Understanding Community Economies

CDILA Session 1

Dr. C. Patrick Scott



Learning Outcomes

- Interpret demographic, occupational, & industry data
- Understand the importance of correctly analyzing economic data
- Examine multiplier effects and various rounds of economic activity
- Discern proper data sources and understand what data needs to be collected

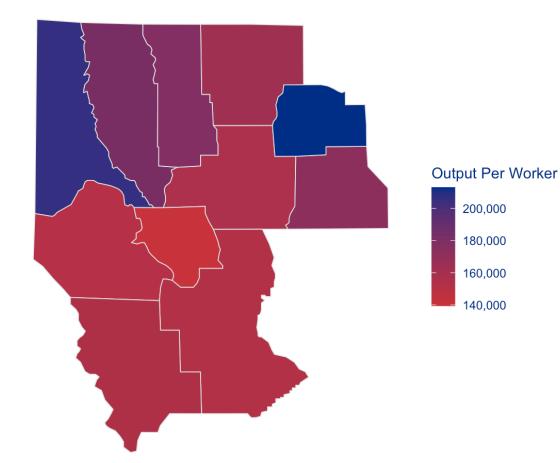
Where I wish the Book Started

Cross section vs time series:

- Cross section data are one or more variables for the same individuals
- Time series data are the same variable repeated over many periods of time
- Sometimes cross section data are static points of a larger time series
 - Caution is urged to ensure past patterns are not overlooked

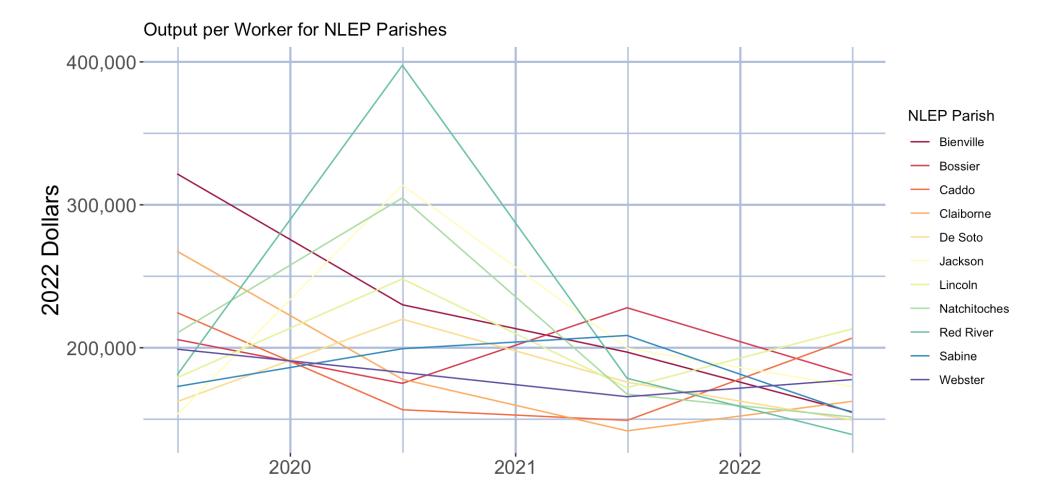
Cross Section Data

Output per worker in all NLEP parishes



Time Series Data

This same data over time tells a different story



Demographic Data

What the book covers:

- Decennial Census of Population and Housing
 - Detailed estimates of populations, income, demographics, etc
- American Community Survey
 - Micro level community data, most of which is geo-located
 - Income, employment status, social benefits, educational attainment, etc

Demographic Data

What the book does not cover:

- Bureau of Economic Analysis
 - Country, metro, and local area data
- Housing and Urban Development
 - Office of Policy Development & Research
 - Many housing survey data sets on program efficacy
- Bureau of Labor Statistics
 - Current Population Survey
 - National Longitudinal Surveys

Occupation & Industry Data

- Most of our occupational data conforms to the Standard Occupation Classification (SOC) System
 - Occupations grouped by skills and employee activities
 - Provides median hourly and annual mean wages by occupation for an area
- Employment (most of which comes from the Current Population Survey)
- Commuting Patterns which is a big part of MSA designations On the Map

Location Quotients - Employment

- Location quotients are a simple calculation that packs a lot of information punch
- LQs are based on two regions: a smaller test region and broader reference region

Quotient = Regional Industry Employment Total Regional Employment Reference Industry Employment Total Reference Employment

• When the test region ratio is similar to the reference region ratio, the LQ \rightarrow 1

Location Quotients - In Practice

- LQs < 1 imply under-development in that area, > 1 overdevelopment
- You are not limited to just employment
- Other examples include wages, industry output, property tax revenues, etc
- Clever use of multiple LQs for a study can really shed light on what is happening in a region for a specific industry

Employment and Wage LQs

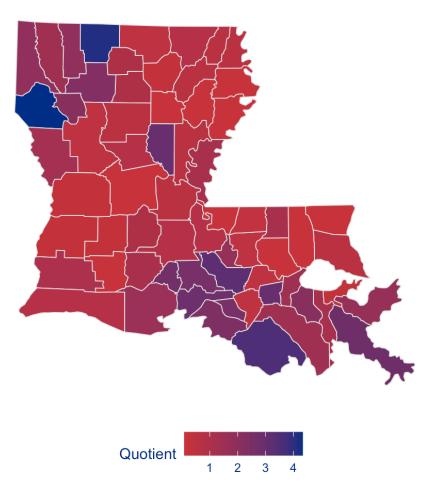
Location Quotients to Labor Market Dynamics

Emp. LQ	Wage LQ	Relative Demand	Relative Supply
Low (<1)	Low (<1)	Low	High
Low (<1)	High (>1)	Low	Low
High (>1)	Low (<1)	High	High
High (>1)	High (>1)	High	Low

• Example: Banking sector in Caldwell Parish

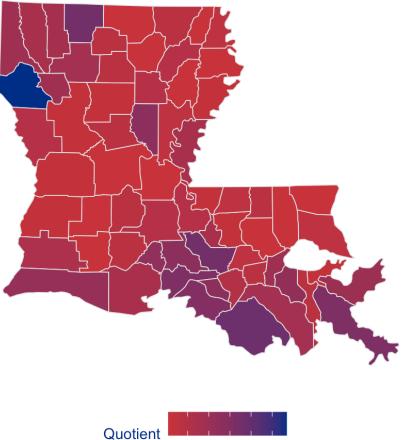
Location Quotients May not be Stable

Oil Industry Employment LQ - 2019



Location Quotients May not be Stable

Oil Industry Employment LQ - 2022





Economic Events

- Broadly speaking each economic event (business opening and closing, natural disaster, tourism, infrastructure project, etc) creates ripple effects in the regional economy
- There are numerous theories that may dictate how one approaches estimating an economic effect
- The total economic impact of an event is governed by three types of impacts; direct, indirect and induced
- In some cases, the direct or initial effect can be different from one another, but in most practical cases they are not

Economic Multipliers

- There are two commonly seen multipliers; Type-1 & Type SAM
- Type SAM are the most common today:

Type SAM = $\frac{\text{Direct + Indirect + Induced Effects}}{\text{Direct Effect}}$

• Type-I are the older standard:

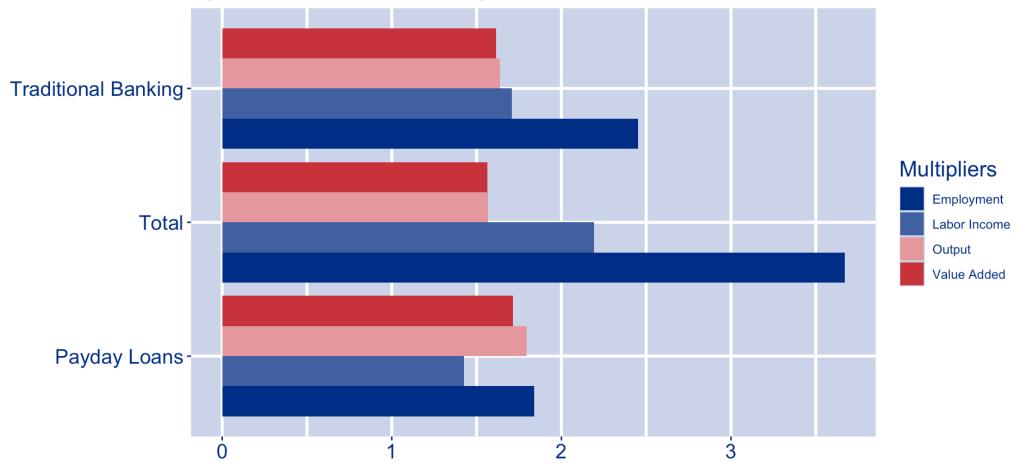
Type I =
$$\frac{\text{Direct + Indirect Effects}}{\text{Direct Effect}}$$

The Economic Impact Payday Lending Regulation

- The direct effect is based on a legislative ban of payday lending (excluding cash advance type transactions)
- This creates a reduction in welfare for some, but also forces marginally credit-worthy individuals into traditional financial intermediation channels
- An estimated 26% of payday lending financial capital would migrate to banks and credit unions
- The direct effect is the net of two changes (one positive and one negative)

The Economic Impact Payday Lending Regulation

Type SAM Multipliers - By Economic Shock



Sources of Reliable Data

- Federal Agencies
 - Census Bureau
 - Bureau of Economic Analysis
 - Bureau of Labor Statistics
 - FDIC
 - Federal Reserve Economic Database
- Regional/State Agencies

Sources of Reliable Data

- Local Agencies
 - Chambers of Commerce
 - EDOs
- University Research Centers
 - LA Tech, Center for Economic Research
- Private Sector Services
 - Council for Community and Economic Research
 - Economic Modeling Specialists
 - Environmental Services Research Institute

Contact Infomation

Email, call, or text anytime

- Email: pscott@latech.edu
- Office phone: (318) 257-2311
- Cell phone: (318) 497-9022