

Lecture 3
Introduction to Data
Economic, Financial, and Trade Data
Search Strategies
Introduction to Excel

ITRN 501
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What we are covering today

- General approach to research
- Literature search databases
- Data identification and assembly
- Data manipulation

Assembling the evidence

- Start early – start writing
- Think before you collect
 - What are you looking for?
 - What do you already know?
- Review the available literature
- Look for analogies that are easier to understand or find research on.
- Assemble evidence to see if you think you will be able to address your problem
- Assemble evidence to see if you have the problem right.

- Start with broad and popular searches
 - Talk to friends and colleagues
 - Talk to people in the field generally
 - Use Google and Wikipedia etc.
- Use the initial search to identify authors and approaches
 - Get those papers or even talk to those people
 - use terms and authors learned to search bibliographic databases
 - be careful if you think you will need to talk to them later be sure to keep channels open.
 - Identify the types of data they use and where to find them for your country
- Iterate!
 - When you think you have a model and an expectation and have identified the data, move on and do your own analysis.
 - Don't wait until its too late to go back to the literature.

Citations

- In general: Do unto others as you would have them do unto you.
 - Most plagiarism is lazy and unnecessary.
 - Don't be afraid to let people know where your ideas come from.
 - Think of it as being helpful to your readers, not covering your behind.
 - Be careful in group projects and “managed” writing projects.

Finding literature

- The public web: Google, Wikipedia, etc.
- Bibliographic and general information resources
 - ABI Inform
 - Article first
 - Lexis-Nexis
 - JSTOR
 - CIA Fact Book
 - Economist Intelligence Unit

Types of statistical data (scales)

Quick Quiz

Define the following

- **Numeric variables**
- **Ordered Categorical Variables**
- **Unordered Categorical Variables**
- **Discrete Variable**
- **Continuous Variable**

What does data look like?

What is a variable?

- Something that varies or is prone to variation.
 - A quantity capable of assuming any of a set of values.
 - A symbol representing such a quantity. For example, in the expression $a^2 + b^2 = c^2$, a , b , and c are variables

What is a constant?

- Something that is unchanging or invariable.
 - A quantity assumed to have a fixed value in a specified mathematical context.
 - An experimental or theoretical condition, factor, or quantity that does not vary or that is regarded as invariant in specified circumstances.

What are raw, micro, aggregate or summary data?

- Raw data are the data as they were collected
- Microdata refers to the cleaned and formatted data for individual observations used by analysts.
- Aggregate data are when data are summed over observations to form a larger unit observation such as firm, industry or country.
- Summary data are measures that allow one to summarize the microdata in some way, including aggregate data.

What are sample and census data?

- A census survey attempts to capture all the relevant data from all relevant members of the population.
 - Random misclassification and bias may play a role
- A sample is selected from the larger population to tell the analyst about the larger population.
 - Additional issues of sampling error may have to be addressed

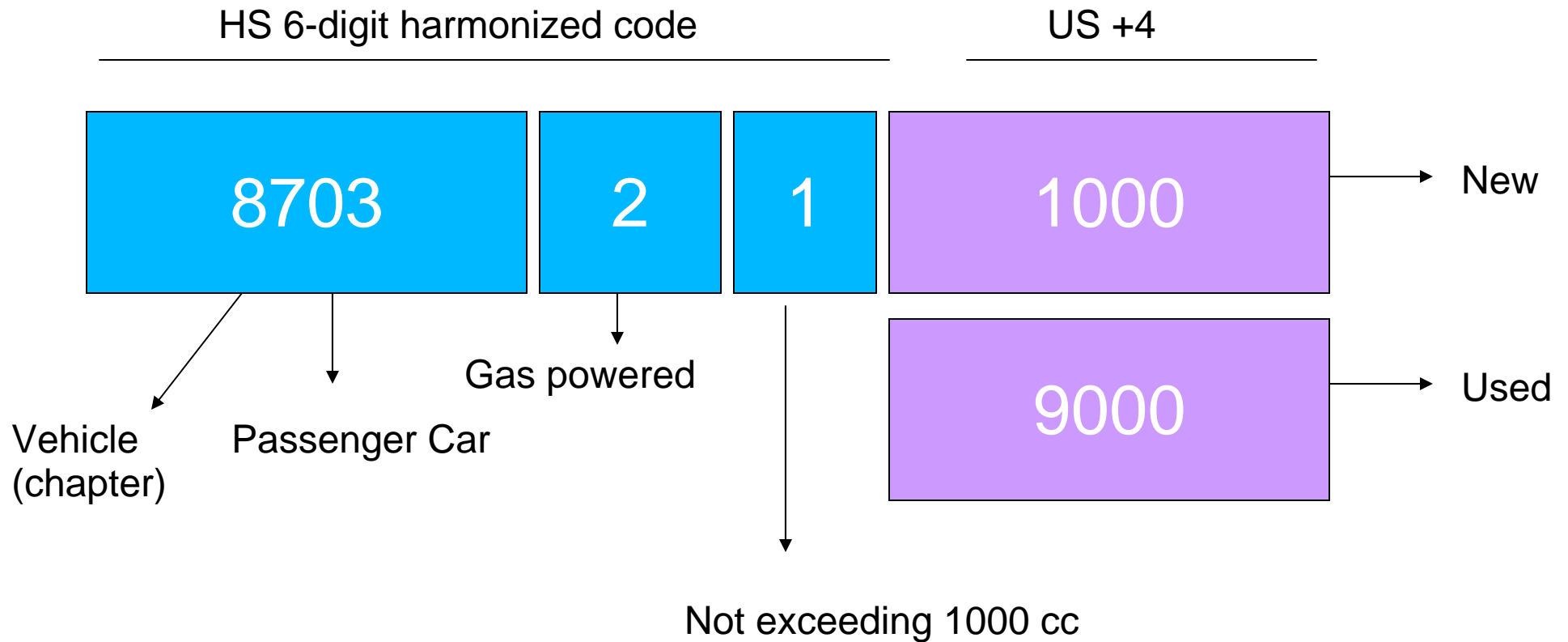
Finding general trade, economic, and financial data

- The public web: Google, Wikipedia, etc.
- General GMU Data Sources
 - World Bank World Development Indicators
 - IMF International Financial Statistics
 - Globaledge
 - Etc.

Specific tariff and trade data

- Harmonized Commodity Description and Coding System (HS)
 - 4- and 6-digit HS product categories administered by the World Customs Organization in Brussels
 - These are subdivided into “over 7-digit” country defined categories.
 - In the US these are 8-digit rate lines and 10-digit statistical reporting categories (schedule B).
 - Import
www.usitc.gov/tata/hts/bychapter/index.htm
 - Export
www.census.gov/foreign-trade/schedules/b/
 - In Europe, for example CN8 is the 8-digit code

HS Codes Explained



Exercise Step 1

1. Look at

www.usitc.gov/tata/hts/bychapter/index.htm

2. Find the 10-digit HS code and general rate of duty for:

1. Hass avocados
2. Wicker luggage
3. Nuclear reactors

Import/Export Data

- Office of Trade and Industry Information
 - <http://ita.doc.gov/td/industry/otea/OTII/OTII-index.html>
 - <http://tse.export.gov/> (only to HS4)
- ITC Dataweb
 - <http://www.usitc.gov/>
- Eurostat Comext
 - <http://epp.eurostat.ec.europa.eu/newxtweb/>

Volume, price, and value

- *Volume* is non-monetary units
 - Automobiles
 - Barrels of oil
 - Bytes of data
- *Price* is the monetary value expressed in a single unit
 - \$20,000 for one automobile
 - \$124 for a barrel of oil
 - \$0.0000000001 per byte of data
- *Value* is Price x Volume
 - 2000 imported vehicles worth \$40,000,000.

What cost basis?

- CIF (costs, insurance, freight)
 - Most often for imports, i.e. “everything it cost to get here”
- FOB (free on board)
 - Recorded value at the point it is loaded onto a vessel after clearing the exporter’s customs.
- FAS (free alongside ship)

Note: “Free” refers to seller’s risk and responsibility.

Exercise Step 2

- Go to dataweb
- Establish an account
- Run a report on imports into the US of the three products using the HTS 10 codes you found in step 1 with countries and products disaggregated

Introduction to Excel

- Basic navigation
- Basic calculation
- Drag and drop
- Fill in
- Basic functions
- Loading Analysis Tool Pak
- Using Analysis Tool Pak