7.3 Lecture 17: Making Choices Over Time

7.3.1 Present value

- Key insight for thinking about capital markets: a dollar tomorrow is worth less than a dollar today.
- Money available today is more valuable than the same amount in the future because it can be invested or used immediately.
- Comparing sums across time requires adjusting future amounts to their present-day equivalent.
- The rule of making choices over time is to pick the option with the highest present value.

7.3.2 Inflation and real interest rate

- Inflation erodes purchasing power over time, so nominal returns must be adjusted to reflect real gains in buying power.
- real interest rate = nominal interest rate − inflation rate
- What matters to individuals is real interest rate when making decisions.

7.3.3 Investment decisions

- When making investment decisions, we invest if net present value > 0.
- Firms evaluate their decisions by weighing up front costs against expected future payoffs under present values.
- Consumers think about long-run gains when making decisions about whether or not to incur expenses today.

7.3.4 TO KNOW – Conceptual Understanding

- A dollar today is worth more than a dollar tomorrow because it can be used or invested immediately
- Rising prices reduce the purchasing power of money over time
- When evaluating future sums, individuals and firms think in terms of what those dollars will actually buy, not just their face value

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