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"While this theoretical result might appear disturbing at first, on reflection it is clear we often do have substantial a priori information about β itself. In the case of Zurcher, we know that β must be 'large' because $\beta = 0$ implies an implausibly large rate of increase in monthly operating costs"

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Without additional restrictions, these are indistinguishable in the data

Rust's suggestion: impose strong a priori assumptions about $u(\cdot)$

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"the difference in the log-likelihoods for $\beta = 0$ vs. $\beta = .9999$ disappears as I generalize the specification of the cost function, c."

Alternative approach: find variables that affect transitions but not flow utility

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Forward-looking agents respond to Z_t; myopic agents do not

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Age excluded from utility function:

$$u(d_t, X_t) \neq f(\text{age}_t)$$

But age affects health transition probabilities:

$$P(X_{t+1}|\text{age}_t, d_t, X_t) \neq P(X_{t+1}|d_t, X_t)$$

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Data determines which pattern fits better

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- Policy changes affecting future (but not current) environment
- Variation in information about future states
- Individual differences in transition probabilities

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Forward-looking behavior reveals itself through responses to intertemporal wedges