

Macroeconomics, Module 8: Consumption, Saving, and Investment

Homework Assignment: Effects on Consumption

(The attached PDF file has better formatting.)

A person receives income of \$10 an hour. The inflation rate is zero, and the real interest rate is 2% per annum. This person consumes 95% of the income and saves 5%. The person now works 2,000 hours a year. The person can work more or fewer hours.

What are the effects on the person's consumption *this year* from each of the following?

- A. The real interest rate rises from 2% to 8% for all maturities.
- B. Real income increases permanently to \$12.50 an hour.
- C. Real income increases to \$12.50 an hour this year, but not for future years.
- D. The person receives an inheritance from a long-forgotten great uncle of \$5,000.

To answer Part A of this homework assignment, assume the person's value of current vs future income doesn't change. The real interest rate changes because other items change in the economy. The person's desire to save has not changed, but the present value of the future savings changes.

For Parts B, C, and D, explain

- The substitution effect on the hours worked. For Part C, note the intertemporal substitution effect.
- The income effect on the hours worked (especially for Part D).
- The effects on the marginal propensity to consume.

The inheritance in Part D is the same as the extra income this year if the person works the same hours. For which scenario B, C, or D does the person's work effort this year rise the most and for which scenario does it rise the least? For which scenario B, C, or D does the person's consumption this year rise the most and for which scenario does it rise the least?