

How Income Changes Affect Personally Experienced Inflation

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Motivation

Much is hidden in the Bureau of Labor Statistic's monthly report of the Consumer Price Index that does not yield a holistic view of inflation's effect on consumers and individuals in the U.S. economy.

Literature review: - Higher income individuals experience lower inflation through to access to product variety and innovation (Jaravel, 2017) - Lower income individuals experienced higher inflation for the costs of living during the Great Recession (Argente & Lee, 2015)

Causal Question of Interest

If someone experiences an increase to their income, how does this cause their personally experienced inflation to change?

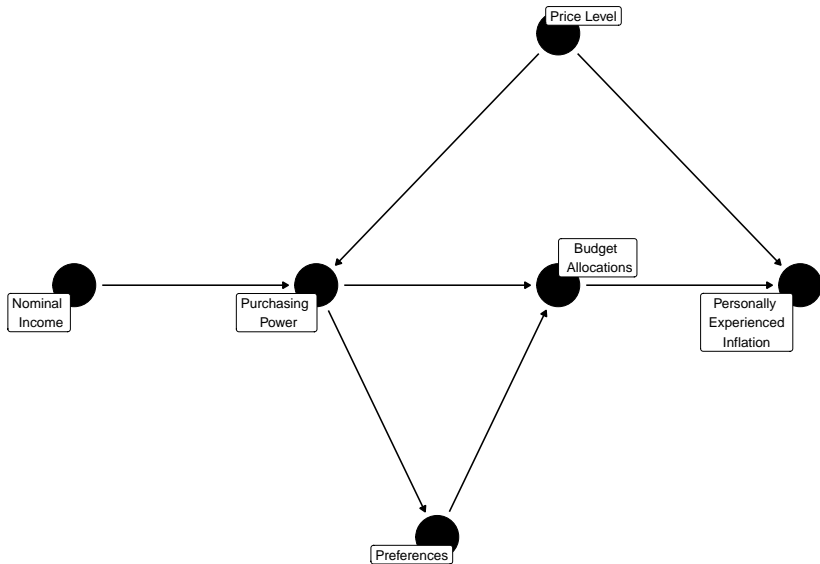
Calculation of personally experienced inflation:

$$\pi_t^i = \frac{\sum_l \theta_{l,t}^i P_{l,t} - \sum_l \theta_{l,t-1}^i P_{l,t-1}}{\sum_l \theta_{l,t-1}^i P_{l,t-1}}$$

As vectors:

$$\pi_t^i = [\theta_t^{i'} P_t - \theta_{t-1}^{i'} P_{t-1}] [\theta_{t-1}^{i'} P_{t-1}]^{-1}$$

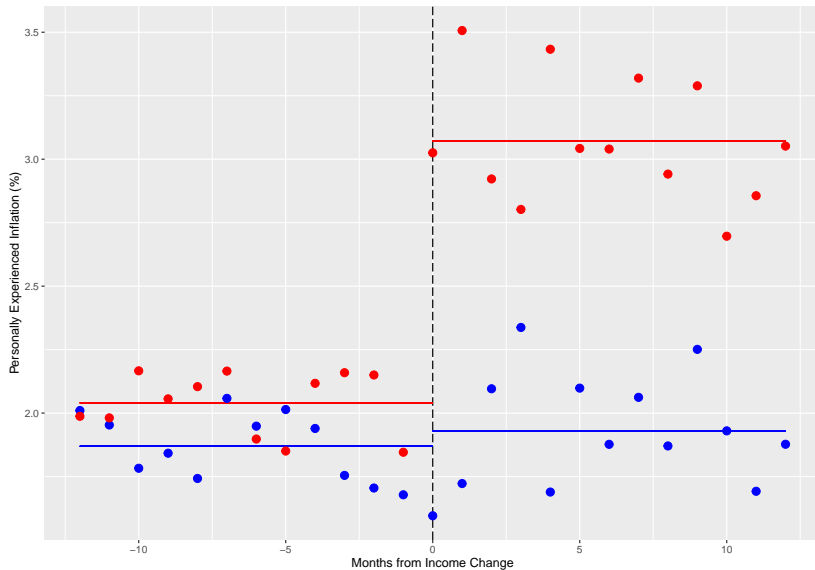
Potential Sources of Bias



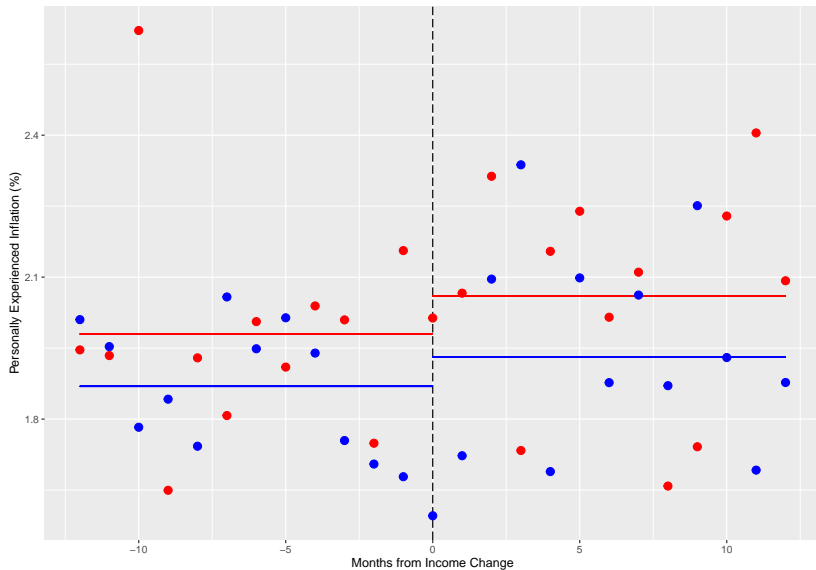
Ideal Experiment

Practical Research Design

Possible Results: Positive Effect



Possible Results: Null Effect



Possible Results: Negative Effect

