



Semester 1/2011

EE 311 Microeconomic Theory

Exercise 4: Consumption Over Time

1. Mr. A has no income at the present time, but next year he is certain to receive an inheritance of 600,000 Baht. Assume that rate is 10 per cent per year.
 - (a) Use a diagram to indicate Mr. A's possible consumption equilibrium.
 - (b) If the interest rate falls to 5 per cent per year, show what may happen to his consumption equilibrium. Indicate the size of the income and substitution effects.
 - (c) Suppose now he has won a lottery worth 100,000 Baht. Suppose also that the lending rate is 8 per cent per year, while the borrowing rate is 12 per cent per year. Use a new diagram to indicate Mr. A's consumption possibility frontier.

 2. Miss B has income of 20,000 Baht this year with no income next year. She decides to invest in a chicken farm. Compare the following aspects: (a) consumption, (b) investment, and (c) utility, under the following alternative conditions:
 - (1) when she has no opportunities for lending or borrowing
 - (2) when she has access to a money market for lending and borrowing.

 3. Company C is considering construction of a luxury hotel and spa that would cost 100 million Baht in initial construction costs, and 8 million Baht per year for maintenance and operation, with major repairs of 40 million Baht expected in year 10.

Assume that construction will take two years to complete. The hotel and spa will then generate revenues of 18 million Baht per year for 20 years, after which it will become obsolete and will be demolished.

Use your economic understanding to help Company C decide whether this is a good investment. Show only the method of calculation and make any necessary assumptions.
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