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Project 1: 10 Questions

1. Why does food insecurity matter more than unemployment or inflation?

Food insecurity captures direct, household-level material hardship, which is more immediately linked to psychological distress than broader economic indicators. While unemployment and inflation reflect macroeconomic conditions, food insecurity measures whether households can meet basic needs, making it a more proximate indicator of mental health risk.

2. Can this be interpreted as causal?

No. The analysis is observational and does not establish causality. Fixed-effects models reduce bias from unobserved, time-invariant state characteristics, and lagged models support temporal ordering, but the results should be interpreted as robust associations rather than causal effects.

3. Why was the analysis restricted to a subset of states?

The Household Pulse Survey suppresses or omits estimates for some states and time periods due to sample size and reliability thresholds. The analysis was restricted to states with consistent data to preserve internal validity and avoid introducing noise from incomplete coverage.

4. Why not include more lag models or dynamic models?

A single one-month lag balances interpretability, statistical power, and policy relevance.

Additional lags or dynamic models would substantially reduce sample size and complicate interpretation without clear evidence of added insight.

5. Why use food insecurity as a proxy instead of income or poverty?

Income and poverty measures change slowly and are typically reported annually, whereas food insecurity responds quickly to economic shocks and reflects lived hardship. As a result, food insecurity is better suited to capturing short-term stress that may affect mental health.

6. How reliable are Household Pulse Survey estimates?

The Household Pulse Survey is designed as a rapid-response tool rather than a traditional annual survey. While individual estimates may be noisy, aggregating to the state-by-month level improves stability, and the survey is widely used by federal agencies for real-time monitoring.

7. Why were ACS variables included if they change slowly?

ACS variables were included as structural controls to account for baseline socioeconomic context. They are not expected to capture short-term dynamics but help assess whether observed associations persist after controlling for underlying differences across states.

8. How can policymakers actually make use of this information?

Policymakers can monitor food insecurity as an early warning signal for rising mental health risk and coordinate food assistance and mental health services during periods of increased hardship. The framework can support more proactive and targeted intervention strategies.

9. What other factors would you include if data was available to use?

Additional factors could include access to mental health services, SNAP participation rates, housing instability, social support indicators, or demographic subgroup measures to better understand heterogeneous impacts across populations.

10. Why do unemployment and inflation lose significance?

Once state and time fixed effects are included, much of the variation in unemployment and inflation is absorbed or mediated through household-level hardship. This suggests that their mental health effects may operate indirectly rather than independently.