

PRESENTATION OF “THE TRADEOFF BETWEEN COVID-19 SAFETY REGULATIONS AND UNEMPLOYMENT RATES” - Early Results

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REVIEW THE RESEARCH QUESTION PROJECT POSITIONING

What is the tradeoff between the strictness of COVID-19 safety regulations and unemployment rates across different states in the United States and what is the simple measure of the link between policy and unemployment?

- ▶ Exploring the link between COVID-19 rules and unemployment: Looking at how strict safety measures affected job losses across different states.
- ▶ Comparing strict vs. relaxed policies: Seeing if stricter rules led to more unemployment compared to states with looser restrictions.
- ▶ Helping future policy decisions: Understanding this tradeoff can guide better choices in balancing health and the economy.

RESEARCH METHODOLOGY: HOW YOU WILL ADDRESS THE RESEARCH QUESTION

- ▶ 1. Collect state-level unemployment rates and death counts from 2019, 2020, 2021.
- ▶ 2. Create a scatter plot to compare excess unemployment rates with excess death rates per state. (excess is calculated by comparing to 2019 deaths/unemployment)
- ▶ 3. Use Excel to analyze how strongly COVID-19 safety measures impacted unemployment.
- ▶ 4. Identify patterns and draw conclusions about the trade-off between public health policies and economic impact.

PRESENTATION OF RAW DATA

1. Excess 2020 Deaths Per State X Excess 2020 Unemployment Per State

- ▶ Each state level count is controlled by 2020 population per state

2. Excess 2021 Deaths Per State X Excess 2021 Unemployment Per State

- ▶ Each state level count is controlled by 2021 population per state

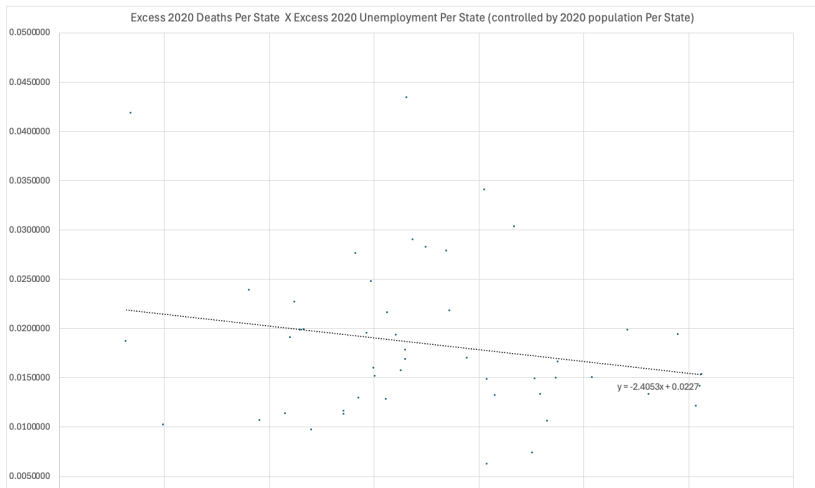
3. Excess 2020 Deaths Per State X Excess 2020 Unemployment Per State

- ▶ Each state level count is controlled by 2020 labor force per state

PRESENTATION OF RAW DATA

1. Excess 2020 Deaths Per State X Excess 2020 Unemployment Per State - Population Controlled

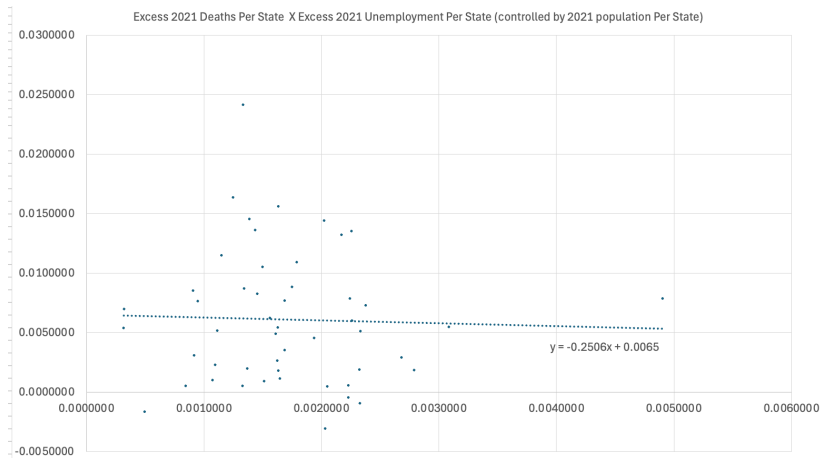
$y = -2.4053x + 0.02227$ For every one additional unemployed person, there are 2.41 fewer excess deaths in the state's population



PRESENTATION OF RAW DATA

2. Excess 2021 Deaths Per State X Excess 2021 Unemployment Per State

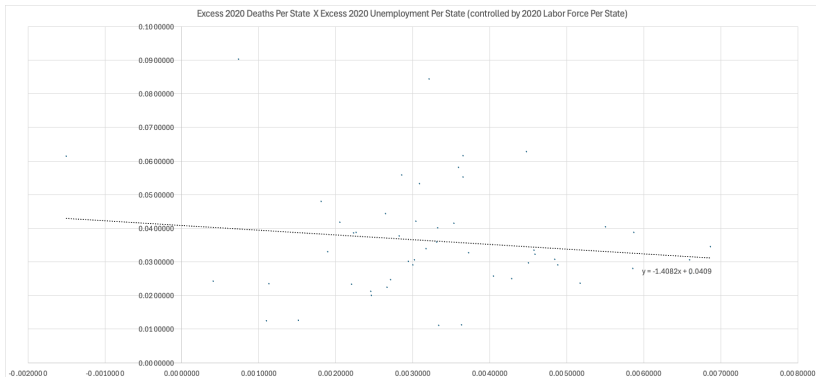
$y = -0.2506x + 0.0065$ For every one additional unemployed person, there are 0.25 fewer excess deaths in 2021



PRESENTATION OF RAW DATA

3. Excess 2020 Deaths Per State X Excess 2020 Unemployment Per State - Labor Force Controlled

$y = -1.4082x + 0.0409$ For every one additional unemployed person, there are 1.41 fewer excess deaths



CONCLUSION: HURDLES AND NEXT STEPS

Hurdles:

- ▶ Interpreting the Relationships: At first glance, these graphs show a weak or slightly negative relationship between excess deaths and excess unemployment. But the real challenge is figuring out why—and making sure I explain it clearly.
- ▶ Dealing with Low Correlation: The trend lines are slightly negative, but the data points are all over the place.
- ▶ Outliers: For the first graph, California's data point was a major outlier so I need to figure out why and if that has an impact on my research
- ▶ Avoiding Oversimplifications: Just because the data doesn't show a strong link doesn't mean there isn't one. There are tons of other factors (like healthcare access, state policies, or demographics) that might be affecting these trends.

CONCLUSION: HURDLES AND NEXT STEPS

Next Steps:

- ▶ Refine my graphs and visuals: Improve labeling so that axes are clearer and easier to read.
- ▶ Frame the tradeoff clearly: Do stricter COVID-19 policies reduce deaths at the cost of jobs? Is there a point of balance?
- ▶ Interpret findings: Does stricter policy correlate with higher unemployment? Does it align with your excess deaths data?