Discovering Diversity Using an Empirical Research Project

Day #2 Session 1: Thursday 18th June, 2020

Brooks Depro and Katy Rouse
Some Results

Placed in the context of Cook and Opoku-Agyeman (2019)
Economists Under the Age of 30: Women with Bachelor’s Degree
Source: American Community Survey (5-year Estimates)

- “Economics is neither a welcoming nor a supportive profession for women” (Cook and Opoku-Agyeman, 2019).

38%
Economists Under the Age of 30: Black Women with Bachelor’s Degree

Source: American Community Survey (5-year Estimates)

• “But if economics is hostile to women, it is especially antagonistic to black women” (Cook and Opoku-Agyeman, 2019).

<1%

‘It Was a Mistake for Me to Choose This Field’
Economist Rhonda Sharpe asserts that “there is cause for alarm as the number of undergraduate economics degrees conferred to Black women was stagnant.” She provides the following compelling evidence . . .
Empirical Project

• Empower students to find, report, and use such facts

• Encourage students to frame and explore diversity questions *from their own angle*.

• Emphasize writing and reproducible methods
Step 1: Link to a real-world application

- Students review a Small Business Administration request for quotation (RFQ).
  - Example: Who is the audience? Client or Proposal Leader?
Step 2: Practice finding and preparing data

- Students use IPUMS USA to create a custom data set from the latest American Community Survey 5-year estimates.
  - Register for an account and agree to abide by the usage license.
  - Create custom extract (choose variables)
    - Age
    - Sex
    - Race
    - Hispanic Origin
    - OCCSOC
    - INDNAICS
    - EDUC
  - Download extract (data, command files, and codebook)
    - Students find that the extract is large, compressed, and ‘messy’.
Step 3: In Class Lab

• Model a Stata analysis file (produces #’s in first two slides)
  • `describe`
  • `summarize`
  • repeat restrict the sample (e.g. occupation and age).
  • `tabulate` create a two-way table.
  • repeat using sample weights. PERWT indicates how many persons in the U.S. population are represented by a given person in an IPUMS sample. Type “help fweights” if you need assistance.

• Students use regression analysis after they frame their own questions.
Step 4: Writing and Reproducing Results: Role Play

• Audience: Your proposal leader has asked you to perform basic regression analysis.

• She asks you to use your creativity; identify your own angle.

• Students will act as entry-level economists as they:
  • collect new variables and use regression analysis;
  • prepare and deliver a concise one-page business memo; and
  • deliver Stata code and data that will be passed on to another economist for a quality control check.
    • Write a single script that runs all code from start to finish.
    • Use common directory structure.
    • Reproduce memo results.
Examples of Student Questions: Tableau Dashboard
Examples of Student Questions: Comparisons of Different Occupations

### Racial Breakdown Compared to Selected Fields

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>African American</th>
<th>Chinese</th>
<th>Asian or Pacific Islander</th>
<th>Not Specified</th>
<th>Mix of 2 races</th>
<th>Mix of 3 or more races</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Consulting</td>
<td>75.83%</td>
<td>3.69%</td>
<td>2.97%</td>
<td>6.14%</td>
<td>6.3%</td>
<td>3.9%</td>
<td>1.17%</td>
</tr>
<tr>
<td>Judicial Law Clerk</td>
<td>78.47%</td>
<td>8.26%</td>
<td>.54%</td>
<td>5.86%</td>
<td>3.09%</td>
<td>3.78%</td>
<td>0%</td>
</tr>
<tr>
<td>Compliance Officers</td>
<td>74.61%</td>
<td>14.18%</td>
<td>.91%</td>
<td>3.24%</td>
<td>2.87%</td>
<td>2.05%</td>
<td>.46%</td>
</tr>
<tr>
<td>Management Analyst</td>
<td>70.56%</td>
<td>7.24%</td>
<td>2.11%</td>
<td>17.66%</td>
<td>.70%</td>
<td>.96%</td>
<td>.2%</td>
</tr>
<tr>
<td>Average</td>
<td>74.87%</td>
<td>8.34%</td>
<td>1.63%</td>
<td>8.23%</td>
<td>3.24%</td>
<td>2.67%</td>
<td>.46%</td>
</tr>
</tbody>
</table>

*Table 2. Percentage of people with bachelor's degrees across different fields by race.*
Contact Information

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