Ideas for Final Project
Econ B2000
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Begin investigating a topic in economics that interests you. This will eventually become the final project that caps the class. Each study group will write a final project. The study group may be of any size from one person up to three people. The standards for the quality and amount of research are, of course, increased for a larger group.

I want you to use basic real data – not pre-chewed, not data that somebody else has gone through and summarized. For example, the ATUS data are available cross-tabulated and with means by various sub-groups, but that's not what we've been using. Reading somebody else's stats is not doing stats, any more than watching sports makes you athletic.

Step 1: Find a topic.

Step 2: Write a basic overview of some of the recent economic research that has been done on this topic. This initial overview should be just a couple of pages and should demonstrate your basic familiarity with the topic, both the theory and the initial data work that must be done. (The research should be high quality academic work, not from newspapers or magazines.)

Step 3: refine and repeat.

Please consult both the CUNY policies on academic integrity and my synopsis about forms of proper citation (below). From my past experience it seems that many students lack this essential background knowledge so please take the time to ensure that you are in compliance.

Don't worry too much about finding the perfect topic: you're not writing a contract, just moving along a particular path for now. If, after a couple of weeks, you change your mind and find another topic that seems better, you can certainly change! You can also change your study group – you might fragment and/or re-group as we go along. The essential step is to start moving; for too many students 'the best is enemy of the good.'

Finding a topic:

"Interesting" articles/topics (to me, anyway): [and don't tell me you have trouble finding these articles – use Google to get exact titles; you should be able to use the library to get the journal articles through either EconLit or JStor or Google]

- more with ATUS – here is some research http://www.bls.gov/tus/research.htm
- look at waves of CPS studies to examine macro effects – how has Financial Crisis affected different demographic groups?
- National Health Interview Study has all sorts of medical and healthcare data – who has insurance, how often they're sick, doctor visits, pregnancy, weight/height
- IPUMS has historical census data http://www.ipums.org/

- look at labor market outcomes for recent veterans; this really lends itself to a group since each person can take a different part – for example one use ATUS, one use NHIS, BRFSS, CPS, SCF, etc.
- Census has info on small business owners: what makes an entrepreneur?
- IMF/World Bank have good international data
- finance data from WRDS – daily stock price and other data going back years, easily available to look at stock/bond returns even at daily intervals (some have denser); there's even some data on option prices
- real estate/housing/mortgage data – very sexy right now! (JEP Fall 2005 has symposium)
- Dept of Energy has data on fuel prices as well as household choices about energy use
- Fed Reserve has data on household finances (2004 and 2007) – again, very very VERY interesting right now – how does credit card debt, car debt, and household debt correlate? How vary with socioeconomic status, location, age, education? Veterans have additional mortgage options; are these important?
- BRFSS, Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2010, http://www.cdc.gov/brfss/technical_infodata/surveydata.htm.
- Deaton paper on global happiness; www.worldvaluessurvey.org has some data; JEP Winter 2006
- Fryer paper "Look Who's Come to Dinner" on interracial marriage – that only looks at black/white/Asian not Hispanic since uses Census data; also no updates on recent trends
- lots of sports data (Red Sox and Patriots use cutting-edge statistical and mathematical-optimization techniques); Romer on Bellman Equation in (American) football, Levitt on soccer penalty kicks; look at http://journals.academia.edu/JournalOfSportsEconomics to see the more academic way of approaching these questions, or even http://www.sabernomics.com/sabernomics/
- Gruber has paper on Divorce but concentrates on implications for kids; could also look at adults (do divorced people make less income?)
- Review of Women's Status in the Labor Market, http://www.bos.frb.org/economic/nerr/regrev.htm

Browse the Journal of Economic Perspectives (JEP, in the library here), which has many survey articles on topics of interest, (note: these are **not** the only possible topics; just suggestions) including:

- Global Poverty & Development, Summer 2003, Spring 2008, and Summer 2010; Trade, Labor, and Environment, Summer 2001; Disease and Development, Summer 2006;
- Outsourcing, Fall 2004; Labor Market Flows Summer 2006;
- Climate Change Spring 2009;

- Education: No Child Left Behind Summer 2010; Gender & Tests Spring 2010; Education, Poverty and Terrorism, Fall 2003; Grade Inflation Summer 2009; Invest in Kids Summer 2008;
- Executive Compensation, Summer 2003; Executive Compensation; the value of options in pay, Fall 1999
- Retirement, Winter 2010; Saving for Retirement Summer 2007; Social Security Spring 2005,
- Welfare Design Summer 2003; Welfare Reform, Spring 2000; Measuring Poverty, Winter 1998; Welfare and Workfare, Winter 90
- Discrimination in the Labor Market, Spring 1998; African-American Economic Status, Fall 90
- Sex Discrimination Summer 2003; Gender and Career Outcomes Winter 2005; Women in the Labor Market, Winter 89, Winter 1998, Fall 2000
- Social Security, Spring 2003 and Summer 96; Medicare, Spring 2000
- Education, Fall 96; Higher Education, Winter 1999; Early Child Educ, Spring 2001
- Immigration, Spring 95 and Summer 88
- Intergenerational Inequality Summer 2002; Wage Inequality, Spring 1997; Trade and Income Inequality, Summer 95
- Health Economics, Summer 92, Spring 1999, Fall 2008; Obesity Summer 2003
- CPI, Winter 2003
- School Choice, Vouchers & Accountability, Fall 2002
- the NAIRU, Fall 2002
- Oligopsony and Monopsonistic Competition, Spring 2002
- Computers & Productivity, Fall 2000
- European Unemployment, Summer 1997
- Crime, Winter 96; Levitt article Winter 2004
- Seniority and Wages, Fall 89
- Unions, Spring 88

There are zillions of other journals and books on other topics – chat with me for ideas and possibilities. Browse Econlit; if CUNY doesn't have the journal we'll get it inter-library.

DATA

There are many sources of data online. Although the principal sources change depending on the particular field, here are some of the basics. If you want other data such as finance data (stock or bond prices) talk with me: access is a bit more difficult but still possible.

http://rfe.org/Data/index.html – RFE is Resources for Economists, sponsored by the American Economic Association. It is a great site; this is their page of data links
http://www.federalreserve.gov/– The Federal Reserve
http://www.ny.frb.gov – our own New York Fed
http://www.census.gov/ the US Census
[or http://www.census.gov/main/www/subjects.html is a list of topics on which the Census Bureau has data.]

http://stats.bls.gov/ is the Bureau of Labor Statistics; as well as the CPS at
http://www.bls.census.gov/cps/cpsmain.htm
http://www.oswego.edu/~economic/data.htm is a good portmanteau of links from SUNY Oswego
http://www.worldbank.org/lsms/ World Bank
Overview of BLS data www.bls.gov/bls/inflation.htm
- CPI www.bls.gov/cpi/home.htm
- CPI Chained http://www.bls.gov/cpi/super_cpi.pdf
- PPI www.bls.gov/ppi/home.htm
- Unemployment www.bls.gov/cps/home.htm
- Wages www.bls.gov/bls/employment.htm
- BLS details on coverage www.bls.gov/opub/hom/homch1_a.htm

Health Statistics of Population, National Health Interview Statistics
Census Data Access: http://dataferrett.census.gov/

Academic Rules for Citations and Avoiding Plagiarism
Read CUNY's policy on acadmic integrity (on the course syllabus and CCNY web page).
see also http://www.dartmouth.edu/~sources/, http://www.princeton.edu/pr/pub/integrity/index.html

Harvard's guide to 'Writing Economics' is an excellent overall reference. See also NYTimes recent bits on plagiarism.

The essential idea is to differentiate your own contributions, what is new about your analysis or compendium, as distinct from what is taken from other sources.

You must realize what constitutes intellectual achievement: gathering diverse sources and comparing them one to another is such an achievement. But you must be clear about what is gathered, versus what points you are making with your comparison.

RULES:
when directly using someone else's words, these must be in quotation marks with an explanatory reference (either cite, footnote, or endnote)
example of cite:
"A strong, credible body of scientific evidence shows that climate change is occurring" (National Academy of Sciences, 2010).

if long quote (>50 words) then no quotation marks but indent & single-space
example of long quote with cite:

> Perhaps the most important argument for engaging in alternative monetary policies before lowering the overnight rate all the way to zero is to ensure that the public does not interpret a zero reading for the overnight rate as evidence that the central bank has "run out of ammunition." That is, low rates risk fostering the misimpression that monetary

> policy is ineffective. As we have stressed, that would indeed be a misimpression, as the central bank has means of providing monetary stimulus other than the conventional measure of lowering the overnight nominal interest rate. However it is also true that policymakers' inexperience with these alternative measures makes the calibration of policy actions more difficult. Moreover, given the important role for expectations in making many of these policies work, the communications challenges would be considerable. Given these difficulties, policymakers are well advised to act preemptively and aggressively to avoid facing the complications raised by the zero lower bound. (Bernanke and Reinhart, 2004)

when using your own words to state someone else's idea or reproducing their image, graph, or data, you don't need quotes but still need a reference.
example:
It is important to address the issues of providing an appropriate decision tree when analyzing game theoretic choices (Aumann, Hart, and Perry 1997).

The cite is of a format that enables the reader to go to your bibliography & find that reference. The usual style is (Author, p. ##) for a book or (Author, Date) for an article or other reference. A footnote or endnote is similar, but placed in a different spot. I think cites work best.

The Bibliography is at the end of the paper, and lists all works used. Include data sources! Also books, articles, web pages, images, graphs, etc. Make sure if your cite is a hyperlink, it gives enough info for a reader of the hard copy to find the reference.

Examples:

Aumann, R., S. Hart and M. Perry, (1997). "The Forgetful Passenger," *Games and Economic Behavior*, 117-20.

Bank of Japan, Flow of Funds Accounts, (2010). http://www.boj.or.jp/en/theme/stat/index.htm accessed July 12, 2010.

Bernanke, B. S., and V. R. Reinhart, (2004). "Conducting Monetary Policy at Very Low Short-Term Interest Rates," *American Economic Review*, May.

Ehrenberg, R. G., and R. S. Smith, (2000). *Modern Labor Economics: Theory and Policy*, seventh edition. New York: Addison-Wesley.

Heckman, J., (1974). "Shadow Prices, Market Wages, and Labor Supply," *Econometrica*, 42(4).

National Academy of Sciences, (2010). "Advancing the Science of Climate Change," *Expert Consensus Report*, National Research Council.

Vames, Steven, (2000). "Income Gains in March Outpaced Spending," *New York Times*, April 28, 2000. http://www.nytimes.com/yr/mo/day/news/financial/28tsc-economy.html

CONSEQUENCES

Failure to follow these rules is a violation of Academic Integrity. This is a severe violation of the basic principles of the academic community. You may be brought up on academic charges before a Disciplinary Committee of the College, where you are subject to a range of consequences up to expulsion.

Internet Resources

An internet search on a given topic will return a wide variety of hits. The most difficult task is to differentiate the junk (most of it) from the few bits of useful information. Since you are a student, just beginning to learn the field, it is only to be expected that you will have a more difficult time distinguishing the good from the bad. You must be wise, dutiful in checking out sources, and should ask questions.

You might usefully create a web page of your own. This takes about 30 minutes to learn, and removes any mystery. Sometimes students think that publishing online is difficult, so only very high-quality material should be online – FALSE. Anybody imbecile can put any damn thing online – and we do! You've got to be careful. Blogs and wikis have lowered the bar even further. A reader needs to be careful and critical of every source.

There are certain sources that have filtered out much of the worst junk. You can limit your search to only articles published in refereed journals by searching online databases (from the CCNY Library), such as EconLit and JStor. Of course not everything that is published is correct – you must still be diligent in finding recent sources, making your own evaluation of the plausibility of the claims, and arriving at your own judgments.

Both of these links are easily found from the CCNY Library's page, where you can pick them from the list. You need to access them from a CCNY computer, or else you will need a login (which the library can provide you, however this takes time so don't wait for the night before the paper is due!)

EconLit collects citations, most with a detailed abstract, and a large fraction have full text available. "Full text" means that you don't have to find the physical journal; you never touch paper. Just save the .pdf file that it produces.

A hint: one of my favorite journals to recommend to students is the **Journal of Economic Perspectives** (JEP). This gives excellent overviews of particular topics in economics, meant to be accessible to a non-specialist, written by some of the most prominent people in those fields. It is published by the American Economic Association (AEA) and is available through both EconLit and JStor. The **Journal of Economic Literature** (JEL) if also from the AEA and it also has occasional articles that summarize a topic. The library has both journals on the shelves – you can browse through these journals, just skimming to find interesting articles. It's a great way to spend a few hours!

JStor has the full text of articles published in the foremost journals of various disciplines (including Economics, Finance, and Statistics). Generally these articles are at least 3-5 years old, but it gives access to every article in the most important journals for the past several decades.

For news stories, you can search **Lexis/Nexus**. This collects the full text of major newspapers, including the New York Times and the Economist. Again, you need to access them from a CCNY computer, or get a login to work remotely.

There are other outlets, such as prominent and well-regarded thinktanks and policy institutions. In economics, the National Bureau of Economic Research (NBER, at www.nber.org) is highly regarded, as is the Brookings Institution (www.brookings.edu).

Of course all of these sources give "the establishment view" not the ideas and opinions of extremists. This is true by definition: formerly extreme views become mainstream once "the establishment" has published them. I do not want to discourage you from research on the fringes, however many classes at this College will require that you demonstrate a knowledge of the mainstream. (Marx and Keynes and Hayek began their radical writings by first demonstrating their knowledge of what had been written previously, to show where it had holes.)

That said, sometimes if I find an interesting article on EconLit that is not available as full-text there, I can Google it to find a free ungated version.

Default Guidelines for Final Project

You don't have to follow this format – use your own if you have a better idea. If you don't, though, this will serve as a basis. Also please ensure that your project does not go through and give bullet points in response to each question! You should write a narrative that gracefully includes the answers to these questions. The quality of the writing is a large factor determining the grade you get. There are writing tutors available – use them!

Introduction

A concise description of the project: include the dataset used, the key interesting results (don't reproduce everything), and why those results are interesting. Should be about a page so every word must count!

Literature Review

Describe the papers you've read that also look at this topic. Explain the differences among the results found in different previous studies. You can point out challenges that remain (even if your project doesn't solve them all). Do different authors come to different conclusions? Why might this be? Are their regressions valid (e.g. do they take adequate account of endogeneity issues)? These should be academic papers – serious studies not newspaper accounts. You can cite a newspaper to indicate why the result is interesting (e.g. to show that policymakers or the public cares about knowing the real

answer, or to give some background on why you're interested in it) but you can't end there.

Means (simple graphs, correlations, differences of means)

First carefully note the dataset you're using, both the original source and any subsequent restrictions (e.g. if you're only looking at children or only those who are working or whatever). Present a table where each important variable in your regression has its mean and standard deviation as well as any other relevant summary statistics (min/max, median, whatever). Verify that the units all make sense.

This is a good place for simple graphs of the sort that we talked about. Does a two-dimensional scatterplot show your regression results? Why or why not? This is also a good place to discuss functional forms: does the graph show that squared or cubic terms could be useful (or logarithms)? What about subgroups? Medians? (Look over past homework assignments for examples.)

Simple Regressions

Present a few different models in easy-to-read tables. Don't just cut-and-paste the SPSS output! That is unacceptable.

Complicated Regressions

Present some more regressions (again, in easy-to-read tables). Show your main conclusion then do some robustness checks (i.e. what if the sample were limited to only males or females or only those of certain ages or whatever is relevant). Go back to the homework assignments from class and do just those sorts of regressions; for example if you have age plus its square and cube, do the results (the coefficients on the variables of interest) change when you put in 5-year age dummies?

Explain Results

Clearly state what you have found and why it is interesting. Do your results confirm what other researchers have found? Or do they contradict earlier research? Why might this be?

Hand in: Paper, dataset, SPSS output

Don't Plagiarize! Remind yourself of the rules for academic honesty (many many previous references are available). The consequences for violations are substantial – up to expulsion.

Example

Using 2010 CPS data, restrict to only fulltime workers with a non-zero wage. Run two sets of regressions to explain earnings: with earnings (annual wage and salary) as the dependent variable; with log of earnings as the dependent.

The first set of basic explanatory variables is hypothesized to be factors such as age, sex, education, race/ethnicity, marital status, veteran status, and if a union member.

Wage/Salary (annual)	$	49,773.79
Age		41.88
Female		44.5%
White		79.7%
African-American		11.8%
Asian-American		5.8%
Native American/ Indian/ Alaskan/ Inuit/ Hawaiian		2.8%
Hispanic		16.1%
Mexican		9.8%
Puerto Rican		1.4%
Cuban		0.6%
Immigrant		17.5%
1 or more Parents were immigrants		23.8%
Education: no high school		8.6%
Education: High School Diploma		28.9%
Education: Some College (incl no degree or Assoc degree)		27.9%
Education: Some College but no degree		17.5%
Education: Associate in vocational		5.0%
Education: Associate in academic		5.4%
Education: 4-yr degree		22.5%
Education: Advanced Degree		12.1%
Married		62.0%
Divorced or Widowed or Separated		14.8%
Unmarried		23.2%
Union member		2.2%
Veteran (any)		7.4%

The regression estimates are made with three basic specifications: Spec 1 has just the listed variables; Spec 2 included dummies for industry, occupation, and state of residence; Spec 3 has dummy interactions for female*age, African-American*age, female*African-American*age, Hispanic*age, female*Hispanic*age, and female*education.

Spec 1		Spec 2	Spec 3
	estimated value	estimated value	estimated value

intercept	-$28,685.56	*		$13,744.52	*		-$10,978.43	*
	1954.106			*3025.180*			*3685.959*	
Age	$2,517.92	*		$2,012.04	*		$3,052.09	*
	93.814			*88.514*			*133.158*	
Age-squared	-$23.60	*		-$18.55	*		-$29.40	*
	1.055			*.994*			*1.504*	
Female	-$17,380.74	*		-$14,587.20	*		$26,912.27	*
	360.019			*393.294*			*4202.955*	
African American	-$6,136.77	*		-$5,315.62	*		$17,924.27	*
	552.138			*545.564*			*7559.610*	
Asian	-$783.89			-$3,140.09	*		-$3,196.33	*
	861.879			*851.007*			*849.324*	
Native American Indian or Alaskan or Hawaiian	-$4,615.72	*		-$3,077.92	*		-$3,030.05	*
	1054.697			*1025.422*			*1022.749*	
Hispanic	-$5,176.56	*		-$4,433.05	*		$32,492.36	*
	596.068			*588.188*			*5715.141*	
Immigrant	-$7,377.88	*		-$4,669.63	*		-$4,080.20	*
	776.395			*731.493*			*733.482*	
1 or more parents were immigrants	$4,513.48	*		$1,231.87			$892.78	
	718.087			*677.532*			*677.771*	
Education: High School Diploma	$7,658.27	*		$3,819.68	*		$4,208.53	*
	701.918			*667.305*			*826.691*	
Education: Some College but no degree	$15,430.94	*		$7,791.73	*		$9,434.14	*
	756.430			*734.022*			*900.898*	
Education: Associate in vocational	$15,719.42	*		$8,376.06	*		$9,873.19	*
	1003.190			*966.454*			*1098.448*	
Education: Associate in academic	$19,907.99	*		$9,660.31	*		$11,310.63	*
	978.304			*948.764*			*1091.644*	
Education: 4-yr degree	$35,565.50	*		$20,756.84	*		$24,651.87	*
	738.325			*761.377*			*949.760*	
Education: Advanced Degree	$63,729.94	*		$40,911.95	*		$46,708.57	*
	815.818			*896.308*			*1109.431*	
Married	$8,100.77	*		$7,074.38	*		$6,912.90	*
	486.083			*459.856*			*459.565*	
Divorced or Widowed or Separated	$1,646.98	*		$1,893.12	*		$1,881.97	*
	633.993			*595.046*			*594.911*	
Union member	-$3,992.75	*		$2,282.96	*		$2,372.64	*
	1169.615			*1108.181*			*1105.552*	
Veteran (any)	-$1,186.63			-$884.41			-$905.22	
	687.786			*648.453*			*659.002*	

R-squared	0.213	0.315	0.319

Discussion….