galegroup.com/itweb/prin77918?db=SSEDL
- NBER <a href="http://www.nber.org/data/">http://www.nber.org/data/</a>
- IQSS Dataverse Network <a href="http://dvn.iq.harvard.edu/dvn/">http://dvn.iq.harvard.edu/dvn/</a>
- Vaderbilt TV news archive <a href="http://tvnews.vanderbilt.edu/">http://tvnews.vanderbilt.edu/</a>
- CQPress Electronic Library <a href="http://library.cqpress.com/index.php">http://library.cqpress.com/index.php</a>





# Finding data (ver. 1.0 beta)

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DEI