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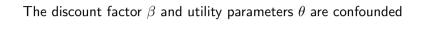
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"While this theoretical result might appear disturbing at first, on reflection it is clear we often do have substantial a priori information about β itself. In the case of Zurcher, we know that β must be 'large' because $\beta=0$ implies an implausibly 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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$$u(x_t, d_t) = -\theta c(x_t, d_t)$$

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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."



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

Empirical example: Arcidiacono, Sieg and Sloan (2007, IER)	

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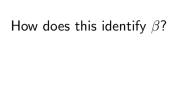
Key idea: Age affects health transitions but not utility of consuming alcohol/tobacco

Age excluded from utility function:

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

But age affects health transition probabilities:

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





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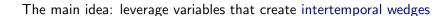
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Data determines which pattern fits better





Variables that change future consequences of current actions but not current payoffs

The main idea: leverage variables that create intertemporal wedges

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Other examples:

- Policy changes affecting future (but not current) environment
- Variation in information about future states
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Forward-looking behavior reveals itself through responses to intertemporal wedges