data and description

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outline

misc

basic research design

examples

analytical methods for regional development (Blakely and Leigh, 2009, ch1, 6)

what to look at?

map it

NECESSARY readings

- http://mailer.fsu.edu/~tchapin/garnet-tchapin/urp5261/topics/econbase/lq.htm
- http://mailer.fsu.edu/~tchapin/garnet-tchapin/urp5261/topics/econbase/lq-ex.htm
- http://faculty.washington.edu/krumme/350/exercises/lq.html (also some data sources)
- http://data.bls.gov/location_quotient/ControllerServlet–
- try to calculate LQ yourself

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Barro, R. (1999): "Determinants of democracy," Journal of Political Economy, 107, 158–183.

Blakely, E. and N. Leigh (2009): Planning local economic development: Theory and practice, Sage Publications, Inc.

Florida, R. (2008): Who's your city?, Basic Books.

Mackie, J. and J. MacKie (1980): The cement of the universe, Clarendon Press Oxford.

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- quote data source in detail; give url
- define variables; maybe table with definitions in the appendix
- describe sample in detail: time, location, sampling, etc...
- what is your contribution? how come everybody else got it wrong or missed it?
- there has to be some contribution in your paper !! data? method? idea?
- avoid results padding: do not present tables, graphs if they do not mean anything or if you do not discuss them or if they do not help with argument

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spurious correlation

- draw a scatter, fit line of some Y and some X
  - X is banana production in Honduras, Y is deaths on US highways
- you think that x causes y, but actually it is z
- say, global warming...
  - we have it–we can measure temperature
  - but the cause: we may think it is CO_2, but actually it is Sun activity
  - or the other way round...
- another way to say it: correlation is not causation

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the gold standard

- the experimental design
- only with experimental design you can confidently argue causality
- and it is because randomization takes care of the known and unknown predictors of the outcome (draw a picture of 2 groups of people)
- most of the time we cannot have an experimental design because it is unethical and politically impossible
  e.g. we cannot randomly assign kids to bad school or to smoking
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internal and external validity

- internal validity is about causality
- external validity is about generalizability
  - can i say something about Rutgers in general by analyzing you?
  - how about just Rutgers-Camden ?
  - no ! people at Law school, computational biology are likely to be different
  - and even per PA, I would ideally like to have a random sample
  - note, random sample is different from randomization/random assignment

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- history, maturation, regression to the mean
  - something else happened that caused Y
  - things develop over time in a certain way
- selection bias, self selection
  - does smoking causes cancer ?
  - maybe less healthy people select to smoke ?

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- but you need to do more work...
- essentially you want to exclude alternative explanations
- so you act like a devil's advocate...
- and try to abolish your story / find an alternative explanation
- if you cannot find any, they your story is right ...
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two basic designs

- you can look over time (PRE, POST) (draw a graph)
  - e.g. you can trace unemployment over time in Camden
  - and, say, you can find that it increased during Reagan administration...
  - but you cannot argue causality right away !
  - there may be lots of alternative explanations, e.g. shift away from manufacturing during the same time, etc etc
- and you can look across space
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levels of analysis

- you are probably familiar with term Unit of Analysis (U/A)
- in regional development a peculiar thing is that there are many levels
- there are states, counties, metropolitan areas, cities, etc
- and you often get different and even opposite conclusions depending on what level you are looking at

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- e.g. income, home ownership rate at county level are sums of person-level values divided by population
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  you don't know the variability and the distribution

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different levels, different effects

- variables at different levels may have opposite effects
- e.g. if i increase your salary, you'll be happier
- but if i increase salary of everybody in your county you'll be less happy
- would you like to live in a world where you make $100k and the average is $150k
- or would you like to live in a world where you make $75k and everybody and the average is $50k
- people chose the second scenario
- "a rich guy is a one who makes $100 more than his wife's sister's husband"

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- but also the context (characteristics of larger units in which U/A is nested)
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outline

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comparing Camden, NJ and Plano, TX

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- homeownership rate is 20% lower in Camden
- Plano has only 7% of population in poverty, while Camden has 36%
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- again, a useful trick is to combine different types of data to come up with a contribution
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- development planning begins with understanding of the of the local economy
- if you cannot measure it, your knowledge is of 'meager kind'
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- federal housing finance agency
- http://www.fhfa.gov/Default.aspx?Page=87
- land prices over time http://www.lincolninst.edu/subcenters/land-values/price-and-quantity.asp
- http://www.standardandpoors.com/indices/sp-case-shiller-home-price-indices/en/us/?indexId=spusa-cashpidff--p-us----
- http://www.zillow.com/local-info/
- http://www.city-data.com/
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basic analysis

- compare economy to region, state, and nation
- compare economic sectors
- identify which sectors are growing fast and slow
- identify most important industries within key sectors

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understanding

- you need to understand economy's strengths and weaknesses

  and think about wheat may be driving them

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the outcome line

- a useful concept is that of outcome line read `http://books.google.com/books?id=GBxhOT8btfYC&lpg=PA16&pg=PA15#v=onepage&q&f=false` and put more text here

think of the larger context

- where are we in the business cycle
- what are the global trends ?
  - they do affect the local economies
  - outsourcing manufacturing jobs to China
- local economy is not simply a fraction of the national economy, though
  - for instance if the there is drought in Latin America, Iowa will benefit more than Nevada (it produces more food)
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standardize

- if you go over time, you need to deflate dollar amounts

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- if you go across divide by population: otherwise you cannot compare, say Philadelphia to Camden

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outline

misc

basic research design

examples

analytical methods for regional development (Blakely and Leigh, 2009, ch1, 6)

what to look at?

map it

labor force characteristics

- this is key ! jobs are key !
- especially in those difficult times
- key in attracting new employers
- you want to have people in occupations that have good prospects

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  how does your occupation prospects stack up ?

- you'll find a ton online, e.g.

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labor force characteristics

- low labor force participation for a specific demographic group
  - may suggest lack of opportunity, discouraged workers, discrimination, etc
- median commute time is interesting indicator
  - if high it suggests a mismatch between housing and job markets
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businesses, job supply

- you also want to look at job suppliers–businesses
- interesting thing is that many businesses cannot find people to fill open jobs
- and there is unemployment and underemployment of course, so there is s mismatch
- http://www.forbes.com/sites/jacquelynsmith/2012/05/29/the-10-hardest-jobs-to-fill-in-america-2/
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basic things to understand (Blakely and Leigh, 2009, p164)

- which local parts of the economy are most valued by locals
  - how locals compare themselves to others
  - (can do a survey, interview, focus group)
- what's the local economic base (LQ)
  - what accounts for most jobs and wealth
  - and what's growing/declining most rapidly
- multiplier: how growth/decline in one part affects other parts
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economic base

- exporting industries are important–they bring the money to the locality
- imports are important to look at, too, there may be an opportunity for substitution
- it's businesses that generate wealth that should be targeted for attraction and nurtured
- we used to focus on industries, but now focus on people, e.g. creative class (Florida, 2008) – an occupation-centered economic base

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- $LQ = \frac{\frac{e_i}{e}}{\frac{E_i}{E}}$
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- (also some data sources) http://faculty.washington.edu/krumme/350/exercises/lq.html

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- also play with sectors, supersectors, etc at the bottom
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- and Camden, NJ to US in different time periods
- also play with sectors, supersectors, etc at the bottom
- ex: eds&meds Camden county v NJ (2013): (40/160)/(600/3240)=1.36

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where jobs will be in the future?

- again, `http://www.bls.gov/ooh/`
- but also take into account local conditions
- how is it changing ? look at trends, over-time difference
- "shift-share" (Blakely and Leigh, 2009, p):
  - how's overall eco doing: "rising or falling tide raises or lowers all boats"
- proportion shift: change in industry relative to overall growth
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shifts formulas (Blakely and Leigh, 2009, p182)

- proportion shift $= \frac{emp10_i}{emp00_i} - \frac{ref10}{ref00}$
- differential shift $= \frac{loc10_i}{loc00_i} - \frac{emp10_i}{emp00_i}$
- $ref00$ 2000 employment in reference economy
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interconnectedness

- most things are produced from things that somebody else produces
- and hence my performance affects that of my suppliers and people whom i supply
- there is some specialized software
- beyond the scope of this class
- a similar idea is that of clusters

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- have competitive advantage because they are concentrated
- share supplier and buyer (marketing) advantages
- are supported by advantageous infrastructure in a region
  e.g. universities, venture capital

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cluster table

- to visualize clusters you can produce a following table

not competitive (declining local shift)	competitive (growing local shift)	
transforming industries	growing base industries	high local concentration ($LQ > 1$)
declining industries	emerging industries	low local concentration ($LQ < 1$)

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use maps and census data

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outline

misc

basic research design

examples

analytical methods for regional development (Blakely and Leigh, 2009, ch1, 6)

what to look at?

map it

always a good idea to provide a map

- it's easy, just google whatever you study
- let's do an example
- go to google maps and e.g. say "university city, philadelphia"
- can also try goog images and say the same
- map is worth 1,000 words–it sets the context etc etc

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- just few examples but trend is that more and more local state fed govt dept etc open their data
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next week

- we will always end the class by having a quick look at the next class