

TIME PREFERENCE AND HEALTH

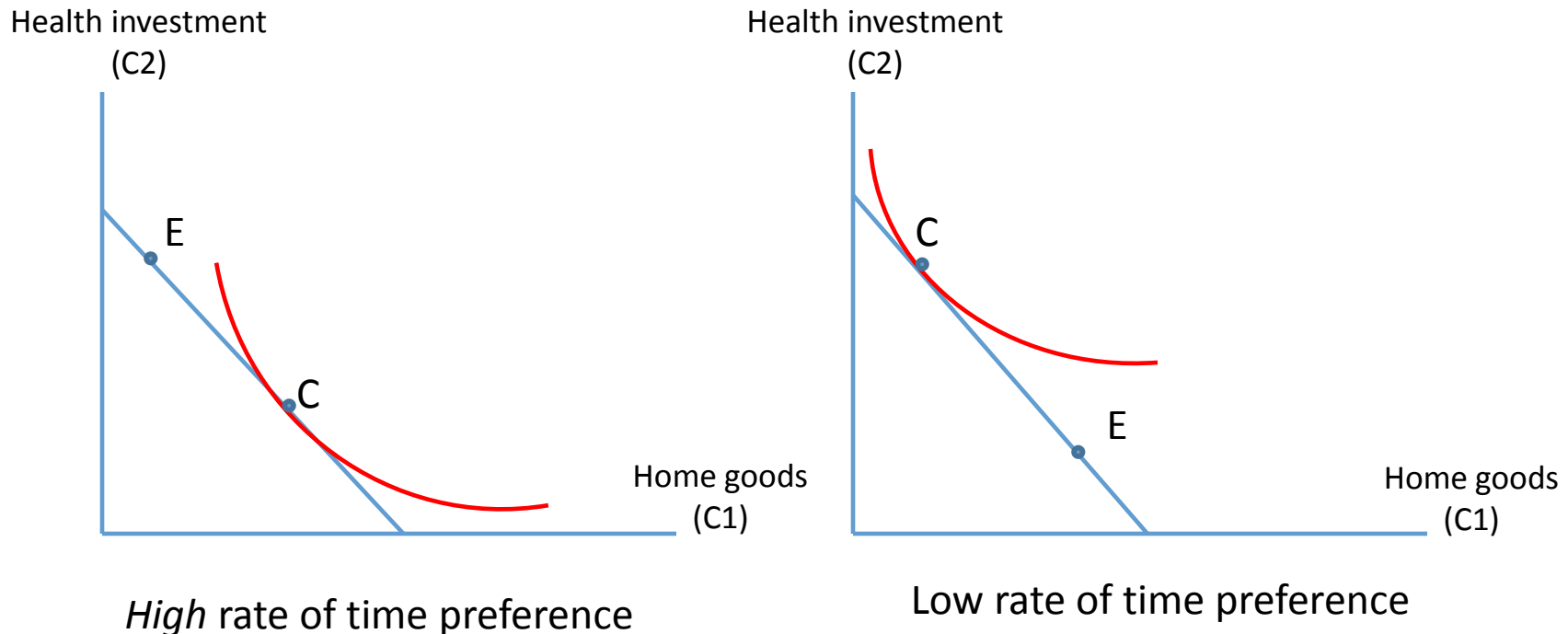
(Supplemental Material)

Concepts

- **Time preference** refers to the consumer's preference for *current consumption* over *future consumption*.
- E.g. $U(C1,C2) = u(c1) + \beta u(c2)$
 - Where $C1$ = current consumption, $C2$ = future consumption
 - β is the **discount rate**.
 - **High** rate of time preference
 - Place a large value on current consumption relative to future consumption
→ low health investment
 - Large discount rate (i.e. less patient)
 - **Low** rate of time preference
 - Place a low value on current consumption relative to future consumption
→ high health investment
 - Small discount rate (i.e. more patient)

Health Investment vs. Home goods

- Think of home goods as 'current consumption' and 'health investment' as 'future consumption'



Grossman's argument

- Uses household production model
- Argues that “Additional years of schooling make the individual a more *efficient producer* of health.
- Sources of efficiency:
 - Wiser use of medical care
 - Lifestyle elements – smoking behavior, diet, etc.

Fuchs (1982): Time Preference and Health

- Attempts to explain the correlation between schooling and health
 - Empirical evidence: positive and significant impacts of schooling on health
 - What is the mechanism?

- Grossman:

More years of schooling make the individual a more efficient producer of health.

- Fuchs:

The concept of time preference (trade-off between *current cost* and *future benefit*) could explain possible links between schooling and health.

Fuchs' argument

- There are 2 possible ways:
- 1. Suppose that differences in time preference are established early in life and do affect subsequent behaviors. **Individuals with low discount rate (low time preference) are more likely to invest in both education and health.** (i.e. Both education and health are correlated with low time preference.)
- 2. Education affects time preference. More schooling make people more willing to invest at a lower rate of return. Thus, **more schooling could result in more investment in health.**