

Appendix: How Concerned Should We Be About Inflation?

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We constructed an approximation to PCE inflation each month with the following equation:

$$\pi_t^{approx} = \sum_{n=1}^N \omega_{n,t-1} \pi_{n,t}$$

In this equation, $\pi_{n,t}$ are rates of price change for the N categories of consumption, and $\omega_{n,t-1}$ are the shares of total nominal consumption expenditure for the N categories in the previous month. Before constructing the approximation, we remove from the data several expenditure categories that enter with negative numbers. Nonetheless, the inflation approximation is quite accurate.

For each month, we rank the consumption items in order of their percent price change, highest to lowest, and then use the corresponding expenditure shares to calculate two measures.

First, the cumulative contribution to inflation, used in Figures 1 and 3:

$$C_{n,t} = \sum_{j=1}^n \omega_{j,t-1} \pi_{j,t}, \quad n = 1, \dots, N$$

Second, the cumulative share of inflation, used in Figures 2 and 4:

$$S_{n,t} = \frac{\sum_{j=1}^n \omega_{j,t-1} \pi_{j,t}}{\pi_t^{approx}}, \quad n = 1, \dots, N$$