

## Lecture 18: Interest Rates

1. We've already talked about the difference between *observed*, or *nominal* interest rates and *real interest rates*

Real interest rate = nominal interest rate minus inflation rate

2. We also talked about the interest rate as the price of moving resources to different time periods

interest rate paid to investors: reward for saving and postponing spending until the future

interest rate paid by borrowers: cost for borrowing and spending more today

3. Interest rates and the business cycle: Interest rates are *procyclical*, meaning they tend to rise during economic expansions and fall during economic recessions

4. Interest rates and time

short term interest rates: interest rates for loans and investments with short time periods

long term interest rates: interest rates for loans and investments with long time periods

Importance: Interest rate on long term loans and investments will typically be higher than interest rate on short term loans and investments

Reason: More can go wrong over a longer period of time, and also a greater chance that the inflation rate can rise

BUT: There is a time when this is reversed, when long term interest rates are lower than short term interest rates – this occurs when investors and lenders think the inflation rate will fall in the future – and this thinking usually precedes a recession. So when long term interest rates move lower than short term interest rates, this is a good prediction of a forthcoming recession.

5. A personal finance concept regarding interest rates: the concept of *amortization*: repaying a loan in equal (usually monthly) payments over a set period of time - means each payment is part interest and part repayment of the original loan (principal) - but as time goes on, the part of each payment that is interest falls and the part that is principal rises. At the end of the time period, the loan is repaid.

Beware of *interest only loans* - payment is lower because you only pay interest - still owe the total amount borrowed at the end of the time period