Time Preference and Health

(Supplemental Material)

EE474

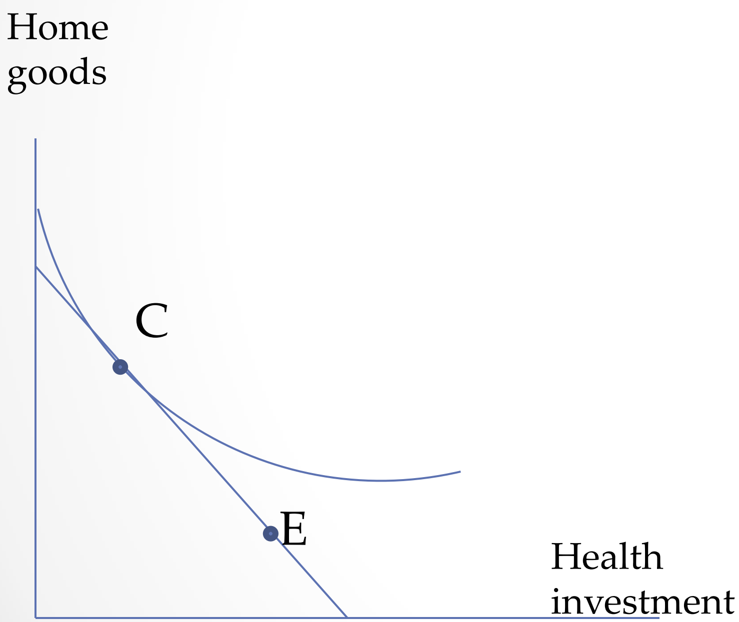
Semester 1/2012

Concepts

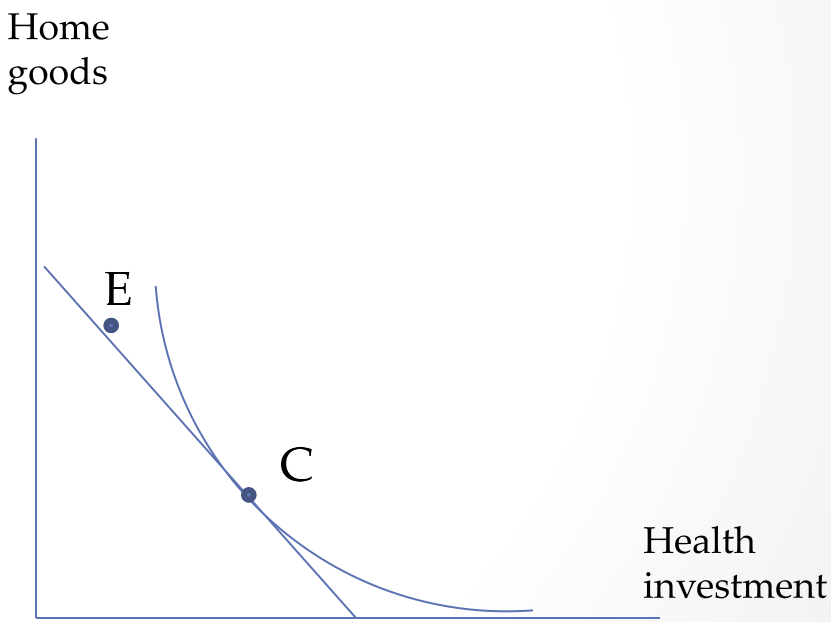
- Time preference refers to the consumer's preference for current consumption over future consumption.
- E.g. $U(C1,C2) = u(c1) + \beta u(c2)$
    - Where C1 = current consumption, C2 = future consumption
    - β is the discount rate.
- *High* rate of time preference
    - Prefer current consumption to future consumption
    - Large discount rate (i.e. less patient)
- Low rate of time preference
    - Prefer future consumption to current consumption
    - 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'



High rate of time preference



Low rate of time preference

Fuchs (1982): Time Preference and Health

- Attempts to explain the correlation between schooling and health
  - Empirical evidence: +ve and significant impacts of schooling on health
  - What is the mechanism?
- <u>Grossman</u>:

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

- <u>Fuchs</u>:

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. (ie. 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.